

# Optimizing For Voice Search & Virtual Assistants



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HEAD OF GLOBAL MARKETING  
AT SEMRUSH



# SEMrush Voice Search Study

**20,000**

**QUERIES**



**3**

**DEVICES**



**8**

**RANKING  
FACTORS**



Where we got **the inspiration** from

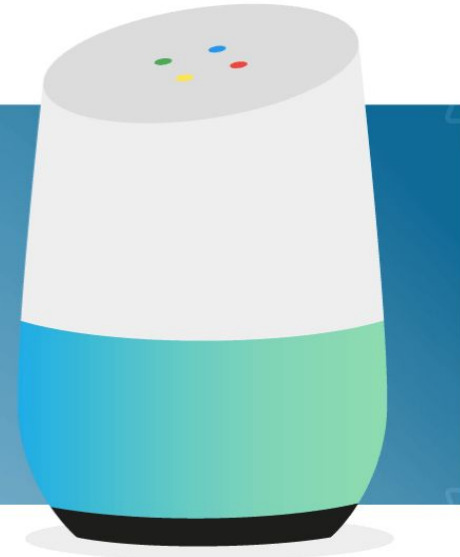
## **We Analyzed 10,000 Google Home Results. Here's What We Learned About Voice Search SEO**



by Brian Dean ⌚ Last updated Feb. 28, 2018

### **10,000 Results**

Voice Search Ranking  
Factors Study





# Voice search: **three devices**

**GOOGLE HOME**

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**GOOGLE HOME MINI**

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**ANDROID PHONE**

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A close-up portrait of a woman with dark hair, looking directly at the camera. Her face is partially obscured by a semi-transparent digital grid pattern, suggesting a digital or artificial theme. The background is dark and out of focus.

# Digital Assistants

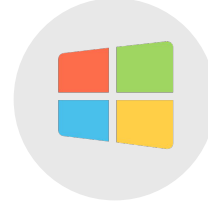
ASSISTANT



ALEXA



CORTANA



SIRI



Operating  
system

**Android/  
Chrome**

**Fire OS**

**Windows**

**Mac OS**

Speaker

**Home/  
Home Mini**

**Echo**

**Invoke**

**HomePod**

Data

**Google**

**Bing**

**Bing**

**Bing/Google**

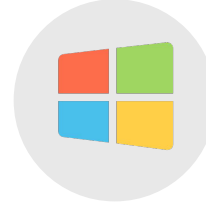
ASSISTANT



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Operating  
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**Android/  
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**Invoke**

**HomePod**

Data

**Google**

**Bing**

**Bing**

**Bing/Google**





# List of potential ranking factors



Content  
length



Text  
Complexity



Position in  
Google SERPs

Ranking in SERP  
features:  
Featured  
Snippet & PAA



Schema



Page  
Performance



HTTPS



Backlinks



# Methodology

A still life composition on a wooden desk. In the center is an open calendar for October, showing the 18th (Friday) and 19th (Saturday). The 18th has a red sticky note with the number '11' and a pen resting on it. To the right is a black Citizen scientific calculator. In the foreground is a whole orange. Other items include a black pen, a yellow sticky note, and a small orange card. The word 'Methodology' is overlaid in large white text.



Hey Google,  
How are you doing?



According to  
[thatcoolwebsite.com](https://thatcoolwebsite.com)  
I am doing great!





How it  
looked in  
real life?

