AS IMPORTANT AS A WEB SITE?
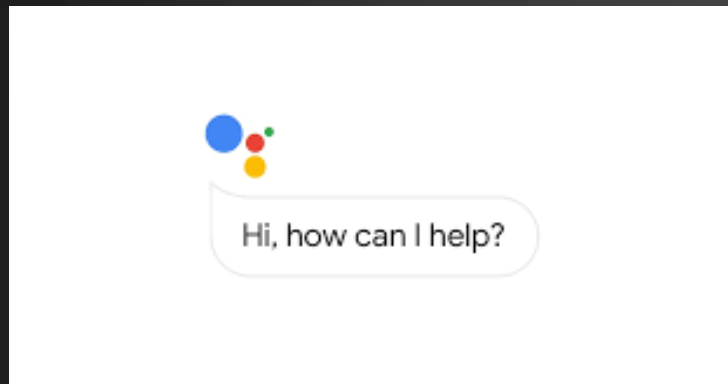# COMPANY-SPECIFIC DIGITAL ASSISTANTS ARE EFFECTIVE AND NECESSARY

WILLIAM MEISEL

PRESIDENT, TMA ASSOCIATES

CONVERSATIONAL INTERACTION

- Major trends in conversational interaction and how they will evolve
- What does this mean for connecting with customers?

GENERAL DIGITAL ASSISTANTS

Google Assistant

Amazon's Alexa

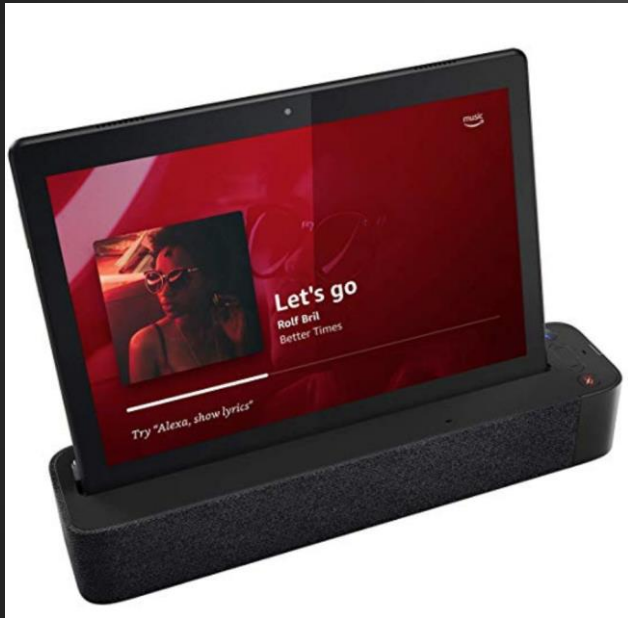Apple's Siri

A WEB PORTAL

Alexa...

- How's the stock market doing?
- Play baseball highlights
- Who won the Emmy for Outstanding Lead Actress in a Comedy Series?
- What's the number for Domino's?
- Find pasta recipes from Food52
- What's the forecast for Miami?
- What sci-fi movies are playing?
- Open The Tonight Show
- Who is playing at the US Open today?

AN ASSISTANT

Alexa…

- Remember something for me

- Dim the lights

- How many ounces are in a cup?

