

## NLP in chatbots

AI-powered chatbots are a hot topic in today's competitive world. It is estimated that the global chatbot market is expected to reach 1.25 billion dollars by 2025.

As AI-powered chatbots provide exceptional customer service, enhance engagement, achieve growth and increase sales, brands across all industries find chatbots imperative to their business.

According to an IBM study, half the customers hung up on customer support lines because they didn't want to wait for an agent. At the same time, it's inefficient even for agents to handle angry customers and solve repetitive problems all day long. However, AI-powered bots can deal with nearly 80% of routine questions intelligently.

Apart from customer service, chatbots are useful for HR and IT service desks in automating workflows so that staff can save time to focus on many higher-priority tasks.

NLP is at the core of chatbot architecture without which they add no value. When you type "Hello", the bot recognizes it as a standard greeting and makes use of the AI capability to give a response. It understands the user's message, parses and converts it into structured data that computers can interpret. A message is not treated as a set of symbols but the hierarchical structure of language – words, phrases, sentences and coherent ideas is analysed.

NLP has changed the way we interact with computers and it will do so in the years to come. For businesses, NLP will continue to be more effective and efficient in providing customers with an excellent, intriguing and tailored experience.