The Era of Redefinition

6 trends that are reshaping the fabric of human systems

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Today, many of the evolutions around us seem to be pointing towards an impending systems change. On the one hand, we have been designing and building technologies that have greatly transformed (AI, platforms, IoT, etc.) - or will deeply impact (Web3, metaverse, quantum computing etc.) - how we live and work. And on the other, we are experiencing some of the most disruptive seismic shocks in society and environment known to mankind (global warming, inflation, energy shortages, a pandemic, geopolitical instability, food insecurity, raw materials issues, food uncertainty etc.). These are exciting times, when we think about the almost utopian possibilities of Web3 or AI. But they are also pretty scary when we reflect upon their dystopian side, climate change or the changing power dynamics in (geo)politics.

That is why transition eras like ours go hand in hand with imbalance, chaos, uncertainty and unrest. But they also come with the redefinition, the rethinking of those aspects of human (business) life which have become irrelevant or even destructive. On the one hand we are revising the fundaments and interfaces of our biggest information system (the web) as well as many different rules and boundaries in business. And on the other, we are rethinking some of the most fundamental characteristics and features of humanity: who we are - online and offline - (identity), what is good or bad (ethics) and what is or isn't ours (ownership).

And so that is what this trend document is about: redefinition.

The next internet ⸺

The internet triggered one of the biggest disruptions in information sharing and ingesting since the printing press. We've become used to it since then, but those of us who remember the pre-internet era, will probably still be able to relive that awe and amazement of the seminal days. Though it has been the source of many positive changes, it also has some pretty dark facets, which took on a life of their own and are very hard to control.

The latest evolutions in the current iteration of the web can be divided into three categories, the first of them specifically designed to battle this dark side:

1.   **Web3:** This is the evolution that is supposed to counter the typical data-misuse of the current (Web2) iteration of the internet. It's a new type of infrastructure that will bind all information to its user, instead of putting it into the hands of companies. One that promises an "internet built, powered, and owned by its users instead of a few major tech companies".

2.   **Metaverse, Brain Computer Interfaces and the IoT:** the same time, we are experiencing a group of changes that are enhancing the one-dimensional interfaces of the current online world.

3.   **Ubiquitous connectivity:**   Though there are still many places in the world without internet and phone access, several players like SpaceX, T-Mobile and Apple are investing in access through satellites in every corner of this planet.

The combination of these will more than probably result into something of which we will "overestimate the effect in the short run and underestimate the effect in the long run", as Roy Amara would have put it. Indeed, Web3 and the metaverse are still being built as we speak, with a lot of use cases proving more gimmicky for the moment than utterly transformative. But this is also definitely the time to experiment and find out what these technologies could mean for your company.

New fundaments: blockchain & Web3

The biggest shift in this online area is probably the one from a centralized and unequal Web2 – where companies own and control our data which enables them to influence our behavior – to the decentralized format of Web3 where users can decide what happens with their online data because they own and control it themselves.

P.S. we're going (back) to London on the Web3 Impact Tour at the end of the year, you can still apply!

Web3 Impact Tour

11.12 -> 13.12 - 2022 | London

The technology supporting this new Web3 internet is called the blockchain, which:

- **Is more efficient and empowering (for users):** It is decentralized and therefore moves the web from a middle men (big tech) model to a direct user-centric model.

- **Is more secure and private (for users):** It allows to record information in a way that makes it difficult or impossible to change or trick the system because each transaction is duplicated and distributed across the entire network of computer systems on the blockchain.

- **Is more interoperable:** If users own their data, then separate siloed platforms like LinkedIn and Facebook would be able to "speak" to one another and exchange.

- **Is more community-driven:** Decentralized Autonomous Organizations or DAOs could change how we organize ourselves from a hierarchical into one that is bottom-up community driven.

If you want to know more about Web3, you can read our [fun introductory blog right here.](#)

Basically, what you need to remember from this mostly technical mumbo jumbo is that the 'dream' of the new internet is that it will be an ultra-secure, private, empowered, efficient and 'free' space where companies will no longer be able to manipulate users into thinking, doing or buying anything without their consent.

But that's the utopian version, right? We experienced these hopeful feelings too, with Web1 and Web2, remember? Not wanting to rain on the parade, here, (just a smudge, maybe), but the reality might be different, as we are seeing quite a few companies moving into industries where users will probably offer access to their data to (tech) giants because the use cases offer them many benefits. In fact, if you look carefully, you can see a lot Web2 or even traditional phoenix companies quietly preparing themselves for that data-less era in different ways (and yes, not always by finding ways to harvest data):

1. Some of them are **moving into useful and valuable data industries** like healthcare and smart home: Amazon, Apple, Google, Microsoft, Bytedance (parent company of TikTok) and even Uber (with Australian patient transport service Uber Health) to name but a few. Their goal might be to gather as much data as possible to create some kind of ultraconvenient lock-in so consumers will practically be forced to give up their data when Web3 happens.

2. Social media giants like Facebook and Instagram have been investigating interaction models that are changing from user-directed to **computer-controlled:** so no longer determined by their network or even the preferences of the individual user but by the most popular content.

3. **Paid instead of free services:** Recognizing that the data +advertising model might be reaching completion, and pushed by privacy laws (and measures from companies like Facebook limiting tracking), social media apps like Facebook, Instagram, TikTok, Twitter, Discord, Telegram and Snapchat have all been investigating paid features.

New Interfaces

The race for creating the interface for this next internet is also on. Many are betting on the AR, VR and MR devices of the **metaverse**, of course, which manifests itself in many ways because of that. It might be fully immersive, where the user is travelling through a **fully virtual environment** through the use of VR goggles. It might take a few years before the user experience is up to speed here, and the goggles ubiquitous, though.

For now, it's mostly about games, e-sports, concerts, events and some brands like Nike, Christie's, Coca Cola and Balenciaga experimenting there. Maybe some early stage education and work projects. But it might become big one day.

A less radical and (for now) more practical metaverse bet might be **augmented** reality or AR, where users are wearing "regular" see through glasses, placing them firmly in reality, but offering them a useful information over-layer. Man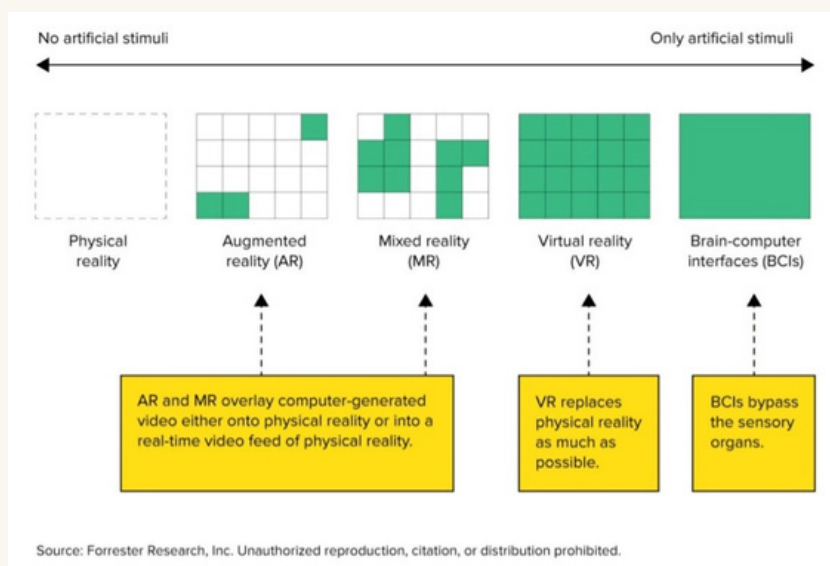y are very curious about the AR glasses Apple has been working on in stealth mode, but Google, Xiaomi, Bose and many others have been focusing on this type of device as well. Next to optimization of the user experience, a big challenge here will be privacy.
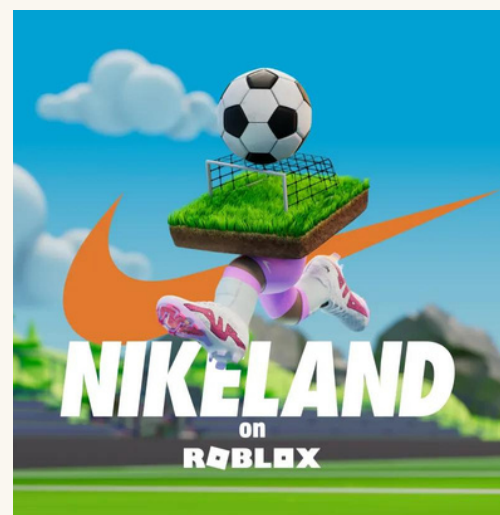
But let's not forget the **holographic approach** either.

