

# USAGE OF VOICE ASSISTANT IN TIME OF COVID 19 AS A TOUCHLESS INTERFACE

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## ABSTRACT

*In order for a company to create a high desire to pay for its products/services, it must first learn about its customers' expectations (latent or explicit). Understanding customers' needs assists the company in providing better services and products, which in turn aids in the development of value for both the company and the consumer. As the COVID-19 pandemic continues to spread throughout the world, consumer health issues are becoming increasingly expensive when dealing with businesses. The epidemic of COVID-19 altered the mindset of customers toward health and safety regulations. The goal is to limit the amount of physical touch while increasing the amount of contactless contacts in order to lessen the danger of infection, and businesses have already begun to recognize this. It is common for people to utilize their voice assistants, such as Amazon's Alexa, Apple's Siri, and Microsoft's Cortana, for emergency response purposes. This allows them to stay connected with friends and family while also connecting them with important resources and aid for COVID-19 diagnosis.*

**Keywords:** Voice Assistant, Voice Technology, Covid-19, Technology Adoption, Customer Value Proposition

## INTRODUCTION

Wicked problems are fundamentally difficult, and there is no prescriptive solution accessible (Alford & Head, 2017), which may apply to the COVID-19 epidemic as well as other wicked challenges. The social consequences of virus transmission, as well as the responses of governments around the world, are not unknown.

As a pandemic from COVID-19 threatens to strike the world hard, public health variables pay a high price to engage with organizations. People are keen to eliminate physical contact and improve contactless interactions to reduce the risk of infection, and businesses take notice of it. The coronavirus epidemic has changed our everyday lives dramatically. Market trends, which may otherwise have taken years, have accelerated drastically, including the use of e-commerce, telemedicine, online education, video chat, in-house sports or workouts and diets. These fast-moving developments have also been brought to accept by existing web and mobile solutions. Companies such as Amazon, Zoom, Slack, Instacart, Microsoft, Google, Netflix and more have already exploded on the market with goods created before they were on sale overnight. Fortunately, the modest Voice Assistant serves as an inexpensive and versatile tool for providing users with an introduction to critical environmental systems and the promotion of well-being during COVID-19. Users have a sensation of presence when using a voice assistant, and older folks consider voice assistants to be similar to adopted friends (Pradhan et al., 2019). These considerations are critical in the creation of COVID-19 strategies.

Voice Assistants like Alexa, Google Home, Google Mini, and Siri provide digital voices of the modern world. Voice Assistants only need a voice input for making a touch, job, game, mission, purchase, e-mail account, and simply talking to someone (Harish et al., 2016). Voice

Assistant only need a voice input. These devices lie still in one ecosystem (e.g., living area, bedroom and kitchen), they are discreet and easy to access, remove the necessity of surfing through computer interfaces that take time or virtual keyboards that are fiddly time-consuming on a tablet and are more accessible than most technologies.

Techniques that are especially difficult to work with (Chan et al., 2011; Genoe et al., 2018; Lisko et al., 2020; Marston et al., 2019; Marston et al., 2016a; Marston et al., 2016b; Marston, 2012; Marston et al., 2012; Uzzhi, 2011; Marston et al., 2014; Marston et al., 2016a). Voice Assistants are unique because they provide links to digital services through voice alone, thus reducing the need to learn technical skills as it is needed by many other kinds of technology. Any people can still use telephones if they live with a visual disability. No other device is so easy to communicate with and provides access to a variety of resources through the environmental infrastructure of a consumer. Voice assistants with the aid of the power of speaking, consumers have access to sources of knowledge (such as the radio, news alerts, general details, recipes of cooking), structured services (such as takeaways, food storage systems, e-mail), etc.

<b>Categories</b>	<b>Examples</b>
Managing time	Setting timers/alarms, setting reminders, and calendar appointments
Information seeking	Determining time and weather, gathering directions, checking facts
Access to various apps, services, and devices	Making phone calls, text messaging, home device control, third party apps like (Uber, Spotify, etc.)
Media and entertainment	Playing music, listening to the news, playing games, and listening to jokes
Math and language aid	Supporting basic arithmetic and conversions, word definitions and synonyms, and sentence translation
Medical	Provide diagnostic or monitoring services, send emergency calls or texts.

