Google

The Future of Search

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An early breakthrough: “Synonyms”

Doctor tells you:

- The exam revealed a problem of "cerebral spinal fluid liquid", or "cs fluid liquid".

- It is serious, but we can repair it.

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An early breakthrough: “Synonyms”

Query: "repairing cs fluid liquid"

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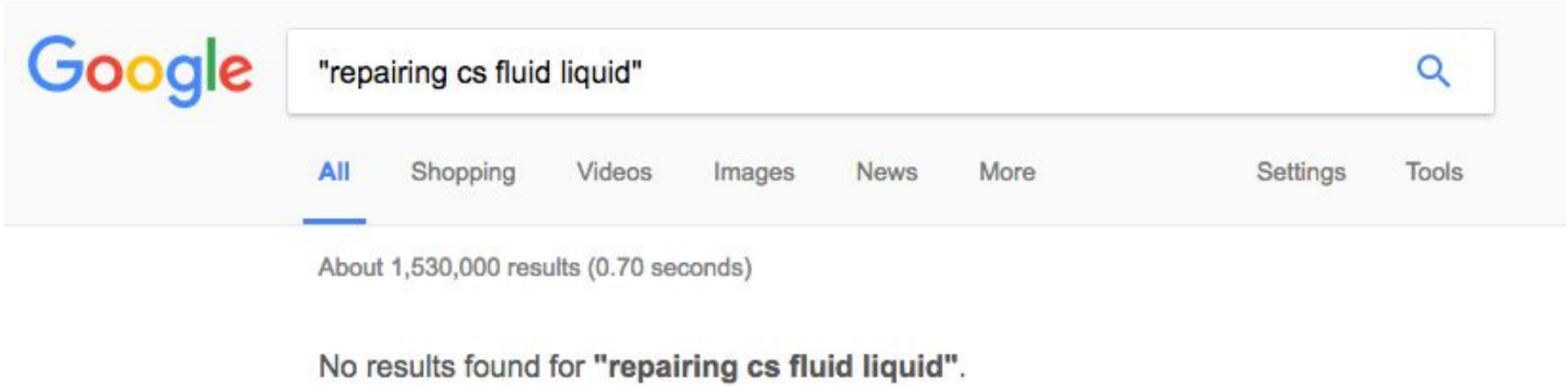
An early breakthrough: “Synonyms”

Query: "repairing cs fluid liquid"



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An early breakthrough: “Synonyms”

Query: repairing fluid liquid

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An early breakthrough: “Synonyms”

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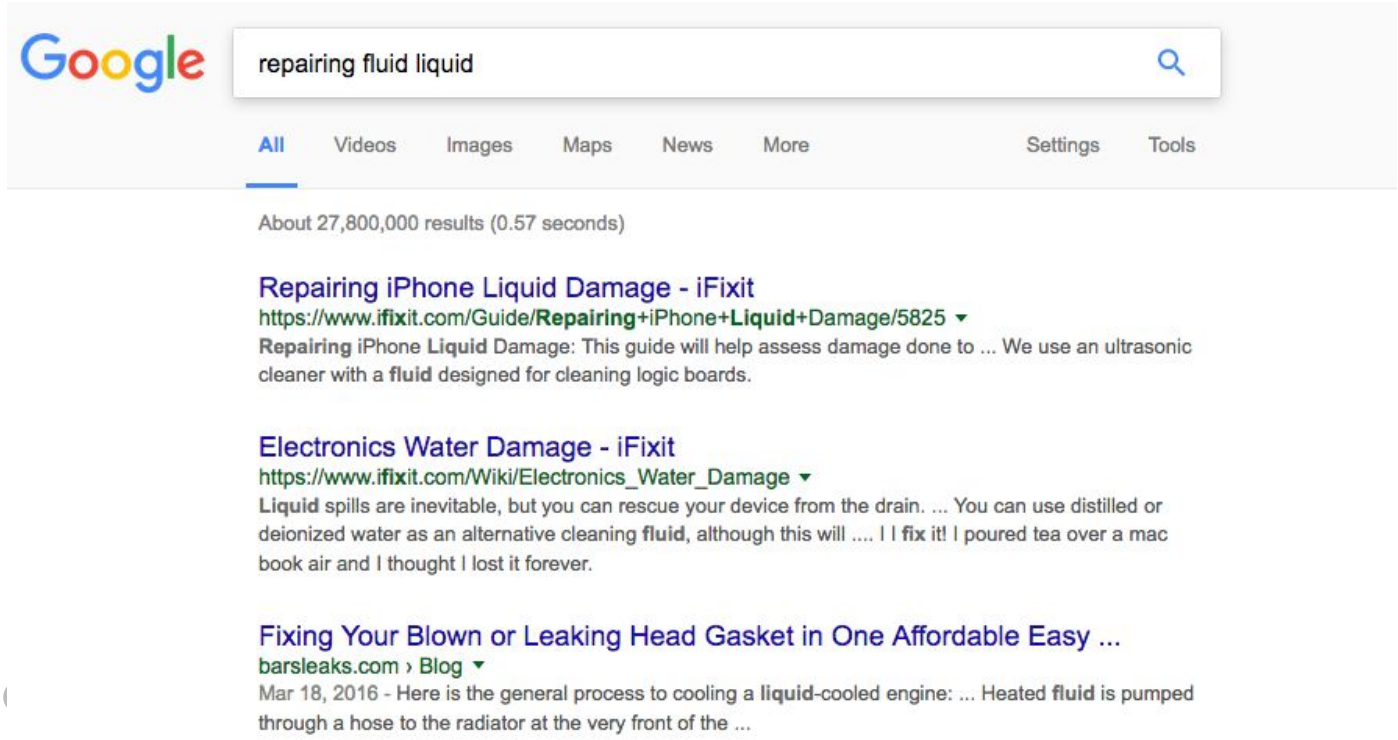

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An early breakthrough: “Synonyms”

Query: repairing cs fluid liquid

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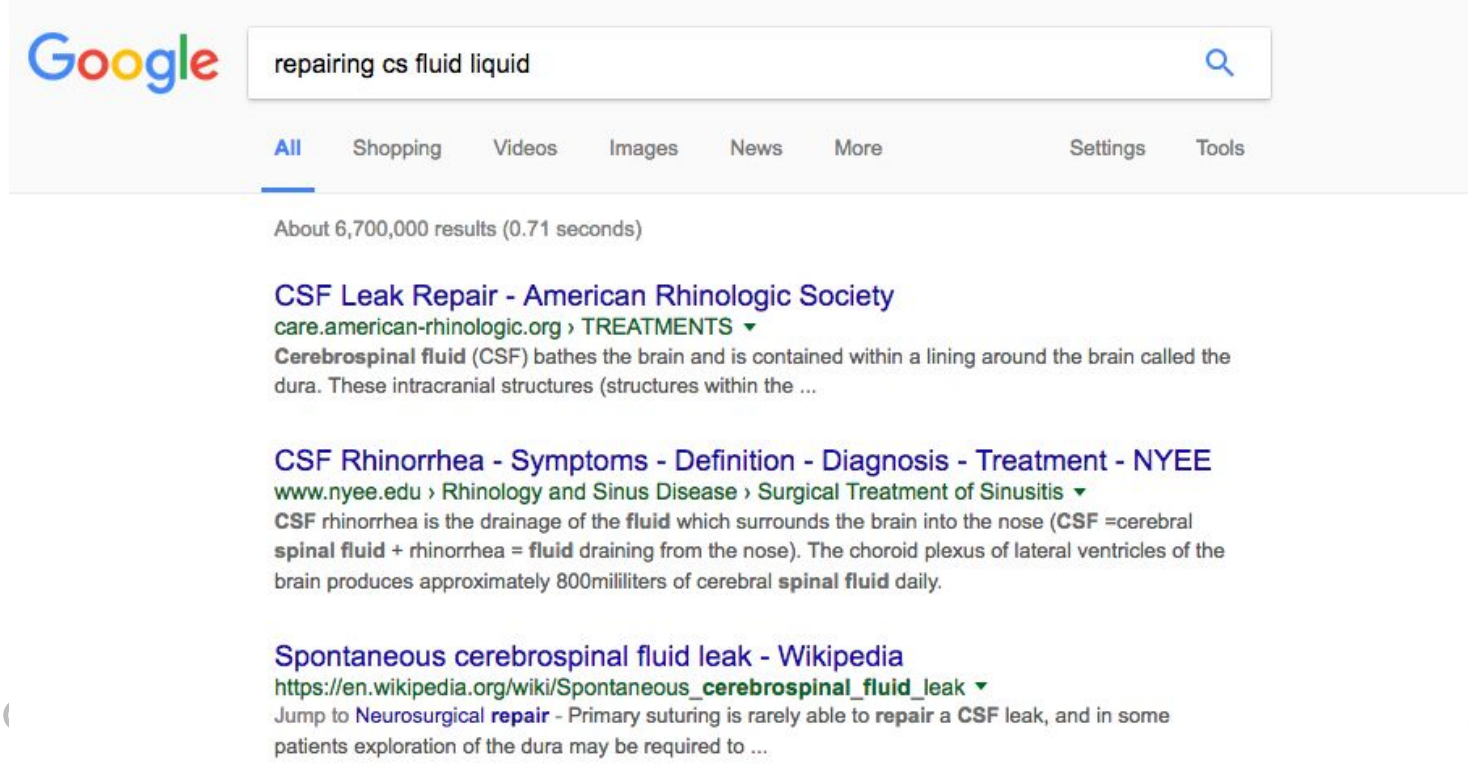
An early breakthrough: “Synonyms”

Query: repairing cs fluid liquid



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An early breakthrough: “Synonyms”

But, how did we get there?

