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Virtual Assistant in Business: A Primer

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ABSTRACT

Virtual assistants refer to artificial intelligence-based systems that offer help with any of a multiple of tasks. Virtual assistants are tools controlled by human; they are not meant to replace human. They are only invented to assist human in carrying out some of the day-to-day tasks and responsibilities. They allow human to invest their power and time on more impactful things. However, the application of this technological innovation is still very new, although some are home-based applications while some are work-based applications. This paper introduces virtual assistants as technological innovation meant to relieve both the business owners and their employees from stress and wastage.

Key words: Virtual assistant, artificial intelligence, technological innovation, application

INTRODUCTION

Virtual assistants are intelligent software agents that their performance is attributed to voice command. Some virtual assistants use synthesized voices to interpret the voice of human and response to the voice. The mundane activities and tasks perform by human waste time and energy that would have been expended on something meaningful. This is common in routine scenario that calls for immediate response as found in some of our everyday tasks. The technology behind virtual assistants allows users to: (1) ask the virtual assistants questions; (2) control home automation devices; (3) play media playback through voice; and (4) manage other basic tasks such as email, to-do lists, and calendars.[1] For example, virtual assistants help in the office activities in the sense that some hundreds of e-mail messages that need to be answered which could not be humanly attended to can be answered through the hiring of virtual assistants. Any business owner can get the stress from their daily activities. There are many administrative tasks that could be solved during the day; to free up time and relieve stress, an assistant is needed who will help in a difficult situation.

Different people have different reasons for hiring virtual assistants. Figure 1 shows the digital assistant installed base by brand between years 2015 and 2021. If there are several tasks that cannot be handled, then hiring a business consultant in business is a good idea. Consider hiring assistants when many repetitive tasks are to be executed is not a bad idea. For example, if a lot of data are required for documentation, virtual assistants will help to do the job. They will help, so that the user can focus on other, more interesting tasks. Sometimes, it is possible to dabble into tasks that are not the foundation of one's business, to have more time and increase productivity; business consultant must be hired to handle such tasks. As an entrepreneur, almost all the works are done by the owner, but this does not mean that the owner is good in all of them; this means that hiring virtual assistants is a good move.

In this paper, we set the following as the objectives: (1) To introduce virtual assistants as technological innovation meant to relieve both the business owners and their employees from stress and wastage and (2) to describe voice user interface (VUI) and text user interface (TUI) as methods use by virtual assistants to carry out their interaction.

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METHODS OF VIRTUAL ASSISTANTS INTERACTION

There are many notable methods that virtual assistants use to interact with the users. Virtual assistants use natural language processing to match user text or voice input to executable commands. Some of the methods of interaction are:

VUI

VUI enables users to have control over a computer with their voice. While it may not be everyday tool for many users, still, users are aware of them. Each of the major phone operating systems has utilized their own VUI for years; for example, Apple utilizes Siri, Microsoft utilizes Cortana, and Google utilizes the Google assistant. All these are by no means new technologies; Siri's first appearance for Apple was in 2011 [Figure 2].[3] It is a custom established that these VUI assistants have been used alongside the graphical user interface (GUI); users ask a simple question vocally and received a visual response in return. As this technology develops, a swing in the usage of these assistants starts appearing, with home-connected devices such as Amazon Echo (Alexa) returning answers to all questions asked without the need for a screen at all.

TUI

Many TUI assistants like chatbots lack "understanding" of human emotions.[4] Although accurate answers are provided by them to queries, they are not capable to comprehend our moods and emotions, and therefore, cannot give a meaningful reply to users' queries. Furthermore, while interacting with chatbots, if user breaks the conversation in between, then the bot will fail to remember the context of the interaction. However, with the help of artificial intelligence and emotional intelligence, chatbots that can gauge human sentiments are now being developed.

