

PHYGITAL FUTURES



The Healthcare Ecosystem in the Metaverse

Strategic Foresight &
Digital Transformation
Prof. Dr. Ingo Rollwagen

Metacare provided by:
Selin Oçal, Sharon Bofinger,
Suhyun Ahn, Jenica Clocker

DYNAMIC DEFINITION:

ENABLED BY THE METAVERSE THE HEALTHCARE INDUSTRY WILL BECOME A DIGITAL ECOSYSTEM COMPRISING HEALTH INSURANCE COMPANIES, PROVIDERS, TECH COMPANIES, IOMD (INTERNET OF MEDICAL DEVICES) AND MORE. THIS WILL LEAD TO MORE PERSONALIZED CARE FOR AN EMPOWERED PATIENT.

Health Care Providers & Insurance Companies

A growing health care provider shortage and rising costs of care means technological and digital innovations could lessen the work burden. Digital workspaces and Telemedicine will lessen geographical ties to specific locations allowing patients to receive care from providers located around the globe.

PATIENTS

Patients are increasingly knowledgeable about their health and healthcare options. A growing digital literacy and IoT is making consumers more comfortable with collecting and monitoring their own health data through a growing product market and wearable health technology.

TECHNOLOGY

Digital twins show tremendous promise in making it easier to customize medical treatments to individuals based on their unique genetic makeup, anatomy, behavior, and other factors. As a result, researchers are starting to call on the medical community to collaborate on scaling digital twins from one-off projects to mass personalization platforms on par with today's advanced customer data platforms.

PRODUCTS

The product matrix for both medical devices and fashionable, wearable health technologies will expand as consumer/patient demand increases and more funding pours into R&D. Products such as: **FitBit, BioSensor, HeartGuide, Move, MotiveRing**, etc are already on the commercial market.

COMPANIES

- Apple
- Microsoft
- Omron
- Withings
- Oculus
- Phillips
- Proxy
- Neofect

FASHION

Wearable health technology includes electronic devices that consumers can wear, like Fitbits and smartwatches, and are designed to collect the data of users' personal health and exercise. These devices can even send a user's health information to a doctor or other healthcare professional in real time. Demand for wearables is projected to jump in the next few years as more consumers exhibit interest in sharing their wearable data with their providers and insurers.

METACARE ECOSYSTEM

Temporal Reach

2020



Increased tele-health usage due to the COVID19 pandemic. Greater need for virtual workspaces.



Health and fitness goes virtual. Exercising has entered virtual spaces via online games and platforms.



Meta invests billions into metaverse development.



Increased use of wearable health devices. These devices are also being prescribed by doctors for symptom monitoring.



Backlash against accessibility of metaverse healthcare mainly in financial terms. Advocates push for affordable devices and health plan coverage.



Partially interoperable healthcare platforms are being developed. First steps towards patient-centered care.

2030



STEEPV
ANALYSIS

Social

As the population of senior citizens increases, access to healthcare will be challenged and new solutions will need to be found.

The healthy lifestyle trend is one of the biggest trends among generation X and Millennials who like to self-monitor their health data.

Technological

The VR and Augmented Reality related technology will become more accessible. Better infrastructures are set with 5G.

AI technology can be used to make sense of vitals and possibly suggest treatment.

Economical

Insurance companies will need to cover expenses.

New jobs related to technology will be created but also with the implementation of AI some jobs in the healthcare industry will be lost.

Ecological

There are unpredictable health threats in the future due to Climate Change. Technology can help by predicting these conditions.

The increased use of technology means more energy consumption and more carbon emission.

Political

Mistrust in authorities after COVID19 when it comes to health. At the same time confidence in digital health services (especially during COVID 19) New privacy regulations and a new code of conduct for healthcare professionals will be needed.

Values

Social gathering and being connected has become very important this will continue on with virtual spaces

