NATURAL LANGUAGE PROCESSING VIA CHATBOTS

Abstract

Chatbots are very common today, to give AI support to customers and the way of developing further AI. The uses of NLP and MI to develop the chatbots and how they analyze the human language and copy them back. The way to understand the human language and they developed a procedure to create that function. The process to analyze human tones, expressions and the way they it's fit into the artificial intelligence world and their future. The way to develop intelligent and more creative chat bots and create differentiate between any human tones and synthesize own creative action. The way NLP provides intelligent virtual assistance to operate the chat box into a different chatbot. The way to improve machine learning of human voice.

Keywords: Natural language process, Chatbots, human language, mimicking, processing

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I. INTRODUCTION

Chatbots are a hot topic nowadays; they become the most modern technology in business for a few years. There are two types majorly used, first, the company wanted to develop capable bots of indistinguishable conversation for humans by using National language processing. Second, private software developers focus on bots' function by focusing to do specific tasks with a quick method and function normally in an efficient way. It helps manage user experience and the experience of customers or seduce the method of technology in its own way. It hope that the chatbot does not need to fool the user, it's trying to help the raise deterred by its developer. To talk to a chatbot it's usually needed AI (artificial intelligence) and natural language processing to recognize the human language. However, many chat bots are silent and do not know how to behave with humans, but developing the chatbot is going on.

II. OBJECTIVE

- To analyze the role of chatbot require NLP
- To identify the NLP structure of chat bots
- To analysis the benefits of chat bots fits into the AI world
- To NLP is creating intelligent chat bots
- To addressed the NLP process

III. METHODOLOGY

This research article, get collected data from different secondary sources. Especially from online print media articles, notable researchers' work and the outcome of research data and how they analyzed the data. For this research, quoting various article and their respected author. Also, get an online presented view of the availability of respected scholars and software developers and their successive way of working.

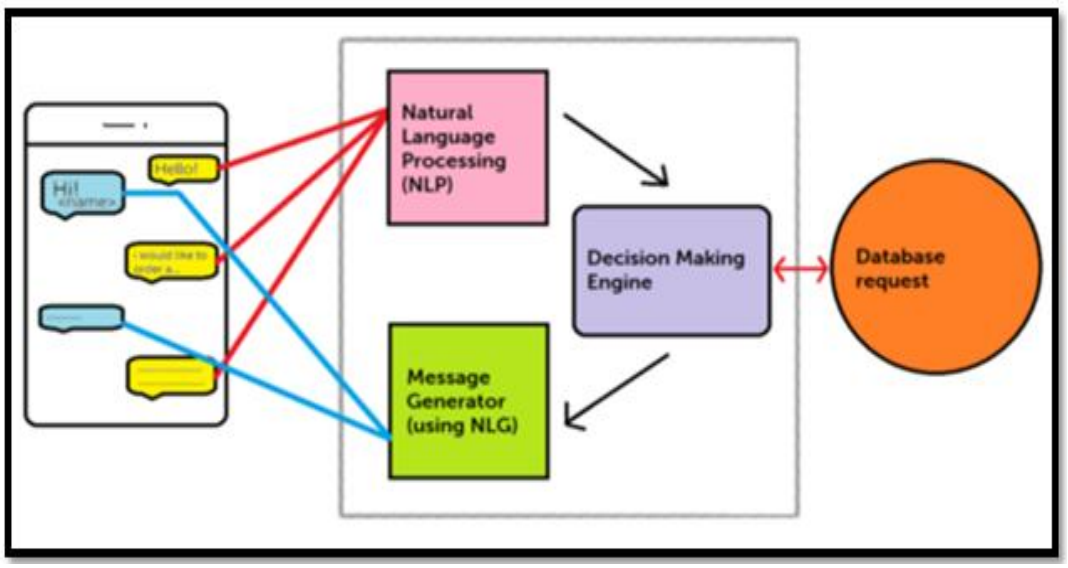


Figure 1: Chatbots functions
(Source: 2)

IV. CHATBOTS NEED NLP

Humans speak 6400 different languages and a lot of tones and topics, expression and word selection, and different structures of sentences in different languages.

Humans can understand the languages of other humans, but chat bots, require something to analyze the language of billions of people and act according to their desire. Filter this data of unstructured to make conversational ways fit into rows and columns like a machine language that helps chat bots a possible outcome.