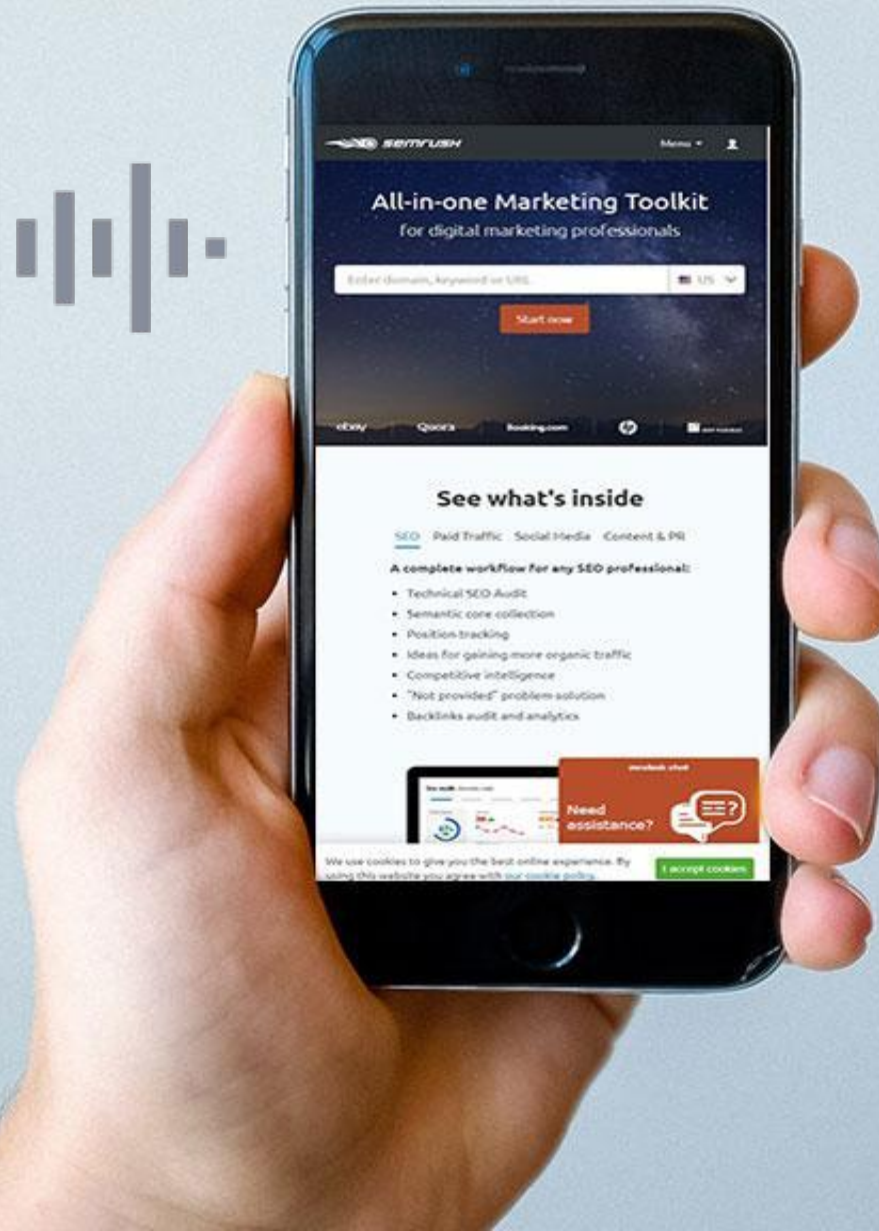




# Voice Search Study

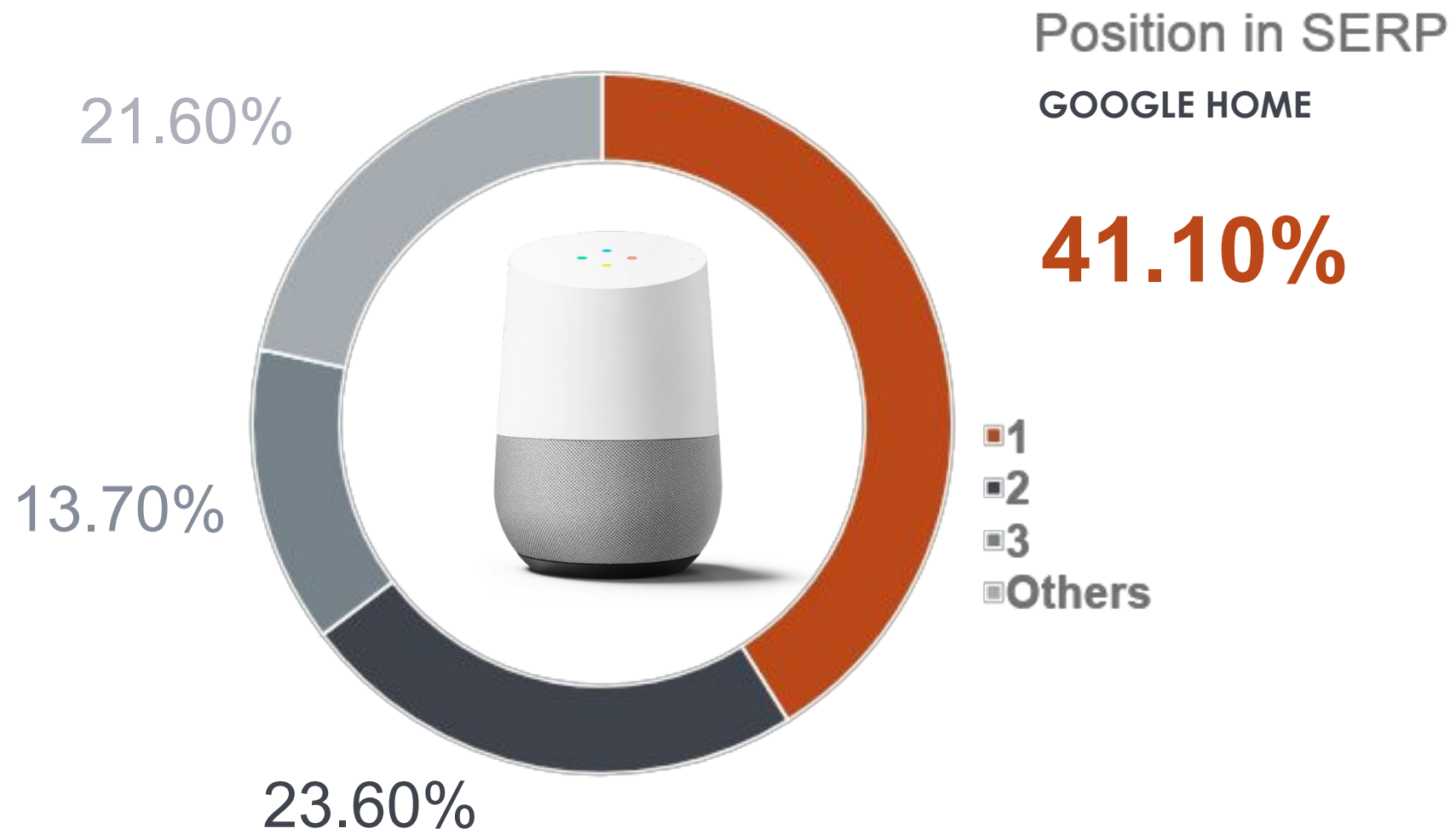
## Key findings

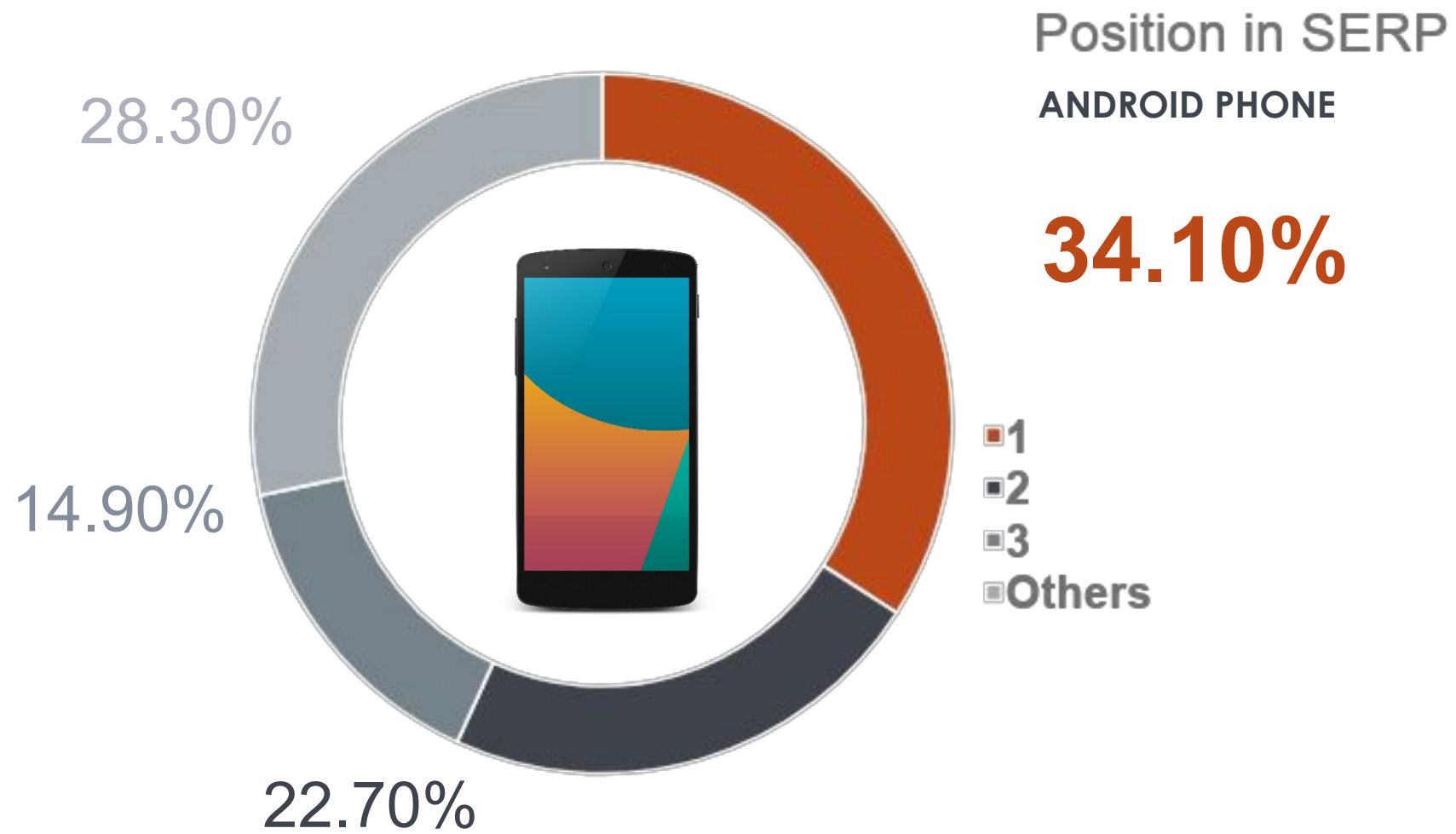


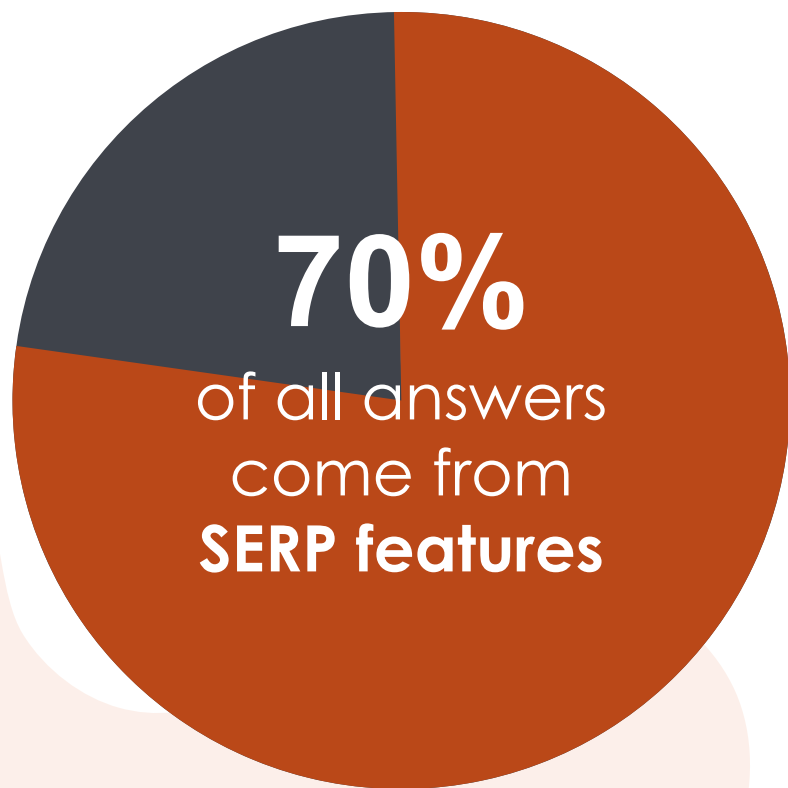


**80%**  
of the answers  
are in the **top 3**  
**organic results.**

(For Android  
Phones, **72%**).








60% 

of them appearing in  
Feat. Snippets

11.5% 

from People Also  
Asked

(60%, 40% & 20% for  
Android Phones, respectively).



GOOGLE HOME



GOOGLE HOME MINI



ANDROID PHONE



Answer in SERP feature [%]

**71.6**

**67.8**

**58.6**

Featured snippet [%]

**61.2**

**56.3**

**40.9**

People also ask [%]

**11.0**

**12.1**

**19.5**

Videos-carousel [%]