- Wake me up in the morning

- Add construction paper to my shopping list

- Tell me a story about the sea

- Send a message

- Reorder paper towels

ALEXA ON NON-AMAZON PRODUCTS

Lenovo Android Tablet
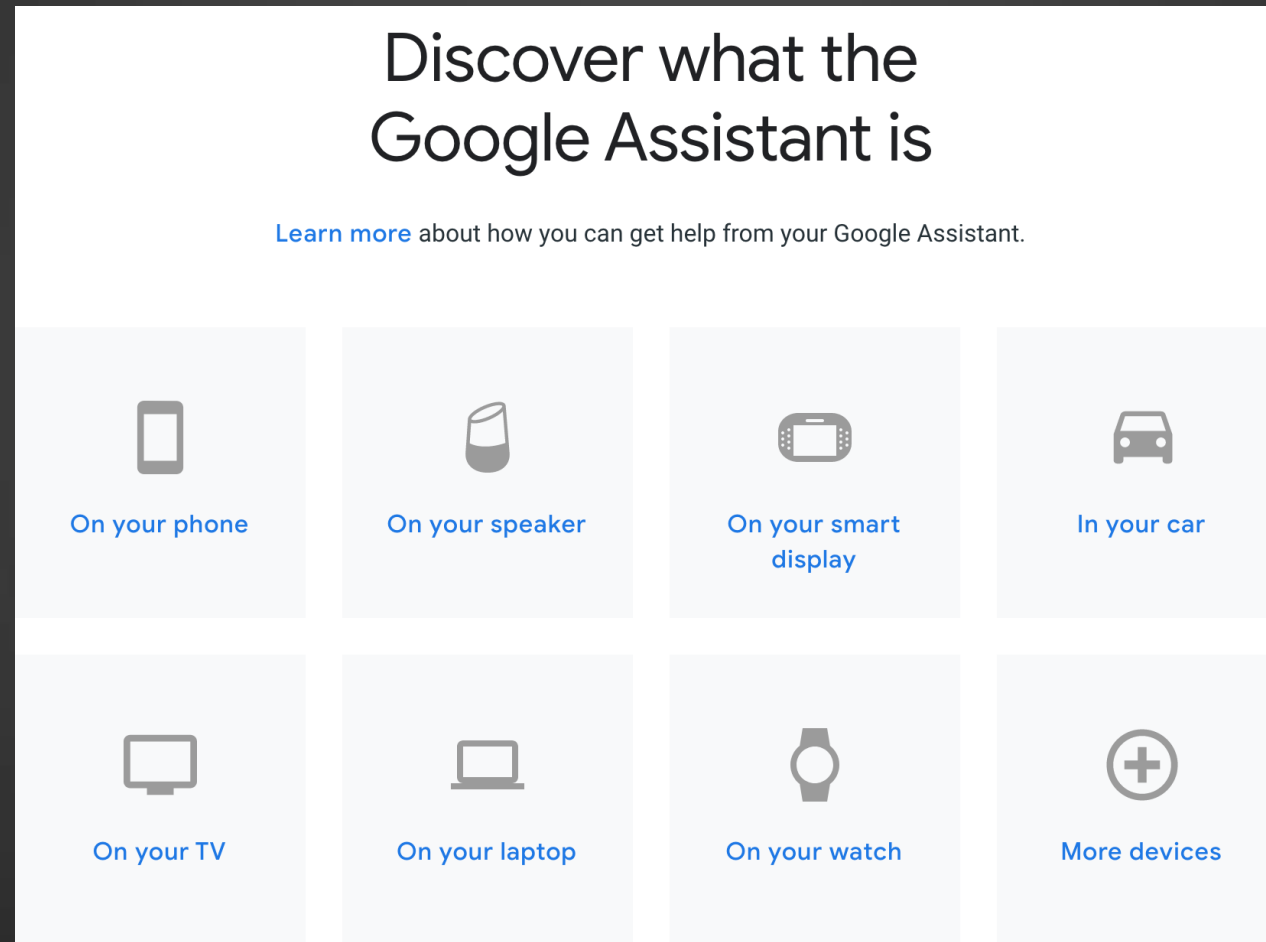
Build Alexa Devices

Build voice-forward products by integrating Alexa into your devices or controlling your devices with Alexa. Use the Alexa Voice Service to create devices with Alexa built-in, add Alexa control to your smart devices, or both. And build fun, Bluetooth-connected accessories called Alexa Gadgets.

