



Wellbeing Tech 2.0

Employee Wellness in the Age of ChatGPT

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Outline

Part 1: Broader Forces (Healthcare, AI and Metaverse Trends)

Part 2: Specific Forces (Holistic approaches, AR/VR, Drug Treatments, AI/ML and Gamification)

Part 1

Broader Forces

Healthcare and Medicine

Trends Summary



LLMs can diagnose as accurately as a specialist.

According to a recent JAMA Internal Medicine study, not only does ChatGPT answer medical questions more accurately and completely than human doctors, but it actually ranks higher in empathy. Human medical experts prefer ChatGPT to a real physician 78.6% of the time, both in terms of quality and empathy.



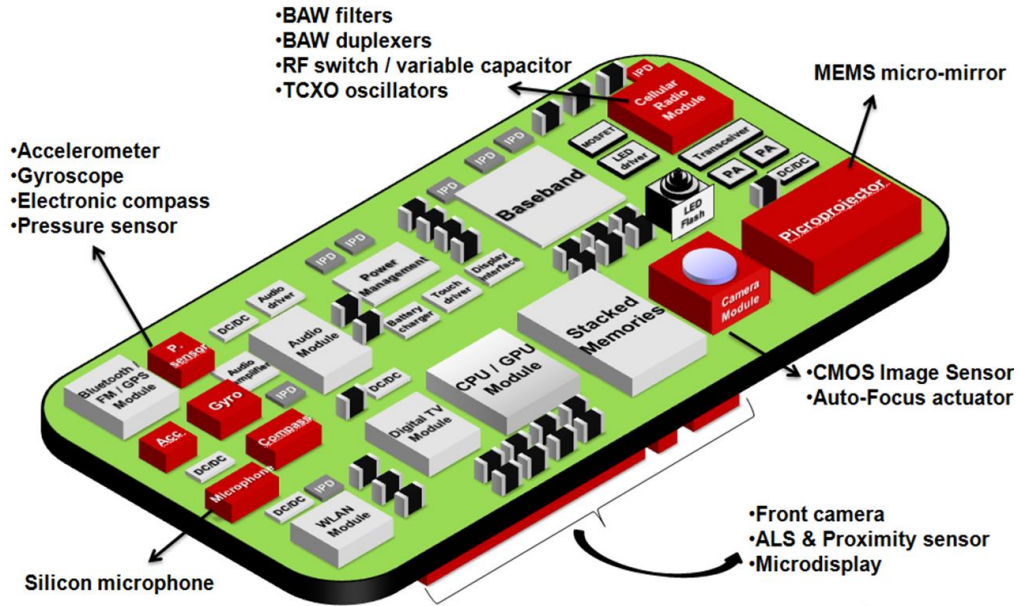


Implications

Wellbeing technology is already capable of medically diagnosing an employee. As social acceptance of non-human diagnosis accelerates then workplace wellbeing companies will integrate diagnostic gateways and service ecosystems behind them.

Health conditions can be diagnosed from corporate data

Variations in parameters such as movement, sleep duration, heart rate, electrocardiogram, skin temperature, etc., are often associated with psychiatric disorders. Namely, accelerometer data, microphone, and call logs can be utilised to identify voice features and social activities indicative of depressive symptoms, and physiological factors such as heart rate and skin conductance can be used to detect stress and anxiety disorders.





Implications

Wearable technologies are moving from fringe to mainstream. Companies should be considering how this data could be used to ethically identify employees in need.

GP Medicare bulk-billing is rapidly decreasing

According to the latest Medicare data, almost nine out of 10 visits to the GP in 2020-21 were bulk billed, with no out-of-pocket cost to the patients. In the last 12 months to June 2021, the GP bulk billing rate was at an all-time high of 88.8%.

However, a report released by online healthcare directory Cleanbill has highlighted that only 35 per cent of GP clinics in Australia offer bulk billing to new patients. GPs themselves estimate that the rates are as low as 17%.





