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STUDY OF AZURE CHAT BOTS SERVICES

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ABSTRACT

With the invention of chatbots, we have come to a new technological era. This paper contains a brief knowledge about the azure chatbots as well as the fields in which they can grow and can have a huge positive impact and where they can be implemented so that their features can also be increased, and to which extent it can help to grow the business and can gain a huge success if it is being properly implemented in business as well as other sectors too. The .NET and Node.js act as the heart of this wonderful technology. The main and one of the most common benefits of these bots is that they can be used by anybody even those who are less educated. This technology is a boon for the web services world and has become one of the most popular technologies today and in the future, its value will increase as the advancement in it increases. This will help the user to simply ask the bot the same way it is asked to humans.

Keywords: Azure Bot Services, Artificial Intelligence, Bot Framework, Dot Net, Facebook, Microsoft, NLP, Node.js, Twitter, WhatsApp.

I. INTRODUCTION

Azure bot services are one of the fanciest services developed by Microsoft. AI bot services are trending now a day. Bot services have helped businesses to grow wider. Bots are becoming an integral part of the digital experience. It is becoming important as a website and application for interaction with service. Bots are something that can interact with the user with speech, text cards, etc. which makes it more interesting. Microsoft has created a bot framework for easy implementation of bot services. If the customer wants to create a bot from scratch the bot framework provides a bot builder SDK. Net and Node.js. bots are sophisticated weaving of artificial intelligence techniques. The bot framework helps you to build tools that are used for interaction with the user. In this, we will also have a look at how chatbots are being implemented in a different business scenario. By using this technology helps to transform the organization into the digital space. [1] These chatbots can also be integrated with various other applications such as Twitter, Facebook. Using this bot helps to increase the satisfaction of customers and helps to bring growth in the business, as well as in various other sectors. This is build using the insights obtained from customer's behaviour. Most of the bot's frameworks are intended with cross-platform and cloud-based. There are various benefits of hosting bots on the cloud are you can use it with server-less technology. And this serverless technology is possible due to C# and Node.js support. Bots are successful when it has a proper conversation with the user i.e., there should be proper responses for the request done by the user. [2] Azure chatbots support more than 18 languages. So, it becomes easy for the customer to interact with the bot in the language they speak and understand.

II. METHODOLOGY

A chatbot is something that is used for the conversation same as humans interact. This is possible through artificial intelligence. Chatbots can communicate with humans but today some applications can also communicate with each other. [5] These bots are the virtual person that can effectively talk to the user. Some examples of Cloud-based chatbots are Microsoft Framework bot, IBM Watson, AWS lambda. The turning test is also implemented, this test includes three users i.e., a human, a machine, and a decision-maker, who will decide whether the talking user is human or machine. Azure chatbots have gained the huge support of large companies like Facebook, WhatsApp, and Twitter. These are some companies using bot technology which has attracted users towards them. Shawar ct. al showed a chatbot for providing answers for FAQ's it used pre-processed data and a pattern matching to map the input provided by the user and to obtain the correct output i.e., answer. A user who read novels found this technology better than google search i.e., they prefer the chatbot more efficient to use. Most of the companies are using chatbots for interacting with customer's example: Google etc. the chatbots are preferred more because there is some emotional request that can be handled by chats bots same as humans handle it. [3] The bot framework provides the services that are used to deploy, build, test, and

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manage the bots. Azure bot services are a powerful tool that helps in handling free form interaction and guided conversation. [4] Azure bot services offer various services and tools to build a bot. Users can use any working environment and command-line tools. SDK for C#, JavaScript, TypeScript, and Python are available and for Java, the SDK development is under development