Users performing tasks using home and mobile Voice assistants

## **STATEMENT OF PROBLEMS**

This study investigates how voice assistant technology functions to aid consumers during a pandemic situation, as well as how firms might rethink their customer experiences to meet this world without interaction as a separate value proposition. Should we expect to see a greater emphasis on touchless interactions in the aftermath of the pandemic? In addition, because contactless experiences need the increased deployment of technology such as voice assistants, enterprises must address issues about data security and privacy that have arisen in recent years.

### **Need for Study**

In order to address the problem statement, the research study adopted a managerial viewpoint in order to get insights into the existing situation in Covid-19 and the adoption of voice assistant technology. The results of the research study were presented in the form of a problem statement. This paper primarily focuses on the key issues that Covid-19 consumers are experiencing as a result of the rapidly evolving scenario. There is a pressing need for this research to identify ways in which voice assistant technology can bridge the gap between consumer and enterprise adoption, as well as the advantages of using touchless technology in the time of pandemic by various sectors in the time for solving various user problems and addressing the pandemic situation by providing a convenient touchless solution The adoption of

voice assistant technology has resulted in a paradigm shift in company and user behavior during a pandemic crisis, and this article helps to explain how this has happened.

## LITERATURE REVIEW

The World Health Organization's (WHO, 2020) recommendation is that it is necessary for us to preserve those routines in the face of a pandemic in the isolation process. Voice Assistant will help the user set up new habits and practice current habits and allow users to remain comfortable during unimaginable and unusual times.

This pattern poses a range of concerns for organizations. How will businesses reinvent their consumer services in line with this contactless world? Is the emphasis beyond the pandemic on touchless interactions? In addition, the research note centered on four main market developments in organizations addressing public protection and privacy issues.

The use of touchless technologies has grown commonplace in a world that is concerned with the health and well-being of its citizens. Taking Tesla as an example, the company offers a contactless car supply system that reduces touch with the customer's automobile manufacturer's employees (Electrived.com, 25 March, 2020).

The pandemic presents an once-in-a-lifetime opportunity for voice-based interfaces to accelerate their adoption in physical environments.

The use and assimilation of Voice Assistants as a positive aspect, as well as the benefits they provide in several fields

### Isolation and Loneliness

Excessive self-isolation can have serious consequences for some people, such as the elderly or those suffering from chronic or life-threatening illnesses or impairments (Burholt et al., 2017). Younger communities are also at risk in this current crisis, which has put many community groups at risk of social isolation and loneliness, including the Church, the Women's Institute, and numerous other sports clubs, as well as friends and relatives, as their daily routines change. In today's world, isolation can be brought on by a variety of factors (Giddens, 1979; Morgan, 2015). Singleness and social isolation can be acute or long-term, and they can have diverse effects on people's health and well-being. Even though persistent solitude and social isolation are associated with poor physical and mental health (Holt-Lunstad et al., 2015; Valtorta et al., 2016), it is less likely to be associated with any longer-term health or welfare consequences in the case of acute or acute loneliness and social isolation. However, if social contacts are not able to continue, there will most likely be short-term consequences for mental health.

Human well-being and good health are believed to be influenced by social interactions and experiences (Dinkins, 2017). Because of the instabilities, people become more vital in their relationships with loved ones, and necessities like health and social care become more relevant.

There is a greater possibility that persons who are at high risk will need to take additional steps to protect older adults or young adults who have life difficulties or who are in life-threatening situations (Blackburn et al., 2014; Earle & Blackburn, in press; Walmsley et al., 2015). COVID-19 has the potential to result in significantly decreased access to a broader community and its relatives for these peoples and for all of us if the rules of the government are followed. It has the potential to expose us all to unparalleled levels of loneliness and isolation.

As a result, technology provides a sense of comfort and encouragement by providing a plethora of communication tools, such as voice assistants such as Siri, Alexa, and Google assistant, which allow us all to speak in a familiar and friendly manner. When used in conjunction with face-to-face engagement, group chat technologies can help to compensate for the loss of physical hospitality and the presence of friends, family, and members of community

groups or sports clubs. These devices and social media channels provide people with the capacity to sense that everyone in this is together and connected, which increases the sense of belonging and, as a result, lowers the feeling of being socially isolated, at the very least physically. There is, however, a unique type of technology that pays little attention to scientific research or the potential benefits in different communities - the voice assistant (Marston & Samuels, 2019).