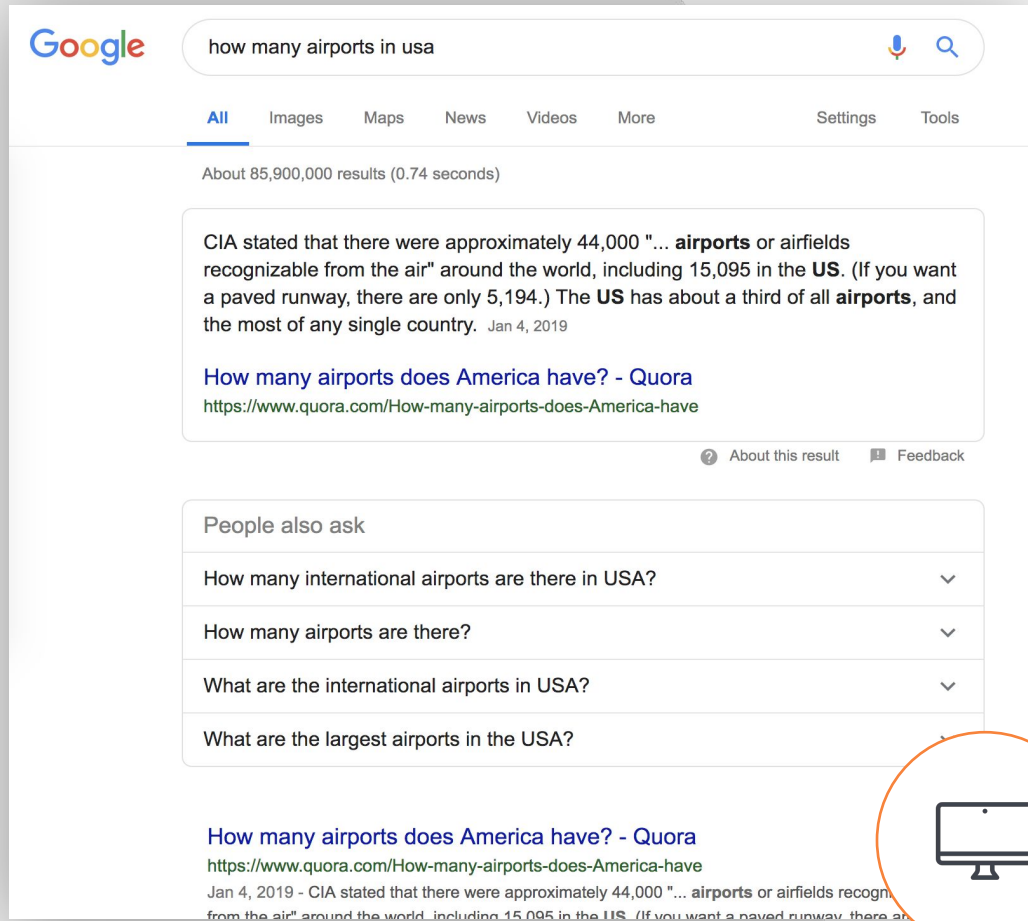
**0.3**

**0.4**

**0.1**

# Result from Featured Snippet

## Query: How many airports in USA?



DESKTOP

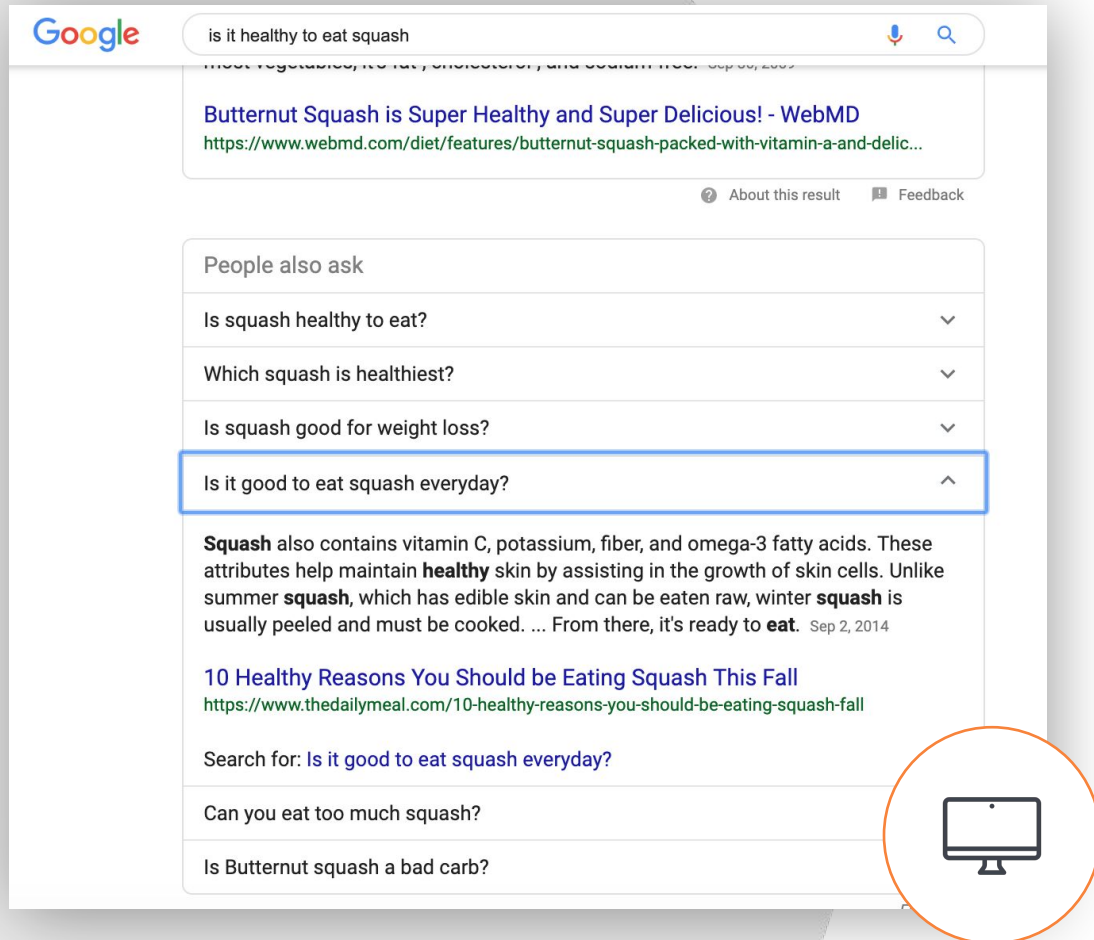
According to Quora: As of 2009, the CIA stated that there were approximately 44,000 airports or airfields recognizable from the air around the world, including 15,095 in the US.



GOOGLE ASSISTANT

# Result from People Also Ask

## Query: Is it healthy to eat squash?



DESKTOP

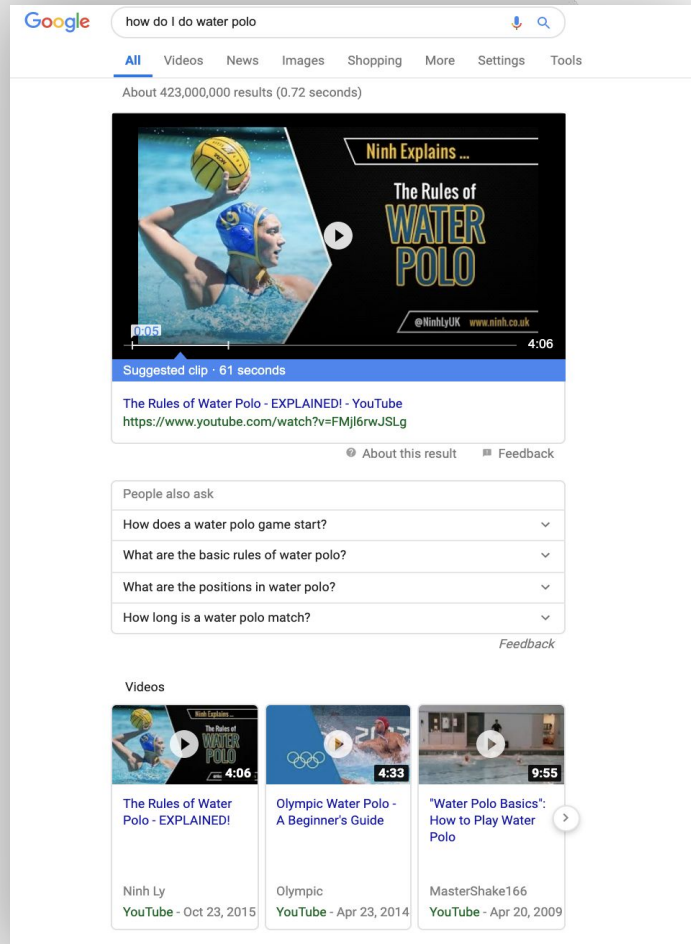
On the website  
thedailymeal.com, they say:.  
These attributes help maintain  
healthy skin by assisting in the  
growth of skin cells.. Unlike  
summer squash, which has edible  
skin and can be eaten raw, winter  
squash is usually peeled and  
must be cooked.



GOOGLE ASSISTANT

# Result from Video Carousel

## Query: How do I do water polo?




DESKTOP

According to Wikipedia:. Water polo is a competitive team sport played in the water between two teams.. The game consists of four quarters in which the two teams attempt to score goals by throwing the ball into the opposing team's goal.



GOOGLE ASSISTANT

## Examples of questions appearing as a Featured Snippet on Google Home / Home Mini, but not as a SERP feature on the Android Phone



which country is the largest producer of goji berry

which country is the largest producer of Apple

which country has the most clothes

when was Dalian founded

what was the profession of Woodrow Wilson before fame

what should I see in Portugal

what should I see in Nicaragua

what should I see in Dominican Republic



# Text Length



A black smart speaker with a mesh grille is positioned on the left. To its right, a smartphone screen displays the Google Home app's 'Welcome Home' setup screen. The screen shows '1 device found' and 'GoogleHome0896 is ready for set-up'.

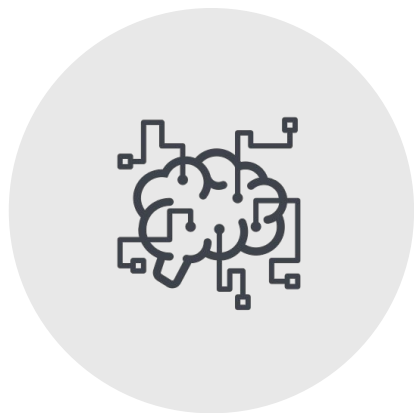
**Text length** is nearly the same for every device: around **42 words** in average

On the website dictionary.com, they say: without interest or concern; not caring; apathetic: his indifferent attitude toward the suffering of others. having no bias, prejudice, or preference; impartial; disinterested. neither good nor bad in character or quality; average; routine: an indifferent specimen.



(**Question:** give me a good example of indifferent)

**Example of answer  
containing 42 words**



**Text complexity ranks  
around 8 on the  
Flesch Kincaid Grade**





In general, the results from voice search are understandable to the **average 15-year-old.**

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Android results use lower difficulty



**Text complexity** (readability, difficult words, length of words/sentences) is **higher in Google Home devices**. Since a user might opt to read the text of the answer on the screen of an Android Phone, it seems that Google **favours lower text complexity** in this case.