True, most companies are dabbling in AR and VR and this seems to be a less popular area, but there are some bigger names conducting experiments in that area. Scientists at Cambridge and Disney Research, for instance, have been working on "holobricks" that can stack and tile together to produce large 3D images that can be viewed from multiple angles in a much higher resolution than the disappointing holograms we are used to.

But where the metaverse is now mostly focused on the sensory experiences, and mostly on seeing (though others - like touch (haptic devices) - are investigated as well), **brain computer interfaces (BCI)** are bypassing those sensory 'middle men' allowing our brains to directly interact with computers.

Source: Forrester Research, Inc. Unauthorized reproduction, citation, or distribution prohibited.

A popular example is Elon Musk's neurotechnology company Neuralink that develops implantable brain–machine interfaces to directly connect humans and computers. This type of invasive interface will probably first be used by paralyzed or epileptic patients, offering them control over devices that they cannot touch, but just image how our world will change if we can open our door or access information by just thinking about that. As a side note: Musk is apparently feeling that Neuralink is not progressing fast enough, having approached brain chip implant developer Synchron Inc about potential investments.

Metaverse Tour
06.11 -> 08.11 - 2022 | Paris
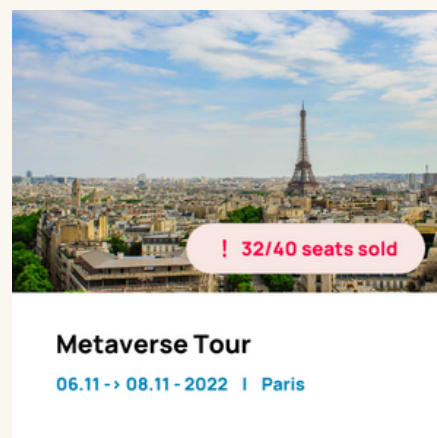
P.S. we're going on the Metaverse Tour with moderator Steven Van Belleghem this November. There are a few seats left so be quick!

As a side note: Musk is apparently feeling that Neuralink is not progressing fast enough, having approached brain chip implant developer Synchron Inc about potential investments. Meanhwile Meta researchers have developed an AI model that can decode speech from noninvasive recordings of brain activity, which could lead to completely new ways of controlling technology.

> **I do not have a crystal ball, but this is something I wonder: the evolution in interfaces is usually that they tend to become increasingly "invisible".**

I do not have a crystal ball, but this is something I wonder: the evolution in interfaces is usually that they tend to become increasingly "invisible". Zero interfaces is what we used to call them, by which we meant that screens were disappearing. Now, if we compare BCIs with the metaverse, BCIs are the ones that are the best fit for this "natural" evolution, while the metaverse puts the users basically in an even bigger, 360 degree screen. Web3 actually follows this same evolution from middle men model (interfaces are middle men, too, right?) to a direct model. So that might be another argument for that direction. Now, don't get me wrong, I'm not saying that the metaverse is a fad. (Would we organize a tour on the topic of the metaverse if that was the case? No, we would not.) I'm just wondering which will "win" in the long run. Or if they will exist simultaneously next to one another, but for different purposes: for instance one for more factual information gathering and one for entertainment.

In many ways, the **IoT devices in our smart homes and smart cities** are interfaces, too. They are often less "active" (in the way that the user knowingly interacts with them) - with sensors measuring our behavior and for instance automatically making sure that traffic lights adapt to the traffic situation - but they too allow users to (unconsciously) interact with computers. The more sensors and machines with image recognition (like smart doorbells and vacuum cleaners), the more of these types of 'silent' interfaces we'll have. And the smarter these sensors and seers will become – being able to read our emotions is for instance a big area of interest – the bigger the impact. In fact, this type of interface is just as immersive as the metaverse (in the sense that we are walking around in a world filled with them), though we are a whole lot less conscious about it.

## New physical infrastructure

Last but not least, a new wave of projects — including those by Starlink, OneWeb, and Amazon's Project Kuiper — are using satellites in low-earth orbit to provide a different kind of internet access.

It's about adopting infrastructure in space - instead of the big underground arterial system of cables we're used to now – to offer ubiquitous connectivity. Up till now, the internet (well, connectivity in general) still had a lot of dead zones, both in large nature domains as well as in more rural regions with less or even no cellular towers. But this may be a thing of the past. Although, to be fair, in a first phase, this might mostly be about emergency access in very remote areas because of the limited capacity on each satellite, as Benedict Evans explained in his newsletter.

SpaceX and T-Mobile recently announced a plan to use the rocket company's satellite constellation technology Starlink to expand cellular service to "dead zones" by the end of next year. Apple announced a forthcoming satellite connectivity feature called Emergency SOS via Satellite at its iPhone 14 launch event, to help people communicate when their cell service isn't working. And the day before that Huawei announced the Mate 50 series, which also holds the ability to send texts via satellite communication. Ok, both Apple and Huawei are 'only' about texts, but let's consider this phase one of opening up connectivity, while internet access will follow later.

Source:
[T-Mobile Takes Coverage Above and Beyond With SpaceX](#)
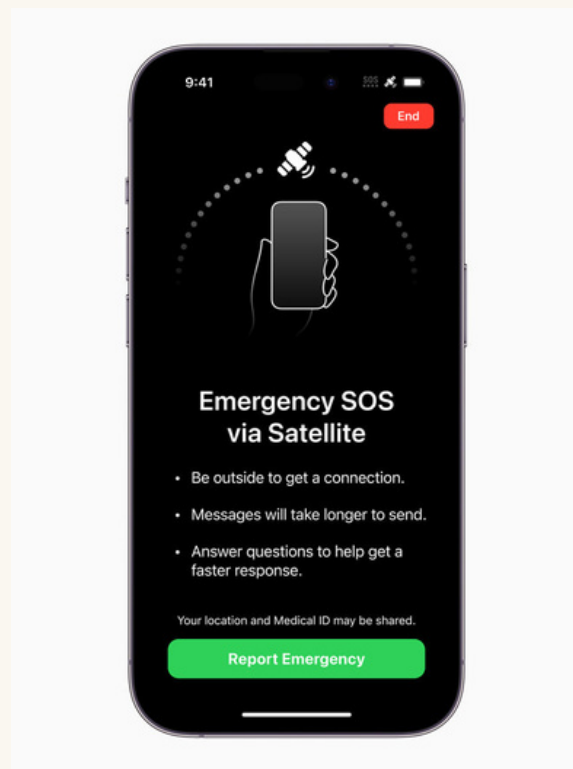
Source:
[Apple Newsroom iPhone 14 announcement](#)

The Big Industry Shift

An interesting trend, which is not new but definitely accelerating is how so many (big tech but also others) companies are venturing into adjacent, often high growth industries. So why are they doing this?

