

# Schibsted | Future Report 2023







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# Rough seas are an opportunity



*Kristin  
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**CEO**  
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**W**hen I wrote the introduction to last year's Future Report, the world looked quite different. Back then, we were seeing the last of the pandemic (or at least we thought so), global markets and supply chains were picking up pace, and I believe that most of us were expecting clearer, bluer skies ahead.

Now, twelve months later, the clouds have truly gathered above us. Russia has invaded Ukraine, causing unimaginable human suffering, as well as a global energy, food and commodity supply crisis. The pandemic lingers both in terms of public health hazards and in terms of global supply chain problems. And as a result of it all, prices and interest rates are up, while consumer and investor confidence is down, across most markets and societies.

These developments have naturally led to some serious consequences that impact people's lives. But when looking at these consequences through the lens of the Future Report, it begs the question: how do we best cope with these developments in the world of tech, innovation and business?

I believe that the most important thing we can do is to recognise the differences between cyclical and structural changes. Think of it as the difference between a storm and climate change. A storm will pass, while climate change is a lasting and fundamental form of change.

**M**any of the changes we've seen over the past twelve months are passing storms. They are powerful because there are many forces pulling in the same direction. We went straight from pandemic to war. We have a highly unstable geopolitical and macroeconomic situation. And there are numerous value chains that haven't been working properly for two to three years running. However, while many will find it tough to navigate through these storms, they won't change how we operate long-term in any fundamental way.

Digital transformation, on the other hand, is a lasting and structural change. That's where you find the climate change in our line of business, if you will, because it forces us to come up with fundamentally new ways of working, doing business, innovating and making an impact.

**R**ight now, most businesses are trying to figure out how to navigate seas that are made rougher by both passing storms and climate change at the same time. What's important is the ability to tell the two apart. Even if you have to adapt and prepare for a passing storm, it is much more important in the long-run to adapt and prepare for climate change.

And once you have a clear idea about short- and long-term changes, you should also have clear ideas about short-term plans and long-term ambitions – and how the two are connected. Or to put it plainly, when making tough decisions for short-term, you need to make sure to keep an eye on what's important for you long-term. Otherwise, you will make the wrong decisions.

In Schibsted, we have always tried to view rough seas as an opportunity, whether made rougher due to passing storms, climate change, or both. Because the thing about rough seas is that so long as you have a good ship, are well-prepared, have all hands on-deck, and truly know how to navigate – rough seas are an opportunity for speed, distance and discovery.