With social disturbances as the new law of the land, people are using their Amazon Echo Show to get real attention on their family and friends. In comparison, technology can play an integral part as a medium for maintaining communication with family and friends through ever-growing steps and restrictions. Recently, the role of technology in the crisis in affecting different societies and people has been discussed by Marston, et al., (2020). Voice assistants as a conversational assistant have become popular in recent years, with busy customers becoming more and more able to see them as a reliable companion. For example, it was found that consumers around the world are using these technologies for purchasing various goods or getting financial advice (Capgemini Institute Study, "January 2020). Today, voice interfaces allow companies to engage with customers during lockdown. In the aftermath of the pandemic, for example, ICICI Bank of India launched voice assistance services. Consumers may access a number, such as account information, credit card history or transaction details by means of vocal-enabled smart speakers. "Non-touch" voice interaction technology offers unprecedented opportunities for companies to communicate with customers from shops to government offices and in physical locations too. (Capgemini Research Institute, September 2019).

Many nations, including the USA (Department of Homeland Security, 2020), Canada (Canadian Press, 2019), Australia and Portugal (Waterson, 2020), have emergency warning systems that provide state/provincial information that their people (such as notified cyclones, floods, and forest fires) (Waterson, 2020). Waterson (2020) states that many of his people are prevented from getting in touch with contaminated people because the proactive existence of South Korea's emergency voice based warning system (Water, 2020). As COVID-19 spreads to Europe and the world, several countries and governments are now developing a separate emergency voice-based warning system (Waterson, 2020). A selection of applications is driven by the desires of voices today. For example, voice-enabled elevators with smart speakers in China were used to eliminate the need to touch the controls during the pandemic. In many ways, China has been at the forefront of adopting voice technology, and this was never the case during the coronavirus crisis. On the medical front, we have seen many technologies that speed up the tracking, testing, and treatment process. China has a voice robot that can make 200 calls in five minutes (compared to two to three hours manually) such as identity, health status, whereabouts (current and recent past). Voicebot is enabled when users write their suggestions, advice and support resources to health care providers that must be at home when they forward their health status data.

### **In-store Ordering**

Even before the pandemic, retailers were experimenting with voice-activated ordering. McDonald's, for example, announced the rollout of Voice-Acknowledgement for Drive-Through orders for the first time in September 2019. (Source: Big Think, 15 September 2019.) Several Starbucks locations in the United States, for example, have just reopened, and the company has emphasized the possibility of spoken ordering in these locations (Starbucks, 2020).

Voice Assistants may be connected to the Internet of Things (IoT); it can help people remind or warn their everyday objects. The combination of domestic goods with the Voice Assistants as an interface may allow older people to buy food and help them understand when a refrigerator runs low on certain foodstuffs and likely coordinate deliveries with local stock, thereby reducing storage and supply requirements. In the case of an emergency these may be changed to represent social needs.

## Corona Symptom Monitoring

During a pandemic, people and institutions would like to understand how and where diseases spread. People want to stop being sick, and institutions like hospitals or municipal councils need data-based strategies to improve capacity and prepare social initiatives (e.g., companies closing) and order more testing kits. But attempts to obtain infection levels rapidly and reliably are stymied by people's concern that the disclosure of symptoms will affect their professional or social life. Voice assistants and Chatbots can only be appropriate for the monitoring of symptoms in pandemics because people who suffer from stigmatic disorders often delay obtaining health treatment and training 19 (Mak et al., 2009). Prior research indicates that individuals are more likely to divulge personal symptoms confidential details to a voice assistant, than human ones (Berger, Wagner & Baker, 2005). Therefore, people with voice assistant, may come more forthcoming than humans, providing more precise time and precise individual triages and population-level estimates on an infection level (Lucas, Gratch, King & Morency, 2014). The organization has developed or helped to create COVID-19-based voice assistants and chatbots for millions of users, possibly aimed at expanding accessibility (WHO, 2020, Farr, 2020, Intermountain Healthcare, 2020) (Apple, Amazon, Facebook, Microsoft and Tencent), the CDC government departments, non-governmental organisations like the WHO, etc.).