Because there is **safety in diversification:** in a fast changing business environment, you distribute the risk and if one or two industries suffer, chances are bigger that the others might fare better. The trick here is probably to find industries that are (currently) pretty essential, like health, wellbeing, energy, food, smart cities, education and finance.

And a **second reason is obviously data:** most of these magnetic platform companies like Amazon are chasing service models where they will be able to harbor a lot of valuable data. As I stated in the point before this, this is also because this is the type of data that consumers will gladly open up, even in a Web3 paradigm where they would not necessarily need to.

1. Many industries are moving into **essential industries,** because this is where consumers will keep investing money, even in a recession: examples are energy, health & wellbeing.

2. Many seem to be venturing in **useful data industries:** space examples are healthcare, smart home and smart city.

3. Industries like energy, education and mobility are really popular because there is **a LOT of room for improvement and growth** and thus a lot of opportunities for disrupters.

4. **Commodity industries** like telecommunications and grocery retail are looking for ways to diversify themselves in more "fun" ways (like video streaming).

5. Tech & fintech seem to be attracted to **education:** that's mostly about marketing & evangelization but who knows how this might pan out?

So here are a few concrete examples:

- British **fintech** company Revolut has been moving into the **education** space, offering a free crypto course 'Learn & Earn' which has been completed by over one million people in the first month since they launched the feature.

- In the same space, **Web3** developer infrastructure startup Alchemy - often referred to as the Amazon Web Services (AWS) of Web3 - acquired a startup in the education space: ChainShot, which runs coding bootcamps for aspiring web3 developers.

- **Retailer** Walmart is investigating how to build its own **streaming service** and is talking to some big-name content players about which shows and movies it can offer to Walmart Plus subscribers. To quote The Verge: "Amazon Prime Video — but make it Walmart". Prior to this it has also frequently been venturing into healthcare with for instance its Walmart Health Centers for primary care.

- Several **social media** platforms are also diversifying, mostly into adjacent services: YouTube is launching a dedicated podcast page and TikTok parent ByteDance filed an application with the US Patent and Trademark Office for "TikTok Music" in May - which will also support podcasts and digital radio content.

- **Streaming** company Netflix has been investing in **mobile gaming** With around 1.7 million people playing daily, it has a long way to go, but its efforts are on an upward trajectory. Netflix's plans may actually include building its own cloud gaming infrastructure (we know what happened when Amazon did that). It has acquired several game studios to help it expand and better understand the space.

- **Media** companies like the BBC and Belgian newspaper De Tijd have been offering training courses to their audience.

- **Music streaming** service Deezer is testing a meditation app.

- **VR gaming** company Roblox is planning to provide a platform where people can build games for themselves, regardless of their technical skill. It's reminiscent of the Amazon AWS approach, where a company builds its own infrastructure instead of sourcing it externally and then provides it as a service to others outside the company.

- **Telecom** company Telenet has invested 3 million euros in de energy start-up June Energy, looking into new growth opportunities and broadening its offer.

- Online **retailer** Amazon has been discussed already, being one of the biggest and fastest acquirers in **healthcare, smart home and financial services** (from payments and lending to insurance and cash deposits) industry for the moment. In healthcare, it has acquired Pillpack (2018), Halo (2020), Teladoc Health (2022) and One Medical (2022) and launched several coronavirus testlabs (2020) as well as Amazon Care (2021). At the time of writing this, it was also included in a bidding war for Signify Health, together with UnitedHealth Group Inc and CVS Health Corp. In the smart home environment Amazon now has Alexa, Ring, Eero and Roomba (2022), which basically allows it to know every nook and cranny inside ànd right outside a user's home.

- **Tech** company Apple recently published a nearly 60-page report outlining its **health** features and partnerships with medical institutions to argue that these offerings are the key to its future.

- **Telecommunications** provider Proximus intends to cash in on the future of mobility and vehicle electrification, planning to install 15,000 EV charging points by 2028.

- **Meta** is moving into education by helping 10 universities launch campuses that will be built on metaverse "soil" (duck pond included!)

- **Telecom** giant AT&T bought entertainment giant Warner Brothers. In fact, getting into entertainment and streaming is a very popular move among telcos to protect them from the 'dumb pipe' syndrome, seeing that, from a cellular service point of view, they are essentially indistinguishable from the competition: T-Mobile's offers its customers Netflix for free and its best customers will get free access to Apple TV+. Verizon offers its customers the Disney bundle of Disney+, Hulu and ESPN+ as well as six months of Discovery+. AT&T offers HBO Max to some long-standing wireless subscribers (although it has stopped offering it to new customers).

Construction techniques for the future

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New world, new me

With all the – technology and systems – changes happening around us, as well as some brutal social and environmental challenges facing humanity, it's pretty logical that humans are also redefining their roles, relationships and sense of self within their new context. They are rethinking their identity, while simultaneously tech companies are investigating how users will be able to identify themselves in the new world.

Personal identity

People are increasingly questioning what defines them as an individual. What is my gender? What is my sexuality? What is my culture? My nationality? What is my relation to nature? To society? What are intelligence and sentience and should we only attribute them to humans? Should I let myself be defined by my work? Am I an accountant or do I just "do" accounting? Is my online self different from my offline self (which will become even more relevant in the metaverse) or should they be the same?

Quite a few traditional people seem annoyed by the "wokeism" that goes hand in hand with some of these pretty fundamental questions. But I think it's pretty special that we are redefining the status quo in all of these domains. The traditional interpretations were often narrowly binary and little nuanced anyway. Questions and choices are good.

> Resetting our default setting when our context is evolving is only normal. There's no need to feel threatened by these changes.

And we do see an increased number of companies complying to these shifts in perspective. Google, for instance, has been adding labels to help searchers easily find businesses from people with a certain identity, like LGBTQ-led, Asian-owned, Latino-owned or veteran-owned businesses. MIT Technology review recently published a gender issue, "Beyond the binary", in August of this year (2022), researching the effect of biological sex on the immune system, gender neutral emoji, unnatural childbirth, and the fight for "Instagram face". And tackling questions like: "Why can't tech fix its gender problem?" or "Will sex become irrelevant to baby-making?" Disney, then, is removing "gender greetings" from its parks: visitors will no longer be addressed by "boys and girls" or "ladies and gentlemen." Internet security firm Cloudfare dropped the controversial online forum Kiwi Farms known for targeting transgender people.

Data Identity

With regards to our online identity, companies can pretty much measure what they want and then use that information to 'nudge' us in certain directions that are not always necessarily to the user's advantage. Yes, there are some laws to protect us but this domain is still mostly the wild west. Again we enter the narrative of Web3 - and Web 3.0 (no, they are not the same and here's why) - where users will finally be able to own, guard and manage their own data - be it in a blockchain-based crypto wallet (Web3) or a Solid pod (Web3.0) - in a way that protects their identity, privacy and even their freedom.

Our online identities are currently mostly open to all, but many companies are now investigating ways to help us identify ourselves in different, more private and secure ways.

There are some pretty radical identity experiments out there at the moment, like Worldcoin and their shiny orb that generates a unique piece of code on the blockchain on the basis of a retina scan. But we also see really interesting cases like UK-based Zamna which organizes secure identity and health data for aviation. Meta, has also officially launched its new metaverse ID-system which it calls Meta accounts and Meta Horizon Profiles, though it seems not to be using the Web3 format. It is actually just ditching the old way of logging on into its VR platform - via personal social media account logins of Facebook and Instagram - after complaints around privacy concerns arose.