AMAZON'S ALEXA IN AUTOMOBILES

Audi
Ford
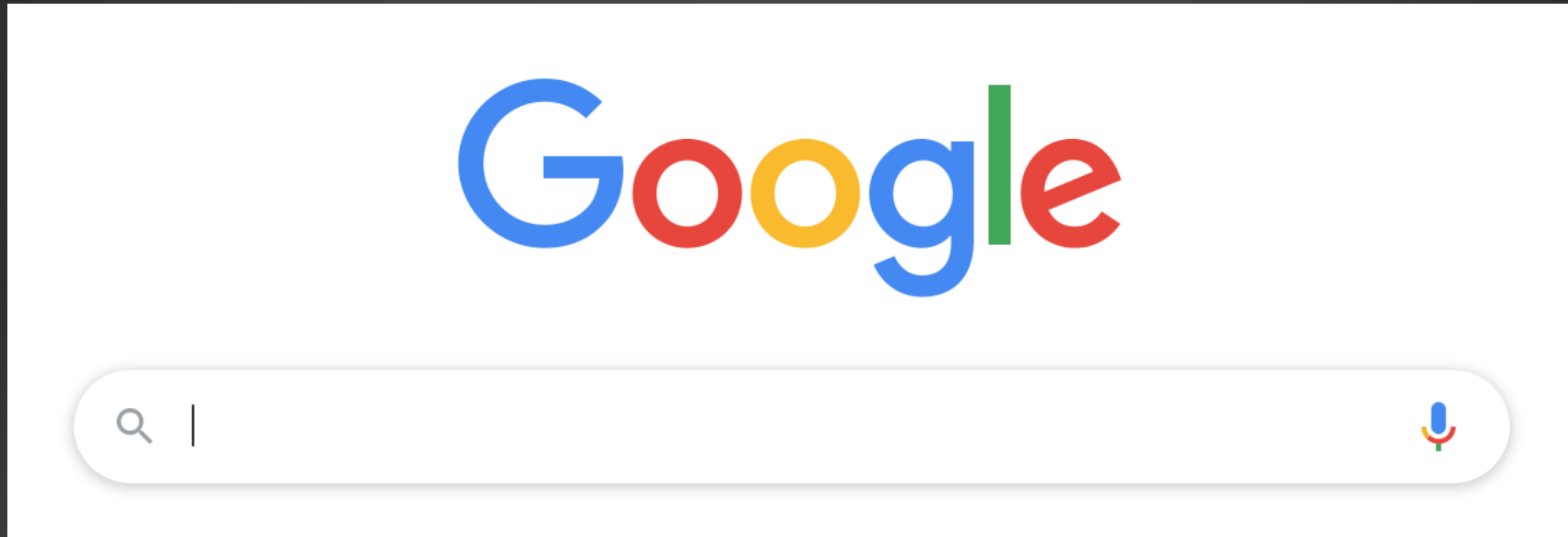Lexus
Toyota
Lamborghini
Rivian

GOOGLE ASSISTANT AVAILABLE THROUGH MANY CHANNELS

"Hey, Siri, OK Google" connects you to Google Assistant on Apple devices

GOOGLE ASSISTANT SAID TO REPLACE VOICE SEARCH IN THE CHROME BROWSER THIS YEAR

APPLE'S SIRI

- Part of Apple's iOS, iPadOS, watchOS, macOS, and tvOS operating systems

INTERNATIONAL COVERAGE

- **Alexa:** 15 language variants and more than 80 countries

- **Apple's Siri:** 21 languages and variants

- **Google Assistant:** 30 languages and variants in 90 countries

VOICE INTEROPERABILITY INITIATIVE

- Announced September 2019

- Cooperation to allow multiple wake words on the same device

- *Amazon, Baidu, BMW, Cerence, ecobee, Microsoft, Orange, Salesforce, SFR, Sonos, Spotify, Sound United, Tencent, Verizon, and more*

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Direct access to your company
digital assistant or service?