GOOGLE HOME



GOOGLE HOME MINI



ANDROID PHONE



Coleman Liau index

10.3

10.3

11.0

Difficult words

9.3

9.2

8.4

Flesch reading ease

62.2

62.6

56.0



GOOGLE  
HOME MINI

42%

Percentage of answers  
containing a link



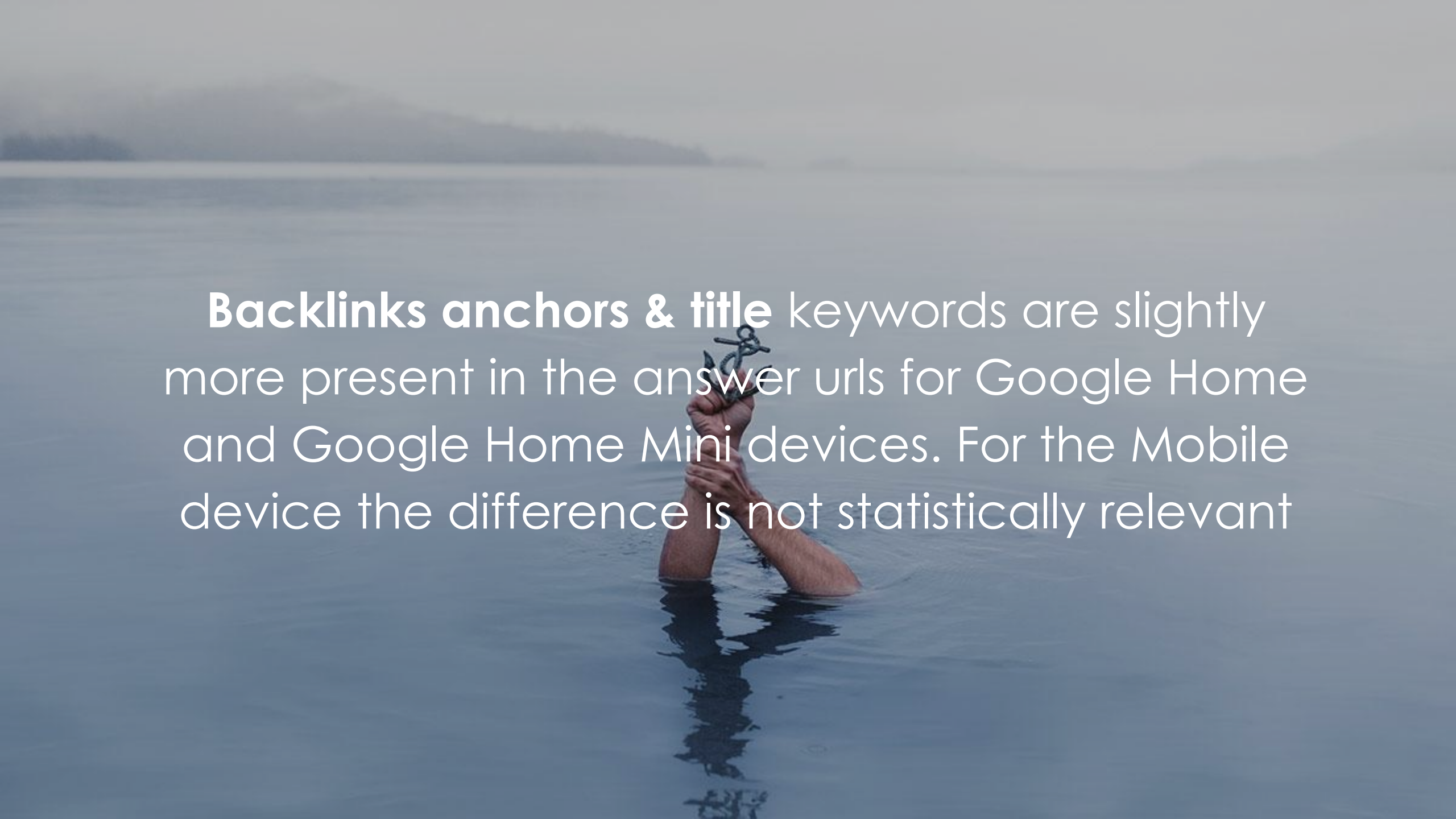
GOOGLE  
HOME

40%



ANDROID  
PHONE

18%

A person's hands are visible, holding a small, dark anchor in the water. The background shows a calm body of water under a hazy, overcast sky, with distant mountains visible on the horizon. The overall tone is serene and somewhat melancholic.

**Backlinks anchors & title** keywords are slightly more present in the answer urls for Google Home and Google Home Mini devices. For the Mobile device the difference is not statistically relevant

