

# Driving Customer Experience through Virtual Reality in IT Help / Service Desk



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A few years ago, the chatbot phenomenon swept the consumer world. Today, people are becoming more and more at ease using conversational AI and virtual assistants to do everything. Yet, despite this consumer-driven craze, one area that seems to have been left largely in the dark is the IT help desk. Surprisingly (and frustratingly) enough, for many organizations, even something as basic as requesting more storage and resetting your password still requires opening and waiting for a ticket to be serviced.

# Driving Customer Experience through Virtual Reality in IT Help Desk & Service Management

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## Technology Landscape

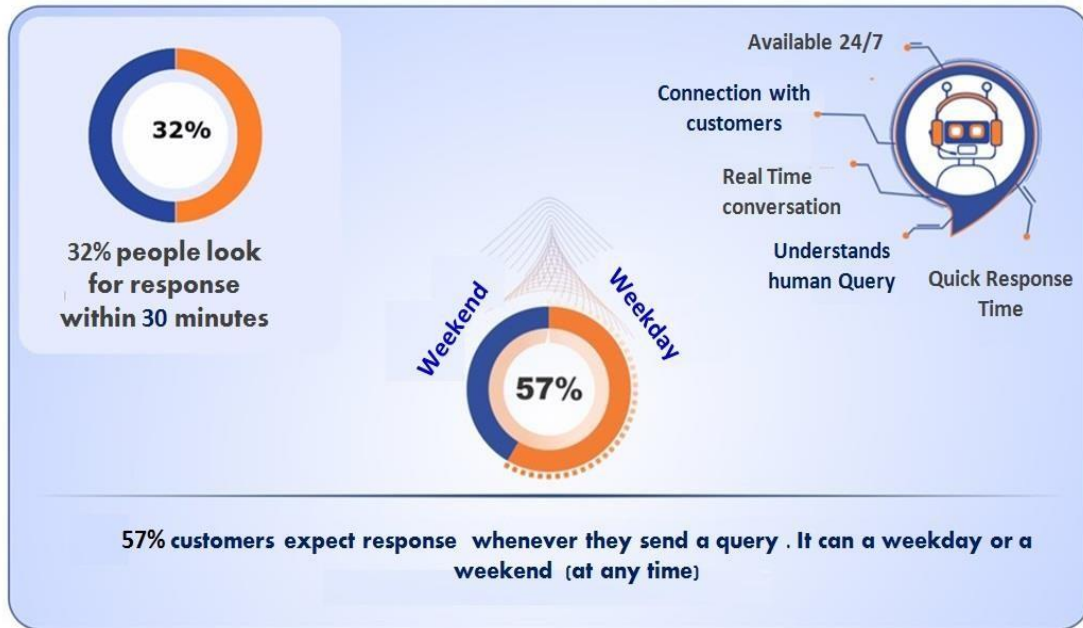
Alexa, Siri, Google Assistant are all names which are in the vocabulary of most households today. You can ask Alexa to play songs or Google Assistant to switch of the lights or Siri to find the shortest route to your destination. People are used to talking to their virtual assistants and feel comfortable.

Virtual Reality (VR) and (AR) augmented reality are no longer terms which geeks use. Today there are computer games, healthcare field service agents etc using this technology. Even now however you need dedicated processing power to be able to run these VR / AR applications.

AI / ML and NLP – These are another three terms which are being used for more than 30 years and it was meant to be the technology to solve all the problems facing mankind. However the processing capabilities that are needed to make these technologies actually usable have been exorbitantly priced till recently.

In the IT Service Management space there have been a lot of new entrants over the last 7-8 year who has captured a lot of the market based on the ease of building workflows and integrating various functionalities. Being cloud based they also don't need any capital investment. Pricing is variable based on the number of users and can be increased or decreased dynamically. These tools have brought in a lot of efficiencies into the organizations where they have been deployed. However people still need to use their computer or tablet to make entries into their applications.