III. MODELLING AND ANALYSIS

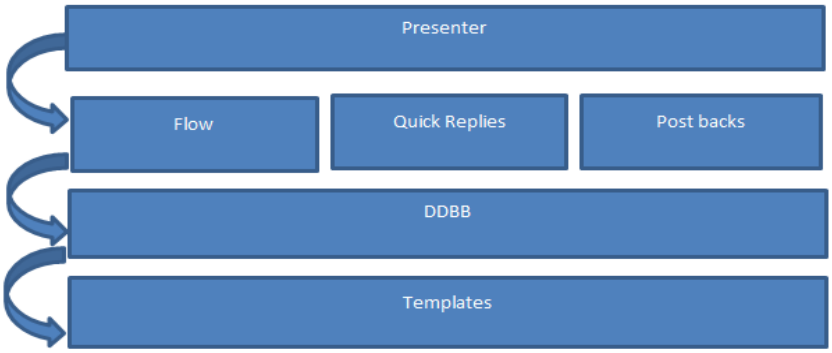

Fig 1

The presenter layer is a UI for example buttons, images, etc. The flow layer is responsible to interact with the web services and store the information. The quick replies as the name suggests are responsible for executing the command given by the user. Post back is used to trigger the actions. The DDBB are the repositories that contain common operation which provides the rights to access the data from our database. Template's layers are actions that are already predefined. Today there are also cloud-based platforms that are used to develop and deploy chatbots. But cloud platform-based chatbots are more efficient. This bot is created using NLP. The framework SDK is used to build the bot tools. This diagram represents our simple architecture of chatbot. This is basically for responding to the user commands. This is all done using NLP.

IV. RESULT AND DISCUSSION

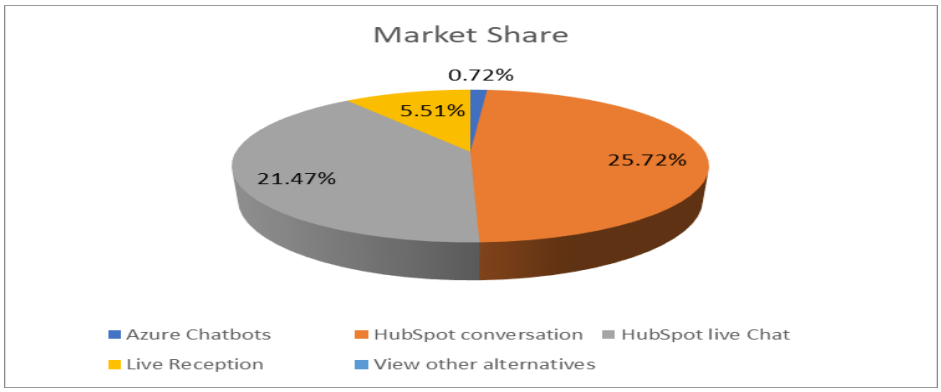

Fig 2: Azure Chat Bot Market Share percentage.

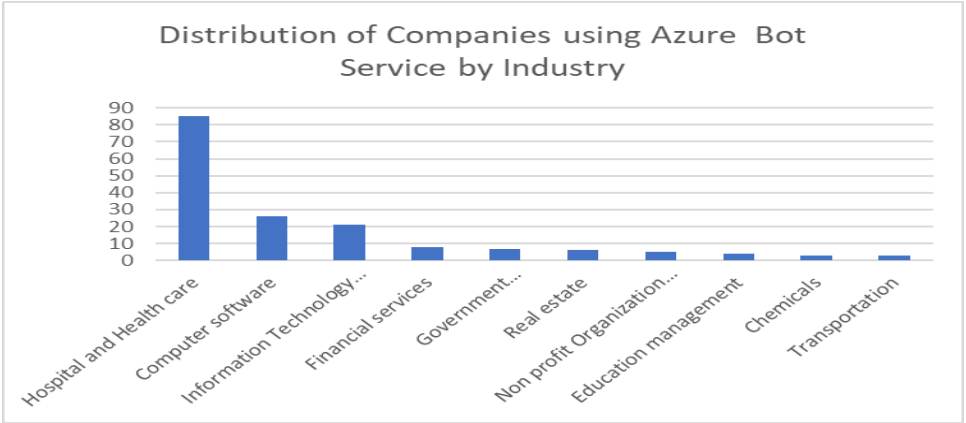

Fig 3: Azure Services are used by various industries.

V. CONCLUSION

Nowadays chatbots have become very popular and are used by everyone. The use of a chatbot has also helped in increasing the business and has made the life of the user easier. In this, the architecture of the chatbot has also been discussed and the algorithm used for the bot to understand and respond to a user command is NLP which is also been taken into consideration. The various application uses this type of bots has also been researched and reviewed.

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