Where is the magic?

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An early breakthrough: “Synonyms”

Query: repairing cs fluid liquid

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An early breakthrough: “Synonyms”

Query: repairing cs fluid liquid

System Query: repairing cerebrospinal fluid liquid

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An early breakthrough: “Synonyms”

Word		Synonym
cs	=	*computer science*
cs	=	*credit suisse*
cs	=	*citizens state*
cs	=	*counter strike*
cs	=	*central station*
cs	=	*cerebrospinal*
cs	=	*culinary specialist*

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An early breakthrough: “Synonyms”

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cs	=	*counter strike*
cs	=	*central station*
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cs	=	*culinary specialist*

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An early breakthrough: “Synonyms”

Context	Algorithmic deduction of “cs”
phd cs admission in california	*cs = computer science*
daily prices for cs equity funds	*cs = credit suisse*
cs bank hayfield	*cs = citizens state*
2007 cs world cup	*cs = counter strike*
bus amsterdam cs to airport	*cs = central station*
repairing cs fluid leak	*cs = cerebrospinal*
2010 navy cs study guide	*cs = culinary specialist*

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An early breakthrough: “Synonyms”

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repairing cs fluid leak	*cs = cerebrospinal*
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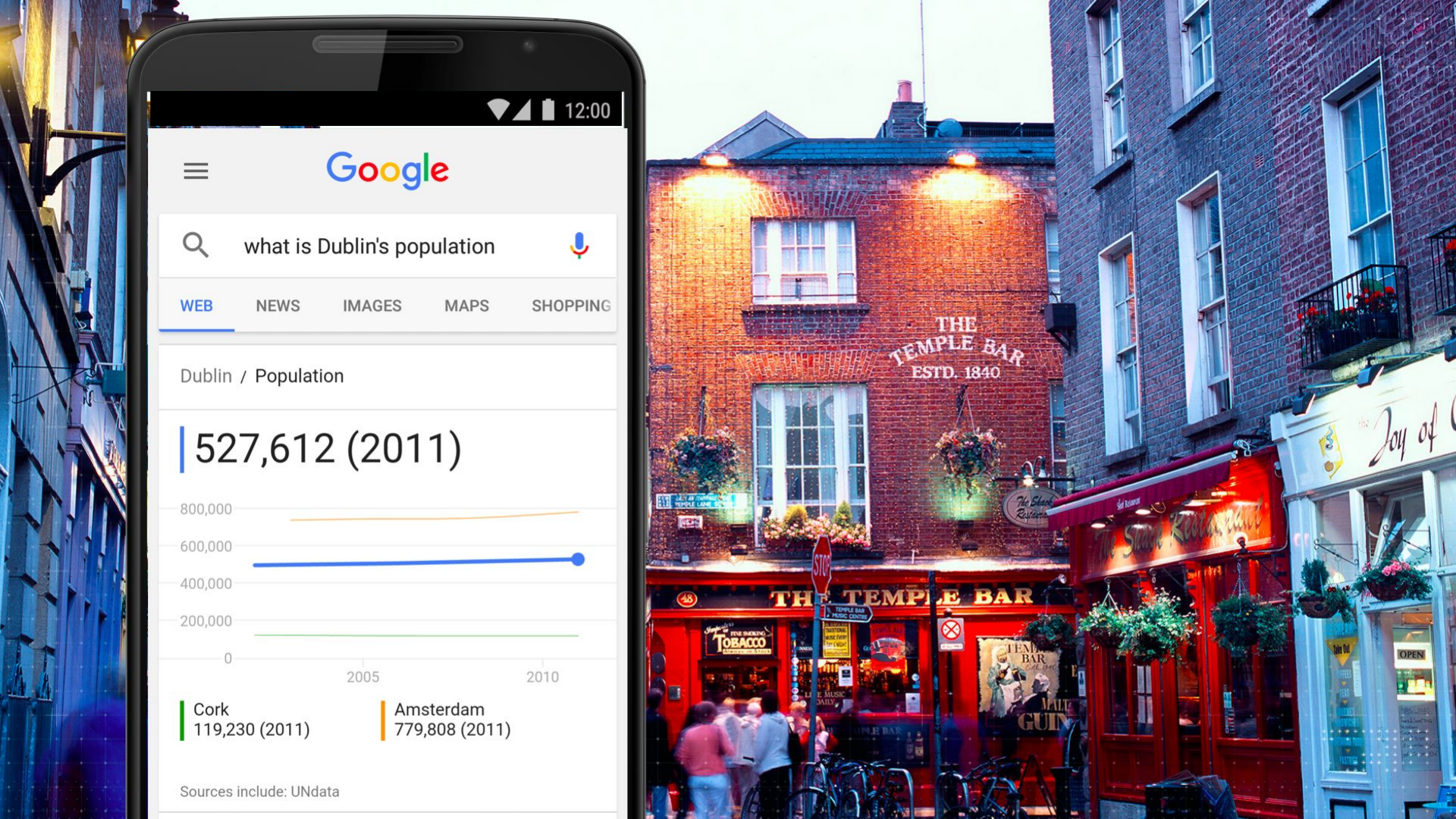
