

THE INNER WORKINGS OF AN AI ASSISTANT

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Is it possible to automate conversations?

How can this be done?

There is a growing need to automate the process of conversing while retaining its human touch. Humanlike conversations are possible with the help of Chatbots driven by Artificial Intelligence (AI), Machine Learning(ML), Natural Language Understanding(NLU) and Natural Language Processing(NLP). An AI banking chatbot helps a business to operate with more precision and less human effort.



HOW AN AI CHATBOT WORKS - 'BEHIND THE SCENES'

How chatbots are trained:

- AI chatbots are trained with the help of old conversation logs which serve as a knowledge base.
- Algorithms are designed to assist chatbots better understand "intent" by leveraging Natural Language Understanding (NLU).
- Artificial Neural Networks, a deep learning model is employed to handle a set of sequences. This will decide the personality of a chatbot.

How chatbots process information:

- AI chatbots use 'text classifiers' to distinguish pieces of data (words or sentences).
- They classify information into multiple categories also called intent.
- Developers strengthen an AI Chatbot in a way that they are able to process and connect the intents to provide correct answers.

How chatbots learn:

- An AI Chatbot learns better after it is live, handling customer queries on a real time basis.
- It also responds with more accuracy, as it is now exposed to more customer data
- Smart feedback system, machine learning modules and retraining modules are great ways to educate an AI chatbot.

2 WAYS OF BUILDING AN AI CHATBOT



1. **Rule-based chatbots** ————— Rule based chatbots are trained with a particular set of rules and pattern. It struggles to respond to questions whose pattern does not match with the rules it is trained on.



2. **AI-based chatbots** ————— Ai Chatbots are designed to understand the language of an user and answer accordingly with the help of NLP. Often, Chatbots are built with both the approaches.

CHATBOT DEVELOPMENT TERMINOLOGIES



Artificial Neural Network

It helps to decide the personality of an AI Chatbot which should be in sync with the personality of the organisation



Natural Language Processing

It helps the chatbot to, comprehend the user, take the desirable action and respond in an understandable language.



NLU Engines

It helps a chatbot to overlook spelling mistakes, swapped words, nuances and other errors in human speech.



Natural Language Toolkit

It helps to develop and build Python programs that work around human languages data to teach the chatbot.



TURING TEST OF AI CHATBOTS TEST THE HUMANNESS OF A CHATBOT

Does a chatbot behave like a human being?

A Turing test assesses a chatbot's ability to behave like a human being and not the machine's intelligence when faced with the same situation

Want to dig deeper into the inner workings of AI chatbots?

Get a demo or mail our industry experts.