## Support for Changing Behavior

The WHO director general was unable to say it loud and clear: "all countries may still alter the trajectory of this pandemic," forcing people to conduct activities that minimize their transmission, such as washing their hands and distancing themselves from society (WHO, 2020) Knowledge must be achievable to impact actions. Talks will fill the void between information and action by repeating, step-by - step instructions and offering "tricks and advices" for improvements in behavior (for example, auto-enact able behavioral modification techniques) (Michie, West & Amlot, 2020). 60% requested additional health information from a chatbot and voice assistant when a study of low-health literacy patients in a hospital setting requested. In a pandemic, voice assistant could discharge time-consuming, but essential behavioral assistance and training from medical staff. Home-driven voice assistants, including Amazon, Apple, and Google devices, can support behavioral change, through "skill" and "action" linking the users to third-party voice apps, which enable voice assistant to provide services and exchange information beyond their native programming.

In Seattle, Sayakara creator of First Ambient AI Voice Assistant for Medical Examination Room Conversations, today announced the addition of telehealth on ramps to facilitate the care of distant patients (Sayakara, 2020). AI-powered voice assistant 'Kara' can now assist clinicians with zoomed video conference calls, documented telehealth visits, and meet a provider's needs to make changes to virtual healthcare. Sayakara is now free to doctors dealing with COVID-19 cases, in support of health care providers at the forefront of the Coroners public health crisis (Sayakara, 2020).

Kara helps providers adapt to virtual visits, enabling them to fully focus on their patients, to easily meet the challenges of a remote care workflow. During a virtual visit, Kara's ambient AI technology is silently used to detect signs in provider-patient testing interactions, as well as key aspects of the patient's history and any relevant clinical orders or patient referrals. Kara uses the entire remote test conversation, relevant information in the patient's chart, and an enhanced testing experience for each physician-patient interaction - in person, over the phone or *via* video conference. AI algorithms are constantly learning the power of Kara, helping doctors to be more precise, quick and sophisticated (Sayakara, 2020). Kara automatically updates notes and patient records so that the physician does not have to spend extra time after entering information on the

EHR and forfeits nothing for billing purposes. Kara works locally with all major EHR platforms and is fully HIPAA-compliant (Sayakara, 2020).

### **Diagnosis of COVID-19**

Unexpectedly, or perhaps with motivation, study investigates whether the tone of a person's voice can be diagnosed with COVID-19. Corona Voice Detect is currently gathering an international dataset of the voices of infected people around the globe, in the hope of discovering speech biomarkers for COVID 19, based on a partnership between Carnegie Mells (USA) and Voica.ai (Schwartz, 2020.). In the United States, Voice assistant are used to help people diagnose themselves by asking a set of questions and informing them (Porter, 2020). These instruments are powerful in a context pandemic which offers the ability to provide prompt diagnosis in the disease epidemiology.

Please accept this, you assume you have moderate COVID-19 symptoms. On your smart speaker you record your voice, and you probably have COVID-19. Your medical information will be discussed with your nearest general practitioner, who will arrange for your door to be shipped a COVID-19 examination, and a diagnosis will be confirmed within 48 hours. Your full diagnostic period was verified for 72 hours and is mapped to a national database immediately. It is critical that COVID-19 is adequately interpreted at both local and national scales to assess the efficacy of social distancing and self-isolation.

### **Control of Infection**

For the frontline staff it is very important to limit surface contact during crises like COVID-19. In Covid-19 at times the caretakers who are approaching citizens' homes in particular to ensure that they're safe, are also risking their health. COVID-19 vulnerabilities people who were previously fit and stable have been heard and read by residents, in some cases resulting in death (Middleton, 2020). Yet no one is excluded from the COVID-19, according to newspaper articles (Readfern, 2020; Simons, 2020).

The IT sector and the government have noted a loss in tactile communication in public shared areas outside of hospitals, and speech technology is making headlines (Walia, 2020). The Hangzhou-based company XIOLIFT is experimenting with voice-activated elevators in order to limit the transmission of microorganisms from surfaces such as elevator buttons. Voice Assistant like Alexa can be attached to doorbells with external cameras, provide additional protection to residents and decrease infection transmission. Alexa's link with the doorbell alerts residents who can communicate with a supplier to leave the package outside, allowing further reduction of the risk of infection. In addition, internal doors can be connected to a tool that can be enabled (opened), thereby reducing the risk of cross-infecting ecosystem residents. This proposal will be and would be suitable both for residents who are considered high-risk (+70 years) and for people who are vulnerable to chronic disease. Integrating this strategy into a Voice Assistant decreases the chance of cross-infection with other ecosystem residents. Voice Assistant and IoTs thus make it simple for users to execute a variety of commands to turn on and off light and music. Marston & Samuels, (2019) describes current and diverse features of Voice Assistant insides of the home, especially for chronically ill and/or disabled users who are in need of additional support. An additional description of the work released a review of the paper and the practicalities of intergenerational life and action in terms of technology and Voice Assistant are presented (Marston & Samuels, 2019).

