

Change in Value Systems

Trend

As AI takes over day-to-day tasks, the shift from prioritising productivity and economic output to emphasising human well-being, creativity and emotional fulfilment is taking place.

Signal

Cyborg—a being that seamlessly integrates human biology with technology

challenging the traditional boundaries between human and machine, and redefining what it means to be human in a technologically saturated world.

Personal digital identity

Trend

Due to different errors of various biometric identity technologies, **multi bio-identification approaches** are combined.

It'll **supplemented by social networks** to assist in authenticating information where necessary

Signal

Biases in algorithm: Commercial gender classification systems exhibit severe **intersectional bias**, with **error rates for darker-skinned women up to 43x higher** than lighter-skinned men, underscoring the urgency of algorithmic fairness governance.

Ecology/Climate Emergency

Trend

AI climate modeling: NVIDIA Earth-2 enables kilometer-scale predictions, but computing power requirements make it unaffordable for developing countries.

Signal

California State Grants \$500M to Build Wildfire Early Warning System (2024) But that doesn't organize the California fires.

California Department of Forestry and Fire Protection | CAL FIRE

UNEP

IPCC Intergovernmental Panel on Climate Change

World Bank

Accessibility

Trend

Whether it's a simple handshake or a full-body hug, the warmth of another person can add a human touch to social interactions. Today, researchers have invented a device that allows amputees to experience this natural feeling of warmth through their prosthetic limbs.

3D Printing and Open Source Hardware Reduce Assistive Device Costs

People are increasingly concerned about the emotional value of technology

Signal

Gene editing technology is already being used and experimented with in the clinic, but there are still very many problems that need to be solved

Technology is gradually being used in deep medical care

Brain-computer interface enters clinical trials

NeuroLink's Brain-Computer Interface Opens for Neurodegenerative Disease Patients

Technological

Trend

Advancements in computer vision and natural language processing have paved the way for more sophisticated emotion recognition systems. Deep learning models, such as convolutional neural networks (CNNs) and recurrent neural networks (RNNs), have demonstrated promising results in emotion classification tasks. These models can process visual and textual data, enabling machines to infer emotions from images, videos, and written text.

Signal

Real-time wearable human emotion recognition technology

Real-time wearable human emotion recognition technology developed

Countries around the world care deeply about their countries' biological and data resources and have introduced relevant laws to protect data security.

But digital colonisation and technological monopoly become more and more serious. Information and data are being transferred to the cloud of technology companies to train algorithmic models, which will have more accurate predictions, and people's reliance on algorithms will increase.

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Governments will be able to monitor the population more accurately, and the competition for data resource among countries around the world will become increasingly fierce.

Place-based

Trend

Nearshore Manufacturing: U.S. Chip AI Subsidies lure TSMC to U.S., But Depend on China for Rare Earth Supply.

Signal

African mobile payment platform M-Pesa passes 500 million users (2025) Unprecedented development of science and technology needs and markets in the global South. But lack of possibilities for localized industries

Mobility

Trend

Haptic Treadmill Explore true freedom of movement in virtual reality with seamless tracking of full body movements.

Bionic exoskeleton helps paraplegics walk 2023 Commercial

'Gravity regulation' in the meta-universe allows users to experience flight Environment — body: virtual space rules change the logic of body movement

Technology is helping people's bodies to achieve actions that are not realistically achievable, broadening the way bodies communicate with time

Signal

There is a growing interest in the autonomous performance of machines

Body → environment: body capacity determines range of movement → environment actively adapts to body

MIT Sensability City Lab

Smart city roads automatically deform into ramps to respond to wheelchair users

Demographic

Trend

Global population ageing and declining birth rates

Signal

Smart Cameras and Memory Tech in South Korea

Natural Cycles: Natural Birth Control Hormones or Side Effects

Social Robots for Aging Populations

Digital Family Planning Assistants

Southern Hemisphere

Trend

The Global South is using international platforms to share its local cultures. It's getting more attention now, but because big tech companies still control everything, the South doesn't really get to decide how culture is shared. So even when it tries to speak up, it's still being controlled by the North.

Lately, we've seen more music and culture from the South, like Afrobeats and Amapiano, becoming popular. But the real meaning behind these things often gets lost or watered down. Most of the platforms that spread this culture are owned by big Western companies, and they often take advantage — like underpaying creators, stealing ideas, or misrepresenting cultures. Also, because access to technology isn't equal, it's harder for people in the South to share their own stories.

Mainstream media still treats Southern culture like it's just "exotic" or trendy, without showing the real life and struggles behind it. Often, people from outside the culture try to copy it without really understanding it.

Signal

VR remote tools like Meta Horizon Workrooms break physical barriers but fail to address digital divides (e.g., weak African internet infrastructure) that fragment labor markets.

Future of Work

Trend

Amazon Warehouse AI System Tracks Employee Efficiency (e.g., Package Picking Speed) in Real Time and Predicts Risk of Leaving, Sparking Labor Rights Controversy

Signal

Global remote work hiring demand +67% year-on-year in 2023 (Flexjobs data), but only 12% of companies in Africa have VR conferencing equipment

South Korea Legislates Against Out-of-Hours Work Message (2024), reflecting the game of technology's encroachment on private life and policy intervention.

New media

Trend

Physical engine upgrades transform the human body into an interface for media interaction, where the medium is no longer just an external tool, but an extension of bodily perception.

The new media of the future will be people as media - creating, disseminating and experiencing information directly through biosignals.

Virtual worlds are becoming more and more realistic, infinitely closer to the real world

Changing human perception of the environment through new media

Signal

Electric shock stimulates the sense of taste Digitally enhanced flavours

Financial

Trend

"Sustainability" is a new economic vision that combines technology, human development, and environmental sustainability to create inclusive and balanced economic growth.

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Biometric Payment Systems

Technocratic Government

Trend

In the past 20 years, more and more technocrats have entered politics in European countries. On the one hand, their expert knowledge can help make decisions more efficiently. But on the other hand, they often don't have much political or social experience, and their time in office is usually short.

At the same time, big tech companies are playing a bigger role in shaping national policies. While they can support decision-making, there's also a risk — powerful businesspeople might use political influence to exploit the public at a national level.

Signal

Estonia has shown that tech can seriously boost how governments work and change how citizens take part. But its success depends a lot on things like public support, digital skills, and solid systems.

Energy & Consumption

Trend

Breakthroughs in batteries (e.g., solid-state, sodium-ion) and EVs are evident, but **global disparities in power infrastructure** (e.g., UHV transmission, smart grids) hinder scalable clean energy adoption.

Commercialization of high-density batteries BYD Blade Battery 2.0 has an energy density of 190 Wh/kg, supporting EV range exceeding 1,000 kilometers. Sodium-ion batteries cost 40% less than lithium batteries, and Ningde Times plans to mass produce them in 2025

Signal

Lack of super-charging networks in developing countries (e.g., charging post density <0.1/million people in Africa)

Low interconnection of Southeast Asia's power grids hinders cross-border power trading

It's decision time for Southeast Asia as power demand grows and climate change looms

Privacy

Trend

In an era of deep technological involvement in the body, the core of privacy has shifted from 'data protection' to 'body sovereignty' — who has the right to define, access and interpret your biometrics, neural activity, and even genetic information?

Vein tattoos instead of passwords Body → Data: biometrics as the ultimate key to authentication

Blurring the boundaries between body and data

Hacking pacemakers Data → Body: Information attacks can directly harm physiology

Signal

AI analyses human expressions as a way to improve customer satisfaction

Identifying human microstates with technology