A not so early breakthrough: “The Knowledge Graph”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Google
what is Dublin's population
WEB
NEWS
IMAGES
MAPS
SHOPPING
Dublin / Population
527,612 (2011)
800,000
600,000
400,000
200,000
0
2005
2010
Cork
119,230 (2011)
Amsterdam
779,808 (2011)
Sources include: UNdata
THE TEMPLE BAR
ESTD. 1840
TEMPLE BAR
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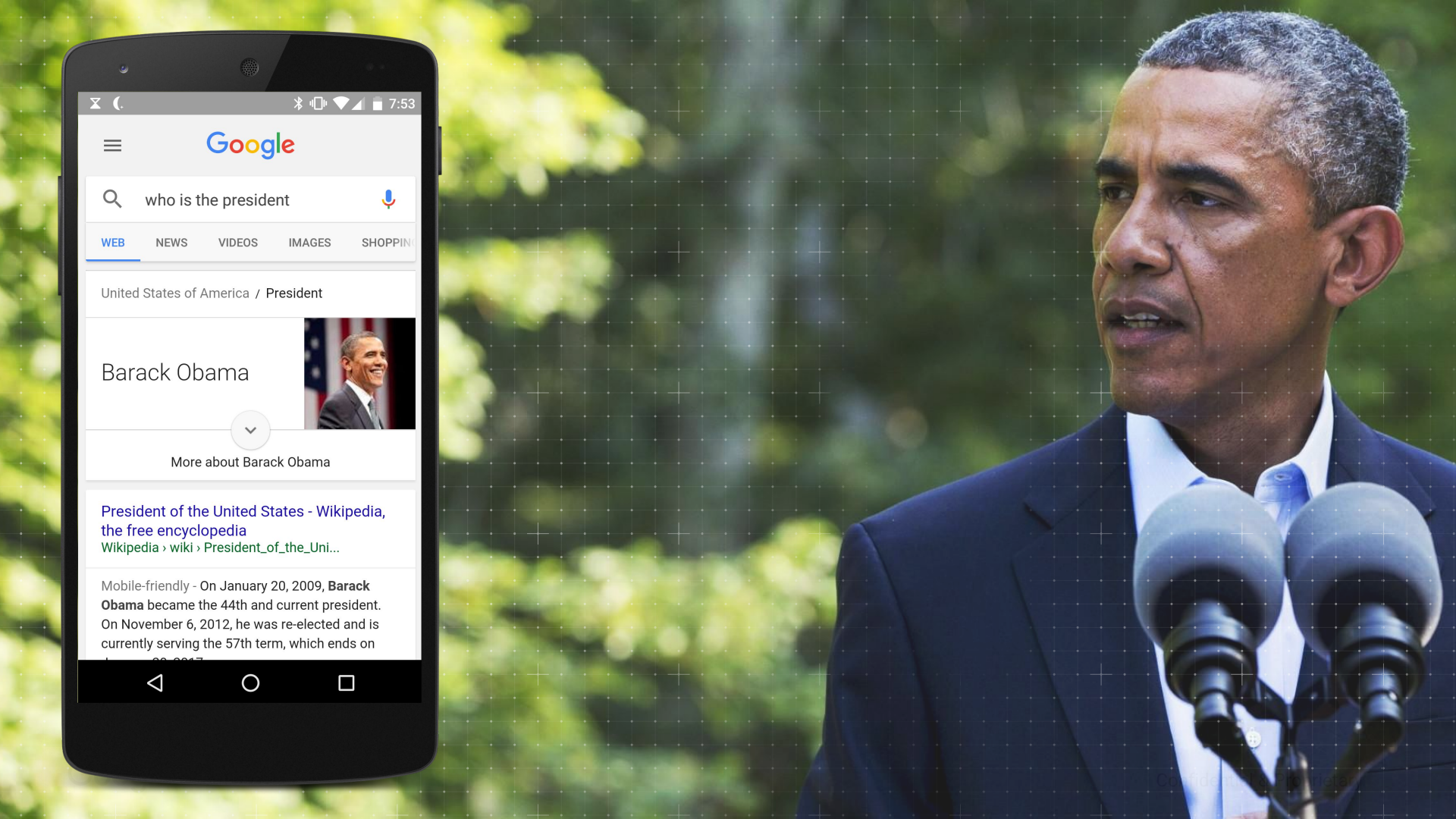
OPEN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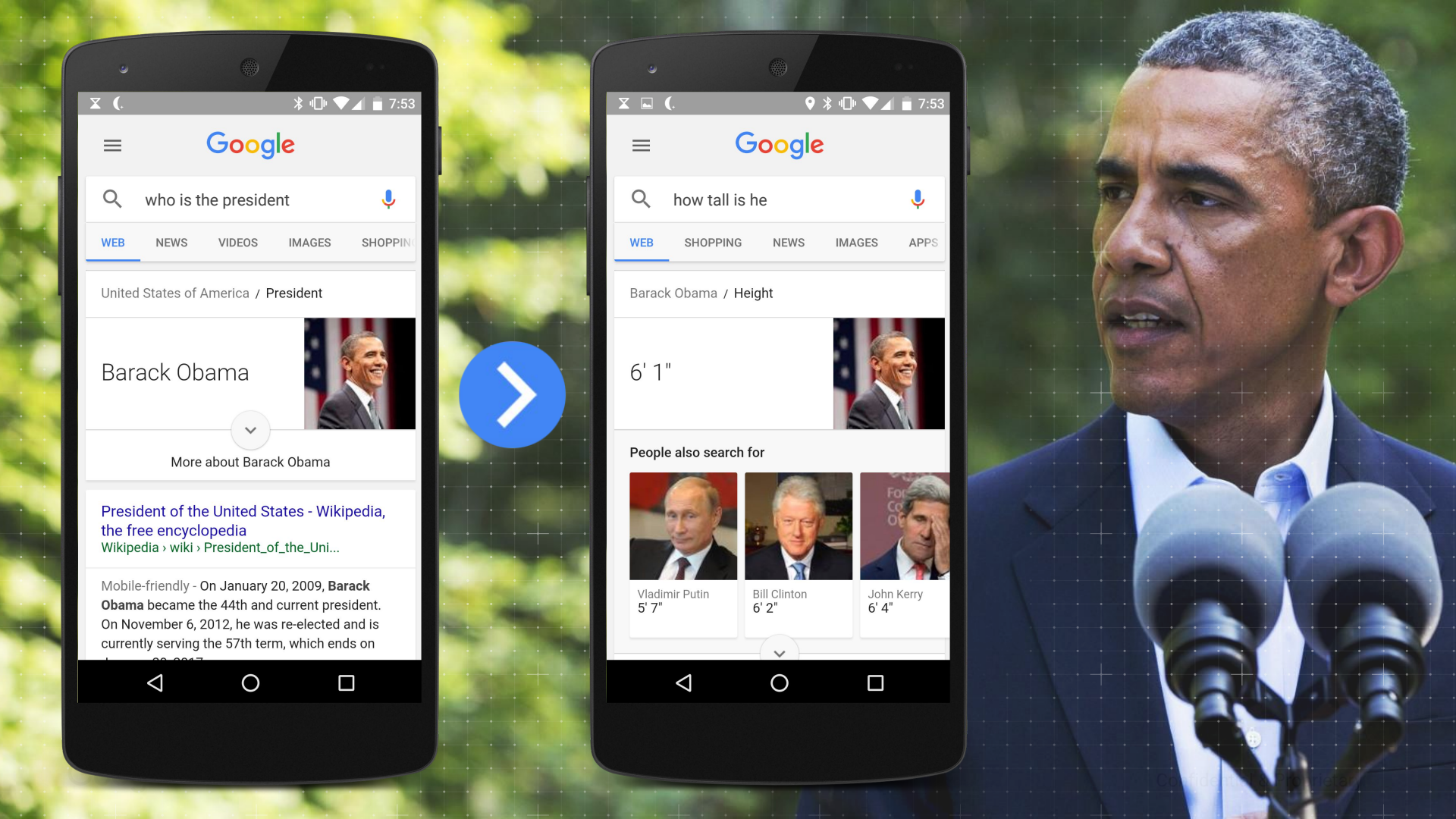
Google
who is the president
WEB
NEWS
VIDEOS
IMAGES
SHOPPIN
United States of America / President
Barack Obama
More about Barack Obama
President of the United States - Wikipedia, the free encyclopedia
Wikipedia › wiki › President_of_the_Uni...
Mobile-friendly - On January 20, 2009, Barack Obama became the 44th and current president. On November 6, 2012, he was re-elected and is currently serving the 57th term, which ends on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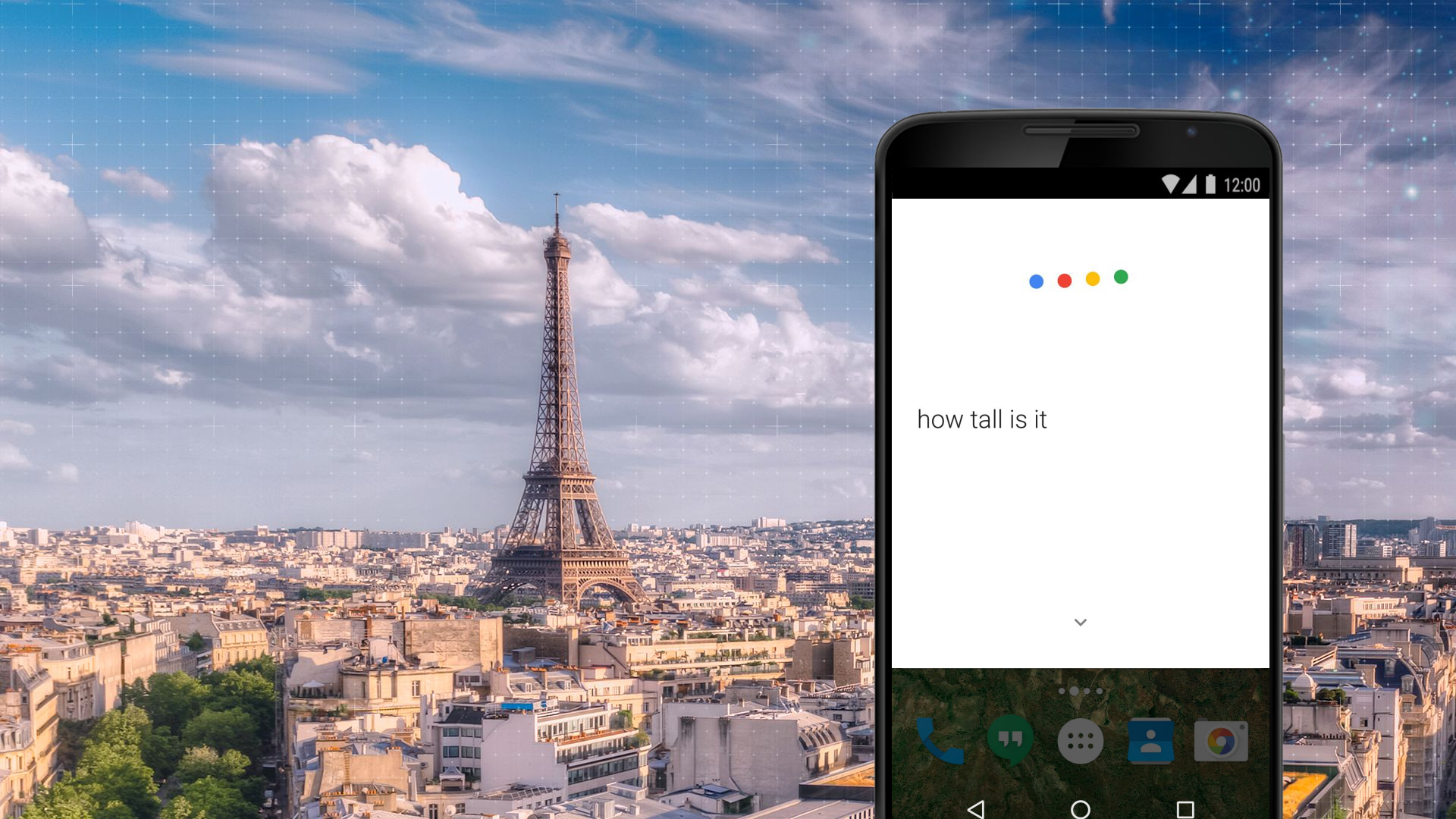
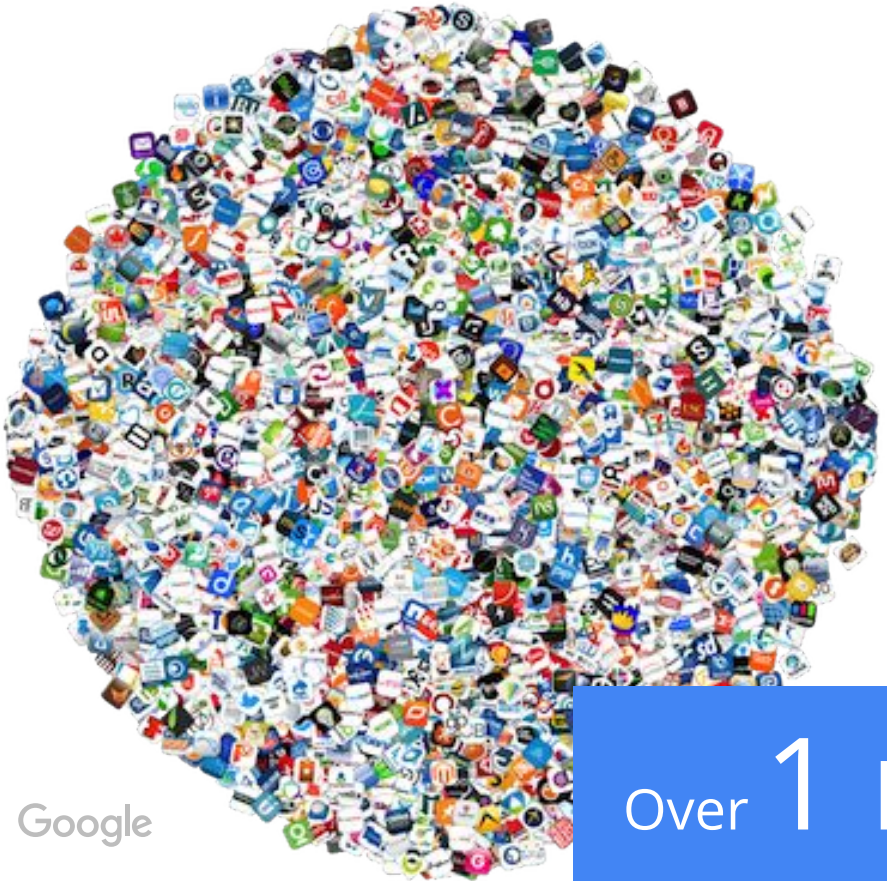
Barack Obama
More about Barack Obama
President of the United States - Wikipedia, the free encyclopedia
Wikipedia › wiki › President_of_the_Uni...
Mobile-friendly - On January 20, 2009, Barack Obama became the 44th and current president. On November 6, 2012, he was re-elected and is currently serving the 57th term, which ends on
7:53
Google
how tall is he
WEB
SHOPPING
NEWS
IMAGES
APPS
Barack Obama / Height
6' 1"
People also search for
Vladimir Putin
5' 7"
Bill Clinton
6' 2"
John Kerry
6' 4"


