INDIAN INSTITUTE OF MANAGEMENT KOZHIKODE

04th International Conference on Marketing, Technology & Society 2020

A Review on Voice Assistant Adoption in Service Sector

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Abstract

A decade ago a revolutionary idea may have been the concept of the quest for knowledge and of transactions through communicating with a computer, but today it is a fact. The breakdown of speech technology has made a person communicating with technology a reality today through verbal commands and questions. Personal assistants based on voice have become so popular that we have opened their homes to devices like Amazon's Alexa, Google's Home, Apple's Siri, Samsung's Viv, etc. Virtual voice assistants have a great potential to interrupt the way people look for the details and make it part of daily conversation and changing lifestyles.

The paper provides a brief introduction to voice support, facilities, accuracy, and voice technology adoption by various service industries.

Keywords: Voice Assistants, Voice Technology, Disruption technology, Alexa, Google Home.

1. Introduction

Today voice as an interactive channel by voice assistants like Alexa, Google home, Siri, Bixby, and Cortana has become reality and essential part of our day today lives. Consumers today are becoming part of this new voice-based ecosystem and brands are utilizing this opportunity to get more closure to them. Customers are performing mundane tasks with the help of digital voice assistants. As a result, the way brands and marketers of various sector like retail, banking and finance, education, hospitality, hospital, and real estate giants are interacting with the consumers is also changing. This is resulting in growth of ecosystem in 3 ways: voice assistant providers are increasing and improving the skill set of their voice devices, industry giants are using these skills in increasing better services in a form of service touch point and consumers are plugging themselves in this ecosystem by buying these voice assistants. Taking this view into consideration the purpose of this paper is to gain an insight on how digital voice assistants are impacting the marketing strategy. The objective of this paper is to review the benefits and application and barriers for voice technology through voice assistants in the present situation. The present paper also aims at finding out how the marketing dynamics are changing.

2. Literature Review

Consumers buying behavior can be influenced by voice assistant for various service sectors as adoption of voice technology is both opportunity and challenge. Firms can use voice assistant as a new communication channel and touch point which will also uplift the brand image of these firms as an innovative service provider.

The term Voice Assistant means conversational agent who does tasks, whether functional or social, with or for a person and who is capable to improve his/her understanding of the speaker and the background. Incorporated in smart objects, this app utilizes a combination of AI techniques, including automated speech recognition (ASR), text-to-speech synthesis (TTS), and natural language understanding (NLU) to communicate with normal interactions with people by conversation (Gaikwad, Gawali & Yannawar 2010).

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This class of IoTs is known as 'Intelligent personal assistant' (Han & Yang 2018), 'personal digital assistant' (Milhorat et al. 2014), AI assistant (Dawar & Bendle, 2018) 'Intelligent assistant' (Jiang et al. 2015) as well as smart speak (Bentley et al. 2018) and 'voice-controlled smart assistant ' (Schweitzer et al. 2019).

With more industries taking over voice assistants, Financial Service companies will need to begin integrating these voice-based technologies into customer acquisition and retention strategies, marketing, sales and customer experience. Financial Service companies can use their internal voice assistants to increase their employees' and sales executives' productivity and effectiveness.

UBS pilots its back-office staff with intelligent virtual assistant Amelia. Amelia works with customer sales assistants to transfer funds from the deceased to the beneficiaries and assists staff in confirming information and filling out forms. UBS has started an initial United States pilot with a dozen sales assistants and plans to start the app for its customers worldwide this year. UBS also operates another Amelia driver with its internal tech desk in the United Kingdom (Tearsheet,2017).

Although speakers can help organize and manage daily routines of customers, they can act as a channel and offer voice-based services which go beyond personalized support for the provision of banking services. Customers have long been using financial apps for personal banking because they can carry out banking tasks without personal interactions on mobile devices. Customers are provided with the convenience and luxury of Voice-enabled digital banking which allows them to carry out banking transactions only via voice.

One of the first to allow customers to access their accounts via the Amazon Alexa device was Capital One (Alexa Blogs,2016)). Realizing the future of technological engagement with conversational interfaces, Capital One provides a diversified customer experience that makes money management easy − wherever and wherever. Capital One Skill allows in real time access to everything from credit cards and loans to bank accounts. BBVA's MIA voice assistant for artificial intelligence was initiated Enable mobile app users to make voice transactions inside Turkish Bank Garanti. A customer can have access, move, and understand the exchange price via voice to the latest account operation. (BBVA website,2017) Customers can also be provided regularly with updates on existing rates of mortgages, interest rates, stock, and portfolio updates, etc.

Early vision of voice support services from Bank of America led to investments in Erica, aimed at helping customers manage financial lives using predictive analytics and cognitive message. Erica took customer relationships into the next level of personalization, modulated on the personal banker. (Tearsheet,2017) Erica has all the information about customers

In the Education sector also voice assistant is contributing in educating kids and adults. Problem Pal is proposed in (Trivedi,2018), an Alexa Skill that enables teachers to produce content from voice commands automatically. The capacity of Wikipedia, Wolfram Alpha and the Khan Academy can generate practical questions about any subject. Speakers are exceptionally good at mathematics and spelling words, so they can be used to monitor and check their performance in mathematics by primary school students. In a first and second grade sample of primary students (Selak. 2017), students have regularly verified their mathematical results and have not requested their teacher's assistance

Alexa may be useful for an appointment in health care Plan, patient information, pharmacy, and pharmacy information facts. Anybody can use Alexa to track the Doctor's availability and we can prepare our Offering of rooms, appointment. Alexa may be used to take the patient's concentration Information of patients such as medications, and diet.

Boston Children's has checked Alexa's abilities to support hospital employees in regular activities. One of the Intensive Care Unit (ICU) skills gives nurses detailed information on medical dosage, unique procedures, contact information for staff and other related data points. It also helps users to decide where a medical device or prescription is stored in a large storage room to save their time.

3. Research Methodology

This research is based on desk research methodology and nonempirical research. This research include literature reviews ,conceptual articles, newspaper, articles, blogs, websites and online databases etc., author's subjective opinion and journalistic type report featuring real life examples of adoption of voice technology in various sectors and usage by different customers. This understanding is important for identification and promotion of this emerging technology in various sectors like education, hospitality, real estate, hospitals,

automobile and banking and financial institutes. This study can be used by researchers and young scholars for their future research, publications, and collaborations. Since the adoption of this technology in various service sector is very new, number of publications, articles and blogs are from 2012 to 2020.

4. Conclusion

The findings from this study will give insights on usage of digital voice assistants that will be helpful for academicians as well as practitioners from the corporate world. It will help the firms to adopt different marketing strategies for customer engagement through voice assistants. Investing in voice solutions today will help businesses develop a new communication channel with their customers and better prepare for future conversational engagements. This study will enhance the knowledge base of academicians and will contribute to the wisdom of practitioners (the ones who are novel to this technology) to appropriately draft and revisit their marketing strategy by considering the benefits of digital voice assistants

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