Bot technology

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ABSTRACT

Bots Technology is the virtual agent which can answer the questions and help you get the things done fast without any need to talk to other people. It makes use of different applications like internet based chatbot, Voice-based chatbot. Bot's technology in detail is discussed in this paper.

Keywords: Modern bot, Chatbots, Voice-based bot's, AI personal assistant bots

1. INTRODUCTION

Bots are the type of artificial intelligence technology of software application that can complete the task in an automated way without any need of human intervention.

Bot technology is not new but research on this technology was done by Joseph Weizenbaum and he wrote: a "Bot" called "ELIZA" in 1966. Everyone is familiar with the concept of AI and if you have only one experience of artificial intelligence that is watching movies, you will have no trouble in understanding the bots. Bots have arrived on Facebook Messenger and also in some of the other messenger services. The future generation makes use of this bot application and are easily able to do everything by handling a personal assistant.

1.1 Natural languages v/s text-based bots
Bot's technology makes use of artificial intelligence processing technology which takes on the new process and goes to the previous step in order to perform the next step. Bot developers are using the text and voice-based interface which experiments on the echo computer science 1960, in the leapfrog the current computerized assistant understands and responds to the voice commands.

1.2 How did humans came up with the bot idea?
In 1950, Alan Turing developed a Turing up test, many developments were carried out in the same field and many artificial intelligence has failed the Turing test until 2014. In 2014 an AI model was developed in Ukraine which is said to be the first AI that has passed in the Turing test. Then Eliza first developed the Chatbot technology in MIT Laboratories. In 2000 people got an older version of the chatterbot including to similar amount of the data that one could search for them.

1.3 Could Bots replace applications?
The latest bot's technology uses the Artificial intelligence and business intelligence concept which are using the natural languages to get the task done. This is one of the many reasons that many people are making use of the Cortana to check the weather forecast, to set the reminders, send an email etc. as it is just faster.

1.4 Bots application based on AI personal assistant:
2018 The Year of the Bots technology use Bots:

- **Voice-based Bots for Automation and Retails:**
  The latest Bot's technology is 2018 which can implement different voice bots for automation and retails. In 2018 it has been estimated that 30% of the interaction were technical conversation based, showing up as Amazon and Flipkart to be the large retailer companies creating voice assistant bots for making a purchases, checking orders, providing products and suggestions of the extending brand experiences of their services.

- **Whatsapp will open their API to the third party:**
  Currently, the third-party developers don't have access to Whatsapp platform. But in 2017, WhatsApp has updated their terms and agreements and told that WhatsApp will soon allow the third-party API on its platform.

- **Evolving MMS functionality For Business:**
  Its carriers will continue to expand their MMS Functionality by offering enhance communication services. The service provider partnering with other service structure then will be increased in cloud-based structure.

- **Messaging as a platform [Maap] will Become Mainstream:**
  Messaging as a platform is the space for user interaction of the commencement and online activity to increase the mainstream.
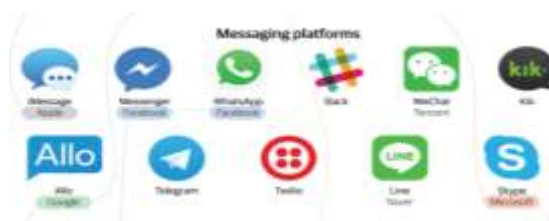
BOTS Application Platform:

Fig. 1: Bot technology platform

1.5 AI-Based Personal Assistants

In the Artificial intelligence, personal assistant or automated virtual personal Assistants can perform the task, or services on behalf of an individual based on the combination of the user input and the location awareness.

1.6 BOT application top intelligent personal assistant or automated personal assistant:

Google Assistant, Siri, Google Now, Cortana, Amazon echo, Nina, Blackberry Assistant, Silvia, Viv, Dragon Go, Hey Athena, Ubi Kit, Hound, Aido, Jibo, Bixby, Braina Virtual Assistant, Lucida, Maluuba, Mycroft, Vlingo, Cubic are some of the top intelligent personal assistant or automated Personal Assistants.