A UNIVERSAL USER INTERFACE

- Just say or type what you want

- In any language

- On any device or operating system

A UNIVERSAL USER INTERFACE

- Just say or type what you want

- In any language

- On any device or operating system

No user manual
required
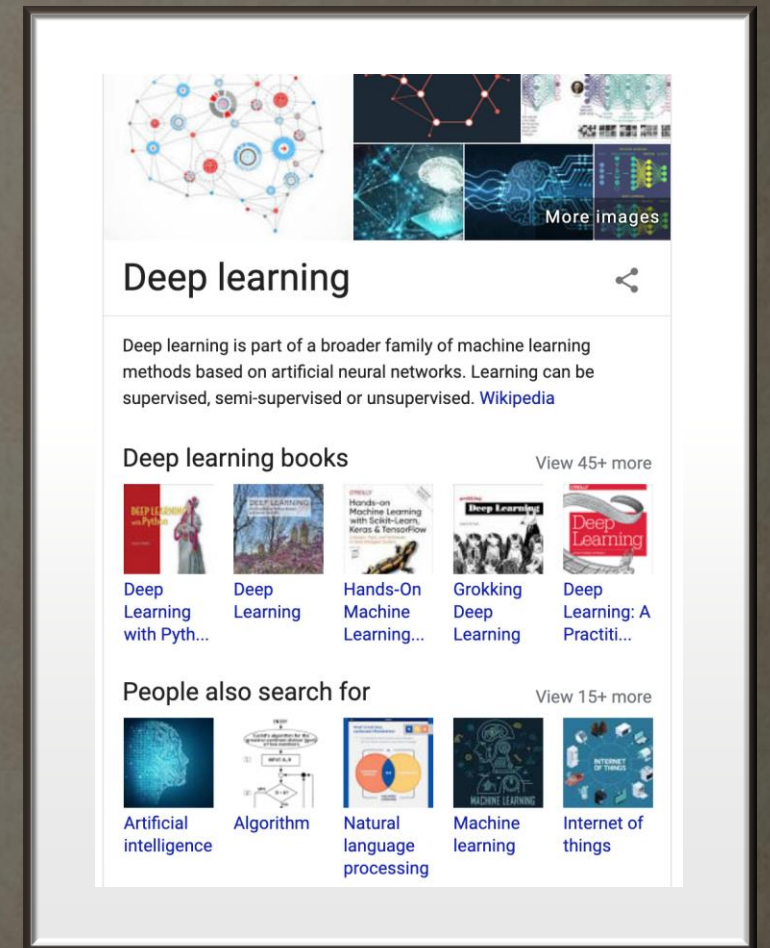
A MAJOR WEB PORTAL…AND MORE

- Major investment by large and small companies

It's a fight!

IMPROVING WEB SEARCH: PROVIDING *ANSWERS*

- Voice-only options require providing *answers*, not a list of web sites
- Today's machine learning technology can help distill answers from the Web

Google Knowledge Panel

FASTER PROCESSING AND CONNECTIONS

- Moore's Law, cloud computing services, and specialized chips continue to provide expanding computer power for services
  - Particularly deep learning, speech recognition, and Natural Language Processing
- This may be the year of 5G—Faster wireless connections
  - Reducing the latency of a voice or text conversation
- On-device AI processors appearing
  - Speech recognition on device, without a cloud requirement

AN ALTERNATIVE CHANNEL TO WEB SEARCH

- Do you need a web site?

AN ALTERNATIVE CHANNEL TO WEB SEARCH

- Do you need a web site?

You'll need a company-specific digital assistant reachable through these channels

PROVIDING CONNECTIONS TO YOUR COMPANY

- Google Assistant "actions"

- Amazon Alexa "skills"

- Apple Siri "shortcuts"

GOOGLE ACTIONS

- Link to your company assistant or application
  - "Hey Google, lets play Mad Libs"
  - "Hey Google, connect with Big Bank"

- App actions: Link to specific activities in your app
  - "Hey Google, ask Nespresso how to create latte art"

Create conversational experiences from scratch

Control the entire user experience with Conversational Actions. Build something new using our voice and visual APIs while tapping into Google's machine learning and natural language understanding capabilities.

ALEXA SKILLS

"Alexa, ask Filtrete to check the status of my hallway filter"

"Alexa, ask Cigna, What is a disability?"

"Alexa ask 1-800-Flowers to order flowers for my sister for her... "

