

Chatbot Development: Everything You Need To Know

redbytes.co.uk/chatbot-development/

May 9,
2019

Everything you need to know about Chatbot Development

Thursday May 9, 2019



Over the last decade, one constant global shift is about how technological innovations perfectly dovetails with various business revenue models and industrial processes.

Chatbot has become the latest current development in this domain and have grown compelling enough to appeal entrepreneurs and investors, be it SMEs or successful brands.



Supporting a number of practical use cases, chatbots marries technology with business streams, bridging the virtual gap that exists between customers and brands.

From automation, user engagement and lead conversion to retention and upsell, chatbots can be tailored to fulfil several business purposes.

The smart technology has also got much boost from the now-famous reality that consumers embraced online chatbot-based support model.

Due to its thriving future market potential in business landscape, business across the globe eye Chatbot development as a pressing project.

| **Read Also: [Impact of Minimalist UI Design](#)**

Let's explore the depth of chatbot market and the process of chatbot development.

1) Realistic perspective on Chatbot market

Seemingly an ideal solution for ecommerce customer assistance, Chatbots have now exponentially emerged as a really strong value proposition for diverse businesses across various industrial domains.

By 2024, the [global chatbots market worth](#) is expected to hit the unbelievable \$3172 million, with conversation [AI market size reaching \\$15.7 billion](#) by 2024.

In last decade the chatbot's power and capability have matured from a straight rule-based mechanism for common repeated queries to more intelligent and adaptive algorithm developed to analyze user behavior and determine the underlying user mindset to present the most relevant responses.

This is why chatbot usability has risen to a new high and so is its market share. This is a sufficient proof to the fact that business have great hopes from chatbots due to the unmatched benefits of profitability and ROI they seem to propose.

2) Business advantages of investing in Chatbot development

Apart from the benefits of automation, efficiency and 24/7 business availability, Chatbots also help deplete business operation cost.

Businesses that dither at the idea of investing in chatbot development would feel at ease learning that chatbot gains outweigh possible loss from manual services.

Juniper research claims that [chatbot development cost](#) is likely to appear fair since chatbots are powerful enough to whittle down the overall cost by \$8 billion annually by 2022. Here are a few incredible gains.

3) Availability and accessibility

Business availability is among those factors that affect customer loyalty and sales. Giving 24/7 service is what today's customer expect for instant resolution of their urgent queries.

Not being able to offer 24/7 mode means significant loss of business. A customer support chatbot remains accessible to customers during off hours in the absence of human representative, thus bolstering your brand image.

4) Low cost, more savings

The major chunk of operational cost involves dealing with high influx of customer calls. Chatbots can handle such sizable volume of incoming calls and answer customer queries in a straightforward fashion, ultimately saving big part of cost related to customer interactions.

Once designed with precise algorithm, Chatbots don't need intense supervision, which further adds to saving. Also, when customers are guided by chat bots in very first conversation, it takes less efforts and time for executives to resolve the queries later.

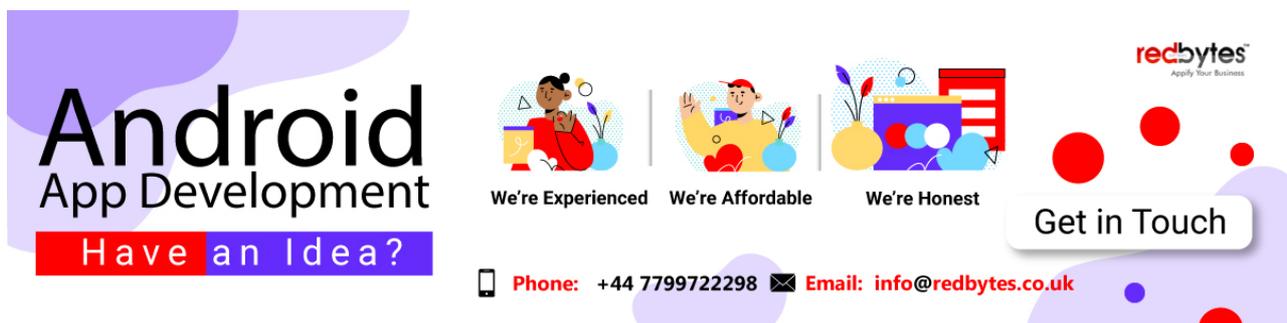
| **Read Also: [Effective Post Launch Marketing Strategy That Can Drive Success](#)**

5) Cognitive learning

Since data runs its regime in digital universe, AI algorithm within chatbots can be programmed to ride data deluge, process information and learn from it.

The cognitive learning solutions can work as an extension to chatbot strategy to transform the data into business-friendly insight of value.

In fact, the word intelligence in AI firmly represents the ability to process the data, which makes the AI system adaptive to volatile market behavior.



The advertisement banner features a purple and white background with red accents. On the left, the text 'Android App Development' is written in a large, bold, black font, with 'Have an Idea?' in a smaller font below it. In the center, there are three circular icons with corresponding text: 'We're Experienced' (with a person icon), 'We're Affordable' (with a person icon), and 'We're Honest' (with a person icon). On the right, the Redbytes logo is displayed above a 'Get in Touch' button. At the bottom, contact information is provided: 'Phone: +44 7799722298' and 'Email: info@redbytes.co.uk'.