### **Promoting Mental Wellbeing**

While the importance of mental health in a pandemic has been stressed by global and national health organisations, COVID-19 mental health needs are currently under-addressed.

Frontline physicians are often not qualified on psychiatric emergency assistance and mental health professionals are short of supply 2 (Xiang et al., 2020) Voice assistants will minimize the psychological damage caused by separation in the short term, even though they cannot sustain human-level talks (Xiang et al., 2020). In some ways it can be helpful to clearly express thoughts and receive emotionally encouraging responses. Voice Assistant may decrease the long-term harm from pandemic-related loneliness, sickness and depression 13, 26 (Brooks et al., 2020) if effectively built and deployed (Huremovic, 2019) Preliminary evidence shows that voice assistants are likely to decrease the symptoms in the mind but long-term results are uncertain and worthy of the future research 6, 27 (Laranjo et al., 2018; Ho, Hancock & Miner).

### **Universal – Inter-Generational and Multilingual**

Although English is a common language, it is a second, third, or even fourth language for many people, for some Indians. In such a crisis, it is important for knowledge and instructions to be understood by all to have a Voice Assistant interface that allows multiple languages. While some citizens may not be able to speak English, they can still live with their children and/or grandchildren. Voice Assistant s has the ability to provide intergenerational commitment and support, and COVID-19 is not required or necessary to have a real skill or digital literacy (if it is retrofitted into the environment or developed by someone else).

### **Safe Language and Domestic Abuse**

During this pandemic (Snuggs, 2020; women's assistance, 2020), there has been a rise in domestic abuse. The UK Government has posted guidelines on their own website for victims of household abuse, including the protection strategy (2020). In addition, a Voice Assistant can include "safe words" which a victim may use to warn emergency responders. There are complications, such as that the attacker knows that the safe word was used, or that the safe word was detected and deleted. Further research will, however, be needed, for example participant seminars, with key stakeholders to decide if Voice Assistant s are appropriate for this.

## **FUTURE SCOPE OF VOICE ASSISTANT**

The coronavirus crisis has transformed our daily lives. Significant increases have already been

In an epidemic-changing world, new and adapting companies are doing well in the post-crisis world. Voice technologies are in a position to power the next generation of products. We consider two shifts related to voice:

1. Existing products add voice interfaces.
2. New and unique experiences built on voice as the primary medium.

Anyone who has been in quarantine, who has entered publicly, suddenly knows that they are not touching anything or getting in touch with anyone. The no-touch, voice-enabled option is inevitable for communicating with any device around us or completing simple transactions. Customers will inevitably demand voice choice for a lift to the grocery store, ATM, airport interactive map and anything that currently requires a touch. Similarly, companies concerned with employee safety implement workplace voice interfaces to reduce the risk of virus spread. As soon as the brick-and-mortar retail stores reopen, some servicers will transition from human to human to virtual assistant, once again relying on voice interfaces (Brace, 2020).

The second phenomenon we see is that most of us spend too much time at home - away from offices, malls, coffee shops or crowded conferences. This arrangement opened our eyes to the new reality. Businesses do not have to pay for expensive offices and employees must maintain traffic and schedule flexibility. Some workers will eventually return to their traditional

offices, take part in travel and activities, and most will continue to work from home. Brands that traditionally rely on foot traffic, event marketing, or other ways to get in front of their customers may need to suggest new channels to reach their audience, where customers can see you comfortably from their home.

Smart technology, a technology that has certainly entered the home in the last few years, now accounts for more than one-third of Americans. Not surprisingly, a recent NPR report suggested that the use of smart speakers was quarantined. This is a good opportunity for brands that traditionally rely on in-marketing and sales to prioritize voice in their O'Neill strategy.