Source: MIT Technology Review

As the connectivity of our world increases, online identity will only grow in importance: just think of all the biometrics data that will be available in a smart home, smart city and smart body environment (by which I mean all types of devices monitoring our (mental) health).

Ethics, ethics everywhere ⎯⎯⎯

In a world in full transformation such as ours, people don't just revisit their identity and relations with others, they also tend to re-evaluate their moral principles. At the end of the last century, for instance, we were still mostly marveling over the technology of cars while we're now figuring out how to get rid of them as much as we can or how to replace them with the lesser evil of electric vehicles (Just as a side note: the environmental and social impact of mining the metals necessary for batteries is significant and electricity is - for now - more often generated by coal than by green energy, which is not environmentally friendly either).

"But why not call this trend ESG or sustainability, rather than ethics?", you ask. Because the latter is a lot broader and more fundamental. Humans have been pondering about good and bad for centuries: in religion, in philosophy, in science even. And seeing that humanity is currently experiencing an identity crisis of sorts, I feel that "ethics" are a better fit for this trend document. Because this trend goes beyond the neat categories of E, S and G. It's about how we treat employees, customers, and citizens and possibly, at one point, even robots. It's about reshaping the kind of world we (want to) live in.

Ethically sound behavior towards employees

In the era of The Great Resignation, quiet quitting and a raging war for talent, you'd better not be known as "that company that treats its employees badly". Like Elon Musk refusing to let employees work from home any longer. Or the unionization protests at companies like Amazon, Apple, Google, Facebook, The New York Times, Starbucks and IBM. Or Uber drivers protesting over low pay and unsafe work. And let's not forget about the lawsuits at Google over underpaid female engineers and overlooked Asian job applicants. The urgent need for talent has given a lot of economic power to employee activists and they have rightfully decided that they want to be treated right.

What some call "employee experience" is actually just about handling your team with the respect they deserve, in ways that allow them to grow, develop their full potential and be happy and fulfilled on the job. It's just as much about learning and coaching possibilities, fulfillment and allowing a work-life balance as it is about legal benefits and fair pay.

> **In the simplest of terms: treat your employees as you would want to be treated. Treat them ethically right. There's really nothing more to it than that.**

Ethically sound behavior towards the environment

This is about the E-part of ESG. The time for companies to quietly indulge in practices that are bad for the climate and the environment is gone. Customers, employees and the media are calling companies out when they pollute or greenwash. A perfect example of that is the major backlash Mercedes-Benz has recently faced with their campaign to promote its electric car range: it featured a series of posters featuring the Mercedes logo over close-up natural images and the slogan 'Nature or Nothing'. Pretty predictable that people would not accept such a radical statement from a car company, even if it was about EVs (which as stated above do (still) have an impact on the environment).

Sustainability-focused consumer review platform WhereFrom even parodied the campaign and replaced the original images with ones of global warming:


Source: 10 Days for Wherefrom
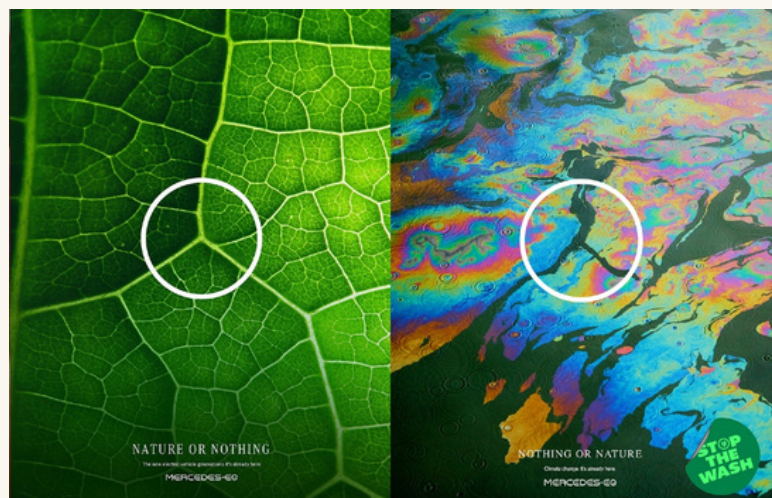
The backlash was so severe that Mercedes-Benz is now distancing itself from the campaign, claiming it was a local Mexican project that was never intended for global rollout and that it did not approve the English translation.

Beyond condemnation from the public, an increased number of companies are now feeling the **direct impact** of environmental and climate-related changes on their business. Just a few recent examples of the burning platform that is forming:

- Factories in China's southwest – including makers of solar panels, cement and urea – were forced to shut down or reduce production after reservoirs used to generate hydropower ran low in a worsening drought and power demand for air conditioning surged in scorching temperatures.

- Alexandre Ricard, CEO of the Pernod-Ricard Group, stated that "their biggest concern is climate change and its direct impact on harvests, more than supply chain issues". He said that the data they gathered showed that harvests happen earlier and earlier in the year because of climate change, therefore generating significant issues in terms of stability and production."

- The water level on the Rhine, Western Europe's most important waterway, was at a record low because of Europe's hot summer, making it too shallow for many ships to pass. Millions of tons of commodities are moved through the Rhine and shipping disruptions are certain to further impact Germany's economy, already reeling from global supply chain disruptions and record high energy costs stemming from Russia's invasion of Ukraine.

And so, environmental and climate changes are moving from an almost abstract and far-off reality (for companies, I mean) to having a direct impact on them that forces them to change. I sincerely hope that their response will be dual: not just looking for ways to up the efficiency again in the short term but finding out how they can diminish their impact on these problems they helped cause in the first place. These huge global problems are actually a fantastic business opportunity, in the way that companies could be developing products and services that really help solve them.

Positive Impact Tour
04.06 -> 07.06 - 2023 | Copenhagen
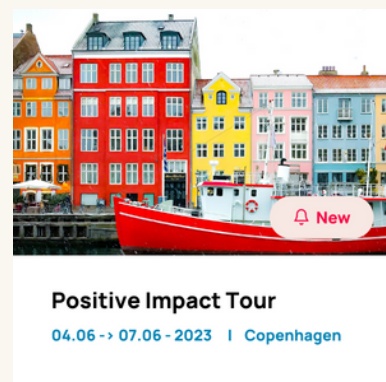
P.S. we're going on the Positive Impact Tour in June 2023 to Copenhagen to focus on ESG.

Ethically sound behavior towards customers

Customers and users, too, have been drawing the line for a while now. Algorithms - like those of Instagram, Facebook, TikTok etc. - have developed some kind of PR problem because of that. As stated, the dark side of Web2 that Web3 is trying to solve is exactly all about the unethical and manipulative use of consumer data. But it's also about governments protecting consumers from poor product quality and planned obsolescence (see also further) with laws and regulations.

Next to these experiments in Web3, we also see an increasing number of people who are condemning unethical services and products, like Ex-Facebook Frances Haugen and ex-Google Tristan Harris. And let's not forget about McKinsey which had to settle for nearly $600 million over its sales advice role in the opioid crisis. People are no longer staying silent about injustice to consumer behavior.

In fact, companies should stop treating customers as customers, because that reduces their relationship to a commercial one, whereby the former just want to sell as much as possible to the latter. They should treat them as humans. Let's start calling it human relations instead of customer relations, which then immediately makes the ethical part unavoidable.