12:00
how tall is it

A more recent breakthrough: "Apps in Search"



Over 1 million apps in Google Play

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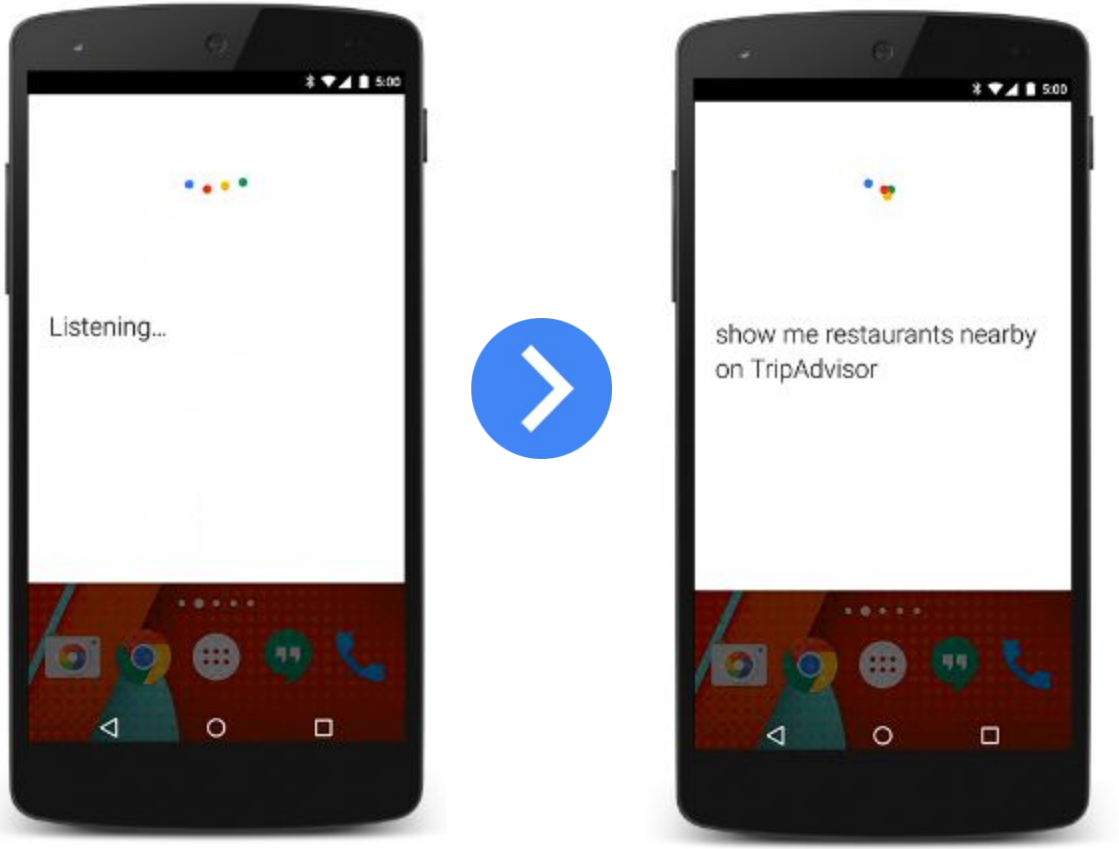

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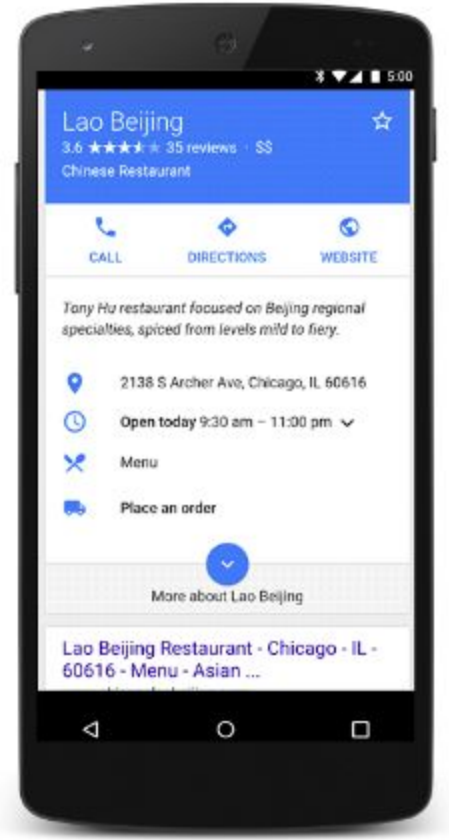

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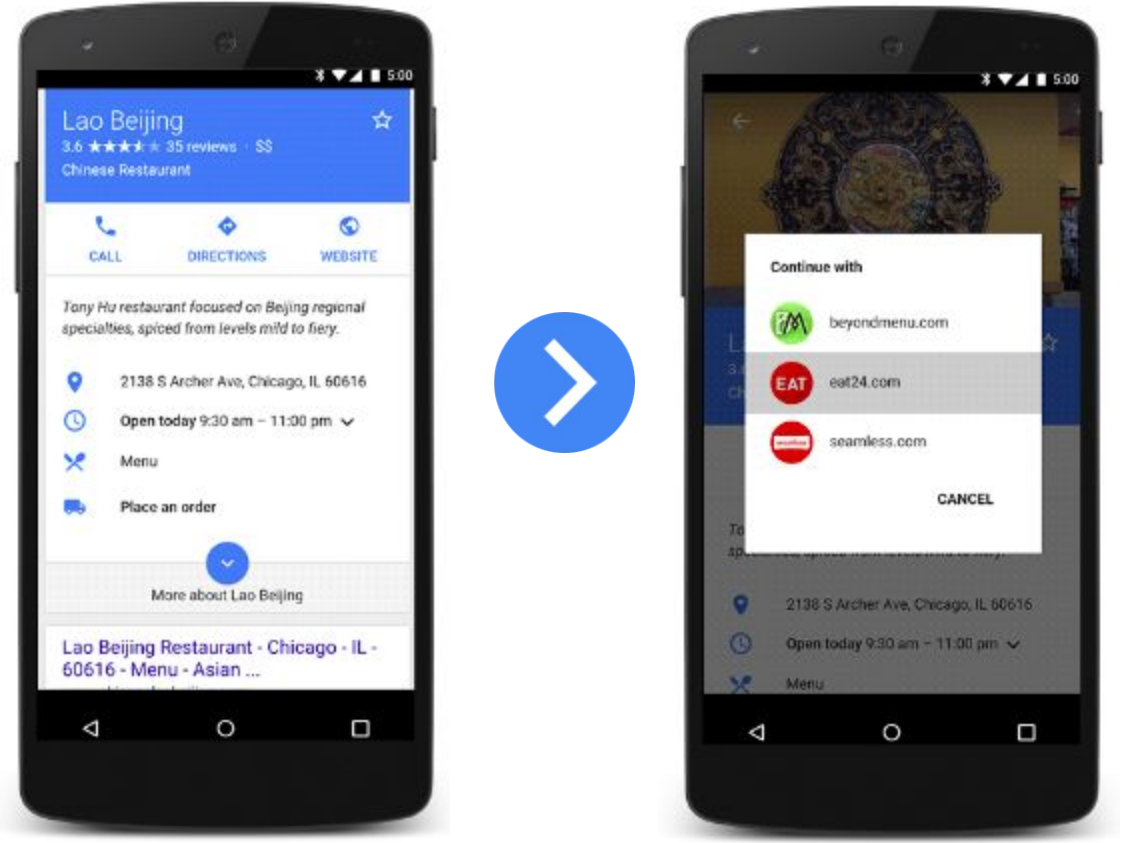