## **New Experiences**

The current environment offers unique opportunities to meet emerging needs and establish new consumer models. Yesterday's iconic products are unlikely to include single modality (e.g., touch only or video) - they combine multi-modal experiences that combine images, video, touch, audio and possibly AR/VR depending on the context of the user. It is possible to get started. And the equipment they use. Voice, if used as a core part of these products, will not change afterwards, changing the user experience (Brace, 2020). There are many emerging requirements that are the voice primary interface. Here we recall three possibilities that the current crisis can specifically address with voice solutions.

## **Mental Wellness at Home**

Even before the coronavirus, Western society was already plagued by a solitary pandemic. Sadly, prolonged social distance, macroeconomic hardship, and a constant negative news cycle have only blossomed in this phenomenon. Although the anti-covid-19 vaccine is expected to develop soon, there is no quick or universal improvement for psychological well-being. (Brace, 2020).

There is a great need for a digital mental wellness coach to interact with people who are experiencing loneliness, depression, addiction, or drug abuse. A coach who can "listen" and provide support and encouragement. A coach who can raise medical professionals in times of crisis. A coach who can guide us through meditation, exercise, healthy habits, and other self-care processes (Brace, 2020).

## **Connecting the Stars with Fans and Advisors**

Large scale events, as we all know, are unlikely to happen for the future. It will be a while before we experience a packed sports stadium, performance hall or festivities. However, it is always important for stars to connect with their audience and experience thrilling partnerships with viewers. Stars need to redefine how they connect with their fans and patrons (Brace, 2020).

The image of listening to his favorite band from the comfort of his room and asking questions about his art - perhaps inspired by his learning routine, favorite concerts or a particular song. Different band members, in their voice, can give you different answers. They can also ask you what you think of their music. These are asynchronous conversations with artists themselves. Having such virtual, personal exchanges with your favorite artists or athletes means how sports, arts and entertainment companies can increase their fan base in the future. There are also creative ways to repeat events at home and share sharing experiences. Using existing voice technologies, it is already possible to create such solutions (Brace, 2020).

## **Digital Voice Interfaces and Inclusion**

Touchless interfaces, voice interfaces, can enable those who are not as knowledgeable or comfortable with apps to increase "digital inclusion." For example, for example Jio, a leading



Indian telecommunications company, voice is also the chosen interface for mobile data and apps users for the first time (Economic Times, March 12, 2019). Defining the touchpoints that meet and want essential customer needs for use: companies, where voice-based interfaces are appropriate and deployable, need to identify key points in the user journey. Understanding the preferences and dislikes of various industries can form the conversational and experiential design strategies. Have customized, informative and human-like experiences: users prefer human-like interfaces, where contextualized, meaningful, and unique experiences are used. This includes a good understanding of the customer, for example, recognizing how customers sound in different voice tones (Capgemini report, 2020).

## **RESEARCH METHODOLOGY**

This study is based on desk research technique and non-empirical research methods and procedures. This research includes literature studies, conceptual pieces, the author's subjective perspective, and a journalistic type of report that includes real-life examples of voice technology from the period of Covid -19. This study helps to the understanding of current voice technology utilization in various areas around the world through the use of voice assistants. This understanding is critical for the identification and promotion of this developing technology in a variety of sectors. Researchers and young scholars can use the findings of this study in their future research, publications, and partnerships. The application of this technology in the Covid - 19 pandemic crisis in the service sector is relatively recent, as seen by the large number of papers, articles, and blogs from 2015 to 2020.

## **CHALLENGES**

### **Technical Challenges**

However, the high cost of voice assistants and limited competition in voice and speech recognition by neural networks limits its use for various cloud-based services, which can hamper global market growth.

### **Security Challenges**

The growing threat of cyber security and privacy issues is expected to impede the growth of the voice-controlled devices market. The most important factor that hinders market growth is the threat to cyber security. In smart homes, devices for communication are interconnected by the cloud. The use of cloud services increases the risk of cyber security, where unauthorized users can access private devices through their systems. Voice-controlled devices are facing system integration problems with consumer systems or devices, which should stop the development of the voice-controlled devices market. Considering the benefits of digital voice assistants.