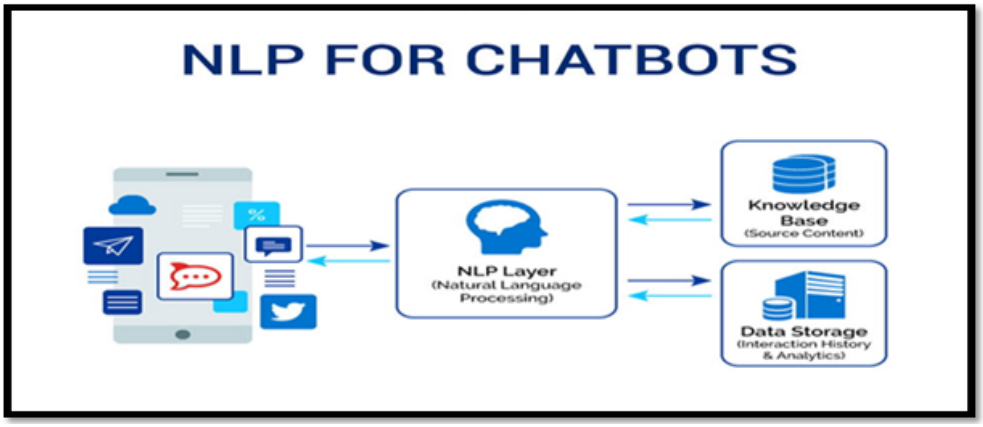


Figure 2: NLP functions for chatbots.
(Source: 3)

V. DEFINITION OF NLP

Humans speak natural languages to speak to one another and also programming language was created so that humans can tell the machine what to do and what to do. Take an example java's natural language is English, to speak machine to human to machine need to speak java or any language of programming. For chatbot, NPL help to decode the enabled computer, copy human language, and answer human back. It is done in such a way as, phases are created by the word, sentences from phases, and coherent ideas by sentences. The best part of NLP is that it does not require keywords, it was just done meaning and factor decoding by factors like the structure of the sentence, idioms, context and so on. NLP has two types 1) an understanding of the national language and 2) generating the natural language.

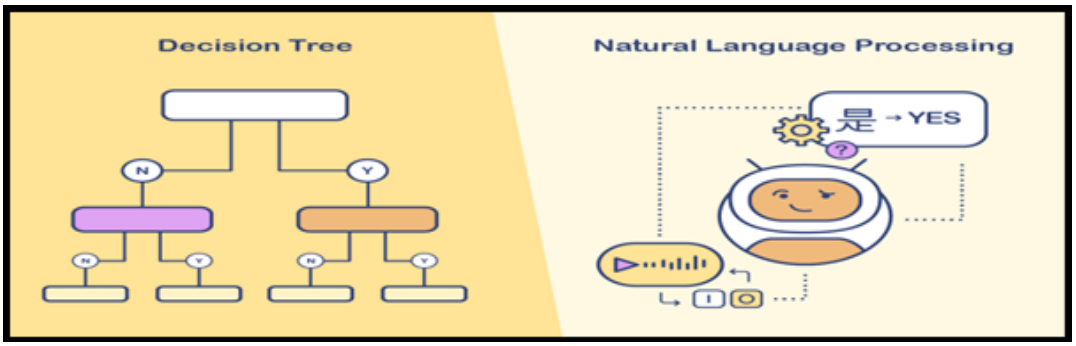


Figure 3: NLP and way fuction to human.
(Source: 5)

VI. HOW THE CHAT BOTS FIT INTO THE AI WORLD

Facebook majorly uses not only in the machine but also in our day-to-day app functions like meena by google, blender bot Chatbots so that people local and human language can be identified and known by people. It can create many sounds like the moving of objects or speak to a human, reorganization, and planning to make art or poetry. For this natural language, AI truly works along with machine learning and NPL.

VII. NLP IS USED FOR CREATING INTELLIGENT CHATBOTS

NLP is not just a tool to analyze human language it helps to develop smart chat bots in a useful ness and intelligent way. Natural language processing is mostly developed through visual assistance to chat bots, which also provide algorithms for search engines and transactional for online, the filter of spam and checking spelling mistakes, it also helps in summarization automatic, suggestion automatic, sentence translation, recognition of entities by name, extraction of relationship, analysis of sentiment, recognition of speech, and segmentation of topic.