Implications

Higher out of pocket costs could put pressure on employers to subsidise medical support copays as a benefit for some employee segments.

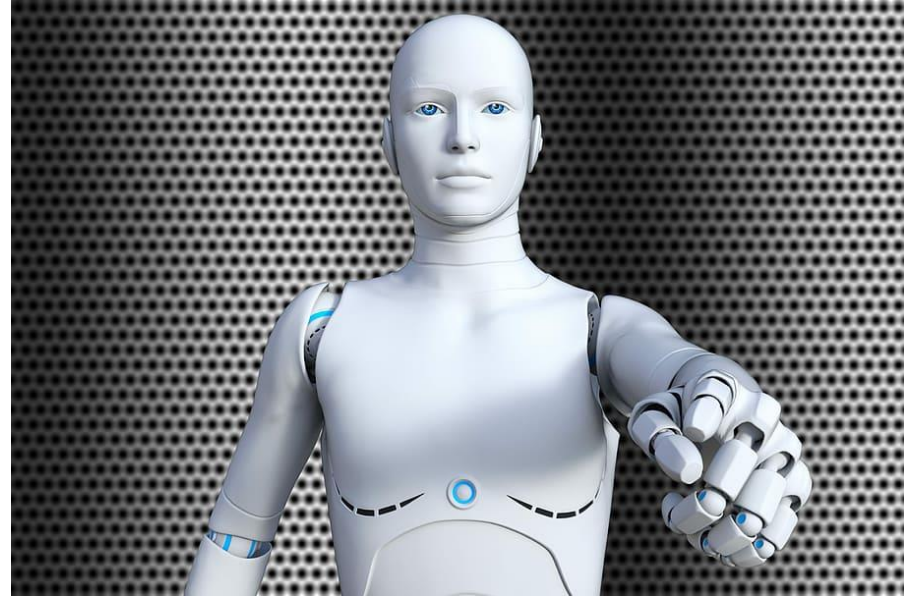


How To Prepare

- Senior execs must confront their beliefs that wellbeing is not the responsibility of the company. Younger generations increasingly believe that their employer is responsible for their wellbeing.
- Pioneering organisations with robust understanding of data security and ethics should consider partnerships with emerging healthtech startups that will be able to provide new models of diagnosis and care using AI. Clear and robust outcome reporting, management of biases in training datasets and protocols for handling AI 'hallucinations' will become a critical criteria over and above adoption/uptake. Late adopters without strong capabilities to screen technology startups for appropriate use of data should watch and wait.
- Wearable technologies are moving from fringe to mainstream. Companies should be considering how this data could be used to ethically identify employees in need.

Artificial Intelligence

Trends Summary



AI will lead to work transformation and job transfers

630,000 jobs in Australia could be displaced by new technologies over the next decade. Vehicle and machine operators, trade workers, retail and construction were the most vulnerable to technological developments.





Implications

Rapid change and job insecurity will increase risks for burnout.



AI and the Intimacy Problem

- Language is the human operating system.
 - EG: Money is given value by the shared narrative that we have about it
- AI doesn't need feelings of its own. It just needs to be able to inspire feelings in us to have us be attached to us.
 - EG: Google engineer claiming that AI chatbot Lambda was sentient. Interesting thing here wasn't so much the claim but the willingness of the engineer to risk losing his job for the sake of the chatbot he was protecting. If it can do that then what else can it induce us to do.



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- **IMPLICATION: AI has gained the ability to mass produce intimacy.**



AI and the Intimacy Problem

- Social media has a battleground for controlling media attention. Now it is shifting from attention to intimacy. AI now works to create intimacy to influence us.
- Workers are increasingly using AI as a one stop oracle for the information they need. This has some radical implications for the workplace as workers use AI to craft not just email responses but their interpersonal relationships and career choices.