Citizens & AI

As mentioned, citizens, too, are taking their rights and needs into their own hands. We are facing huge problems because of climate change, droughts, geopolitics, polarization or the decline of democracy. And when things go bad, the people rise. That's how the French and the Russian revolution happened. That's what's happening in Indonesia. Or in China, where there is the "lying flat" movement in which young (middle-class) workers and professionals, are opting out of the struggle for workplace success, and rejecting the promise of consumer fulfillment. They no longer want to mindlessly participate in a fast-paced society and technology sector where competition is unrelenting.

La Liberté guidant le peuple by Eugène Delacroix

Now, this last one is perhaps a weird one, but no less relevant. Some people believe that AI and robots that one point will become sentient. Actually, some – like Blake Lemoine, the Google engineer who publicly claimed that the company's conversational artificial intelligence, LaMDA, could think and feel like a human – believe that this has already happened. Even if it's (probably) not true, it is wildly interesting that an AI system is able to fool someone who develops this type of system as a living. And if it is, or will be, we will have a lot of thinking to do about how we treat these systems.

There are two ways that companies (and governments) can react to all the ethical (r)evolutions described here. With fear and paralysis because their playing field is becoming a lot more complicated now that people are a lot more critical about everything they do and sell. But why not grab these challenges with both hands and turn them into huge opportunities for creating new products and services that really help employees and consumers or that help solve some huge environmental challenges..

Just look at this popular shout of from an Atlassian employee to her company explaining how it allows 26 weeks off, 100% paid, for both mothers ànd father. Or how Orsted transformed their business from fossil fuel-dependence to renewable energy in just 10 years, becoming the world's most sustainable energy company.

These can be scary times, but if we look at them with excitement and an open and change-accepting mindset, then we can help make the world a better place.

Art of Talent Tour

End of May - 2023 | Copenhagen
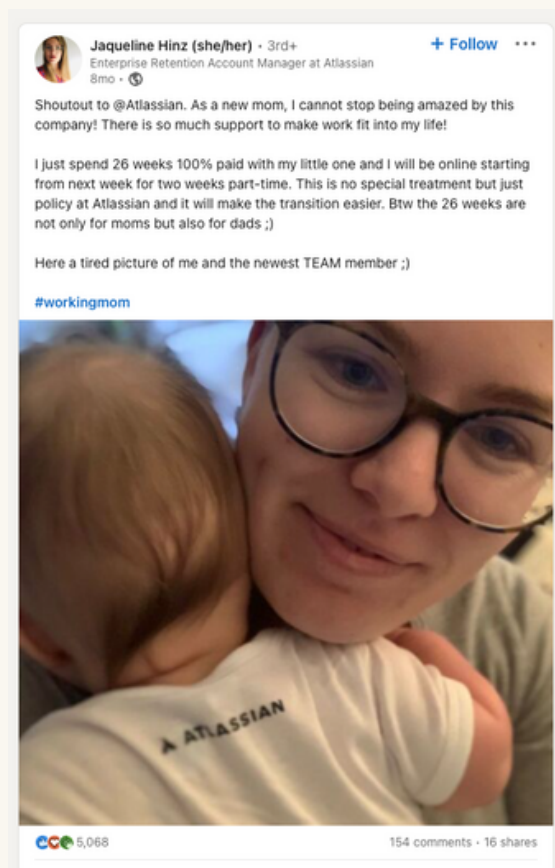
P.S. we're going on the Art of Talent Tour to Copenhagen next year.

(N)ownership

Ownership, too, has been changing pretty significantly over the past years, both in the online and offline domain. While it has been decreasing in a lot of places (rather than own certain products, we now enjoy them as services), in other virtual domains, it has been increasing as well.

Increase in ownership

When it comes to digital assets and information, we are definitely seeing an increase in ownership. Whereas virtual goods were seldom unique and easily copyable (and so commercially uninteresting), we now have the non-fungible token (NFT) trend that allows people to really own unique pieces of digital art like a Bored Ape or apparel like a special Balenciaga bag in some metaverse (which we will discuss in the next point) game.

The interesting part about this type of Web3 products and services is that they will also change the nature of ownership itself. NFTs, for instance, are basically pieces of "if this ...then that..." code that can even be programmed to change. And that is very different from other virtual products which are static in nature. If you buy a song, a movie, a book, concert ticket, they will never change, but an NFT could.

One of our 'Web3 Tour' speakers at Christie's told us that she had bought a visual that changed along with the seasons. A gimmick, of course. But what if you could buy the concept of "the most popular virtual dress in Asos" as some sort of subscription NFT for your avatar, where your attire would change along with fashion trends? **Products could become fluid,** adapting to their context, which is a truly fascinating idea. Another type of Web3 driven ownership is fractional or **micro-ownership.** The Rembrandt Heritage Foundation, for instance, is planning to digitally cut Rembrandt's most famous painting, the Nightwatch, into 8,000 pieces and sell them as NFTs.

Visiting Christie's on the Web3 Tour

We will also need to talk about **ownership rights** when machines will increasingly develop products, arts and text on their own. Who owns the IP of a DALL-E visual: is it the user who asked for the image, is it DALL-E, is it Open AI (the organization behind DALL-E) or is it the developers behind DALL-E? A lot of food for thought, here.

DALL·E 2 can create original, realistic images and art from a text description. It can combine concepts, attributes, and styles.

TEXT DESCRIPTION

An astronaut Teddy bears A bowl of soup

riding a horse lounging in a tropical resort in space playing basketball with cats in space

in a photorealistic style in the style of Andy Warhol as a pencil drawing

DALL·E 2

Not only will ownership of products and services change, we might also see a big shift in the **ownership of user data** (as described above): from the tech companies in the Web2 model to the user in the Web3 model. Again, this could have some huge impact on identity, privacy and security, seen from the user's point of view. But seen from the perspective of companies (where the increase actually becomes a decrease), this will mean rethinking any type of data-related marketing and business model. Interesting times lie ahead.

Decrease in ownership

But at the same time, we are definitely seeing a decrease in ownership in the world of atoms (Versus the world of bits, I mean, not the actual atoms, who in fact, never owned things and cannot therefore decrease their ownership of them. Poor atoms.).

There are two main reasons: **first of all ESG and ethics, the increased appeal for degrowth** and the fact that our rampant consumer behavior is devastating for planet, climate and even society. Just think of the plastic soup in the sea, the insane amount of travel done by cheap products from China to here, the awful labor conditions of workers allowing us to buy cheap clothes or the clandestine giant dump in the Atacama desert with tons of discarded clothes. Especially the younger generations are advocating to buy (and therefore to own) less things.

Second, affordability: in the current downturn food, energy, real estate and care prices are rising. And so the younger generations are choosing to rent cars when they need them (and favoring other types of mobility), instead of buying them. In fact, it has also become almost impossible for them to buy real estate without the financial help of parents. But it's interesting to see that this also seems to go hand in hand with new types of renting models: like community driven rental or short term rental. The latter is especially interesting for employees in fully working from home regime, who want to test out new regions to live.

We see quite a few things moving in this area. Andreessen Horowitz has invested 350 million dollar in ex-WeWork Adam Neumann's new 'Flow' rental apartments, which are basically WeWork, but for living: he wants to "connect people through transforming their physical spaces and building communities". Shortly after that news, Zumper and Landing – which both have short-term rental models – announced they respectively each raised $30 and $75 million.

But it's not just private real estate, office real estate will also go down because it's expensive ànd people are working more and more from home. I'm not expecting that there will no longer be offices, but they will probably be smaller than before.