2. GOOGLE ASSISTANT

Google Assistant allows you to basically inquire about it by asking questions about weather, flight status, place etc. This can search any question that you ask about and can give the suitable answer. It can also translate the information in over multiple languages. It can also be of help around the house through hand speech recognition capability to manage schedule and control the home screen. It can always redirect you to its assistant for doing things you want like making reservations and confirmation or payment of the ticket it can also act as a reminder. All these activities can be done from your phone.

3. CORTANA

Cortana is an intelligent personal assistant created by the Microsoft that offers the personal digital assistant which can be a reminder and can help you with the work that are to be done and helping them across the device.

It can be a reminder based on the time, place and people. Cortana is specifically reminds you on exactly that time that you can set. It can also do the location-based reminder where you have to pick up the something at the location.

4. NINA

Nina is an intelligent personal automated assistant application that is the virtually human application that acts as an intelligence for the automated work that can be used by the customer using self-service of the companies which allows the conversations that has human touch in them.

Integrating this app to your customer service platform in your company Nina virtually understands everything that your customer does, therefore, it can maintain all activity and can truly handle the consistency of the voice for a brand and product Nina is able to natural converse with your customer and their questions and can give the answer by the assistant.

5. SKYPE BOT

Skype Messenger also includes the bot application by using the artificial intelligence of the application. The user can send the text and voice-based bot application using the functionality included in the Microsoft.
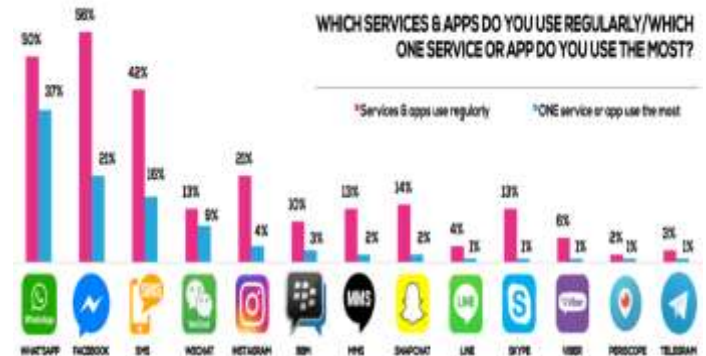
Skype bots enable rich text messages and quick action and real-time audio and video can also be used in 1:1 groups of the application. Bots can do so much on skype:

   i. **Chat all days:** Bots are always happy and are always ready to chat.
   ii. **The plan as a group:** The bot can help you plan your next big trip or even just a quick meet anytime.
   iii. **Play or Work:** Bots are available in all shapes and sizes, when you are looking for a personal assistant.

Table 1: Different platforms with features

Platform	Launch date	Key features
Siri AI	October 2011	It integrates a number of devices.
Mobvoi	August 2014	In this Platform the personal agent is available on iPhone and android phones.
Amazon Echo	June 2015	It can Interact and control the devises and services.
Google Now	July 2015	It is a new technology to anticipate the user information.
Microsoft Cortana	April 2015	The Cortana is the process of intelligence to ask the permission of the user's information on the device and it will be recorded automatically.
Facebook Messenger	August 2015	They are AI improving the User Interface.
Viv messenger	May 2016	It is the messenger that can handle the particular inquiry and open the device and service.
Hound	Mar 2018	It uses the compressive natural language suitable to handle the commands.

Bots Application using the Social sites.

Fig. 2: BOTS application which platform service mosttly use

Future of Bots:

1. It is extremely like the application of Siri in apple devices, but the capabilities of the user have not significantly improved. It is more than anything to make it into a universal and kit design.
2. Bots will be limited by the platform on which they can run.
3. Google is busy to build the bots application and it will be fascinating to the see what will appear in IOS and Android's latest versions.
4. You will quickly discover that bots' technology is not intelligent of them yet.

6. CONCLUSION

Bots are not intelligent enough to operate completely autonomously yet and they are not capable of understanding everything we ask. In some cases it might happen where in

some steps bots are not capable in operating the system which is manually operated company's employees. There is a lot of feature about bots right now and we will probably see a lot of development in the coming months of this year. There is, to sum up, don't expect the bot to do your jobs for your but they have shown promise in telling that certain tasks can be made easy. So, let's see how big the part Bot's will play in our future.

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