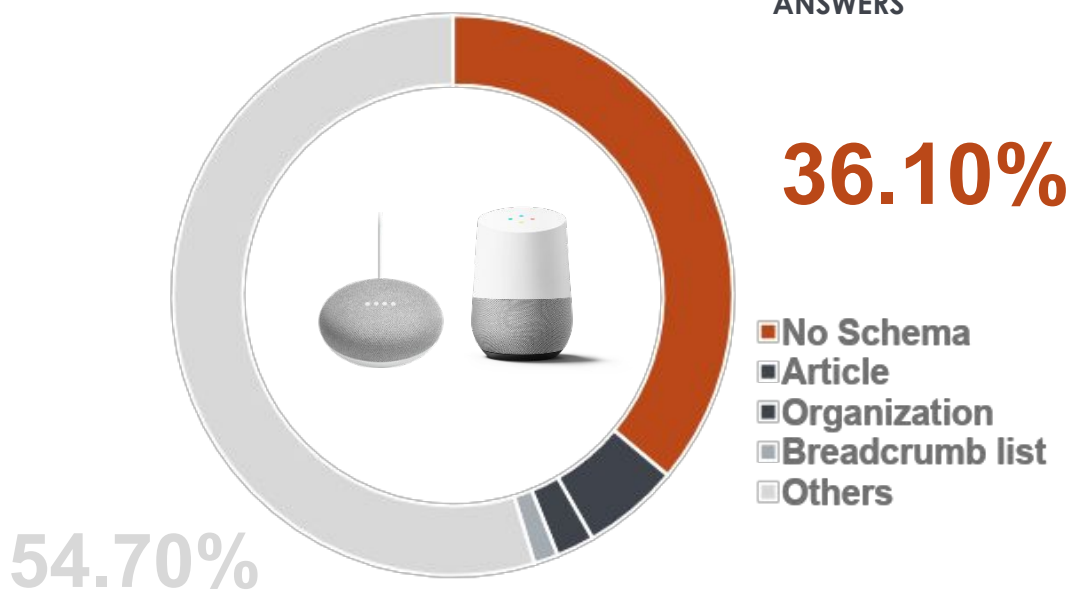


# Technical SEO Factors



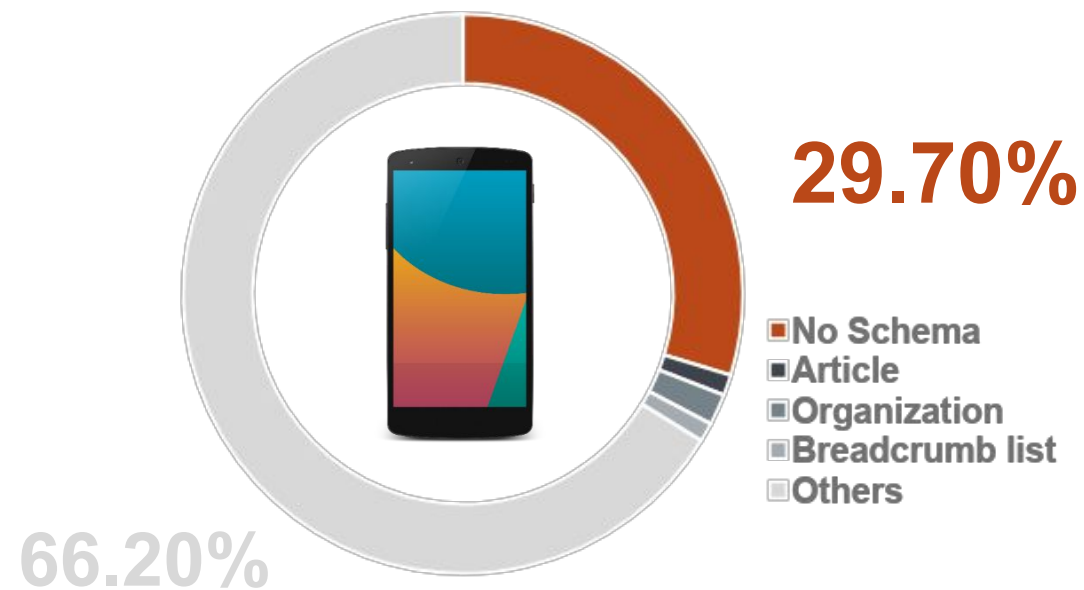
## Schema

GOOGLE HOME DEVICES -  
ANSWERS



## Schema

ANDROID PHONE - ANSWERS



GOOGLE HOME



GOOGLE HOME MINI



ANDROID PHONE



**[%]**

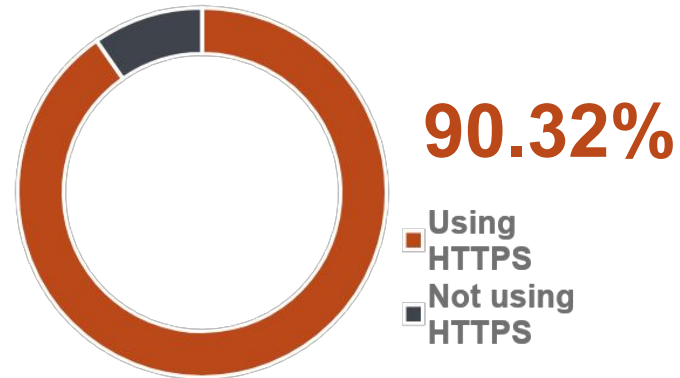
No schema

Answer	Others	Answer	Others	Answer	Others
36.1	28.8	36.1	28.1	29.7	33.1

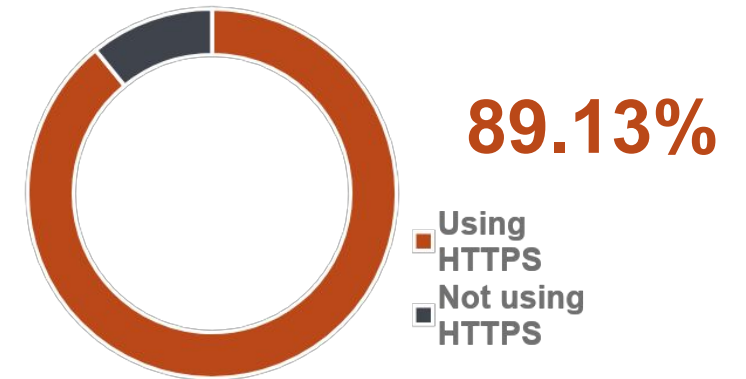
# HTTPS is **not** a factor already

Most results within the Google's top 10, and beyond, had already added that extra layer of security

HTTPS usage in top 10 organic results  
US DATA ALL INDUSTRIES



HTTPS usage in top 20 organic results  
US DATA ALL INDUSTRIES



Speed indicators seem to be important for all devices. For a majority of questions, the answer chosen by **Google** **loads faster** than the average page in the SERP.





GOOGLE HOME



GOOGLE HOME MINI



ANDROID PHONE



time-to-interactive

ttfb

Answer	Others	Answer	Others	Answer	Others
3.02	3.09	3.06	3.17	3.33	3.13
0.5500	0.6414	0.5464	0.6425	0.6401	0.6341

# Page Speed for **answers and non-answers**

GOOGLE HOME /  
MINI



GOOGLE HOME /  
MINI



ANDROID



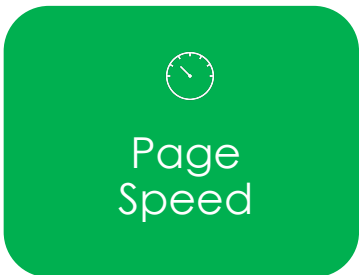
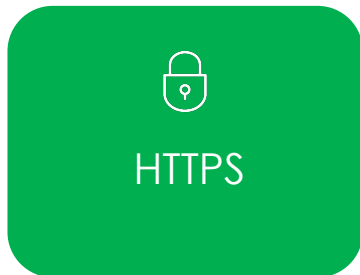
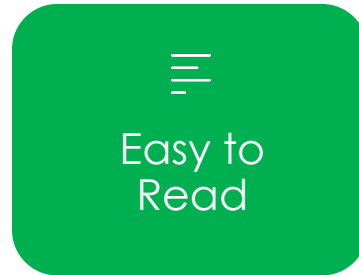
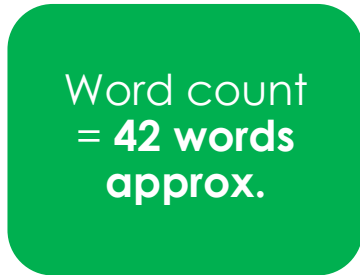
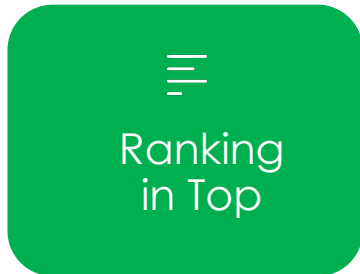
ANDROID



Query	Speed of Answer (milliseconds)	Average Speed of Non-Answer (milliseconds)	Answer is X Times Faster
Where does a bird live	207	3059.2	14.8
What are the rules of horse ball	260	3435.5	13.2
What is the typical size of a monitor	230	2267.8	9.9
Best recipes from New Zealand	701	4478.0	6.4

## Summary: 8 ranking factors analyzed

YES



NO



## SEMrush voice search poll (May 15)



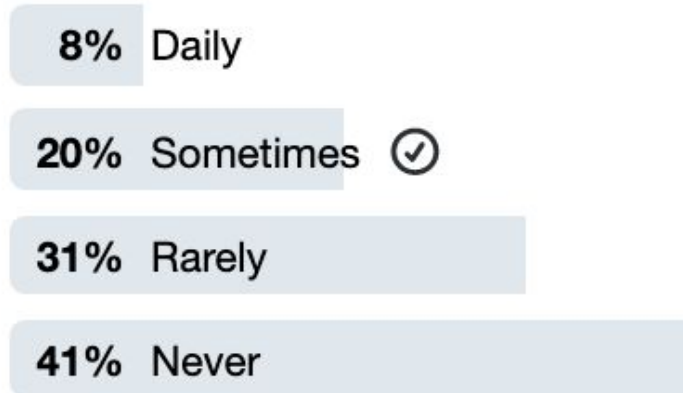
**SEMrush** 

@semrush

Following



As a user, how often do you use  
**#voicesearch?**



274 votes • 2 hours left



“The world hasn’t completely shifted to voice, **nor do we expect it to.** Screens bring a completely new canvas for conversational AI, where we can **bring together voice** and touch in an **intelligent way.**”



*Scott Huffman*

VP OF ENGINEERING  
AT GOOGLE

Source: <https://blog.google/perspectives/scott-Huffman/five-insights-voice-technology/>

“In the US, on our mobile app  
in Android, **1 in 5 queries...**



**SUNDAR PICHAI**

CEO Google  
i/o 2016 keynote



**@olgandrienko**



**What SEOs should  
focus on today**

can i drink tap water in australia

All

Images

News

Maps

Videos

More

SettingsTools

About 225,000,000 results (0.64 seconds)

For the most part, you **can drink** the **tap water** in the US, Canada, **Australia**, New Zealand, Western Europe, Japan, South Korea, Singapore, and Hong Kong. ... But the **tap water** is still safe. You don't need to buy tons of bottled **water** while you're traveling around **Australia** or Germany. Oct 26, 2014

**Can You Drink the Water? | Travel Made Simple**  
<https://travel-made-simple.com/can-you-drink-the-water>

About Featured Snippets

Feedback

People also ask

Is Sydney tap water safe to drink?

