AI/VR – The future of Healthcare

From microscopes and surgical navigation to cloud-based EHR solutions, technical innovation in the medical industry has always played a pivotal role in enabling better health outcomes for patients. Virtual reality (VR) and user experience, while long used as a buzzword in many sectors, has found a real-world application in the medical industry.

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HealthCare – Existing set-up

In India healthcare has been a sector which has been lagging behind. Over the last 20 years corporate hospitals have made an entry into the healthcare sector and quality of healthcare has started to improve.

Due to the massive population that we have and the lack of decent facilities the pressure on the healthcare system is always very high and good hospitals are always flooded with patients. Due to this it's imperative that technology is used to eliminate the constraints in the system.

While hospitals have bought the latest equipment for pathology radiology &intensive care, the use of IT for decongesting the operations has still not taken place. This results in long lines at the reception or the IVR to book an appointment for an OPD consultation as well as to get a pathology test done or to even ask routine questions about rates for tests and in-patient beds.

Healthcare is a capital-intensive business. From the land/building, to the equipment to the facilities, everything in the hospital requires large investments. Those investments are prioritized first towards things which can result in direct revenue – like MRI machines, CT Scan machines etc. Which can become productive in revenue immediately? On the other hand, IT is not seen giving immediate revenue hence in general we have observed, that IT adoption is little slower.

Healthcare – Adopting AI/NLP/VR

We have analyzed a few websites of hospitals and observed that while some do have "chat bots" they can only function
on a given set of parameters. There are limited chatbots for Health care and they are not user friendly as they -

* Require to invoke the chatbot from hospital website and login before initiating the conversation while these steps can be bypassed if user can initiate the conversation using whatsApp itself which is commonly used application for messaging.
* Don't have a persona based Virtual Assistant, which can interact
* There is no consistency between multiple channels like chatbot and IVR as these applications are running in Silos
* The existing channels don't have the capability to interact in Natural Language – as a conversation

Just Rethink

Think of a scenario where you can speak to your App and a Virtual Assistant pops up to help you through the booking of an appointment. If you desire to use WhatsApp, you could use WhatsApp to book an appointment or you could type your request. You could offer all these facilities to your patients, without having to invest in any new capital expenditure. All these channels will use the same backend HIS/ERP Application which you presently use.

Personalized My Health App focusing on Health Monitoring and Health Provider connectivity which is simple to use specially for senior citizen

How AI/VR enabled Assistants are positively impacting the Health

care sector

For an industry that's battling challenges of continually rising costs, disparate ways of managing medical records, and a perceived lack of engagement with patients, there's a prescription at hand. Chatbots are turning problems into opportunities for healthcare providers. By making access to information quick and easy, and enabling a more personalized and engaging channel of interactions, AI-charged bots are helping healthcare providers deliver their services effectively and bridge the gap with those in the need of aid.

AI enable Assistant for patients

AI-powered bots give personalized medical care and reminders for appointments and

medications. These bots can be treated as a virtual assistant that tells the

patients what and when to take medicines.

AI for scheduling Appointments

Bots are designed to enforce better follow-up of medical care that can help hospital deliver better patient care,

curb poor patient engagement and improve overall health outcomes. Chatbots are particularly effective when it comes to scheduling appointments with doctors, matching patients with the right specialists based on diagnosis, and keeping track of their follow-ups and appointments for future reference.

AI enabled Assistant for public convenience

Healthcare bots provide a 24/7 assistance for patients to check existing prescription, help renewing prescriptions or discuss about their symptoms. For providers, the convenience and efficiency that bots offers allow the medical staff to focus on other complex triage requests.

Architecture and Features
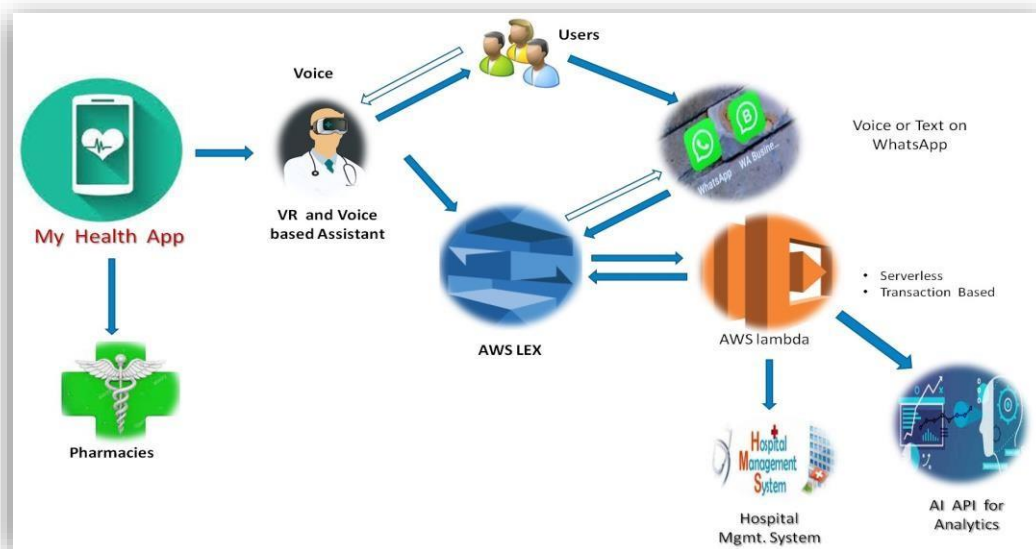
Salient Features

- One App for all my Healthcare needs
- VR and Voice based Virtual Assistant
- WhatsApp text or Voice to suite user preference
- Personalized App specially designed for Senior Citizens
- Appointment Booking
- Video Consultation
- Multi Lingual
- Connect to Pharmacies for Medicines and Health Check
- Automation of Prescription Scan and Loading of Medicines in the App

Data Upload from Hospital
- Data Security and Multi Function Authentication
- Reminder for Medicines and regular health check at home
- Health Check Trending reports for all stakeholders – Patients, Doctors and Family
- Data Analytics and Alerts