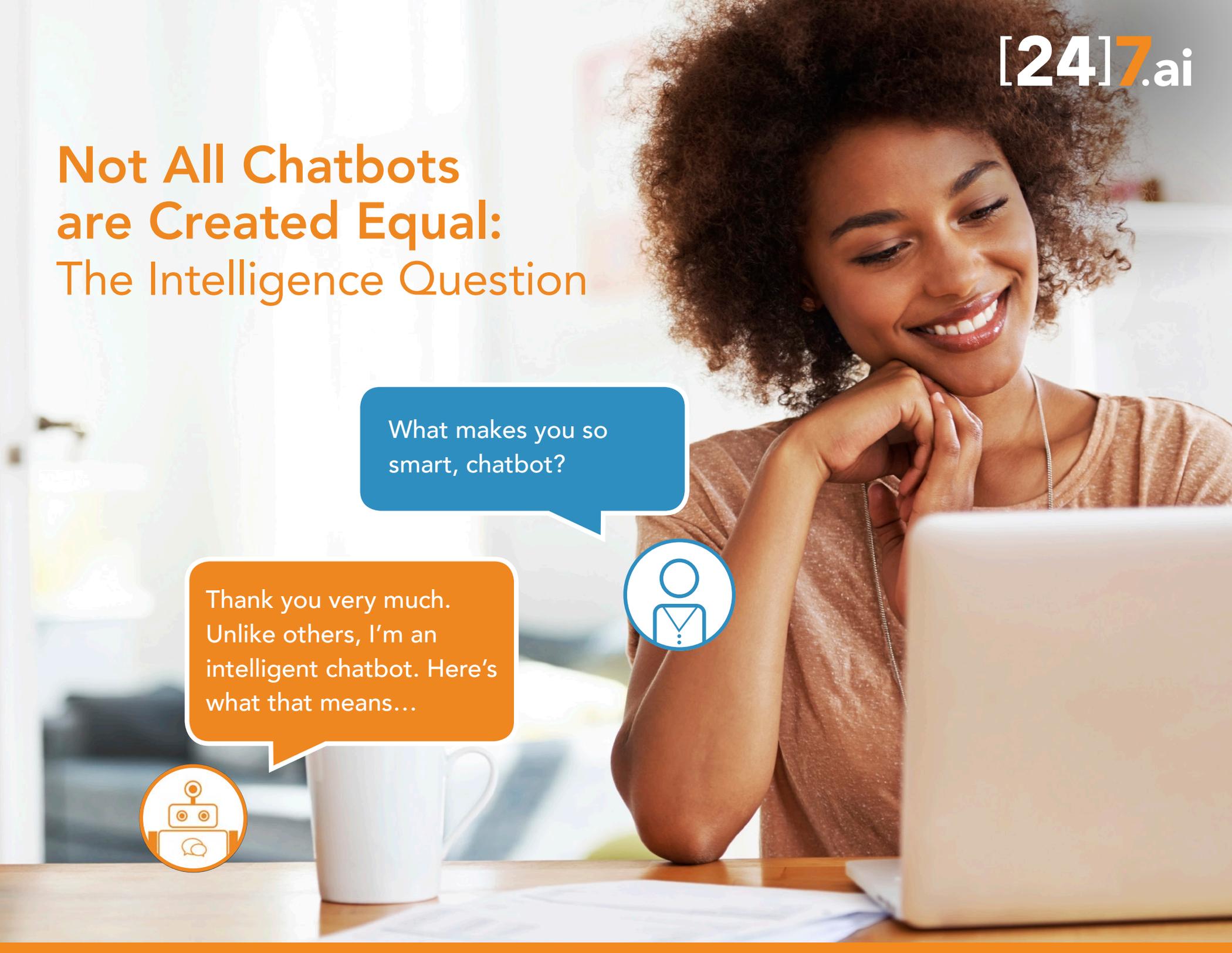


Not All Chatbots are Created Equal: The Intelligence Question

What makes you so smart, chatbot?

Thank you very much. Unlike others, I'm an intelligent chatbot. Here's what that means...



What's In a Name?

While chatbots have been around for a while, they are not all the same. “Chatbot” refers to a broad range of technologies that allow consumers to use a conversational interface to accomplish tasks.

Lets begin by looking at a simple chatbot.

Simple Chatbot: Many popular chatbots are aimed at casual use and are designed to deliver an entertaining experience. If a simple chatbot doesn't know the answer or can't understand the question, the stakes are relatively low for the brand. For instance, we don't really expect Apple's Siri or Amazon's Alexa to know all the answers. These are examples of “unbound” chatbots that have no specific context to operate within. These are commonly known as virtual assistants.

For businesses, chatbots need to be smarter to be effective. “Intelligent chatbots” are able to integrate with enterprise systems, leverage big data, and use artificial intelligence to help customers resolve issues or conduct transactions. These are also referred to as virtual agents or virtual customer assistants.

These chatbots are being used by enterprises to achieve incredible results.

Intelligent Chatbot: Some chatbots interact with customers to resolve issues, conduct transactions, and answer questions. The best enterprise chatbots mimic the effectiveness of your top customer service agent, salesperson, or support technician. The fact that these chatbots are “bounded”, or operating within a certain context (mortgages, utilities, wireless), ensures they can better support the conversation. If these chatbots make a mistake, the risk for the brand can be high. Consider what would happen if a banking chatbot answered a policy question inaccurately.

Where can you use chatbots?

You can deploy chatbots on nearly any interface (web, mobile, social, messaging app, voice response, SMS).

How do they engage with customers?