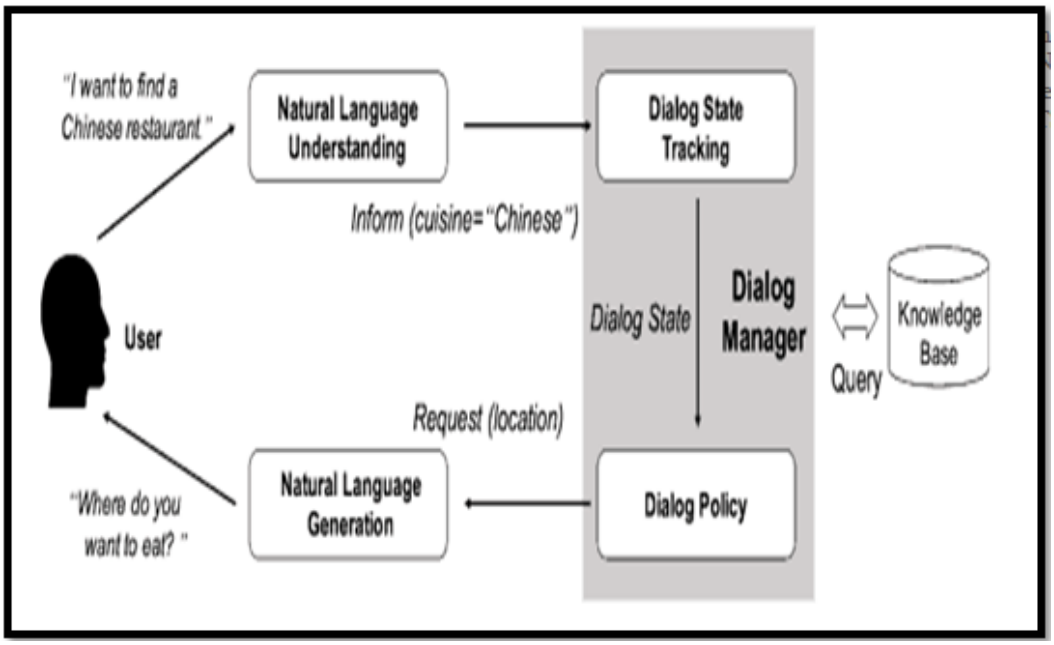
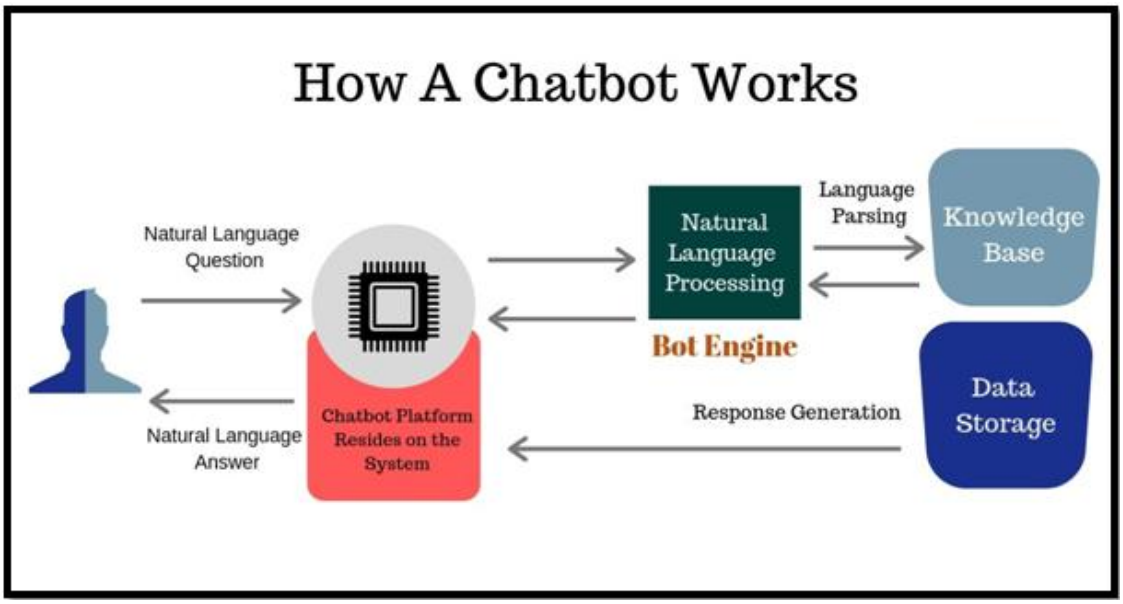


Figure 4: Explaining the way analyzes human language.
(Source: 3)

VIII. PROBLEM STATEMENT

Due to a shortage of primary data, this article heavily relies on secondary data . Along with that, we get the researcher's research work and their general publishes data. It can vary due to using different methods like understanding different ways. Not having proper primary data like interviews or research general. It can be very difficult to understand what method of collecting data can be good or can be wrong. In that case, we have a different problem to solve like a proper definition or the user method.



IX. CONCLUSIONS

This research article discussed the procedure of the natural learning process for chat bots. The way chat bots require the NLP and how they fit into the AI world, how they mimic human language. The way it can be further developed and it is future uses. How does natural language work in the chatbot and how the non-technical team or people can use it for future development, The way of major companies like Face book, Google, Microsoft, and YouTube use chat bots and serve their respective customers.

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