

Lucus Tai
Aditya Thota
Yohan Dhake

Life
Health
Wellbeing

Introduction

AI is growing. In relevance. In strength. In capabilities. From producing working code from scratch to have complete conversations with users, AI has been trained enough to operate to a high extent. The surge of AI development opens the world to a **multitude of possibilities.**

“WE STAND ON THE THRESHOLD OF A BRAVE NEW WORLD. IT’S AN EXCITING YET PRECARIOUS PLACE TO BE” – SAM ALTMAN (2023)

Case Study

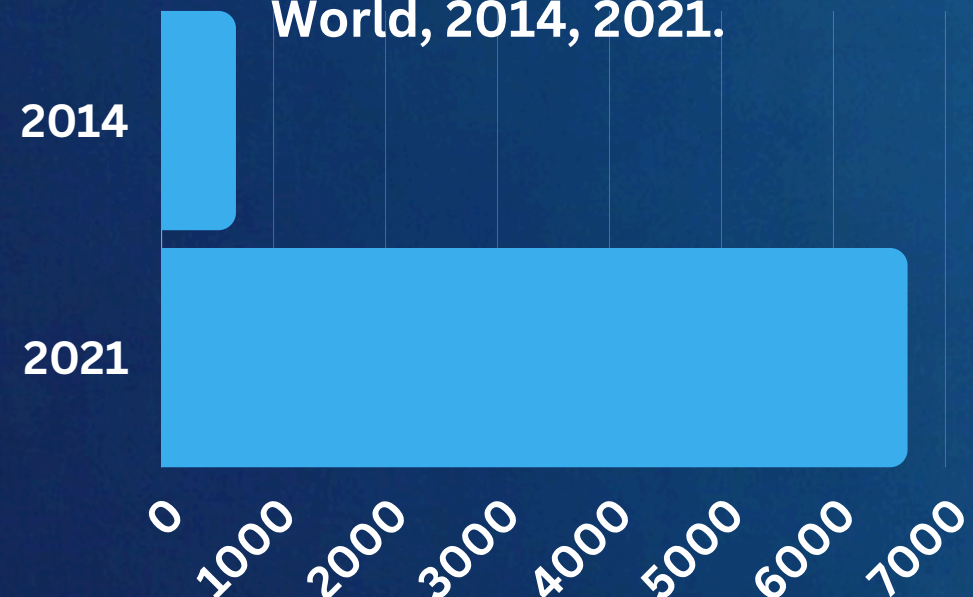
TidalHealth Peninsula Regional (TPR)

- TPR, a level II Trauma center, invested in drug information databases and found that clinicians were still spending far too long searching for solutions.
- **“Traditional search methods in drug information tools are a bit clunky,” says Rachel Cordrey, supervisor of pharmacy operations at TPR**
- TidalHealth worked with IBM to implement IBM Micromedex with Watson AI, a cloud-based clinical decision support system

Results

- Clinicians reported **saving up to 20 minutes per encounter**
- Increased adherence to best practices → Leading to **increased consistency in care**

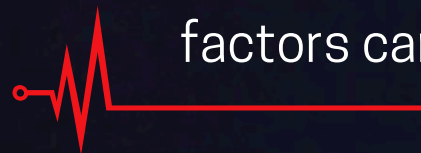
AI Market for Healthcare Applications, World, 2014, 2021.



Uses

Health

- Advanced algorithms with the **ability to sift through huge amounts of data**, images and scans
- Able to **check patient’s vitals** around the clock
- Ability to **track and analyse trends** and deduce the reason
- The ability to take into consideration many more factors can **enhance diagnosis accuracy**



Wellbeing

- Remind people to sleep on time
- Wake them during a period of NREM Stage 1 in the morning (More restful sleep experience)
- Offer fitness goals and **track progress** through weight loss, muscle & fat proportion and the overall benefit from exercise
- Diet plans in conjunction with human specialists **tailored to suit the requirements** of the person



Life

- **Smart Homes:** AI could be used to manage home automation systems such as lighting, security, heating, etc.
- **AI Assistants:** Virtual assistants could be used to help with tasks, scheduling and reminders, taking stress off shoulders.



- **Transportation:** Autonomous vehicles and AI-enhanced public transport for safer and more efficient travel. Utilises Light Detection and ranging sensors.
- **Energy management:** AI optimising energy consumption in homes and businesses to **reduce costs** and environmental impact. Google DeepMind AI - Reduces energy consumption by predicting cooling needs

A PROCESS



Doctor + AI **listens to the patient’s symptoms**, conducts a physical examination, and takes medical history notes



AI technology **processes the patient’s health data**, including medical history, current symptoms, and test results.



Doctors review the **AI-generated analysis** and integrate it with their clinical expertise to create a **comprehensive medical report**

What Next?



Learn more about how AI is transforming different fields

Summary

AI has lots of potential. It compliments the Human skillset and talents. It provides a more round the clock tracking approach, increasing consistency. When used correctly, AI can improve the overall experience of the average Australian in many aspects of life.