Can I drink tap water in Melbourne?

Can I drink tap water in Brisbane?

Is Perth tap water OK to drink?

Feedback

Question about drinking water - Australia Forum - TripAdvisor

[https://www.tripadvisor.com.au/.../Australia/Australia Travel Forum](https://www.tripadvisor.com.au/.../Australia/Australia%20Travel%20Forum)  
In all Australian cities and in towns of reasonable size, the tap water is fine to drink. Some people find the water supply in some places to taste quite mineralised as it may be drawn from

## FEATURED SNIPPETS

People also ask

What is considered the healthiest fruit?

What is the best fruit for weight loss?

What fruits should you eat everyday?

What is the best fruit to eat in the morning?

Feedback

## PEOPLE ALSO ASK



# Breaking Down **Featured Snippet Questions**

## QUESTIONS



	Table %	List %	Paragraph %
WHAT	3.52%	11.09%	85.39%
WHO	12.00%	9.00%	79.70%
WHEN	5.00%	6.00%	89.18%
WHERE	3.00%	15.00%	82.42%
WHY	0.00%	0.00%	99.45%
ARE	0.00%	0.00%	100.00%
WAS	0.00%	0.00%	100.00%
WHICH	12.00%	30.00%	57.36%
WILL	0.00%	0.00%	100.00%
HOW	2.00%	42.00%	55.47%
HAVE	25.00%	0.00%	75.00%
DOES	0.00%	0.00%	100.00%
DO	0.00%	1.00%	99.22%
CAN	0.00%	1.00%	99.28%
IS	0.00%	0.00%	99.22%
SHOULD	0.00%	2.00%	98.28%
	3.93%	7.07%	88.97%

**89%**

of questions should be optimized for paragraph featured snippets.

Voice search is about  
**PARAGRAPHS**

# Breaking Down **Featured Snippet Questions**



PARAGRAPH	Words	Characters
Average	44	297
Maximum	108	691



LIST	Items	Words per Item
Average	5	6
Maximum	8	52



TABLE	Rows	Columns
Average	3.7	2.6
Maximum	5	7

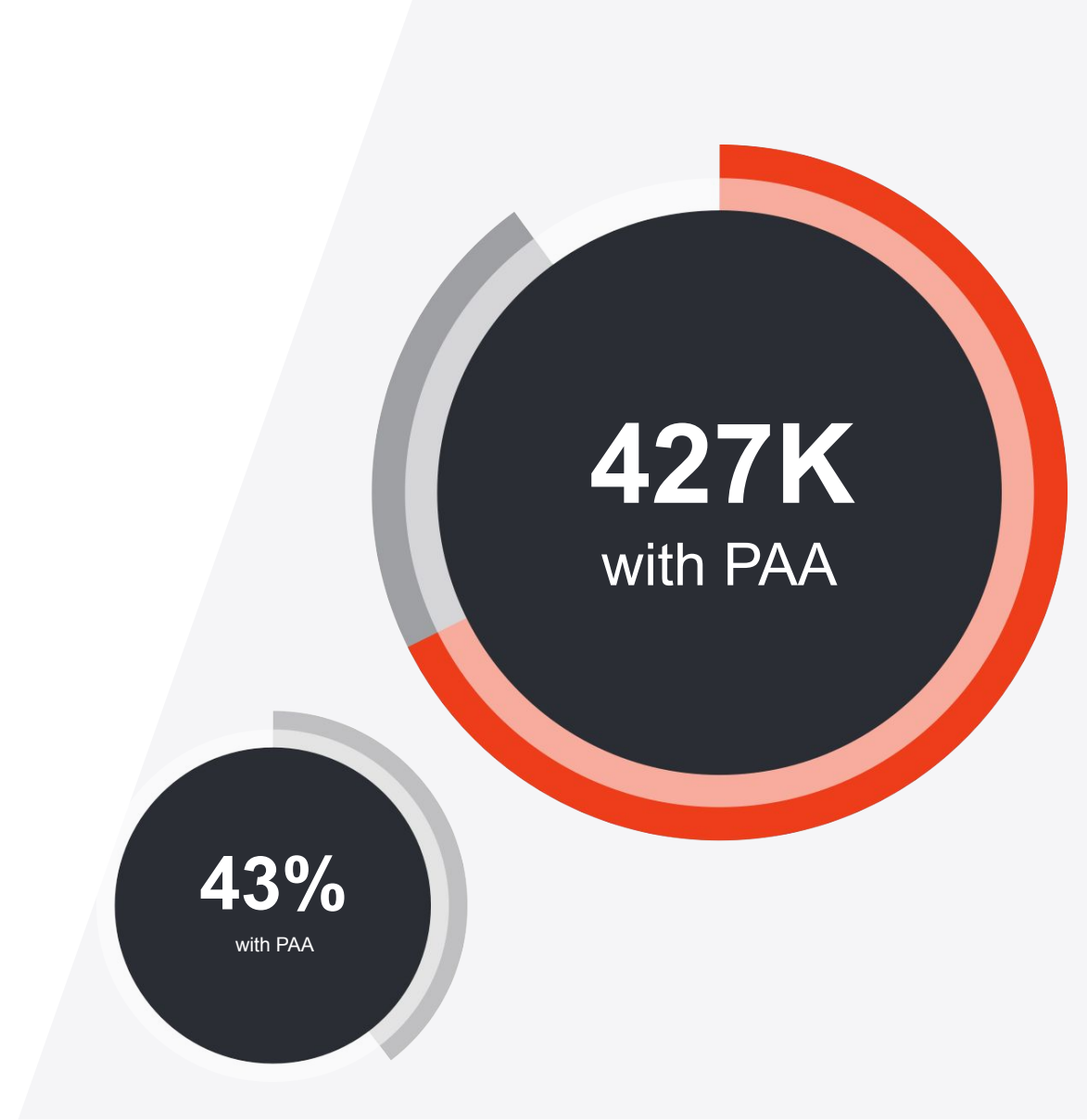


IMAGES	Height	Width
Average	159	231
Maximum	600	800

To optimize for paragraph featured snippets, **craft succinct paragraphs in the 40 to 60-word range, or roughly 350 characters**