Due to the consumer's experience with gaming and using tools like Alexa and Siri, the expectations of service have changed. If the technology cannot be used to give the customer the same experience that she gets at home in the office then there's always a mismatch. Customers no longer like the idea of waiting in a queue for getting support. Siri or Alexa give them a response immediately so why doesn't their IT be able to do it is a question which has started popping up in a lot of the users



Source: statista.com

LET US LOOK AT SOME OF THE DAILY SCENARIOS AND SEE HOW MUCH USER EXPERIENCE IS ENHANCED AND HOW MUCH IS STILL COMPROMISED.

### Scenario 1

I am working on a important document at 10 PM in the night from home (This is new normal for all of us) and realized that “I am unable to login to the office VPN”. I called up office IT Support center and got the response that I need to wait and I am in the queue as we company is working with limited staff and at the same time there is 300% increase in the VPN usage due to WFH. I have no other option but to wait as I need to complete the document for the board meeting. While I am waiting, I am getting frustrated and thinking why I joined this company and why not a Large MNC company. I am not paying attention to what my wife is asking and hence increasing the frustration level for the family.

### Scenario 2

While I am driving , I realized that I have not booked the conference room and laptop I needed tomorrow for a client meeting ( It may be a virtual room and a VM in the new normal) , I called up my secretary and she is not picking up the phone . I cannot login to the office intranet and do the booking. I thought my secretary would call me back after looking at the Missed call so I relaxed and got involved in the other activities.

When my calendar popped up Alert for the meeting, I realized that conference room and laptop were not booked yesterday and they are not available now.

### *Scenario 3*

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I have to create a PPT and I thought I have the previous version on my workstation so I would pick that and it would hardly take me 10 minutes to do the changes. When I started searching for the previous version, I realized it is not there and may be it got deleted somehow. I remember IT takes regular backup of my workstation as my company has invested into that. I called up IT but no one was available as couples of guys are on leave.

### **Possibilities**

With the advent of cloud technologies three key things have happened.

- ✚ The cost of compute has fallen dramatically and if Moore's law is to be relied on for the next 10 years also then the compute capabilities will grow even more exponentially from here. So the best is yet to come.
- ✚ In spite of the cost coming down, you don't need to invest capital to procure the compute. You can "rent" it from the cloud
- ✚ Today VR and AR utilities can be incorporated in your browser eliminating the need for dedicated hardware

## **Challenges in building the user experience for integrating with IT Service Management**

### *Setting up the contexts in the language being used*

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Each language has its own nuances. You write in a different manner but when you speak you may use phrases which need to be understood as synonyms to the way the terms are used in writing. This is where Natural Language Processing and Machine Learning play a big part.

### *Integrating with various IT tools in your environment*

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While things like Windows Active Directory are generally common in a lot of companies, for ITSM they could be using ServiceNow or IBM Control Desk or Cherwell etc. Similarly for backup the customers could be using IBM Spectrum, Acronis, Commvault or Veritas backup. Similarly for

email they could be on Exchange or Gmail. Now creating a seamless experience by integrating all these tools into the user experience is a complex task.

### *Setting up the environment so that the user feels as if they are interacting with a real person from their own company*

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User experience is enhanced when there is a certain amount of familiarity with the environment. So the Virtual Reality environment which the user sees on her browser should make her feel she's interacting with someone from her own office. Creating this office environment with the nuance of the office space has a lot of complexity