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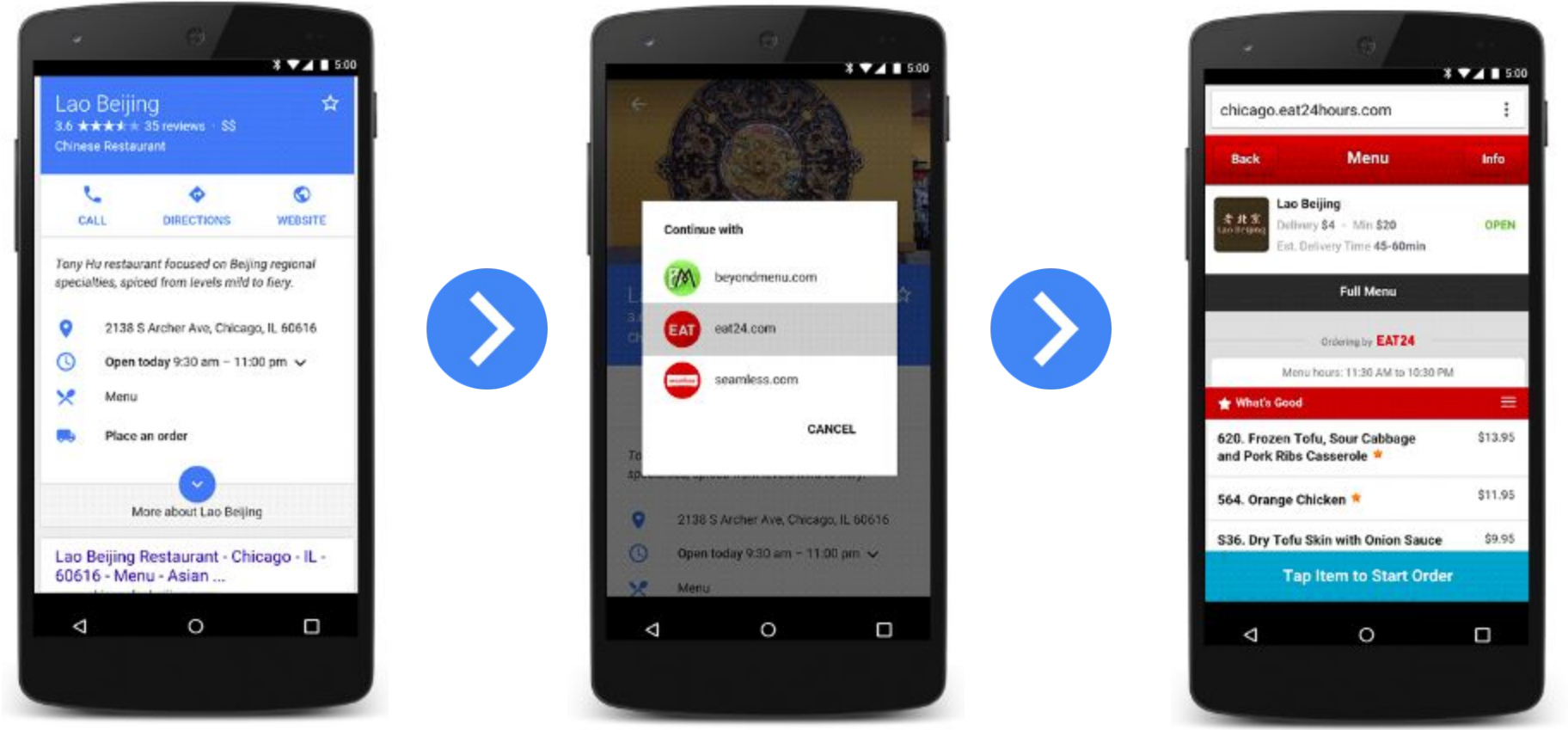

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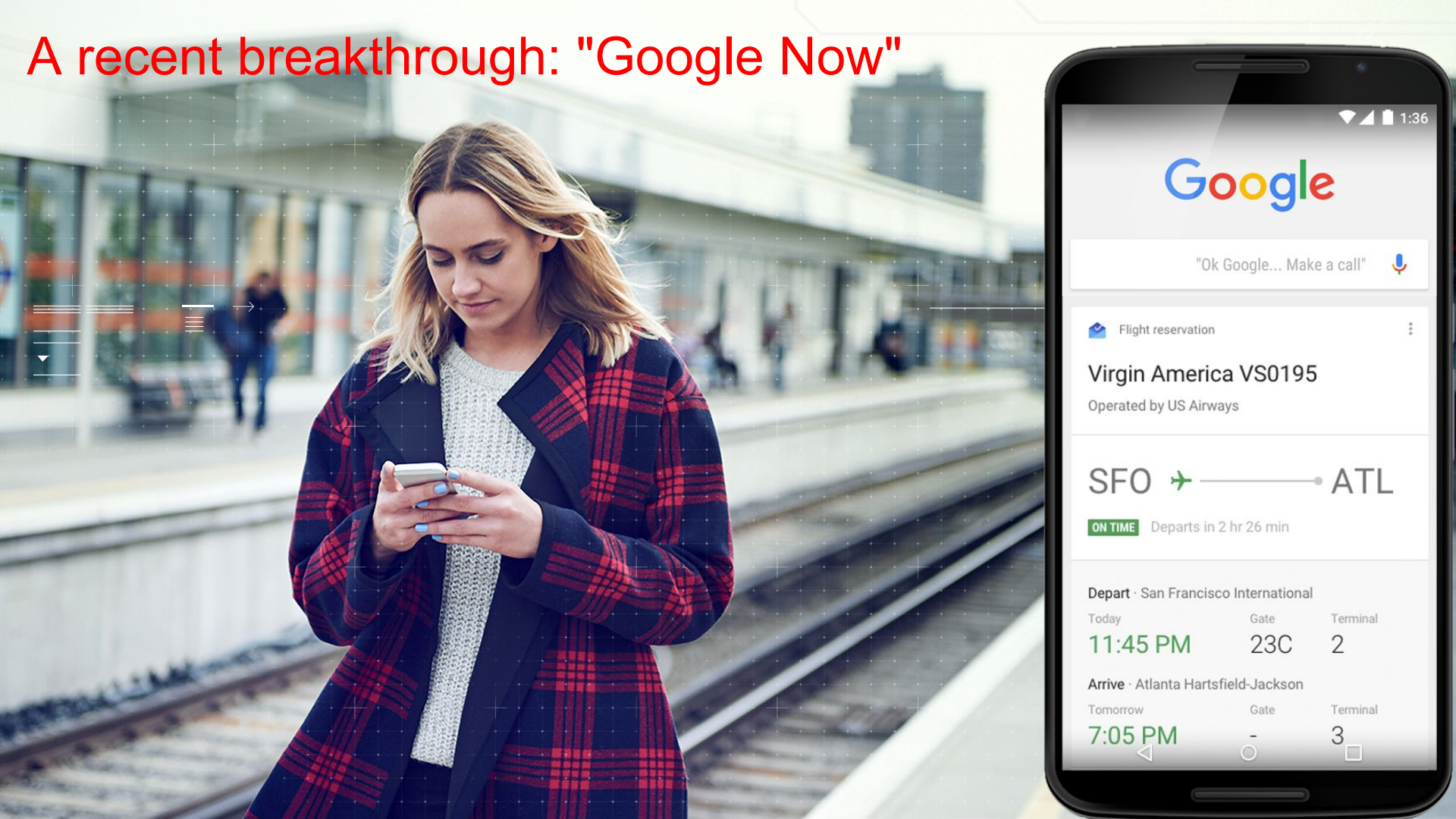
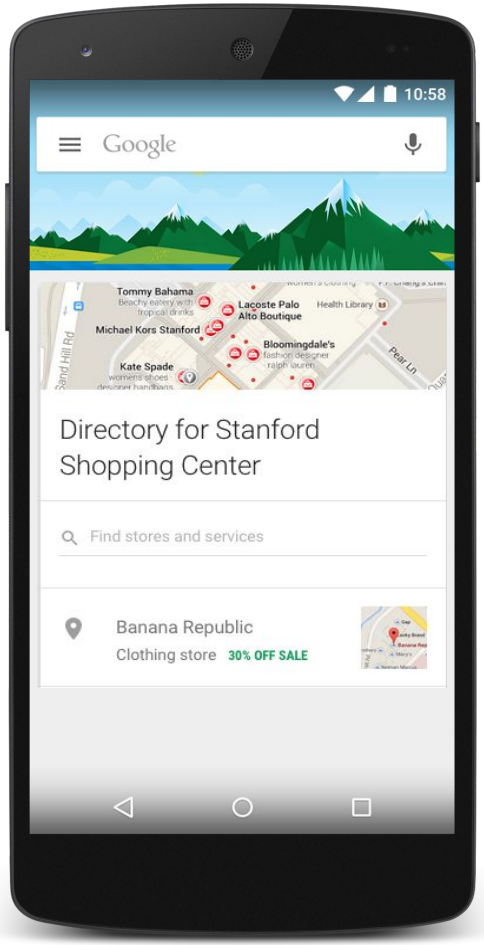
A recent breakthrough: "Google Now"