BENEFITS OF VIRTUAL ASSISTANTS (VA)

There are many benefits that come with virtual assistants. Some of the benefits include:

1. Concentration: When virtual assistants are employed to solve tasks that directly affect the core of user's business, then user can concentrate on important tasks. This leads to greater performance and better results. Furthermore, users usually have the opportunity to grow their business faster.
2. Saving money: When business owners hire employees in the traditional way, they have to provide them with office, computers, salary, insurance, and much more, and it will be expensive. Virtual assistants have their own workstations, computers, and they do not require insurance. Hence, VA users can also easily dismiss them. The money users save
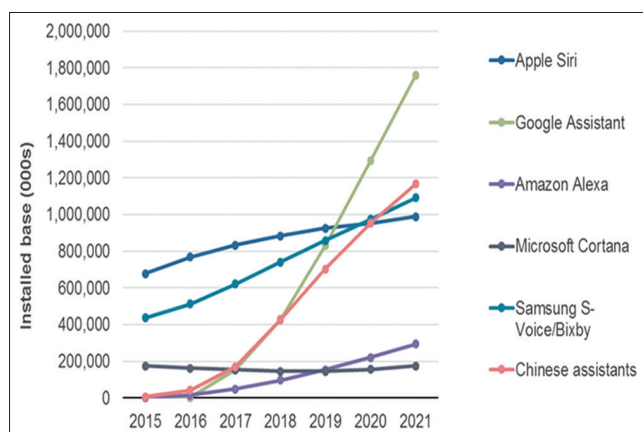

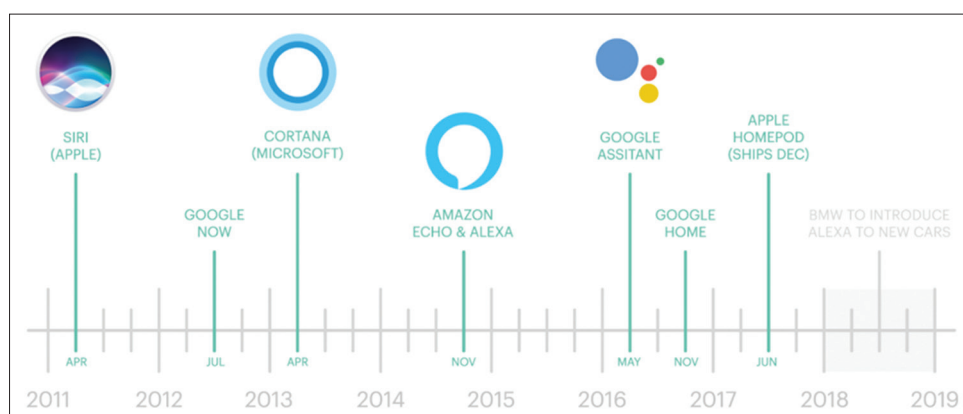**Figure 1:** Digital assistant installed base by brand, 2015–21[2]

Figure 2: A modern history of the voice assistant[3]

can be spent in the business; what will lead to the growth of their business.

3. Access to talent: Business owners can hire people from globally to work. In this regard, they have access to talent. For greater business growth and to reduce stress, users hire virtual assistants. To make the right choice of employee, business owners must do a lot of research and interviews to make sure that they hire the right person, another heavy task. Hence, business owners when overloaded with everyday tasks should consider using the services of virtual assistants. There are many professionals who can help with the work.

4. Email management: Virtual assistants can sort and send emails.

5. Social networks: Planning social media posts for social sites. Hiring a virtual assistant for help is a big time saver for potential virtual assistants' users. It will schedule posts, find or create images for use in posts, create graphics for posts, and manage analytics. Respond to comments is a business page administrator.

6. The content is in writing: Virtual assistants can free up users time. He will be writing blog posts and email, online course materials. If business owner's employee likes to write, then that is a plus.

7. Research: This is time-consuming. The task of virtual assistants is to take over these functions. They will do research for your competitors, select keywords for articles; search for partners, and also do other research.

8. Newsletters: Virtual assistants can write newsletters for business owners or formatting newsletter to be planned in email system, which will be sent monthly or weekly. Proofreading and error correction for newsletter. Uploading mailing to business owner's CRM tool.

9. Internet customers: Virtual assistants can take care for the business owners of all the documents that must be signed when they first start working with clients; among which is management calendar, submission of documents, printing documents, as well as any other customer service tasks.

CONCLUSION

Presented in this paper is an introductory text to virtual assistants in business. Throughout the history of computing, user interfaces have become progressively natural to use. The keyboard device and screen were one step in this direction. The GUI and mouse were another. This evolution continues till it gets to touch screens, which are one of the most recent technological developments. The future generation of these technological trends may likely consist of a mix of voice commands, augmented reality, and gestures. The more a person interacts with voice-activated devices, the more trends, and patterns the system identifies based on the information it receives. Then, these data can be utilized to determine user preferences and tastes, which is a long-term selling point for making a home smarter and business booming.

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