The Year in Tech 2024

Harvard Business Review

Businesses that don't embrace emerging technologies are walking a path towards obsolescence.

This year tech is not driven by new technologies but by new integrations that are more advanced and efficient in using existing technologies.

Every digital transformation has two sides – on the one hand the promise of exciting opportunity to dramatically reinvent your business and on the other hand certain aspects of your business must hold steady.

A conundrum for business leaders is to embrace new technology but ensure that these new technologies serve their employees.

The global market for neurotech is growing at 12 % per annum and will reach $21 billion by 2026. This is not a new fad but a new way to think about ourselves professionally and personally.

Neurotech devices offer employers ways to improve well being and productivity of their employees and thus create healthier, more successful organizations.

Neurotech also gives employers information that could well be used against employees.

Smart cap has a product – life band – this gathers brain wave data and processes it to assess wearers fatigue level on a scale on 1 to 10.

A recent study of companies that track their employee usage of their computers showed that 26 % of employers had fired workers for misusing the internet and 25 % had fired them for misusing e mail.

Many of us lack the ability to focus for long stretches of time.

The MN8 product looks like a pair of earbuds, in can be used to listen to music, to participate in conference calls, the device allows employers to monitor the stress and attention levels in real time.

Some companies are using webcams to track attentiveness via eye movements, body position, facial expressions.

Today's dominant internet platforms are built on aggregating users and user data.

In web3, instead of platforms owning the underlying data, users typically own whatever content they have created as well as digital objects they have purchased.

Hence these assets are portable, in the sense that a user can leave any given platform with his/her data.

Making platform backend interoperable and open enables compounding innovation.

Sharing infrastructure means that apps can focus on building great experiences

Web3 platforms have the potential to unlock a novel and especially powerful form of network effect.

In December 2022, Open AI released Chatgpt, a powerful new chatbot that can communicate in plain English using an updated version of its AI systems.

One good programmer can do the work of many , using chat GPT.

Industries such as marketing, advertising, consulting and finance will benefit since they need high quality written materials all the time.

With chat GPT the possibility of human – machine hybrid work becomes real.

With chat GPT, you can create customized data and prompts for each customer

Traditional boundaries of jobs shifts, machines can now do what highly skilled people did earlier.

The location of low cost labor largely shaped today's global supply chain, but that has changed dramatically over the last 5 years.

Companies are trying to use technology to make their supply chains resilient and cost competitive.

The biggest costs to reshoring are labor costs, labor availability and deep manufacturing expertise.

China southern airlines is using augmented operations on its fleet. A typical Boeing 737 has 100 inspections and an Airbus 320 has 200 inspections. CSA is augmenting this with data and saving time and cost.

Metaverse promises to make the virtual world a far more realistic substitute of the physical world.

Metaverse will make the physical location a more , not less important consideration for business.

The metaverse allows for much richer technologies for online interactions.

An app in the ride sharing business dehumanizes the driver. The driver is invisible except as a dot on a location tracker.

Most CEOs are open to look at digital freelancing, this will change the way talent is housed.

Work arrangements in the gig economy are characterized by weak employer - employee relationships, strong reliance on technology and social isolation.

Musk seems to develop his company vision on solving a problem at scale by navigating complexity.

Musk works on the principle that the experience curve delivers.

Musk operates a vertically integrated closed technology strategy.

All companies want to give their customers engaging experiences. You have to do this without commoditizing the experience or depersonalizing it.

Throwing people at a problem becomes prohibitively expensive very quickly.

Watchout for digital humans.

A digital human is like Alexa and Siri, the consumer knows he/she is not human but they relate to the 'genuine' and 'authentic' side of the digital human.

We assign a personality to it.