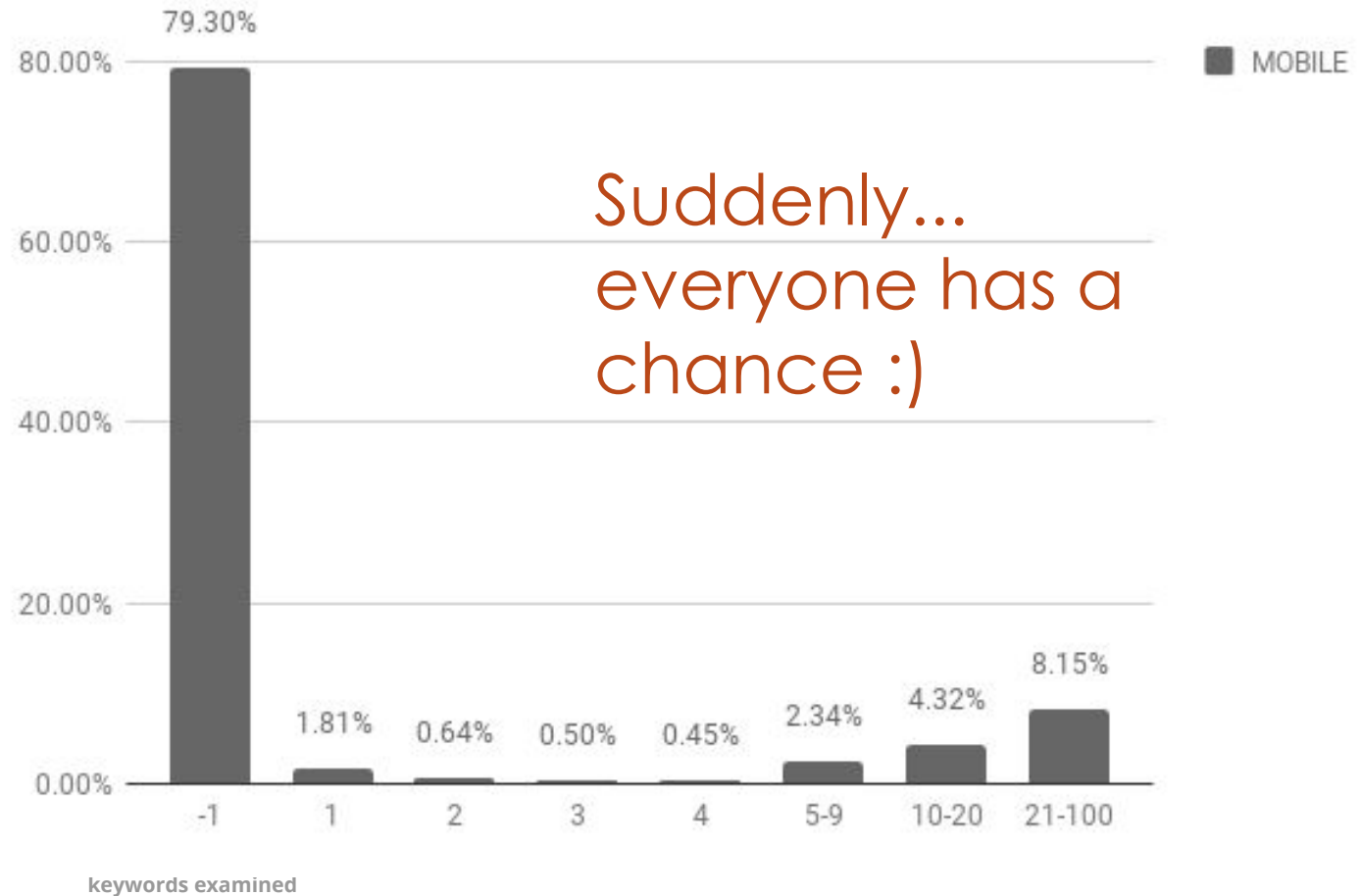
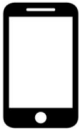
## Percentage of **PAA**s

- **1M** KW analysed
- **427,000** with PAA -> **43%**

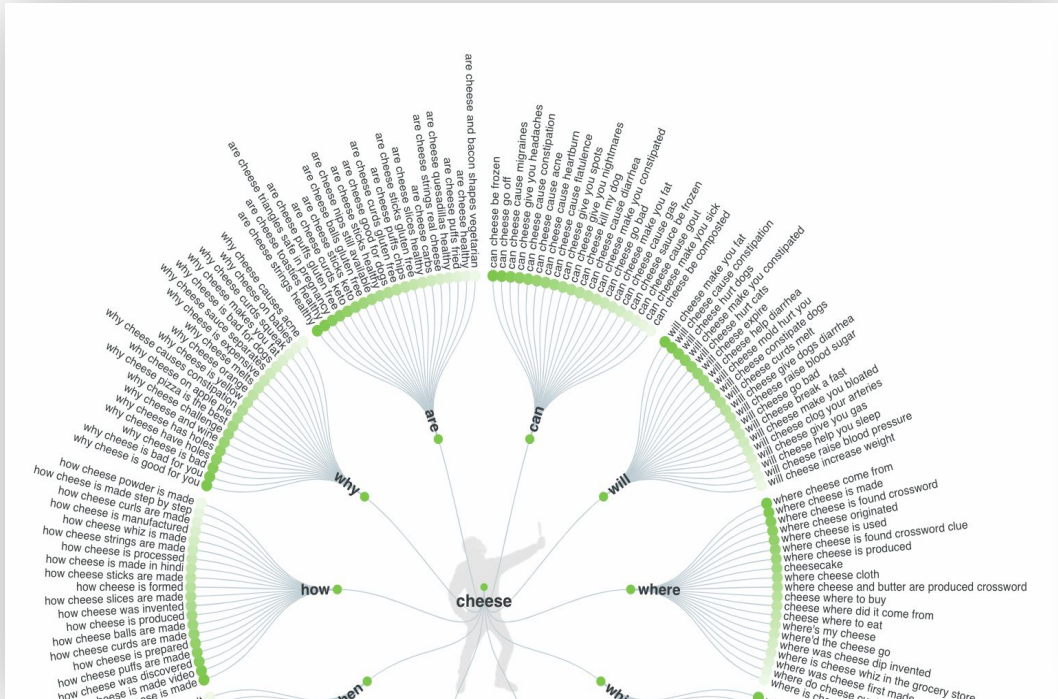


# Positions of the sites presented in the PAA box

- ~ **80%** of PAA don't rank in organic results by the keywords examined
- ~ **2.3%** of PAA come from position 5-9
- ~ **4.3%** of PAAs are generated from positions 10-20
- ~ **8.2%** sites with outside the TOP 20 position appear in PA



# Tools that help with Featured Snippets and PAAs



ANSWER THE PUBLIC

Goat Cheese	Subtopic Volume 22200	Difficulty 77.84%	Topic Efficiency High
<b>Headlines (10)</b>			
Fresh Goat Cheese			
Goat cheese			
Goat Cheese: Nutrition, Benefits and Recipe Ideas			
39 Ways to Use Goat Cheese			
Goat Cheese Varieties			
List of goat milk cheeses			
Chevre			
4 Common Mistakes People Make About Goat Cheese			
Snackable Goat Cheese Medallions			
Is Feta Goat Cheese? Learn The Difference			
<b>Questions (67)</b>			
All What Why Is How Can Do What's			
Is feta cheese a type of goat cheese?			
How different is feta cheese from goat cheese?			
Can you eat goat cheese by itself?			
Why does goat cheese is so famous than other cheese?			
Why does goat cheese taste so bad?			
What is goats cheese?			
Why is goat's cheese white?			
What is the difference between goat cheese and goat curd?			
Why is goat cheese considered vegetarian?			
Is goats cheese supposed to smell like 'goat'?			
Why does goat cheese taste different from cow's milk cheeses?			

TOPIC RESEARCH BY SEMRUSH



# Interested in learning more?



*Find the full study here:*  
[bit.ly/voice-search-semrush](https://bit.ly/voice-search-semrush)



**@olgandrienko**