

# VOICE-BASED ARTIFICIAL INTELLIGENCE IN OUR EVERYDAY LIVES

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## ABSTRACT

*Recent advancements in technology and artificial intelligence has opened numerous opportunities to deepen and strengthen human intelligence. Artificial Intelligence is now entering the lives of consumers with transforming their ways of accessing the products, browsing internet and communicating with brands. Artificial Intelligence has shown significant progress and its growth potential, especially in areas like Natural Language Processing or Voice-based Artificial Intelligence. Voice Assistants are software agents which incorporate artificial intelligence, capable of understanding and respond to natural human voices. This column will discuss the various applications and benefits of voice assistants. It will also discuss how voice-based artificial intelligence is transforming everyday consumer lives.*

**Keywords:** Voice Assistants, Artificial Intelligence, Voice-based AI, Natural Language Processing.

## INTRODUCTION

Hey Siri, call my mother.

Alexa set a reminder to pick groceries.

Cortana, should I take my umbrella to the office?

Voice Assistants are conversational software agents having in-built system to interpret human voice and then respond accordingly to perform numerous required tasks like controlling home automation devices, playing songs, make phone calls, send messages, answer informational queries, set alarms. Voice Assistants like Alexa, Siri, Cortana are either embedded in smartphones and smart wearables or built-in as stand-alone speakers (Hoy, 2018). Voice Assistants constantly listens for the wake words like Hey Siri for Apple's Siri; after hearing the wake word, it sends the recorded user voice to a specialized server which further processes and interprets it as a command to perform the required task. Voice assistants are not less than any luxury, with having somebody who listens to your commands, anticipates your needs, and even performs numerous tasks.

Artificial Intelligence and machine learning have made it possible for even the normal public to own a personal secretary in the form of voice assistants. Voice-based Artificial Intelligence has entered the lives of billions of customers and has now become an important segment of the smart devices market. Voice Assistants are either integrated into smartphones, smart wearables, television, automobiles, or built-in as stand-alone smart speakers. Voice-based Artificial Intelligence is now transforming the everyday lives of people in almost all sectors, be it retail, education, healthcare, telecommunications, automobiles, etc.

Deloitte's Global mobile consumer survey reported a nearly doubled penetration of voice assistants from 12 percent in 2017 to 20 percent in 2018 (Srivastava, 2018).

Forecasts also suggest that by 2024, there would be a substantial increase in the number of voice assistants surpassing the 8 billion mark (Statista Research Department, 2021), and that consumer and business spending on voice assistants will cross \$3.5 billion by 2021 (Bradley, 2020). According to Statista, the number of voice assistants in use around the globe is 4.08 billion in 2020 and can grow by almost 50% by 2023.

Voice Assistants help individuals to have humane conversations with their technology-driven devices and perform numerous tasks simultaneously. You can ask the voice assistants to make calls or navigate while driving. Voice-based enabled technology can also prove to be beneficial for the future. Businesses can use voice assistants to enhance by building a strong voice application ecosystem. Management should respond actively to the changing interaction patterns of consumers. When given a more natural, humane touch to their products, their sales tend to be increased. Voice-based artificial intelligence can also help in running successful marketing campaigns by providing an enriched personalized experience, especially at the online platforms where there are no real humans in touch with the prospective consumer. Besides, it also helps in building strong customer relationship management by recording the purchase histories, specific instructions, or preferences.

Artificial intelligence is impacting all sectors. COVID-19 pandemic has affected the whole world making it more important to develop and include AI in all our tasks like healthcare which portrayed various weak links in difficult times (Kumar et al. 2021). Voice-based Artificial intelligence also offers great opportunities to lower costs and reduce entry barriers for businesses to deliver innovative solutions while overcoming traditional processes (Strusani & Hounghonon, 2019). In simple words, the dawn of voice assistants, with the number of people using voice assistants growing at an exponential rate. With major technology advancements, consumer needs and expectations will rise. Brands and marketers must focus on syncing their products with this voice ecosystem.

**VOICE IS THE FUTURE!**

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