LIVING IN THE WORLD OF INTELLIGENT VIRTUAL ASSISTANTS – SKY IS THE LIMIT

Abstract

The international market for Virtual assistants in growing at a gigantic pace, and it is forecasted that this market will be on the peak from 2023-2030. The growth of virtual assistant will lead to the revolutionizing the workforce, and this is result of digitization and technological advancement where every task can be completed quickly from the comfort zone of our houses. This chapter showcases some points as to how the HVA (Human Virtual Assistant) and the IVA (Intelligent Virtual Assistant) have clear benefits in saving time and improving efficiency and productivity across all the organizational departments. The rapid adoption of IVA has helped lots of businesses to be in sync with the technological innovation happening in the world which in turn is a primary driver of the global virtual assistant market. Virtual assistants are widely being used across industry verticals due to ML, deep neural networks and other artificial intelligence technologies.

Keywords: Intelligent Virtual Assistants, HVA, IVA, Chatbots.

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Living in the virtual world, where everything can be virtual be it meetings, travel, conversations, love, searching a life partner and what not. Virtual is a new reality now.

In this article I would like to discuss my thoughts on a new concept of VA also known as "Virtual Assistant". A career in virtual assistant can be dynamic, versatile and offers a flexibility in terms of work environment. Living in the technical era, where we cannot live without internet (thanks to Reliance Jio for offering the cheapest internet data plans) the demand for virtual assistant is on high boom. As stated on My Cloud crew, there has been a 257 million increase in internet users from July 2020 to July 2021. In addition to this there is an increase of 520 million in social media user number. Based on the article by Business Wire, it is estimated that by 2025, the market size of VA's will reach \$25.6 billion. This gigantic increase in the numbers in a short span of time have resulted in the business owners from across different industries in investing a huge amount in the hiring of VAs to maintain their operations at a large scale while optimizing their time and expenses.

The VA's can be chatbots, a living female/male human being. Numerous MNC's prefer to hire the VA who are trained specifically for the tasks like data entry, inbox, and calendar management and to the complex tasks like Ad video editing, content writing, social media management, web designing & development and many more. the main reason for hiring a virtual assistant is that a corporate can get more tasks done in less time and less salary without incurring any cost on office space, equipment's etc. The businesses can hire the Virtual Assistants from any part of the world since businesses are not restricted to the local area and they can hire qualified and skilled individual no matter where they are located.

Virtual assistants are not a new concept, but the demand for the same have been heightened since the remote work culture has come into existence (one positive gift given to the world by COVID 19). No doubt that the Virtual assistant shoulders some very important tasks which are considered trivial corporate administrative duties but performing these tasks efficiently and that too within the deadlines becomes the prerogative of the Virtual Assistant.

This book chapter highlights the changing prerogatives of Startups and already existing business giants. Now we will be focusing on the increasing use of AI powered Virtual assistants, yes here I am talking about Chatbots, Alexa, Siri and the list is endless. Virtual assistants are meant to just make your life easy. AI Virtual Assistants Market to Flourish with an Impressive CAGR 38% by 2030 Top Key Players –Apple, Microsoft, Google the increasing interest of the individuals in this industry is that the major reason for the expansion of this market.

You might have observed that as soon as we go on any website be it IRCTC, lens kart etc. immediately you will get to see a POP UP. These pop ups help the users to provide solutions to their queries or giving them assistance in case of any complaint filed and so on. It should therefore come with no surprise that virtual assistants have made their way into the economic ecosystem.

At this stage it becomes important for us to understand that how far and how bright is the future of the Virtual Assistant. To understand this, we have gone back and understand as to where we get to see the presence of the Virtual assistants. / Most of the educational institute are using the automated intelligent agents to automate all counselling queries Similarly, the healthcare service sector is also using the services of the Chatbots to complete

the tasks of extracting reports, fixing/rescheduling the doctor's appointment, checking doctors' availability, and collecting payments and releasing of invoices. For new businesses, every day comes with a new challenge. The daily changing customer needs are to be taken care of to sustain in the market. These chatbots helps the business to collect the data, analyze the responses, conduct surveys, customer feedback with full consistency and efficacy. As artificial intelligence becomes more advanced, the areas of application for bots and virtual assistants will become virtually limitless; it isn't for nothing that the global market for intelligent virtual assistants is expected to grow at a CAGR of 30% to be worth \$50 billion by 2028. Aldriven virtual assistants are expected to power the interface on the first wave of true human-like robots and even make their way into the Metaverse as they take on avatars in a VR landscape. The Virtual assistant market is the highest in North America followed by the countries like Europe, Asia Pacific, Middle east and Africa and Latin America.

It is a fact that the Virtual assistants will very soon dominate in most of the businesses. It will be found I all physical devices, Humans will feel more comfortable with these AI chatbots rather than a living human being. Virtual assistants personalise the digital world. Gartner predicts that both the consumer and businesses will be spending \$3.5 billion by the end of this year, 2021, on what it refers to as Virtual Personal Assistants (VPAs). New York, USA, May 30, 2023 (GLOBE NEWSWIRE) -- According to the research report published by Market Research Future (MRFR), "Intelligent Virtual Assistant Market Information By Technology, By Service, By Application And By Region – Market Forecast Till 2030", the Intelligent Virtual Assistant Market could thrive at a rate of 25.30% between 2022 and 2030. The market size will reach around USD 58.2 billion by the end of the year 2030.