Lyft, for instance, announced it will cut back on its physical office space in the U.S. as it is increasingly shifting to remote work. In fact it is renting out approximately 44% of its 615,000-square-foot office real estate. On the other hand, the high cost of energy might be driving employees back to the office again, so this might become a really interesting area of change. Maybe companies could cut back on physical space (because of the cost), but offer energy vouchers to employees (instead of meal vouchers) to help them meet ends?
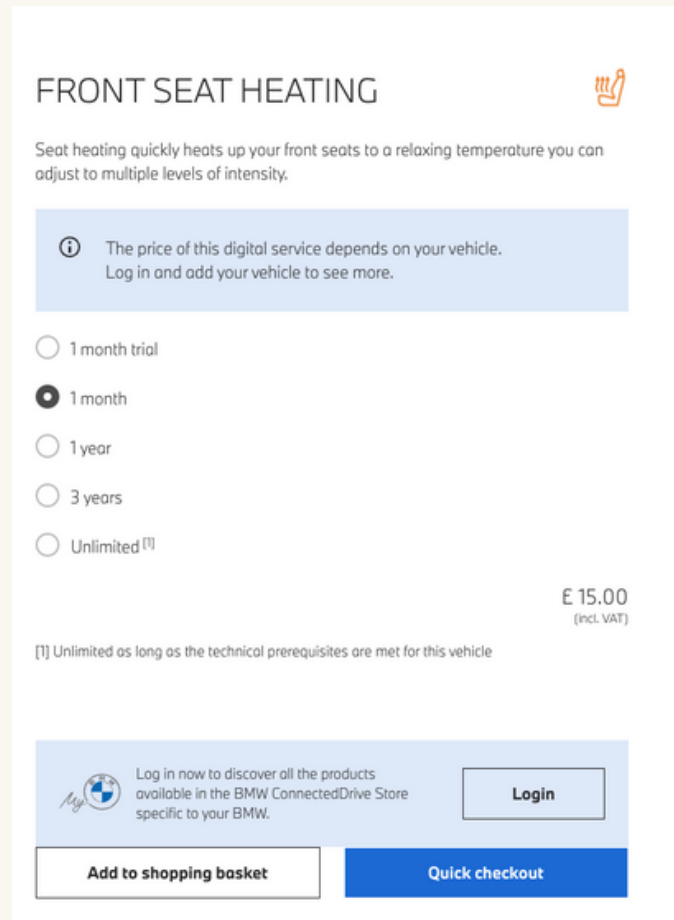
And of course, there's still **the 'old' trend of the sharing economy** that's still out there, with platforms like Turo (car sharing), Zipcar (car sharing), Airbnb (house sharing) or Link Coworking. And let's not forget the streaming of media and entertainment (movies, music and games) instead of owning the carriers. The latter models have been around for a loooong time, of course, but there are more recent examples of this type of "streaming" of services, which we have now come to call "subscription models".

For instance, seat heating used to be a fixed feature of a car. You either bought a car with it or without it. But BMW has started rolling out subscriptions for seat heating in some vehicles in South Korea. Similarly, Tesla has announced that new Tesla orders would require a subscription for navigation services. Old cars came with navigation, new cars no longer do. Same goes for tires, Michelin, for instance, is offering Tires-as-a-Service. The Verge analyzed that the "auto industry is racing towards a future of microtransactions."

It's interesting to see this decoupling of hardware and software here, with BMW and Tesla. Though we have always been accustomed to buy or lease the software on our computers and sometimes on our cell phones (the apps, I mean), the software in camera's, cars, smart home speakers etc. have always been inherent to the product. But if we can regard Tesla and BMW's evolution, this might be about to change. Which means that we might need to subscribe to the software on many of our smart devices like fridges, vacuum cleaners and security camera's in the future. And maybe the software and hardware providers will no longer be the same at one point: with for instance Tesla providing the hardware and Apple the software.

Playing the long game ———————

One of the most interesting emerging trends focusses on the concept of longevity. And I think that this change in our time horizons - from short term to long term - has increased in impact and appeal for these past years because of two very specific reasons:

1.   **The value of human longevity for healthcare:** According to Aubrey De Grey, one of the most respected voices in the human longevity industry, "aging is just a disease", and one that he believes can be cured. Well, the pandemic has made us realize how fragile our health and healthcare system is and how we need to invest in it to make it more anti-fragile. That's one. But though society's interest in healthcare was boosted by the pandemic, the interest of big (tech) companies - like Walmart, Amazon, Apple, Ping An, etc. - in it had been going on for quite a while, as discussed above.

2.   **' Wicked problems that push the need for a broader - systems ànd** term thinking - view: Long term thinking has been advocated for quite a while now in business and society by pioneers like Peter Schwarz (The Art of the Long View), Peter Hinssen (The Day After Tomorrow) and the Long Now Foundation. But the complex and highly connected challenges that we are struggling with - wicked problems as they are sometimes called – like climate change, migration or polarization are really forcing us to rethink our strategies for the longer term, while remaining agile in their execution in the short term.

A useful tool to understand this need for a long term horizon when it comes to systemic problems, is Amy Webb's time cone. The more uncertainty and the less data and evidence there is – which is certainly the fact with some of the huge environmental, social, personal and organizational challenges we are currently facing – the longer your time frame should be.

Source: Amy Webb, Future Today Institute

HBR

Human longevity

The quest for human longevity - stopping and even reversing the process of ageing to ensure lives that are not only longer but more qualitative too - seems to be on fire lately. In fact, once you start noticing it (if you haven't already), you'll see it appear everywhere in true "Baader-Meinhof Phenomenon" style from now on. In fact, longevity expert Aubrey De Grey stated that "The funding situation is totally unrecognizable relative to even a few years ago".

Here are just a few examples of the most recent longevity events and investments:

- Altos Labs - a new anti-ageing start-up that hopes to prolong human life - drew billions of dollars of investment, including from Jeff Bezos and Yuri Milner.

- Saudi Arabia plans to spend $1 billion a year discovering treatments to slow aging.

- New York–based Life Extension Ventures is a new $100 million fund that claims it will focus on "longevity for people and planet." The aim is to back founders who are accelerating the science around longevity.

- BioAge Labs, a biotech company developing therapeutics that target the molecular causes of aging to extend healthy human lifespan, announced a partnership with Age Labs, a diagnostic company that develops tests for the early detection of age-related diseases.

- This year in September, Dublin will host a "Longevity Summit" for the first time ever.

- Scientists from the Universidad de Oviedo in Spain say they found the genes that makes immortal jellyfish immortal.

Long term mindset

As stated above, advocating a long term or "Day After Tomorrow" mindset is not new, but - among other events – climate change and a pandemic have forced us to zoom our view out, from our own (time) context to that of the planet, and of future generations. It's about "expanding our time horizons" as Stewart Brand from The Long Now Foundation would call it.

