

CHATBOTS 101



In the "Mobile-First" world, what type of app is used most widely and most often?

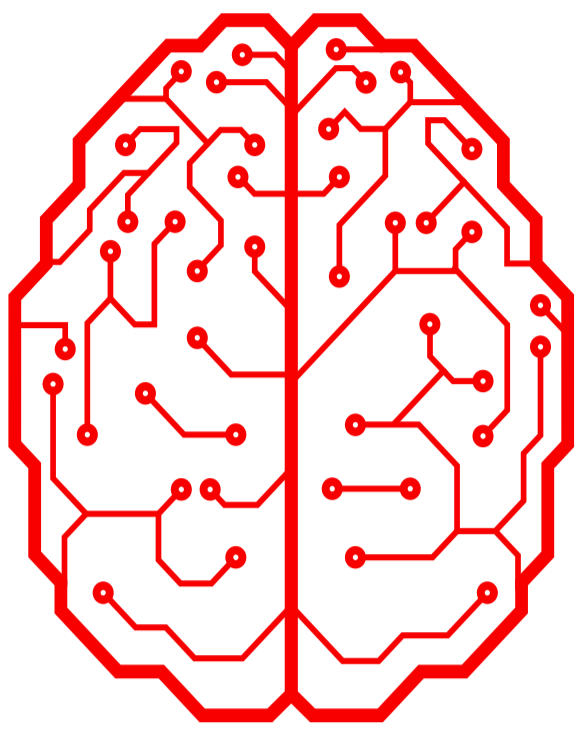
Messaging apps!

4.1 Billion users on messaging apps¹

6 of the Top 10 most used apps globally are **messaging apps!**

Intelligent conversational chatbots are the new interfaces for these apps, and they are changing the way businesses and customers interact.

NOTABLE ARTIFICIAL INTELLIGENCE MILESTONES



1950

THE TURING TEST

Alan Turing proposed "intelligent" machines would be indistinguishable from humans in text-only conversations

1997

DEEP BLUE

Defeated Garry Kasparov, Chess World Champion

2011

WATSON

Defeated Ken Jennings & Brad Rutter, the two most successful contestants ever, in Jeopardy, but struggled on clues with few words

2016

ALPHAGO

Defeated Lee Sedol, "Go" World Champion, runner-up for Science's "Breakthrough of the Year"

LIBRATUS

Defeated four professional poker players in a No-Limit Texas Hold'em tournament; learned how to bluff

MESSAGING APPS: THE PERFECT CHANNEL FOR CHATBOTS



65% Consumers prefer using a messaging app when contacting a business²



50% Consumers would make a purchase through a messaging app²



Over **50%** Customers expect a business to be open 24/7³

BUSINESSES ARE FOLLOWING CUSTOMERS ONTO MESSAGING PLATFORMS

90% of businesses use Facebook to respond to service requests⁴

5X: How much more often customers message a company than posting on its Facebook page⁴

The average messaging conversation is **66%** longer than the average page conversation⁴

10 Hours: The average time it takes for a company to respond to a message⁴

BUSINESSES UNDERSTAND THE VALUE OF SOCIAL MESSAGING CHANNELS

Already **30,000** bots on Facebook & Kik⁵

56% say engagement through messaging is ROI positive; **58%** say it reduces costs⁴

Chatbots could save **\$174 Billion** across Insurance, Financial Services, Sales, and Customer Service⁶



CHATBOTS & AI: TWO TYPES OF ENGAGEMENT

TASK ORIENTED (DECLARATIVE)

Think of a more robust, interactive FAQ

Most common type of chatbot... so far

User-initiated queries with automated responses and conversational menus

Uses Natural Language Processing, but not much Machine Learning

Integrates with backend systems of record

Highly specialized & structured interactions

Most useful in the Support and Service industries

DATA-DRIVEN & PREDICTIVE (CONVERSATIONAL)

Similar to Amazon's Alexa or to Google Assistant

Can monitor data, intent, & even initiate conversation; is contextually aware!

Personalized based on user profile and past user behavior

Uses Natural Language Processing & Machine Learning

Predictive Intelligence and analytics based on collected data across use cases Integrates with Big Data sources

POSSIBILITIES WITH CHATBOTS IN GOVERNMENT

SOME OF THE AREAS IN WHICH CHATBOTS CAN HELP

When will I get my financial aid? — What energy-saving tax credits are available to me?

What types of jobs are available in my area? — Show me any recalls on items I've purchased in the past 90 days.

Where can I find housing assistance for someone who is HIV positive? — What National Parks are in my state?

I'd like to pay my parking ticket. — I'd like to apply for social benefits.

What time is the next bus? — What's the status of my tax refund?

What events and tours are taking place at the National Archives today? — What are the symptoms of Zika virus?

FIND OUT MORE



VISIT: ORACLE.COM/BOTS

For more information on chatbots

¹ BI Intelligence, January 2016 and Statista, April 2016

² "Fifty Essential Mobile Marketing Facts," Forbes.com, November 12, 2013

³ "3 Stats That Show Chatbots Are Here To Stay," Venturebeat.com, August 26, 2016

⁴ "Data: A Massive, Hidden Shift Is Driving Companies To Use A.I. Bots Inside Facebook Messenger," BusinessInsider.com, May 12, 2016

⁵ "Kik Users Have Now Sent Branded Chatbots Nearly 2 Billion Messages," Adweek.com, August 4, 2016;

⁶ "There Are Now More Than 11,000 Bots On Facebook Messenger," TheVerge.com, July 1, 2016

⁶ BI Intelligence, McKinsey & Company, and the US Office of Personnel Management, 2016