



A Comprehensive Study on Professional Announcer Voice with Voice Conversion

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Abstract

Chatbot have evolved as the important role in various department. It has been used in various means as in the services of customer services, healthcare, education. This survey paper discusses the details scratch of the chatbots, by detailing the foundation technologies and the dynamic changes influencing their future.

The survey paper is done by studying the foundational technologies that is used to develop the chatbot such as the NLP and AI. It focuses on developments in these fields and impact on enhancing the user queries with increasing accuracy and relevance. The paper also explores the various in various application where the chatbot are use it has application in various

domains including the education customer support.

KEYWORDS: Chatbot, Artificial Intelligence, Jarvis, Voice input, voice search.

1. Introduction

Chatbot:-

Chatbot has evolved as a important enhancement in technology, it has totally transformed the programs of a chatbot are programmed by artificial intelligence. It simulates and the human conversation we will explore various application across various industries and how it effects on the daily life chores. The main purpose of the chatbot it is used for providing useful information, is it is also used to answer the

questions, with the help of automation it is also helping to assist to the task .

Artificial Intelligence:-

AI means artificial intelligence with the help of we can develop multiple applications and the with the help of ai we also develop chatbot are used in industry such as education , ecommerce website with the help of ai we can develop application that can use in health care for various predictions in BFSI to predict stocks . AI refer to stimulate of human task that can perform task by requiring human intelligence it does involves developing in that can do on automate task by using human intelligence type of ai. ai are narrow ai or weak ai. ai also have subfield like machine learning, NLP there are various ai applications that impact various industry including health care, finance, education and entertainment.

2. Related Work:

[1] Speak Like a Professional: Increasing Speech Intelligibility by Mimicking Professional Announcer Voice with Voice Conversion - Tuan Vu Ho, Maori Kobayashi, Masato Akagi- Professional announcers are easier to understand in noisy environments than nonprofessional speakers. This tells us that their speaking style might improve speech impact. Researchers investigated if voice conversion technology could make nonprofessional voices sound more like announcers. They found that speakers of different skill levels had unique voice characteristics. Tests with different words spoken in noisy settings revealed that converted voices were more understandable, especially when background noise was loud. This research shows

promise for improving speech clarity in challenging listening environments.

[2] . Chatbots and Virtual Assistants in Education: Enhancing Student Support and Engagement- Prachi Goyal Nitish Kumar Minz Ayushi Sha- This paper discloses about In this new era of technology the chatbot is rrapid increasing. The use of chatbot in education and research is increasing rapidly. Here, it is explained that how the chatbot is used in education and research . Here it also studies the advantages of A.I. Along with the advantages the limitations are also studied in order to how help A.I. can help in Human expertise and Human judgement. Here, it also focuses on the adoption of the new A.I. techniques to make task effective.

[3]. Machine learning algorithms for teaching AI chat bots Evgeny Tebenkov , Igor Prokhorov.- Machine learning is a way to make computer systems learn, and make decisions and predicting outcomes by analyzing data from the server . It enables systems, like chatbots, to identify patterns and learn from past interactions and past experience . Chatbots, for example, are trained using the history of previous conversations. There are various machine learning algorithms, each serving different purposes, to teach chatbots and enhance automated communication. Chatbots are used for improving the customer overall experience.

[4]. Chatbots in customer service: Their relevance and impact on service quality Chiara Valentina Misischiaa, Flora Poeczzeb, Christine Straussa - This paper discloses about the integration of the chatbot across various websites like e-commerce, and various e-services to enhance the

customer service . It also explores various aspects of chatbots that significantly improve the quality of the customer satisfaction. Here it also provides key features of the chatbot in customer service to enhance the customer quality and customer satisfaction. It also explores how the chatbot can contribute to streamline the operations of the customer service.

[5]. Future directions for chatbot research: an interdisciplinary research agenda -Asbjørn Følstad ,Theo AraujoEffie, Lai-Chong Law, · Petter Bae Brandtzaeg,Symeon Papadopoulos, Lea Reis, Marcos Baez,Guy Laban,· Patrick McAllister, Carolin Ischen, Rebecca Wald, Fabio Catania, Raphael Meyer von Wolff, Sebastian Hobert· Ewa Luger - This paper discloses about ,Chatbots, are the computer programs that can chat like humans, are showing up everywhere from customer service to healthcare.While they're getting popular day-by-day, we don't fully understand how they impact individuals, groups, and society as a whole . Researchers are putting a lot of effort into understanding how chatbots affect people and how to improve them. They've been holding discussions for years on the best ways to develop chatbots responsibly and effectively, making sure they're beneficial and well-designed.