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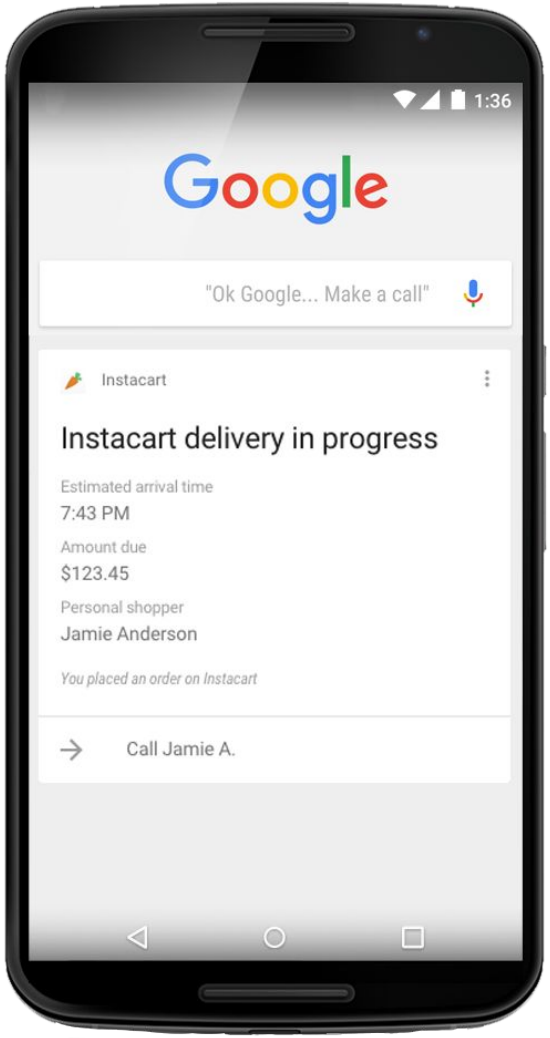

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But, what is there in the *future*?

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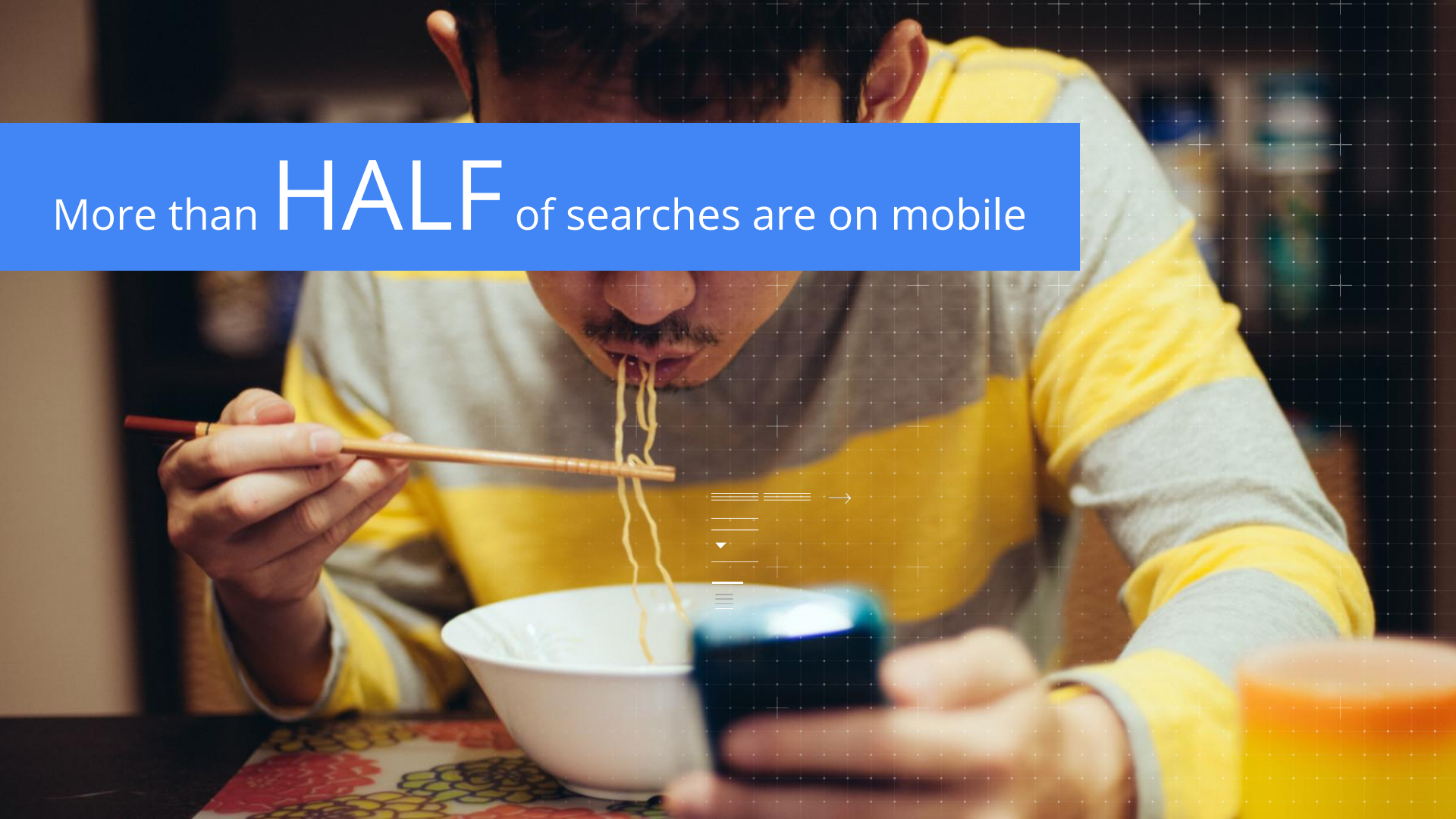
“The perfect search engine should understand exactly what you mean and give you back exactly what you need.”

- Larry Page

Over 100 billion searches per month
... and 15% of daily queries we've never seen before!


More than HALF of searches are on mobile

5 billion mobile users by 2020

Search should be an "Assistant"

An "assistant" is an engine that allows the users to quickly:

- identify key topics of interest
- identify related topics of interest for exploration
- summarize the contents of Web pages in the result
- recommend or suggest actions in the physical world
- detect challenges, risks, even dangers associated with the actions recommended

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Search should be an "Assistant"

An "assistant" should fundamentally facilitate learning by the users.

For this, it must "understand" natural language and its meaning.

Understand natural language ?!

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An "assistant" that understands language ...
is it even possible?

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The latest breakthrough?

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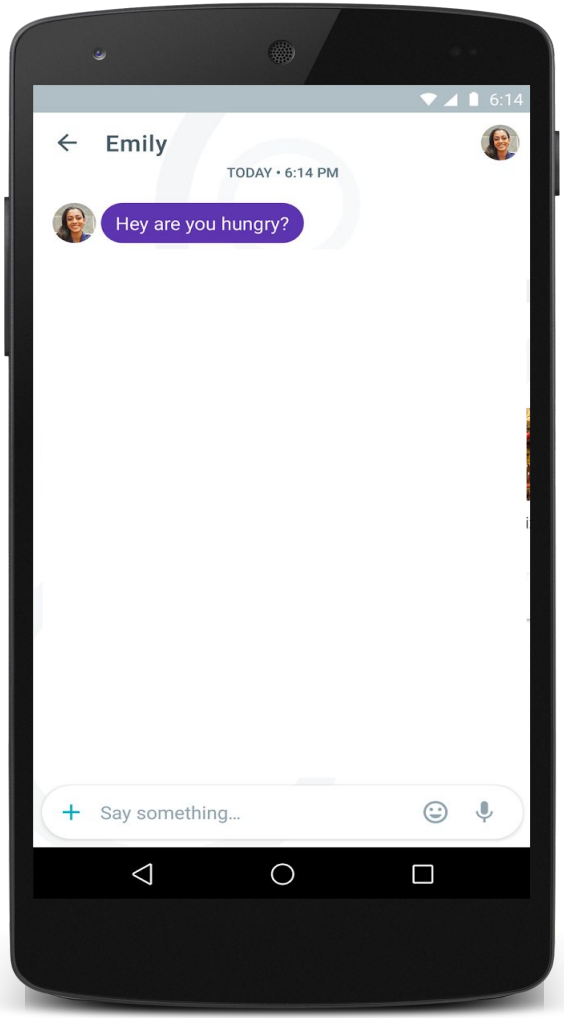