Proactive: Intelligent chatbots can operate in real time and predict customer intentions—offering specific help when they detect that a customer may need assistance. For example, a client has visited several mortgage pages and pauses on a specific page whereby the chatbot can proactively engage the client.

Reactive: Customers can select chatbots from a menu or a button on a web page or in a mobile app. Other approaches include chatbots as “listeners” (for example, twitter, Facebook, or SMS) that react to inquiries as customers enter these channels.

Here's How an Intelligent Chatbot Works...

1. Captures data in real time

The intelligent chatbot captures the customer's identity, attributes, and engagement data, and any feedback the customer provides—all in real time.

For example, the chatbot determines:

- Date, time, physical location, and device information
- Whether the customer is on the web or a mobile app
- Whether the customer requested to engage with a chatbot or received a proactive invitation
- Where the customer was on the website or mobile app when he or she began the interaction with the chatbot

2. Uses internal data

Using data such as customer profile and preferences, value to the company, location, industry, and amount of money spent in the past year gives the chatbot more insights about the customer. This data is gathered from various sources and is typically available in customer relationship management (CRM) systems.

3. Combines data to predict customer intentions

The chatbot develops an understanding of what the customer wants/needs by combining all the data signals. This helps make the conversation contextual and more natural when the customer engages the chatbot.

4. Engages customers

Customers can invoke chatbots themselves when they need assistance, or chatbots can proactively engage customers.

5. Understands what is said

The chatbot takes each message written or each utterance spoken and runs it through natural language models to understand what the customer said. This interaction is contextual and personalized to the customer. The chatbot achieves this by leveraging information such as the web page the customer was on when they engaged with the chatbot and their customer profile. For example, if a customer is on a bank's website looking at a page on mortgages and asks the chatbot what the interest rate is, the chatbot will know the customer is asking about the interest rate for mortgages.

6. Formulates a response

Once the chatbot understands the customer's intent, the response-matching algorithm determines the correct response and assembles it from knowledge bases and CRM systems.

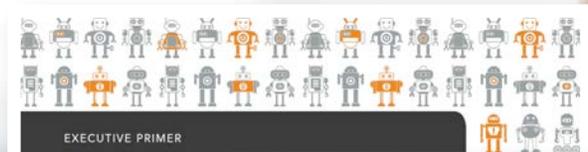
7. Determines follow-up actions

If the customer provides feedback that he or she is satisfied with the chatbot response, the chatbot closes that intent and waits for a new intent. If the customer requests the chatbot to help "pay my credit card bill," for example, the chatbot will determine the appropriate follow-up actions such as asking the customer for a password and then completing the transaction.

Comparing Simple vs. Intelligent Chatbots

Simplistic chatbots use logic that is based on keywords or sentences and perform simple pattern matching. These bots can only respond to very specific commands. If users say the wrong thing, the basic chatbot won't know what they mean. It's far more difficult to build an intelligent enterprise chatbot that understands and responds intelligently to the true meaning of the words and phrases that users enter.

FEATURE/CAPABILITY	SIMPLE/DIY CHATBOT	INTELLIGENT CHATBOT
Reads natural language	<input checked="" type="checkbox"/> Predefined grammar	<input checked="" type="checkbox"/> NL understanding and processing
Applies logic	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Learns through experience	<input checked="" type="checkbox"/> Manual efforts	<input checked="" type="checkbox"/> Machine learning
Understands intent	<input checked="" type="checkbox"/> Explicit keyword spotting and scoring	<input checked="" type="checkbox"/> Big data-driven understanding
Escalates to a human agent when it can't answer a question, address an issue, or complete a task	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Understands context		<input checked="" type="checkbox"/>
Applies context to distinguish between different uses of the same word to understand the implied meaning		<input checked="" type="checkbox"/>
Uses follow-up questions to clarify intent		<input checked="" type="checkbox"/>
Understands, learns, and interacts as a human would to solve problems		<input checked="" type="checkbox"/>
Manages tasks and completes transaction		<input checked="" type="checkbox"/>
Accesses enterprise information to personalize the experience or perform transactions		<input checked="" type="checkbox"/>
Independently assesses what actions it needs to execute at each step of an overall process to resolve the problem as swiftly as possible		<input checked="" type="checkbox"/>



EXECUTIVE PRIMER

Your Best Agent

Everything You Should Know
for Customer Engagement

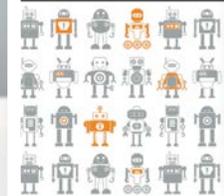
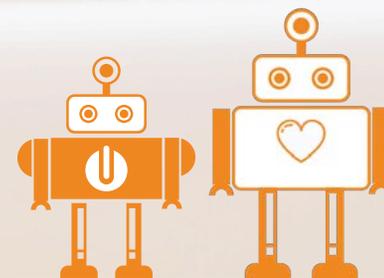


TABLE OF CONTENTS

2 Introduction	16 Chapter 5 So You Want to Build Your Own
3 Chapter 1 Chatbot 101	19 Chapter 6 Defining the Business Case
6 Chapter 2 Enterprise Chatbots in Action	21 Chapter 7 How Should Your Chatbot Look and Act?
10 Chapter 3 Not All Chatbots are Created Equal: The Intelligence Question	24 Chapter 8 Good Bots/Bad Bots, Pitfalls and Best Practices
14 Chapter 4 Chatbots and Agents: Better Together	28 Next Steps

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www.247.ai
queries@247.ai

USA +1 855 692 9247
CA +1 866 454 0084

UK +44 0 207 836 9203
AUS +61 2 90025780

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