[6]. Chatbot in business- Milan Puvačaa, Ivan Kunac – This paper discloses about ,The high cost of employees and constantly changing nature of training employeesespecially in online customer support , are leading businesses to explore chatbots . Therefore the AI-powered chatbots are seen as a way to answer basic questions quickly and efficiently. It is advancements in technology allow companies to

automate tasks and satisfy demanding customersTo understand the true impact of implementing chatbots, we need to weight their advantages and disadvantages compared to traditional customer support methods.

[7]. Integrating Artificial Intelligence with Customer Experience in Banking: An Empirical Study on how Chatbots and Virtual Assistants Enhance Empathy -Waldemar Pfoertsch, Kejsi Sulaj - This paper discloses about the the effects of chatbots and virtual assistants on the customer stisfisation in the banking sector. Here various regression and correleation and techniques are used to achive the customer quality and customer satisfaction. It also uncover various insightsof empathy for implications of bank operations. It also describe to encopass global internet banking trends and also to increase the use of A.I. across varoius industries. It also focuses on the digital inclusivity, ethical AI utilization and human- centric design in the industry of banking. [8]. Introducing a Chatbot to the Web Portal of a Higher Education Institution to Enhance Student Interaction Pedro Filipe Oliveira,Paulo Matos-This paper discloses about the how the chatbot is implemented on the web portal on the higher education institution. This paer also tells us about the various chatbot provided by the chatbot. As in this the digital era of technology , for student engagement and effective communication techniques to meet the diverse requiremnets of students this chatbot is implemeneted. The chatbot has various features Information retrieval,Academic support, Campus services. Appointment scheduling .

[9]. Design Principles for Gamified Pedagogical Conversational Agents Bijan Khosrawi-Rad,

Arne Borchers, Linda Grogorick, Susanne Robra-Bissantz- This paper discloses about the pedagogical conversational agents . The PCAs are chatbots and virtual voice assistant. That help the learners in their studies . The interaction are less motivating. Enhancing PCAs with more interactive features to enhance the user and learner engagement. To bridge this the survey , and reviewed of relevant literature . They have identified the meta requirements, design features, and design principles to enhance the PCA's. The various experiments also done to increase the user engagement for learning in PCA's.

[10]. Implementation of Artificial Intelligence Chatbot in Optimizing Customer Service in Financial Technology Company PT. FinAccel Finance Indonesia- Mohammad Ridha, Khansa Haura Maharani-This paper discloses about the chatbot usage in customer service. It tells us about chatbot is implemented in PT. FinAccel Finance Indonesia. It has implemented in PT. FinAccel Finance Indonesia to streamline the operations in PT. FinAccel Finance Indonesia. It applies the swot analysis to find the internal and external factors affecting the chatbot.

3. Methodologies

In the chatbot model, the front end will used to serve the the respond from the backend.The process of data processing takes place in the backend and the output is generated. The properties that are provided it is suitable for NLP tasks. The encoder is to encapsulate the information. Chatbot is a program that is used as intermediate to take input taken the input is processed and output is predicted IT maintains the input is provide in the form of voice through the device which is voice enabled. The response is given in the form voice or text.

User can efficiently interact with the Chatbot through the voice input, as this voice. Input is enabled there no need of typing. By accessing the Chatbot interface to input the queries via voice. The speech recognizing technology is integrate in the UI ; after the input is ; the analyzed by the conversation mechanism; it analyzes the input the output is predicated.

The Chatbot has various Component:

- 1) Input
- 2) Backend
- 3) Output

1) Input:

- The input is given in the form of voice
- The input is given by via a voice-enabled device

2) Backend:

- In order to given output Chatbot interact with backend
- It includes database and API Calling in order to retrieve info.

3) Output:

- Once the input is processed, the output is presented.
- The output is presented in U.I
- The output is presented in U.I

4. Conclusion

As in the recent year the Chatbot has received the notable growth. As with the notable feature of Ai it has as many as advantages that help us to take to increase the business and achieve and money as growth in the profit revenue. Other than the common application of Chatbot such as customer support Our Jarvis provides weather prediction, music playback.

5. References

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