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- Workers are increasingly using AI as a one stop oracle for the information they need. This has some radical implications for the workplace as workers use AI to craft not just email responses but their interpersonal relationships and career choices.
- **EXAMPLE: Even if I assure you that this talk was created by me rather than an AI, you can't know. If it's affected your opinions then it may affect your actions. The key consideration is that you can't know whether you've just been influenced by an AI or a human.**



How To Prepare

- Consider how the adoption of AI technologies will influence the determinants of mental health at work: job design, job control, institutional justice etc
- Consider whether a publicised and transparent approach to technology adoption will ameliorate the impact of job insecurity
- Given that government regulation of AI is still outstanding, consider developing internal policies and procedures about AI that can be used for work purposes. As a broad recommendation, mainstream AI companies with clear oversight by internal or external ethics committees could be acceptable whereas upcoming AI projects without this could be excluded.

Metaverse

Trends Summary



Interfaces will become more immersive as both virtual spaces and the physical world are interlaced with rich digital media experiences.

New computing interfaces like headsets and glasses will take years to reach wide user adoption but will be partially driven by the need for workplaces to make hybrid work more efficient.





Implications

As people create digital versions of themselves, the impact is estimated to lead to an acceleration of the current risks inherent to social media: that it can simultaneously be a tool for connection and wellbeing improvement as well as a force for comparison, disconnection and deteriorations in wellbeing.



How To Prepare

- As companies move into AR and VR workspaces (notably in a WFH setting) they should provide information on the risks it poses to deteriorate wellbeing as well as instructions and modelling on how it can be used for connection and improved relationships.

Part 2

Specific Forces



Specific Trends in Workplace Wellbeing

- Holistic Approach: Addressing Physical, Mental, and Emotional Health
- Flexible Work Arrangements: Embracing Remote and Hybrid Work Models
- Technology Integration: Utilizing Tools for Health Monitoring and Support
- Personalized Solutions: Tailoring Wellbeing to Individual Needs
- Data-driven Insights: Empowering Users to Make Informed Decisions



Virtual Reality (VR) and Augmented Reality (AR)

- Immersive Mindfulness Experiences: Guided Meditations and Stress Relief
- Virtual Fitness Training: Interactive Workouts and Personalized Coaching
- Workplace Wellbeing Simulations: Training for Stress Management and Conflict Resolution



Emerging Drug Treatments

- Psilocybin
- MDMA
- Ketamine

(1) Psychedelic Treatment with Psilocybin Relieves Major Depression, Study <https://www.hopkinsmedicine.org/news/newsroom/news-releases/psychedelic-treatment-with-psilocybin-relieves-major-depression-study-shows>.

(2) Psychedelic drugs from LSD to psilocybin could help with ... - NPR. <https://www.npr.org/sections/health-shots/2022/12/27/1145306096/psychedelic-drugs-psychiatric-disorders-brain-research>.

(3) TGA approves psilocybin and MDMA for use in treating depression and <https://www.abc.net.au/news/2023-02-03/tga-approves-psilocybin-mdma-for-treating-depression-ptsd/101929578>.

(4) Psilocybin Treatment for Major Depression Effective for Up to a Year <https://www.hopkinsmedicine.org/news/newsroom/news-releases/psilocybin-treatment-for-major-depression-effective-for-up-to-a-year-for-most-patients-study-shows>

(5) Clinical potential of psilocybin as a treatment for mental health <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6007659/>.



Artificial Intelligence (AI) and Machine Learning (ML)

- Virtual Assistants: AI-powered Chatbots for Mental Health Support and Guidance
- Personalized Recommendations: ML Algorithms for Customized Wellbeing Plans
- Sentiment Analysis: Analyzing Corporate Data for Mental Health Awareness



Gamification and Behavioral Change

- Wellness Gamification: ML Algorithms for Engaging Users and Forming Positive Habits
- Social Connectivity Wildcard: Building Supportive Communities for Wellbeing Goals

Thank you

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