



IT BUSINESS NET

The Importance of Crisis Chatbots



By [AgreeYa Solutions](#)

We have come a long way since the creation of ELIZA, the first chatbot, in 1966. The recent rise of machine intelligence has led to the increased demand and use of chatbots, especially amid the current COVID-19 pandemic. As artificial intelligence (AI) and natural language processing (NLP) continue to advance, so too will the chatbots that are being built and used across enterprise organizations. This article takes a deep dive into all things chatbots and the importance of crisis chatbots during these unprecedented times.

What is a chatbot?

On the surface a chatbot can be mistaken for a normal app; however, unlike apps, chatbots have a conversational interface. At its core, a chatbot is a computer program built upon bot frameworks and cognitive services, provided by cloud services providers such as Microsoft, to mimic human conversation. By adopting pattern matchers, algorithms and AI neural networks, a chatbot can process human languages, connect a customer's questions to correct intent and produce the right answer.

How have chatbots evolved throughout the years?

ELIZA was first created at MIT in 1966, with the primary purpose of being a communication interface between machine and man. By detecting words in a user's questions, ELIZA would then match these words to a collection of pre-programmed responses.

PARRY was another very famous chatbot created at Stanford in 1972. During a variation of the Turing Test, professional psychiatrists were only able to differentiate scripts between PARRY and human patients 48 percent of the time. However, the most famous chatbot of the 20th century was 1995's ALICE. Due to its heuristic matching rules, inspired by ELIZA, ALICE was able to chat with humans more efficiently than any previous chatbot.

The most recent revolution on the chatbot front came with the launch of Apple's AI personal assistant, Siri. Today's version of Siri greatly differs from earlier versions, with its vivid range of user commands, including performing phone actions, scheduling events, checking basic information, issuing reminders, handling device settings, navigation, searching the Internet and more. Siri is also able to engage with iOS-integrated applications. Today, there are a multitude of chatbots like Siri being used in everyday life – including Amazon's Alexa, Google Home, and others.

The rise of chatbots.

Chatbots are increasingly being implemented in businesses across a wide array of industry verticals and are becoming an integral part of both daily life and business operations. This is largely due to their ability to analyze information and make decisions on their own.

Here are the most popular business benefits of adopting chatbots:

- 24/7/365 support availability
- Multilingual support
- Easy and quick onboarding on new skills
- Provides conversational interface for users to perform desired actions
- Support for multiple channels
- Low maintenance cost
- Higher engagement and sales
- Optimization for mobile devices
- Availability of SaaS or a "pay as you go" model

The importance of crisis chatbots.

Currently, organizations around the world are scrambling to develop crisis communication plans to address the COVID-19 pandemic. Enterprises of varying sizes are all struggling to share real-time information with the public, employees and stakeholders. As information is changing daily, an efficient communication infrastructure is critical, in order to minimize negative impacts, maintain control and ensure business continuity.

Businesses can extend their crisis communication capabilities by implementing a crisis FAQ chatbot, which creates an interactive means of answering relevant employee queries regarding company policies, emergency contact details and health tips and advisories. Designed as self-service agents, crisis bots can leverage adaptable AI chatbots called Power Virtual Agents for custom solutions, a high accuracy response rate and seamless user experience.

As social distancing and a global remote workforce are the new normal during these unprecedented times, it's helpful to boost collaboration and productive engagement across an organization's remote teams through crisis chatbots.

Challenges of adopting chatbots.

Natural language processing (NLP) allows chatbots to process and analyze a conversation. However, some of the most common chatbot implementation challenges are around NLP, including natural language understanding (NLU), information extraction and natural language generation (NLG). For bots that rely on human speech and spoken word NLU is an issue, as it's difficult for bots to pick up on the context and intent in a conversation. This also ties into the ability of a bot to grasp the meaning of a message. For instance, they can struggle to pick up on the subtleties of speech impediments, accents, tone and feelings (e.g. sarcasm or condescension). Additionally, NLG is how bots are able to generate a more human-like response, but this requires some level of human supervision in order to course correct the bot if it interprets a message incorrectly.

The future of chatbots.

The growing popularity of chatbots will continue to have a major impact on organizations. Chatbots help reduce the load on the technical support team and cut operational costs. Furthermore, they offer a progressive avenue for marketing and sales departments to streamline customer and client communications, ultimately improving sales and customer services. In a time of a pandemic, combined with the increasing number of remote workers, the adoption and implementation of chatbots will only continue to grow.