

Welcome. Part of Propeller's mission and promise is to be at the forefront of digital. We consistently strive to bring innovation and creativity to our healthcare partners and their customers.

It is in this spirit that we curate a quarterly experience, strategically selecting the latest, most important digital marketing trends and tech innovations—and assess the impact each of these has in healthcare, and why it's important for you to know, now.

#### Together, let's be experts and so on the Pulse!

Emerging Tech Enhancements

#### **OVERVIEW**

Today's technology is becoming increasingly more intelligent, convenient, and accessible for users. In this edition of **Propeller Pulse: The Edit**, we will explore **Emerging Tech Enhancements**. As we continuously strive to leverage technology in new, innovative ways, tools such as generative AI, multisensory extended reality, convenience technologies, and SuperApps can help reshape the way we work and how we experience the blend of physical and digital worlds. Together, we will dig deeper into how these trends are shaping the healthcare landscape and how you can activate them.





# THE EVOLUTION OF AI

Understanding the future of collaboration between machines and humans Curated by: Justin McLeod, Medical Writing

#### What is it?

- Artificial Intelligence (AI) involves using computers to process large amounts of data to do things that traditionally require human intelligence, like recognizing patterns and making decisions
- Recent advances in machine learning and computing storage have boosted the mainstream accessibility of AI
- Using language models, AIs can generate content based on simple inputs like questions, commands, and keywords
- Despite this, there are still limitations to AI. Building trust and educating users over time will be key to widespread adoption, especially in healthcare

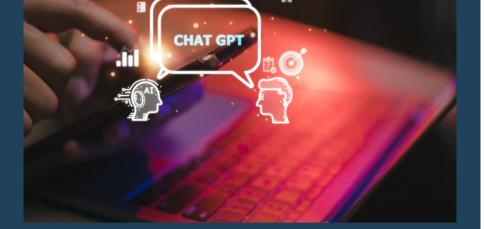
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#### What it means for healthcare

- Generative AI tools can summarize medical records based on inputs like family history, symptoms, and lab results
- Al functions have transcended traditional chatbots; they can now create images, write code, and even support content ideation
- Machine learning can also assist in medical decision-making, especially in cases that have clear parameters and historical precedents
- A <u>2022 study</u> from Scientific Reports has already shown that collaboration between humans and AI can drive better medical outcomes. HCPs often use AI capabilities to help inform medical decisions, using a sort of "hybrid intelligence"
- For marketing and communication tasks, AI has the potential to eliminate mundane tasks and help workers use their talents in more productive ways

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The most talked about name in AI is <u>ChatGPT</u>, a chatbot launched by OpenAI in November 2022. Like many emerging technologies, this tool has great potential—and some significant limitations.

- The "GPT" stands for Generative Pretrained Transformer. This type of Al uses natural language processing to produce human-like text
- ChatGPT is already being used in medical practices for small, time-saving tasks (eg, writing an email to an insurance company)
  ChatGPT is also capable of generating personalized treatment plans
- Combined with human intelligence, ChatGPT can help create the
- framework for a marketing strategy and gather data on customer interactions, demographics, and purchase history
- We expect ChatGPT to keep integrating with healthcare platforms we utilize in marketing every day. For example, in February 2023 Doximity rolled out a beta version of a ChatGPT tool (<u>DocsGPT.com</u>) for doctors that helps streamline some of their time-consuming administrative tasks, such as drafting and faxing preauthorization and appeal letters to insurers



# **MULTISENSORY EXTENDED REALITY** Amplifying digital experiences through physical sensory integrations

**Curated by:** Olivia Vizcarra, Experience Strategy

What is it?

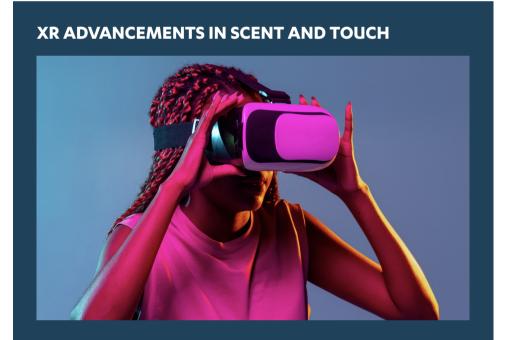
- Multisensory extended reality (XR) bridges virtual reality (VR) and augmented reality (AR) with traditional senses, such as smell, touch, or taste, to create more immersive and realistic experiences
- XR is predicted to be the future of AR and VR as companies and individuals alike seek increasingly innovative digital experiences
- Scent and touch sensory integrations are truly exciting enhancements, bringing virtual environments that much closer to reality

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## What it means for healthcare

- XR focused on scent integration can be used across a variety of patient wellness initiatives, from meditation apps to PTSD rehabilitation. It can also be leveraged in high-risk occupation training (eg, EMTs) to expose and desensitize responders to certain odors
- Haptic gloves, designed to provide realistic touch feedback, can be used in surgical training to help surgeons build muscle memory in advance of an operation. This type of multisensory activation can help bring healthcare products to life in a new, engaging way that heightens the virtual experience while providing valuable product training
  - Patients can also benefit from experiential touch integrations. Haptic gloves can be used to address patient phobias, such as a fear of getting injections, providing realistic sensory feedback in a controlled virtual environment
- XR can also be used to bring disease state experiences to life in a more realistic way, helping HCPs understand what their patients experience from a sensory perspective. This is expected to be activated in rep delivered training, at congresses, and more





Two vendors that are leading the way in XR: • <u>OVR Technology</u> is changing the experiential game through their