### *Integrating the existing knowledgebase*

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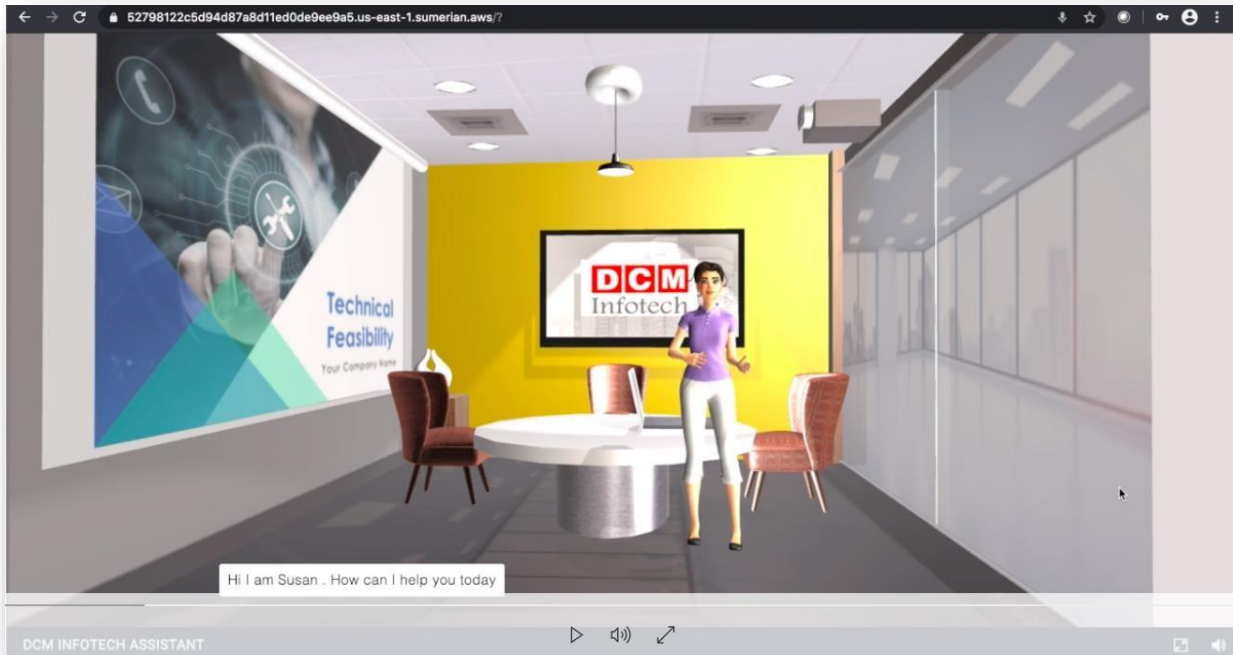
Over the years the company would have created a large knowledge base based on the problems they have solved. Users should be able to access this knowledge base and get problems solved faster

**NOW LET'S BREAK DOWN THE PROBLEMS WHICH COME TO A HELP DESK. IF YOU BREAK DOWN THE TOP 60-70% OF THE PROBLEMS WHICH COME, THEY ARE ALL RELATED TO SOME KIND OF A LOG-IN ISSUE, OR A SERVICE REQUEST OR LOSS OF FILES.**

### **Possible solution:**

Using technologies which are available on various cloud platforms you can create VR Assistants with AI/ML and NLP capabilities.

We have developed working models of these tools which are now being used with our own customers to build better models of interactions. As the learning of the VR assistant grows its able to handle more requests without a glitch. Being an IT Infrastructure specialist we understand the intricacies involved in the integration of various IT tools. Since we also understand ITIL and ITSM deeply we are able to ensure all the problems listed above are addressed.



**Our solution is Transaction based and using functions based compute (stateless machine) power instead of a dedicated VM. As an example, if our VA need 30 seconds of CPU power then we pay only for 30 seconds of consumption.**

*For instance: Let's assume we are doing 100 tickets a day then we are charged only for 100\* 30 seconds of compute power. There would be some charges for the AIML API calls (as we are not paying any license fee).*

**THERE IS ZERO CAPEX OR FIXED COST OF THE ENTIRE SOLUTION.**

*If you would like to see how this tool can improve the user experience of your employees from your IT Service Desk – write to [sales@dcminfotech.com](mailto:sales@dcminfotech.com)*

### **About DCM Infotech Limited:**

With the strong corporate lineage and core values we have evolved through the years and working on some of the latest Cloud, Artificial Intelligence, Virtual Reality and Natural Language Processing technologies. We are a partner to all the major public cloud providers like AWS, IBM Watson, MS-Azure.

Over the years DCM Infotech has implemented and managed various, ITSM tools, Database Tools, Backup tools and currently manages the data centers for some of the largest automotive companies, finance and utility companies in the world.

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