As a sign of the times, quite a few recent books have been published on the matter over the last 5 years. Here are some examples:

- Peter Hinssen: The Day After Tomorrow (2017)

- Jonas and Jonathan Salk: A New Reality (2018)

- Roman Kznaric: The Good Ancestor (2021)

- Dorie Clark: The Long Game (2021)

- William MacAskill: What We Owe the Future (2022)

- Ari Wallach: Becoming the Great Ancestors Our Future Needs –
  An Antidote for Short-Termism (2022)
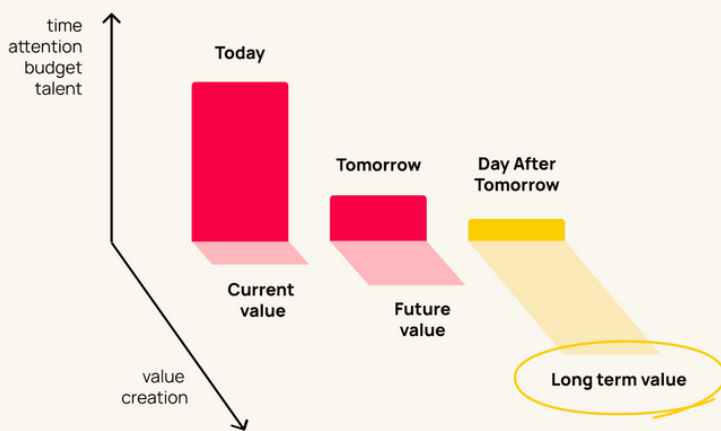
Read our approach and Day After Tomorrow vision on
nexxworks.com/day-after-tomorrow

It's also great to see how governments all over the world are tapping into this long term perspective. Sweden has a Ministry of the Future, Scotland has a Future Generations Commissioner and the United Arab Emirates made a similar commitment to future generations. We're definitely not there yet, but it's good to see progress. Perhaps the most poetic and beautiful argument I heard for longtermism comes from Vox' Sigal Samuel: "**future people matter** morally just as much as people alive today".

Organization longevity

A long term existence is obviously the holy grail for companies. In these times of accelerating change and uncertainty, that becomes an increasing challenge. Just to compare: a study by McKinsey found that the average life-span of companies listed in Standard & Poor's 500 was 61 years in 1958. Today, it is less than 18 years. Having successful long lived companies is not just beneficial for its stakeholders, it also is for environment and society. Because the shorter the time horizon of companies, the shorter-term their strategies and approaches will be. More than ever, we need companies with long term horizons.

That's why I love The Long Now's **The Organizational Continuity Project** which studies long-lived institutions in the hope of discovering the lessons behind these long-lived organizations and gaining insights that will help contemporary institutions, companies, and governments develop into robust, long-lasting structures. One of the patterns revealed by their research into long-lived organizations is a key individual - which they call "keeper of the fabric" - who tells stories, ensures continuity of information and connects the generations within the company.

I really loved that concept, and I highly recommend this clip where Alexander Rose explains it.
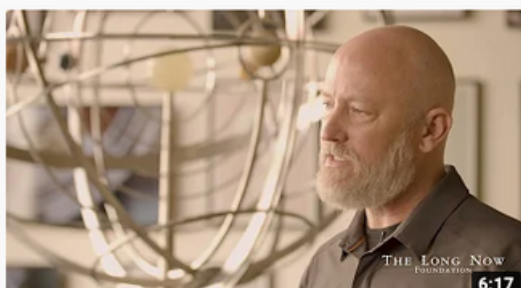
Keeper of the Fabric | Alexander Rose

853 weergaven • 1 jaar geleden

X Long Now Foundation

Long Now Foundation's Executive Director, **Alexander Rose**, reveals a recurring pattern within long-lived organizations: a key ...

Ondertiteling

Longevity of technology

A lot of technology has been 'built to fail': companies design a product with an artificially limited useful life or a purposely frail design, so that it becomes obsolete after a certain pre-determined period of time. This strategy is called 'planned obsolescence' and it's what happens when your smartphone's older version is no longer compatible with its latest OS. Or when a perfectly fine printer stops functioning. Or when a battery is glued into a product and cannot be replaced. The result is that consumers have to replace their devices more often than necessary, for reasons that are not exactly (aaaand, ... we're back to the 'ethics' part) morally sound.

So we see an increasing number of people advocating for longevity in hardware. Not just because they want to protect the consumer from this type of unjust practice, but also because of the huge social and environmental cost of hardware. You can find more about the impact of mining the raw materials necessary to build modern devices here if you want to know more.

Another concern of the overproduction and short-termism of devices is how many of these critical raw materials are found in (often) geopolitically unstable environments like China, Russia, South America and Africa. Which is actually a great opportunity for circular economy models, where these types of precious metals are recycled as much as possible, instead of mined.

Here are for instance the countries accounting for largest share of EU supply of critical raw materials:
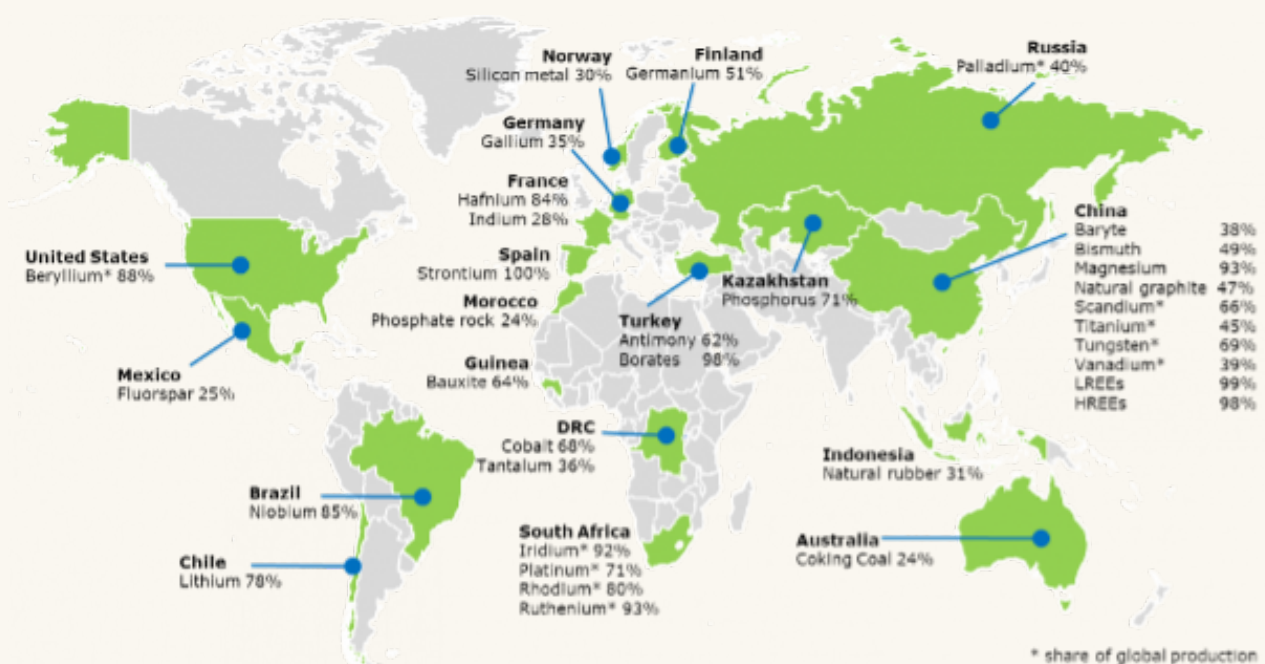
Some governments have been installing laws to counter planned obsolescence strategies, like the Digital Fair Repair Act (NY) and the Right To Repair Act (EU). And the result is that companies like Apple - notorious for designing products that are hard and expensive to fix – has been launching home repair kits for their products, while AppleCare Plus now covers "unlimited repairs for accidental damage protection".

A solution could be to move from ownership models to subscription models, not just of software (see also above) but of hardware. Because when people "rent" products instead of buying them, the priorities of companies shift. If the latter sell a product, it is unfortunately in their best interest that the product breaks down as soon as possible (without pissing off the customer) so they can sell again. If they rent products to customers, it is of course in their best interest that this product works as long as possible.

You may think that renting physical products as a service is ridiculous, but Philips Lightning is offering Light-as-a-Service while Michelin has been offering Tires-as-a-Service. So why not introduce this model more in the hardware area?