- cartridge-based scent technology. Their VR headset addition has 9 chambers of liquid-based ingredients that mix in real-time to create scents. Picture walking through a field of flowers and smelling fresh lavender, or meditating to the smell of eucalyptus—all while hooked up to a VR headset
- Wearable technology, such as the <u>OWO Haptic Vest</u>, gives wearers instant feedback on their digital experience. The vest's haptic sensors activate sensations on 10 areas of the upper body, allowing users to feel physical sensations from their digital environment, such as free falling or being bitten by an insect



## TREND #3

## **CONVENIENCE TECHNOLOGY**

Smart technology has become a necessity that makes our lives easier Curated by: Nicoli Sinclair, Experience Strategy

#### What is it?

- Convenience technology consists of all digital tools that have transformed our everyday lives to make tasks easier, more efficient, and faster at home, on the go, and in the workplace
- These technologies can be anything that helps make your daily life easier, from a virtual assistant technology like Alexa or Google Home, to a smart TV that guides you through recommended programs and houses all of your viewing platforms in one easily accessible hub
- Digital advances have enhanced our ability and speed to respond to consumer demands by making it more convenient to access information, educate, connect, build facilities, and offer a wide range of services from afar
- With the vast number of ways that technology has made everyday life better, convenience technology has become more of a necessity for businesses wanting to thrive in a rapidly changing and consumer-centered digital landscape

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## What it means for healthcare

- In healthcare, convenience technology bridges the gap between making life easier and giving everyone the opportunity to take care of their health outside of the confines of their doctor's office
- FDA-approved digital therapeutics are becoming more accessible for people to use at home to easily manage ongoing health conditions. Products such as <u>Withings U-Scan</u> toilet sensors that can monitor various health issues and flag markers for specific types of cancers. <u>Evie smart rings</u> give you detailed health readings (SpO2, heart rate) and track your menstrual cycle to give your doctor insights into what's going on inside your body
- Advancements in convenience technology also allow for patients to treat their conditions at home using new tools like <u>CareWear's</u> portable red light therapy, which can address soft tissue injuries
- Leveraging these various new health technologies to continually monitor patient's vital signs and disease progression at home can help HCPs identify serious issues earlier on and make in-person appointments more efficient and impactful, leveraging previously gathered data and insights



## BRINGING HEALTH MONITORING INTO YOUR HOME WITH AI-POWERED STETHOSCOPES



- Smartsound, the makers of <u>Skeeper® H1</u>, responded to the market demand for healthcare-focused convenience technology by creating an innovative stethoscope that uses AI to analyze the sound measured from the device, allowing patients and their caregivers to easily manage heart and lung health at home
- The AI stethoscope for telemedicine and home care includes:
  - Data pairing with telemedicine services
  - Self-monitoring of heart and lung disease with 80% accuracy
    Early screening of childhood asthma
  - Primary self-screening for infectious lung diseases, such as COVID-19
  - Health monitoring of pregnant women and fetuses (fetal movement test and health monitoring)
- With a savvy digital device that can conveniently be used at home and integrated with telemedicine technology, Smartsound seems to have a formula for success



## **SUPERAPPS**

Providing multiple services and core features in one platform is the future of apps

Curated by: Caroline Keene, Medical Writing

### What is it?

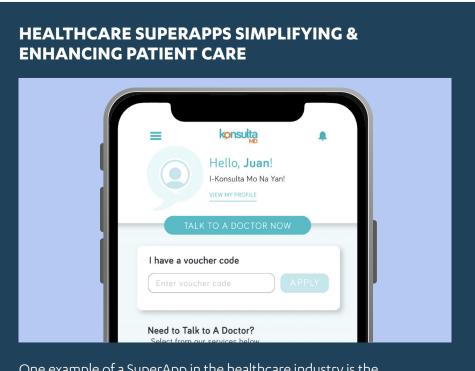
- A SuperApp is an app that allows users to access both a core feature(s), as well as independently created mini-apps, all in one place. <u>Gartner</u> refers to them as a Swiss Army Knife—a single app with a range of component tools that the user can use and remove as needed
- SuperApps provides users with the benefit of a seamless experience across multiple microapps—allowing users to do multiple things at once. No more switching between multiple apps or remembering 57 passwords
- An example of a SuperApp? <u>WeChat</u>. This famous Chinese app allows users to not only chat with their friends, but also send money through the app, buy a movie ticket, etc

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#### What it means for healthcare

- SuperApps could be a gamechanger for the healthcare industry by enhancing the patient experience with pharma brands, including delivering all of the important information they need to monitor their Rx in one place—from medication reminders and a nurse chat feature, to providing additional educational resources
- From a patient perspective, anything to enhance and streamline their user experience will be critical
- Just as Netflix presents curated selections based on individual tastes, healthcare will soon be able to deliver a more tailored experience to patients and consumers. This keeps engagement up, something potentially very appealing to HCPs who are looking for their patients to be as informed and healthy as possible
- However, due to US regulatory constraints, the impact of SuperApps on non-enterprise opportunities remains to be seen
- In the future, more open architecture within platforms will be required for the seamless flow of information (eg, results of your last physical) to be accessible with wellness measurements like daily step counts

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One example of a SuperApp in the healthcare industry is the KonsultaMD app.

- Set to launch in the Philippines, this SuperApp combines three existing apps to offer users the ability to order medicine through their phones, access their medical records, and schedule a virtual or at-home aid—all in one seamless user experience
- With KonsultaMD, a user could have a virtual consultation and then immediately schedule a lab test—without having to switch apps

# **PROPELLER'S CURATION PROCESS**

Propeller is passionate about identifying trends that are important for your business and customers—and we're always looking for the next big thing. We scour the internet and social platforms, read marketing handbooks, listen to what our clients are interested in, and look at what's being talked about in our healthcare industry. We use all this information to find patterns of what's popular, determine their importance, and carefully edit it down to a short-list of must-knows in digital marketing and technology.