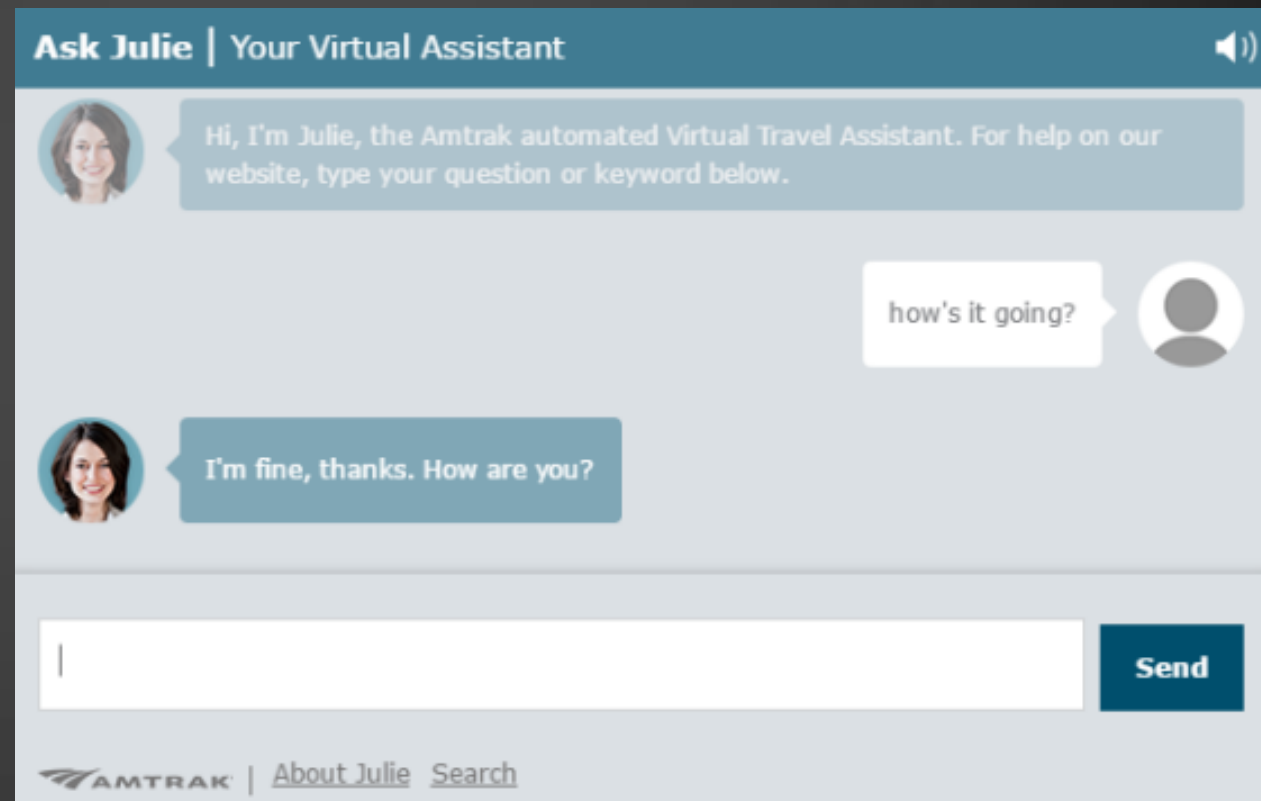The US had 70,729 skills at 2019 year-end

SIRI SHORTCUTS

- Focus on specific actions

- Food ordering app: "Order takeout"
    - "Which order would you like?"
        - A list of favorite orders

CONVERSATIONAL TECHNOLOGY IS A MAJOR USER INTERFACE INNOVATION

- Augments the over-burdened Graphical User Interface
  - Particularly without a screen or on devices with smaller screens

INDEPENDENT CHANNELS PROVIDING DIRECT NATURAL LANGUAGE ACCESS

- Chatbots on web sites

MOBILE APPS

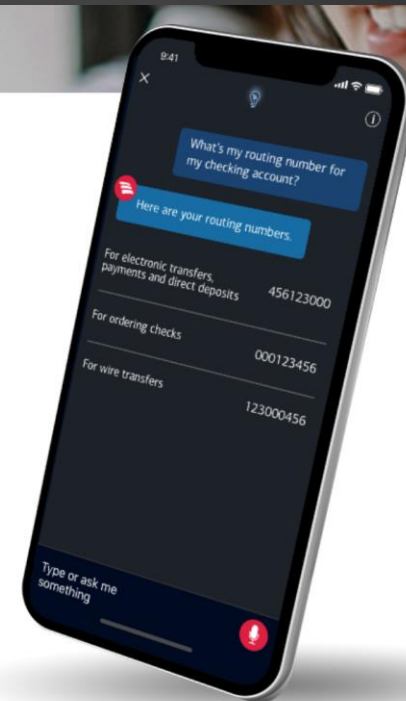Meet Erica, your virtual financial assistant in the Bank of America mobile app.[1]

Download the app

Erica helps make
everyday banking easier

Get account information

Erica can help you access your routing and account numbers.

See more ways Erica can help >

Bank of America

HOW DO YOU BUILD A DIGITAL ASSISTANT?

- Many tools and services available
- Many described at this conference

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Building for one channel goes a long
way toward building for another

START!

QUESTIONS

- wmeisel@tmaa.com
- 818-708-0962