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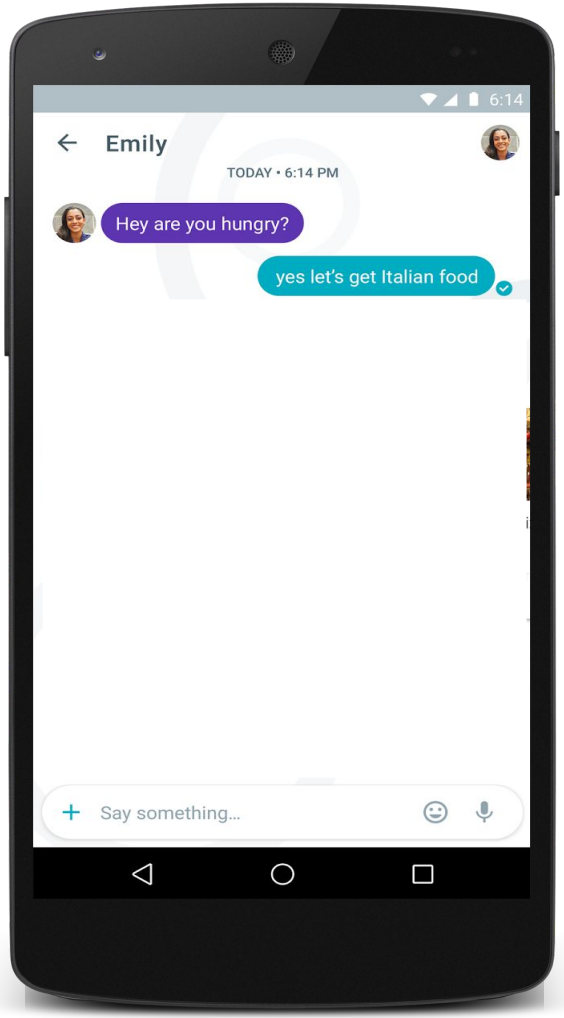

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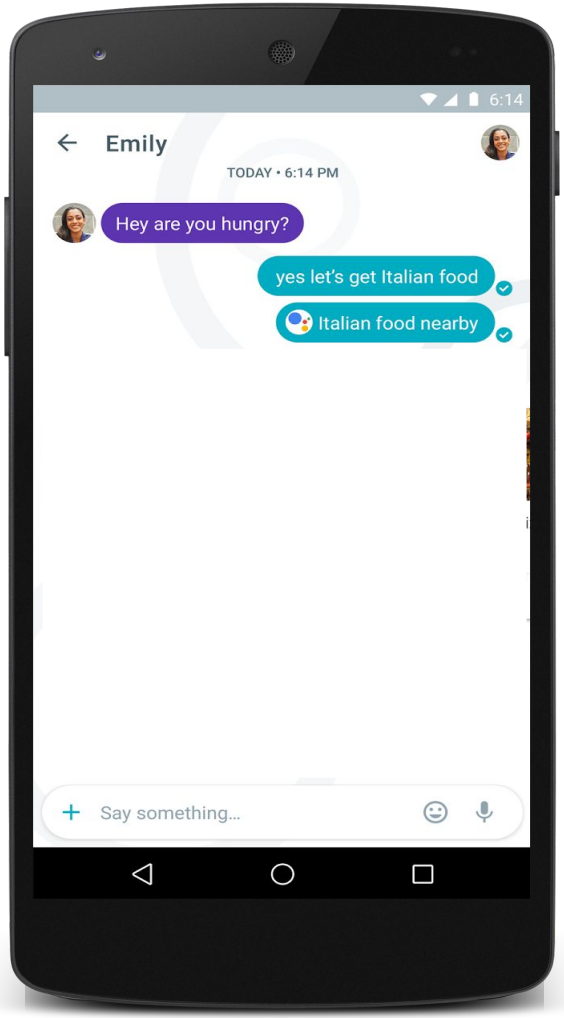

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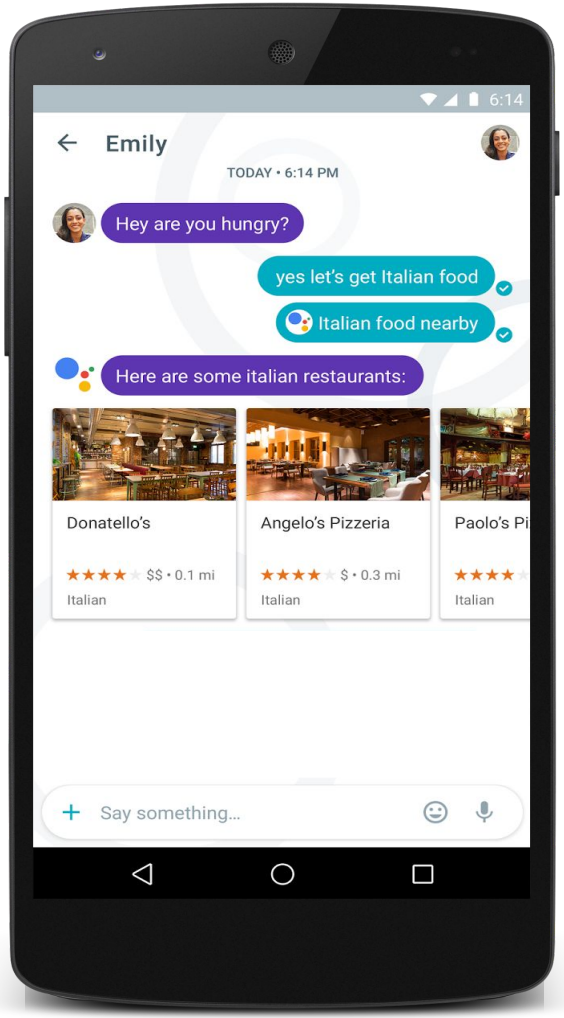

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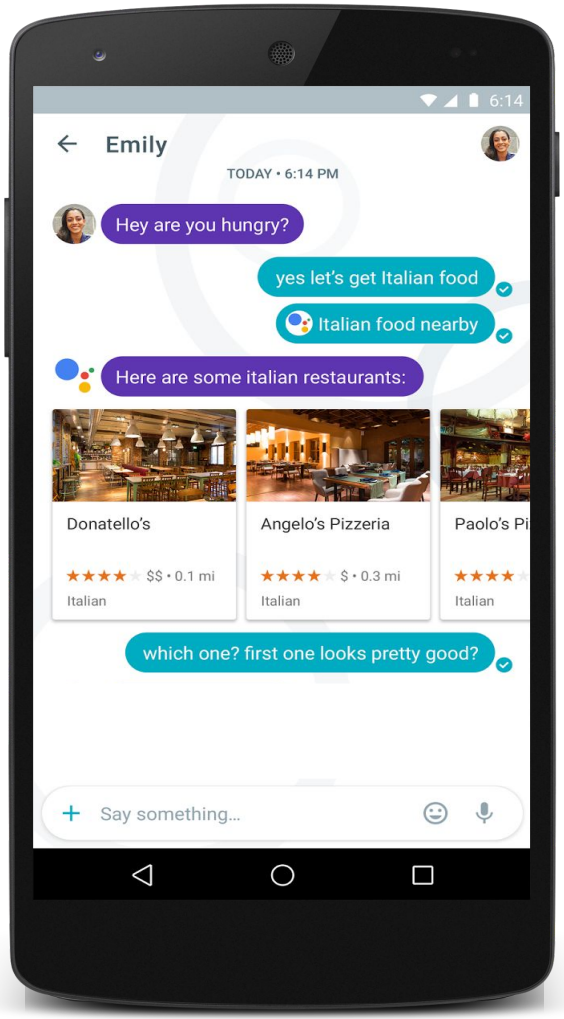

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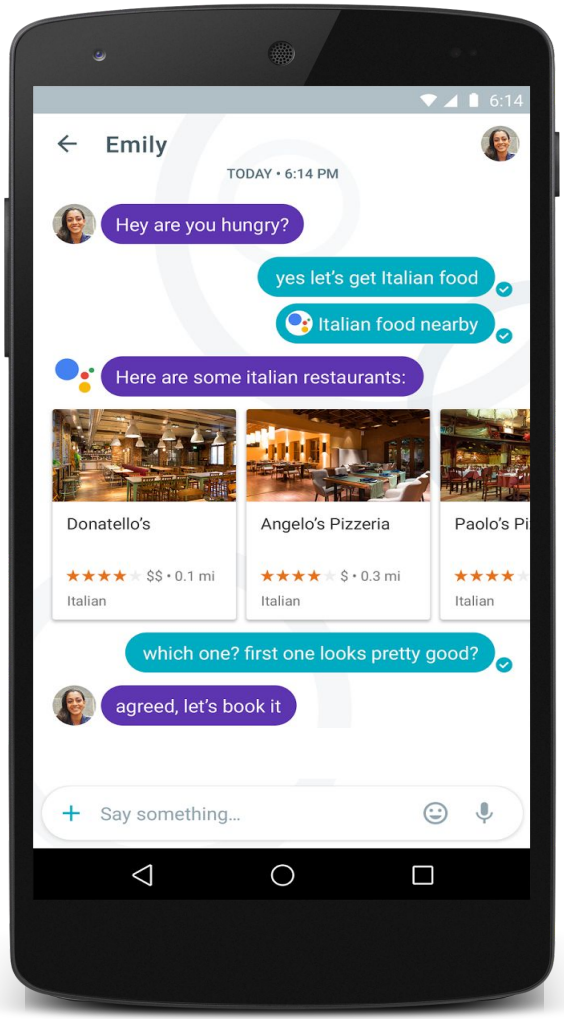