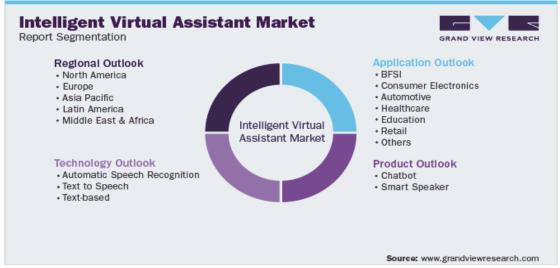
Virtual assistants have become an integral part of the modern world. As technology continues to evolve, virtual assistance will become more sophisticated, providing clients with real time solutions without any delays. Virtual assistance is an excellent option to manage time and cost effectively.

With the development of Artificial Intelligence and other technology, the demand for the human virtual assistants can see prominent decrease and can get automated in near future. One breakthrough in this field which is time effective and more reliable web applications is the evolution of Chat GPT. ChatGPT is an AI virtual based virtual assistant which is more efficient as compared to the human virtual assistant. Microsoft Cortana,, Apple Siri, and Google assistant are a few personal assistant that are well known in most of the businesses and have make their lives easier. By leveraging machine learning advanced algorithms ChatGPT can handle wide variety of tasks from basic to advance data collections and the analysis. This will help the human virtual assistant to improve their portfolios by participating in the strategic tasks of decision making, building relationships with the stakeholders, and developing the innovative solutions rather than wasting time on the routine assignments. Incorporation of ChatGPT in the virtual assistant team will not only improve the efficiency of the team but will also result in the increased productivity. Technology may be the engine, but humans will always be drivers for growth Online assistance became viable solution for businesses.

COVID -19 has drastically accelerated the digital transformation specifically in IT sector. After COVID, the employees are comfortable to offer their service from home, as per the report 78% of the employees think that their companies have sped up their respective IT Infrastructure due to pandemic, but this is not fully true. Every organisation wants their

employee to work smarter and not harder therefore to ease out the repetitive tasks, the organisation introduced the concept of IVA or digital assistants who can carry out these tasks in less time, and this trend is going to increase in the future which will result in the increase in numbers of the remote workers decreasing the overhead costs. As per Best of Budgets report, the companies hiring the virtual assistants can reduce 78% of Operating Costs as it eliminates all the expenses required to maintain a traditional employee and the companies need not have to worry about the equipment's, benefits, paid training, or long-term contract agreements.

Virtual and augmented reality technology will help the remote workers to feel more connected to their co-workers and work organisation. It has been seen that 49% of companies hiring the VA's have more than 1000 employees. Virtual assistants provide a unique opportunity to create a new digital workforce and augment the human workforce that ultimately satisfies the consumer needs, and the business needs too. Since the world is increasingly opened for globalisation the business environment has changed and the economic interdependence has become more obvious. The development has fostered a growing trend in the conversational AI industry especially by embedding the virtual assistants in the mobile apps, gadgets, web apps. The global intelligent virtual assistant market in segregated based on technology, application, and service. The chatbots are used in retail sector, medical sector, IT sector, social media, Recruitment, and the list is endless. In retail sector the use of IVA helps in understanding the consumer behaviour as to what a consumer is intending to buy. Similarly, in medical sector the IVA help in responding the queries of the patients, find a doctor, fill, and refill the prescription, get payment reminders and focuses on managing the chronic disease. this is currently being adopted my healthcare sector. Chatbots helps in directly connecting with the candidates for recruitment. For example, they shortlist the candidates, revert to their queries and schedule the interviews matching and identifying their skills in sync with the job descriptions. The digital companies are using the chatbots at a large scale as it helps them to gain the customer insights, customer demands and optimize them by procuring the product in demand. Not only this, but the success of the business also depends upon how prompt they are in rendering the services to their customers by answering their queries in time, so the best resolution for this is deployment of a virtual assistant or a chatbot which will not only reply to the query during the Office hours but will assist the customer 24*7*365 support. In this way, the organisation can brand their product on social media by giving an opportunity to their consumer to interact with them with better suggestions. That's the beauty of IVA. A technologically advanced organisation is always successful in long run. Chatbots are mainly used as a marketing tool in most of the big organisation as a tool for customer engagement.



Now a days the chatbots are used to felicitate customers to choose the product as per their body type and assist in buying a product. It can personalise the interactions with the customers. Chatbots are leveraged in the platforms such as Facebook messengers, Kik, and WhatsApp, Sephora, Covergirl etc which are having the proud base of billion users helping in the augmenting the customer experience.

In addition to this, the chatbot also proves instrumental in collecting the data, collating it, and analysing the same. The inputs which are collected are further assessed by the team to come to the consensus as to what is the real time need of the consumer. These chatbots maintain tract of the queries, asked, responses given, and the requests forwarded to the agents. In addition to this the companies are also investing crores of rupees in improving the IVA technology with the help of AI and machine learning to support the decision-making process.

To conclude the virtual assistant concept is booming with the intention of brightening the future and the life efficiently productive incurring less cost. With Virtual assistants, becoming the part of the international landscape, it's important for businesses to outsource their functions to keep pace with the changing demands and increasing competition. With the right Virtual assistant, the sky is the limit. We must broaden our horizon and need to look what's there and what's hidden in the coming future for all of us. Afterall, adaptation is the only key to survival.

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