6) Automation of processes

Artificial intelligence is rapidly automating mundane processes involved in the business, thanks to its cognitive learning ability.

The automation thus allows Chatbot dependents to be free from monotonous routines and focus on more important innovations and user engagement tactics.

AI can now automate processing data from various reports to conduct detailed analysis to suggest areas of profitability.

7) Economy of Business Manpower

Custom chatbots tailored to meet your business-specific service requirements can minimize manpower to a great extent. [McKinsey report](#) suggests that having a perfectly designed chatbot in place is able to automate nearly 29% of customer support positions in the US.

Businesses with a chatbot-integrated service system can experience double the efficiency of employees while costing quite lower than their annual salary.

This also goes to say that customer service industry will be dominated by chatbots that can handle tons of users simultaneously.

8) Scrutiny and evaluation of unstructured data

Since AI takes over mundane business processes with enhanced learning, you are left with more time to innovate and automate the systems such as data collection process and analysis of different reports.

The in-depth scrutiny of unstructured data will lead to growth in business profit and ROI.

9) Increased Sales and Revenue

The reason why many businesses rely on chatbots to attain lead conversion and improved sales is that it facilitates the system of recommending beneficial offers to customers in conversation.

This creates more opportunities for ample instances of upsell, retention and extra revenue. In addition, intelligent chatbots integrated with social messengers spread the brand awareness more rapidly.

10) Types of modern chatbots

Based on what we experience nowadays in virtual world of digital operations, we can suggest the following categories of interactive chatbots.



The image is a promotional banner for recbytes. On the left, there are four smartphone screens displaying different app interfaces: a 'Yay! It's You!' screen, a 'Let's Create a Group' screen, a 'My Groups' screen, and a 'Settings' screen. To the right of the screens, the text 'DESIGN, DEVELOP & DEPLOY' is written in large, bold, black letters, with 'SMARTER iOS APPS' below it in a similar font. A red button with the text 'Contact us' is positioned to the right of the text. The recbytes logo is in the top right corner.

Two main categories based on their implementation are:

1) In-app implemented chatbots – Chatbots are a built-in element of a mobile app to work and perform a pre-determined function for automating the interactions between the app and users.

2) Bots implemented as a function within a Messenger – These chatbots work within a messengers to support customer interactions and best suits business models that involve chatbot support on social media.

Along with these, below are other function-specific chatbots:

3) Conversational chatbot – Uses natural language understanding technology to launch organic conversations and engage customers.

4) FAQ chatbot – They are focused on QnA that includes common questions asked by users with automated intuitive responses.

5) Transactional chatbot – they are made to enhance conversion by helping users learn about and purchase products inside the app without relying on human representative.

6) Predictive/Analytical Chatbot – These chatbots are quite advanced and uses machine learning, and are tailored as a case-specific solution to analyze reactive pattern of customers.

Industry-oriented chatbots will target:

- Ecommerce customer support
- Banking and Insurance support
- Online service bookings queries
- Travel and tourism solutions
- Hotels and Hospitality
- Healthcare queries



Development of different components of a Chatbot

To develop a chatbot that transforms customer experience and makes business profitable, you need to consider certain components that form the chatbot body.

You may expect the following essentials from a **chatbot development company** you partner with:

1) Backend

Backend forms the backbone of any software and Chatbots need it to manage and process messages coming from various channels.

The backend also incorporates business logic and controls other integrated systems while holding the conversational algorithm developed to instigate conversation with users.

2) Channels

To support the functioning of backend and smoothly relay messages, it is important to set up the endpoints in the backend for sustaining the integration with all included channels.

To efficiently guide users with prompt replies and visual cards, developers will also need to implement the UI specific to channel.

3) NLP

The AI chatbot system needs NLP services like Luis, Api.ai, and Wit.ai to gain insight from user messages and intents. Setting up NLP and training its entities might pose certain challenges though SDK makes it easy to process messages.

It requires some work to understand entities related to elements in Contacts, Products, etc.

4) Conversational Intelligence

After implementing NLP intents and entities comes the complicated component of developing conversational intelligence. This expects you to create an algorithm for every possible aspect of conversational elements and navigation.

The challenge is to build decision trees, state workflows, if-yes-if-no conditions and logics and other deeper learning tactics to handle real-time conversations.

5) Integration

Mostly, consumer-conscious chatbots are designed to execute commercial processes such as product recommendations and purchase, online bookings, scheduling appointments, etc.

They are therefore implemented in the existing mobile application. The component of integration will focus on business logic, validations and data channels incorporated in the target business process.

| **Read Also: [Why Should Mobile App Developers Should Consider Flutter in 2019](#)**

Final Words: Chatbot development is a good investment

We have seen here each stage of chatbot development including chatbot market prospects, types of popular chatbots, benefits and the components involved in the process.

HOW MUCH WILL IT COST TO
CREATE AN APP?

Phone: +44 7799722298 Email: info@redbytes.co.uk



For those who purse over the price and investment risks, the estimated figure for building a chatbot usually falls in the bracket of \$20000 to \$30000 – which typically includes the entire journey from its design from scratch to the successful in-app integration.