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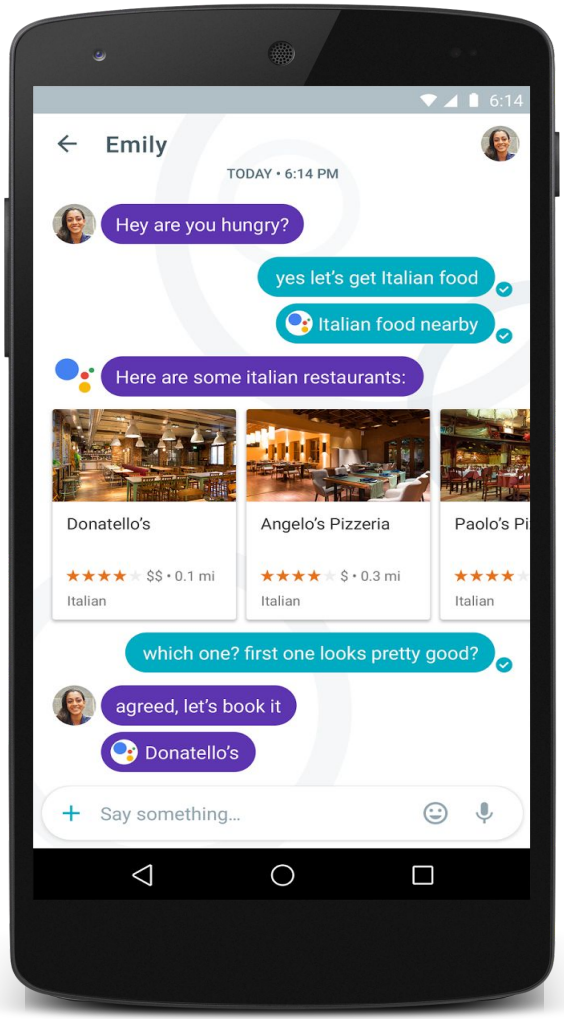

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Thank you!

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Appendix

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Introducing
Accelerated Mobile Pages (AMP)

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Web pages, today

Accelerated Mobile Pages

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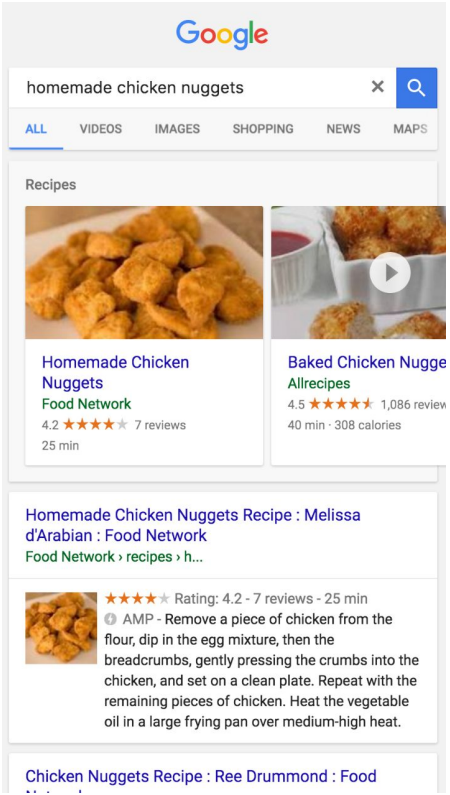
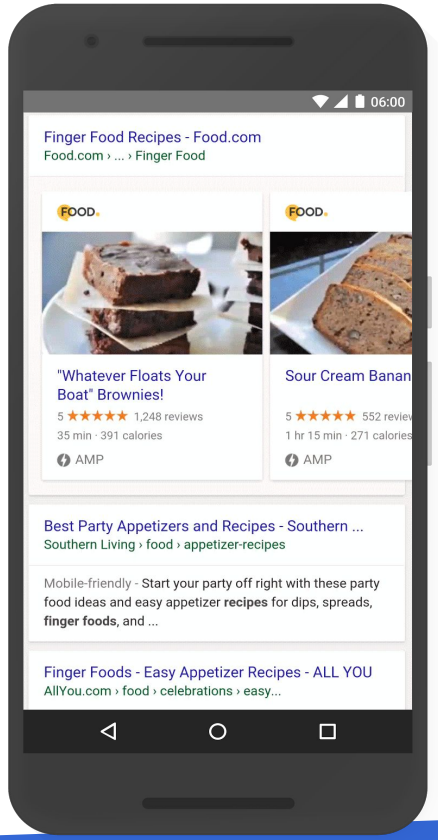
AMP will be everywhere!





Google

Blue Links Dev Preview

Rich Cards

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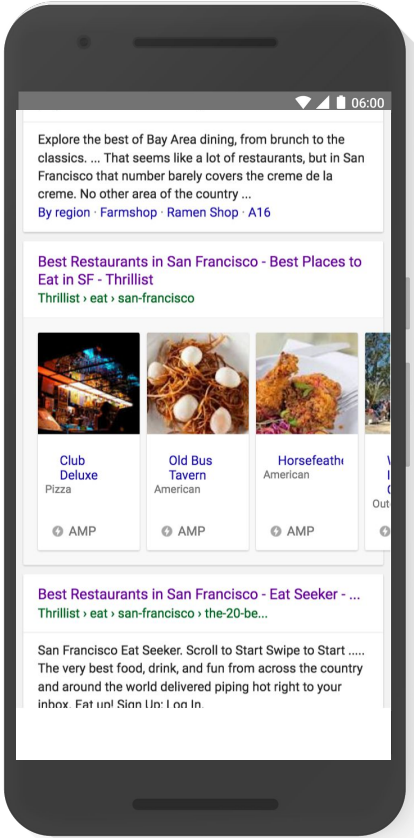
AMP benefits

Instant: reduce bounce rate, improve user engagement, and increase loyalty

Everywhere: AMP HTML embraces the open web, so content appears across all modern browsers & apps.

Seamless, simplified publishing
Pages are published normally to your site, and are accelerated via caches created by Google and others. Plus, work with our Google Support team to launch your AMPed recipes before this is open to the public.

"This exercise of AMP'ing our content was beneficial to scrutinize every aspect of our pages and make intentional choices about what to show users" --Food Network



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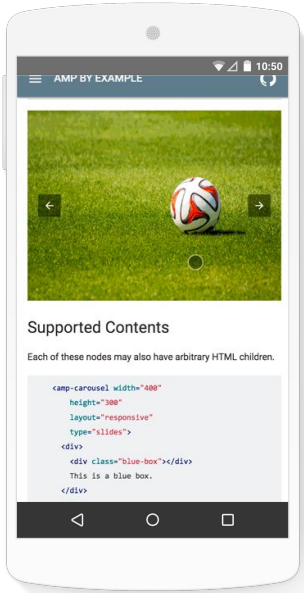
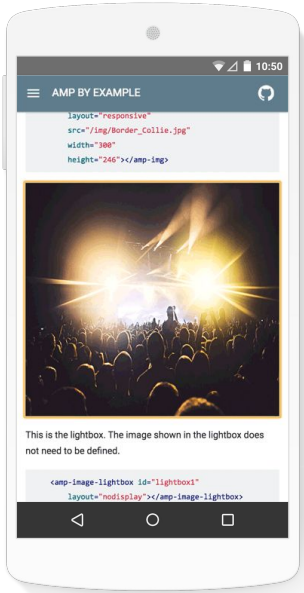
AMP Roadmap

The AMP roadmap is the result of **ongoing collaboration** with the ecosystem to bring new features to AMP to support your unique content





Currently supported

- 40+ ad vendors
- 20+ analytics vendors
- ~10 video embed vendors
- Numerous format components, including key recipe features like the image carousel and lightbox

Key features on the roadmap

- Carousel + lightbox enhancements
- Forms (add item to shopping list, mailing list signup, search)

Potential areas for exploration

- Comments
- Tabbed sections
- Flexbox layout
- Search autocomplete
- Filter search results
- Star ratings

ampproject.org/roadmap

Did you mean?
Synonyms
Autocomplete
Universal Search
Google Instant
Knowledge Graph
Google Search for Developers
Registered Google.com
AdWords
Images
Products
News
Books
Stocks
Local
Scores
Flights
Weather
Video
Patents
Movie Times
Search Tools
Google mobile app
Voice Search
Voice Search on Desktop
Search by Image
Intelligence Features
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Actions
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