### **Privacy and Trust Challenges**

Privacy is concern for many people because of its in-built microphone which is alert all the time. Also, in case of financial transaction people are hesitant to use voice assistant (Park, 2018). Data security and privacy are essential to ensuring that user data and information are protected on any device or related network. The same applies to Voice assistants as well. In 2018, GDPR had to be consistent with the people and businesses (large or small) (Information Commissioners Office, 2018). Where the information is processed is a concern when using Voice assistants and possibly IoTs. Data is actually stored in a cloud and can easily be accessed from a desktop/laptop or smartphone. However, the cloud may not be controlled by UK data

security laws, compromising users' private lives and establishing a surveillance environment if it is situated outside of UK jurisdiction. The UK Government should ensure that all data are protected and are subject to UK legislation, and if our suggested application of Voice assistants as a supplementary State Emergency Warning is to be placed in effect, strict guarantees must be in place to protect privacy, integrity and confidentiality of its users. What are also the precautions in place for Voice assistants and IoTs? In the last 12 months or so, we have seen how Voice assistants are capable of violating their users' privacy without the consent of the respective users (Lynskey, 2019; Taylor, 2019; Vlahos, 2019). Encouraging market openness is crucial and user control is essential for the complete incorporation of VAs in our personal environments and what is not relevant.

The problem is perhaps special with regard to voice assistants, since the system is "always on" and ready to react, so that it can catch snapshots of our lives constantly, generate pictures of our lives and personal data. In that way, without a user's direct and available approval, we argue that it is unreasonable and immoral, with questions about what a lay person might understand about privacy notes and how and where data are processed. All participants, including the United Kingdom Government, should understand that user behavior can be monitored. However, for a device to be used as a warning system for state emergencies, compliance with the existing law will have to be apparent.

### **Contribution of the Study**

The findings of this study provide scholars, researchers, and organizations with a helpful critical analysis of voice assistants and their usefulness in scenarios such as those encountered in Covid-19. This research contributes to the understanding of the emerging use of voice technology in many places around the world through the use of a voice assistant. Using this understanding, the study will assist researchers and young scholars in their future work, writing, and collaboration across a variety of industries to discover and promote emerging technologies such as Artificial Intelligence (AI).

### **CONCLUSION**

Individuals under quarantine or who have entered the public domain are immediately aware that they are not touching anything or coming into contact with anyone. When it comes to talking with any gadget in our environment or conducting simple transactions, the no-touch, voice-enabled choice is unavoidable. When it comes to things like a ride to the grocery store, an ATM, an airport interactive map, and other things that currently need a touch, customers will certainly expect voice selection. In a similar vein, businesses concerned about employee safety adopt voice interfaces in the workplace to limit the danger of virus transmission. As soon as brick-and-mortar retail locations reopen, some customer service will be provided by a virtual assistant that communicates with customers on a human-to-human basis, once again relying on voice interfaces. Voice assistants are busier than ever before, with tasks ranging from assisting in the tracking of positive cases of infection to managing people's daily routines at home, among other things. The use of voice-activated systems such as Google Assistant, Amazon Alexa, and Apple's Siri has grown in recent years, and the virus pandemic is expected to spread quickly. Voice assistants are not only used to answer questions and make purchases, but they are also used for smart home control and a variety of business and medical applications, all of which are of interest in order to limit people's personal contagion.

In this current crisis, the daily conditions of the COVID-19 are at stake for both people and governments. The UK Government is seeking guidance from the academic community *via* evidence-based analysis and modelling, with improvements every day and shared through media outlets, a live regular announcement, and social media channels (e.g. Twitter). Political journalists including Chris Mason, Laura Kuenssberg, Adam Fleming and Katja Adler, who

report on their own Twitter profiles daily and The Coronavirus Newscast (BBC, 2020). The latter is a common concern. Although Voice assistants offer clearly specified benefits and a world of connections in a time of confusion, they are not without challenges. Technology provides a host of innovative and creative ways to work collaborate and connect with the world we live in and search after the most disadvantaged in our communities and culture and help them there. With this in mind, Voice assistants may also prove to be a fundamental social arm to combat COVID-19. Voice assistants is a rising, disruptive platform that is capable of creating new and more complex experiences with society and its global societies, if not millions of people worldwide in emergencies and crisis. Our research has identified voice assistants as an excellent tool for preserving social connectivity despite the high risk posed by COVID-19 and the uncertainty surrounding the future. Voice assistants should save lives, promote well-being, and serve as a critical social instrument during COVID-19 in order to maintain chaos stability.

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