Source: Philips

Some others

Writing about trends is about making choices and so I selected the 6 ones mentioned above. But there are many signals and patterns that kept surfacing when I did my research, some of which might even turn out to be more impactful than the ones I described. So I decided to list some of the most interesting new ones and more obvious older ones too:

- **(Not so) hybrid work:** Many talk (a lot) about it, but few seem to have cracked the code of hybrid work. Instead of investigating how they need to change their HR, support, learning, coaching, team cohesion, culture etc. policies, quite a few companies seem to return to the more rigid old ways. Apple expects staff to return to the office three days per week, while Elon Musk even wants his staff to work from home in their own time, not during office hours.

- **The war for talent:** Companies have always competed for acquiring and retaining the best talent but the pandemic-driven identity crisis of many - sometimes manifested as The Great Resignation, sometimes as quiet quitting or other symptoms - has made them more critical than ever about what they expect from employers.

- **Localisation & protectionism:** Global imbalance and shifting power dynamics - because of the Russo-Ukrainian War, the volatile situation in Taiwan, the relationship of the world with global power China, and other geopolitical situations – drove several government to mine for raw materials, find energy and produce valuable technology (parts) locally. Some are even issuing protectionist measures. Examples are how the US, China, Japan and Europe all seek greater self-reliance in semiconductor production. Or that countries like Germany and Poland are investigating how they can be less dependent on gass from Russia.

- **Big tech in trouble:** After having experienced a golden year during the pandemic, many (big) tech companies now seem to be suffering from the overinvestments they have made back then to keep up with a rising demand - that is now declining. Combine that with a looming recession and the threat of 'new' kids like TikTok, BeReal, metaverse games, Web3 innovators and we see quite a few suffering revenue losses, making budget cuts and even laying off employees: Zoom, Baidu, Tencent, Alibaba, Google, Facebook, Microsoft, Snap, Netflix, Cisco, Lyft and Salesforce among others. It should not come as a surprise, as companies like that need to reinvent themselves quite drastically every 10 years (don't take my word, I got that from Benedict Evans) and that number will probably keep going down.
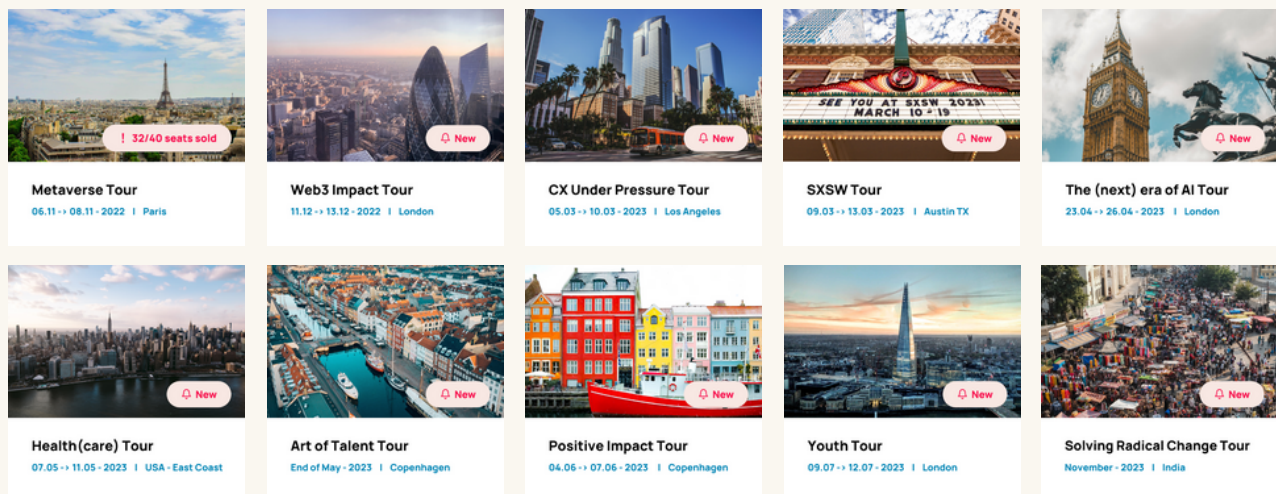
- **Smart city projects:** We all know Toyota Woven City, ReGen Villages, Hangzhou's City Brain and other "old" smart city projects, but others like Hyundai Motor Group's Smart City, IKEA's Smart City Project, Greece's Ellinikon (the largest sustainably built urban regeneration project in Europe's history), billionaire Marc Lore's eco-friendly "Telosa" metropolis (150,000 acres in the Southwest desert) or The Line (a mirrored ecotopia in Saudi Arabia) keep steadily surfacing. There are many reasons for the need for smarter cities, of course but global warming, a growing world population and data models might be among the most important ones.

- **The steady but continuous improvements in AI:** You'd almost feel sorry for AI that all the attention is currently going to cool kids Web3 and metaverse. But the developments in AI keep becoming more impressive and evolve faster than ever: the incredible text-to-visual capacities of DALL-E and Midjourney, the Minority Report-like capability to predict crimes with 90% accuracy, MIT's AI detecting Parkinson's disease from breathing patterns, unprecedented breakthroughs in AI chip technology, AI that is used to remove accents from call center workers etc.

- **Community thinking:** a lot of the advances and experiments in the area of Web3 and the metaverse like NFTs, massive multiplayer games and DAOs are focused on creating communities. But we see the trend surfacing in the 'real' world as well, with community-driven real estate projects like the 'Flow' rental apartments described earlier. Perhaps the pandemic has even sharpened our craving for connection with kindred spirits.

- **Affective technology:** the amount of companies measuring the emotions of users and customers (yes, also with AI) keeps growing. That can be with really simple measures like Whatsapp allowing to react with emojis on messages or LinkedIn adding a laugh emoji to broaden the spectrum of emotions measured. But there are more sophisticated examples, too, like Meta's "social presence" - which features eye-tracking and face-tracking - which is designed to capture users' facial expressions and have them replicated on their avatars in real time to enhance non-verbal communication. Obviously, this is a great way for Meta to track, understand and (probably) steer the emotions of its VR users. A 'Connected Scarf' - by creative agency, Octagon, which has partnered with Cisco - that helps monitor a sport fan's emotional journey is also a great example.

So, that's it, dear reader, I hope you enjoyed this trend report. Obviously, there are many more things to be excited about these days, but – for now – these are the evolutions that struck me the most. If you don't agree, or would just like to complement these trends with findings of your own, let me know over the social media.

If you're up for more inspiration, why not check our upcoming programs, many of which tie in with some of the trends described above:

See all experiences

Metaverse Tour
06.11 -> 08.11 - 2022 | Paris

Web3 Impact Tour
11.12 -> 13.12 - 2022 | London

CX Under Pressure Tour
05.03 -> 10.03 - 2023 | Los Angeles

SXSW Tour
09.03 -> 13.03 - 2023 | Austin TX

The (next) era of AI Tour
23.04 -> 26.04 - 2023 | London

Health(care) Tour
07.05 -> 11.05 - 2023 | USA - East Coast

Art of Talent Tour
End of May - 2023 | Copenhagen

Positive Impact Tour
04.06 -> 07.06 - 2023 | Copenhagen

Youth Tour
09.07 -> 12.07 - 2023 | London

Solving Radical Change Tour
November - 2023 | India

In the meanwhile, may you live long and prosper!

Cheers!

Laurence

Thank you, dear reader

We hope you enjoyed these pieces of advice, and that you may end up imparting some of them to your children, if you have any.

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