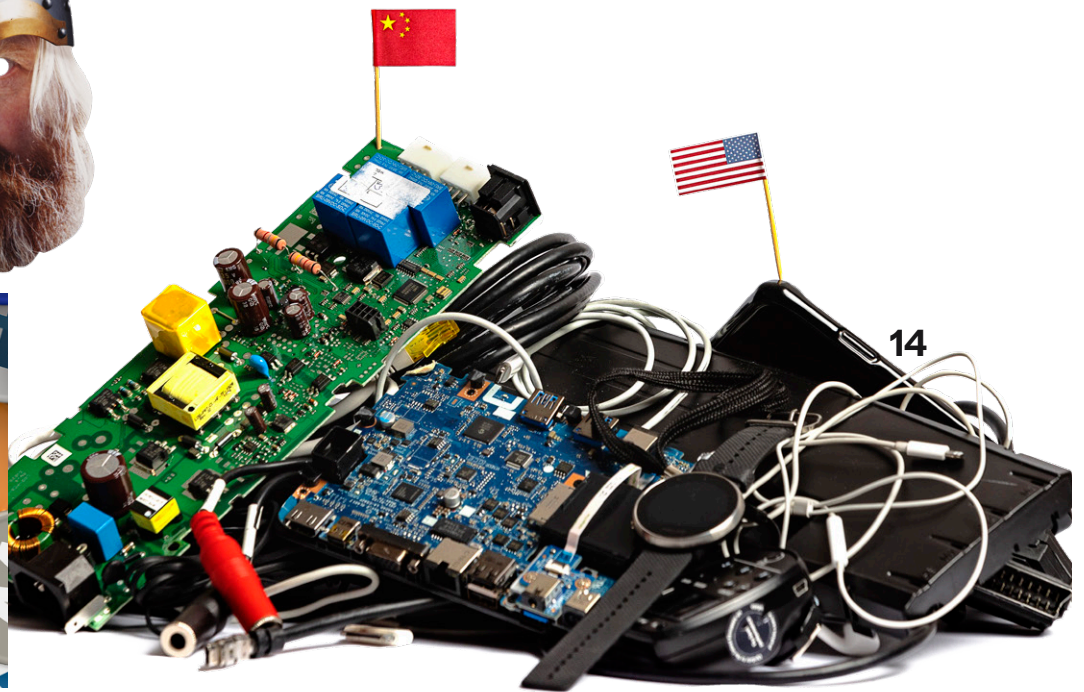


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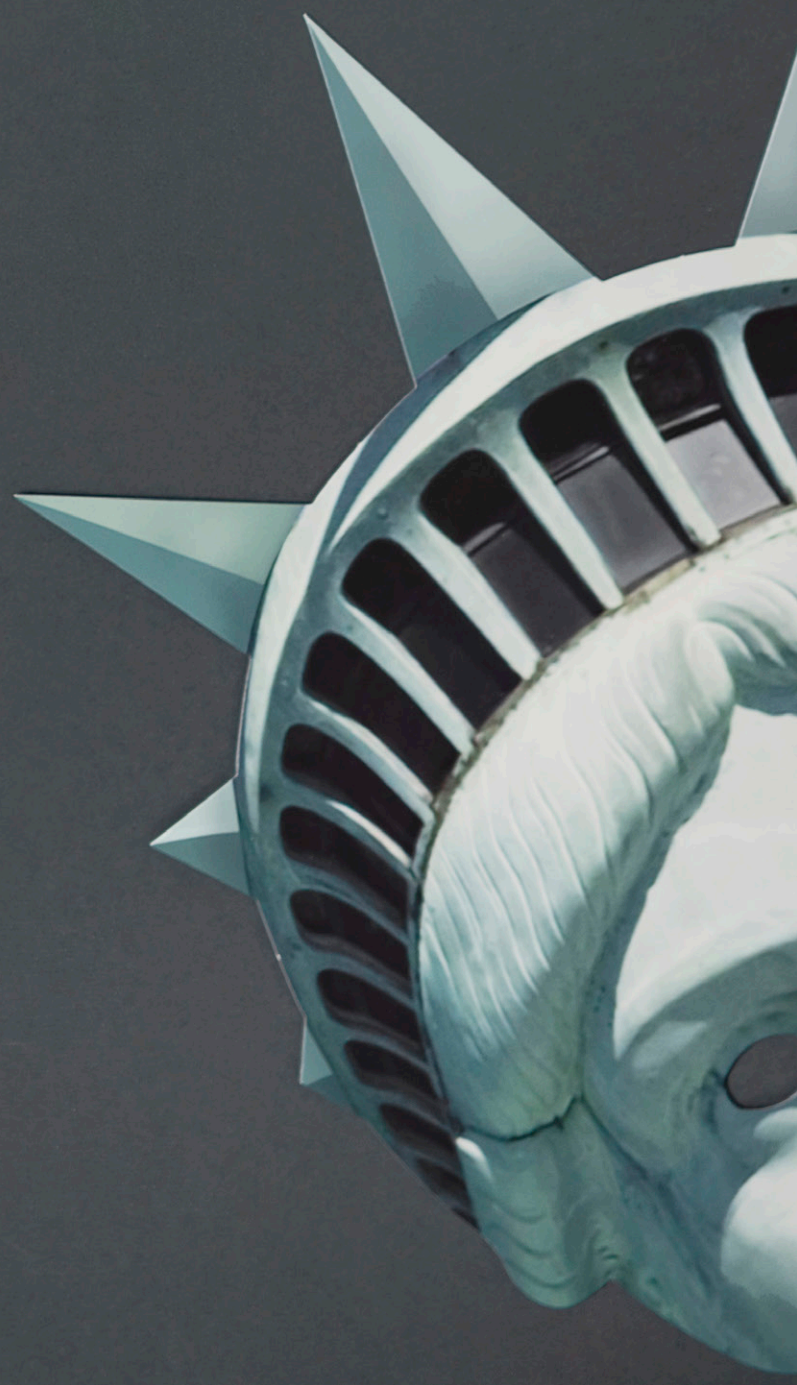




# REDEFINING OUR DIGITAL LIVES

The metaverse is a term that defines the optimism and hubris of the tech industry today. Will this utopic vision for the future of the internet usher us into brave new virtual worlds, or will it fall by the wayside as Meta's last-ditch effort to save their business?









**Christopher  
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Few topics in the tech world are attracting such unbridled optimism and derisive scepticism as the metaverse, with, perhaps, the exception of NFTs. And this year, Meta and countless other tech companies have doubled down on reorienting their businesses towards building “the next chapter of the internet.” Around the world, executives and the consultants they hire took note, with one of McKinsey’s forecasts topping out at a staggering USD 5 trillion valuation for the metaverse by 2030.

But what are we actually talking about when we refer to the metaverse? Countless definitions have been written this year, and they generally follow a similar recipe to this one offered by Gartner: the metaverse is a “persistent, immersive and all-encompassing joining of our physical and digital lives, bringing together work, entertainment, marketplaces and social spaces in one seamless experience.”

In practical terms, this definition relies heavily on rapidly improving extended reality (XR) technologies like virtual reality (VR), augmented reality (AR) and ambient computing (voice assistants and home automation).

While this definition may still be somewhat vague, the idea behind it isn’t new. The term itself was coined by Neal Stephenson in his 1992 novel *Snow Crash*. Stephenson describes a dystopian future in which the only escape from failed states and corporate warfare is to strap on a headset and dive into a three-dimensional digital world complete with personalised avatars, virtual real estate, transportation networks and nightclubs.

Stephenson’s concept builds on the cyberpunk traditions established in works like William Gibson’s novel *Neuromancer*, which popularised the term Cyberspace and imagined a virtual reality environment he called “the Matrix”. The cyberpunk genre of science-fiction has had profound cultural impact, not least of which is a long line of dystopian films, a surprising number of which star Keanu Reeves.

The people who read books like *Snow Crash* and *Neuromancer* as teenagers grew up to found global tech companies. But they focused on an escapist, tech-utopic vision of the metaverse, leaving aside the critique of unbridled capitalism and technocratic rule that defines the cyberpunk genre. While these contemporary visions of the metaverse should be viewed with healthy scepticism, they offer a profound reimagining of our digital lives and crystallise a vision for where current technological developments might lead.

The obvious starting point here is Meta. With Facebook losing daily users and facing increasing obstacles for their ad business due to privacy initiatives in Apple and Google’s mobile platforms, it’s no wonder that Meta is searching for new revenue streams and new ways of connecting to users. Mark Zuckerberg has famously tied the future of his business to a future augmented reality platform that he hopes will replace the mobile phone, breaking Meta’s reliance on the mobile giants for access to users.

The release of the Oculus Quest Pro, a pass-through





Epic Games' *Fortnite* is a traditional computer game that has successfully integrated purchases of virtual goods.

VR/AR headset that allows for both full immersion and for virtual elements to be added to real environments, is a major milestone towards this vision. Meta hopes that one day we will all use improved versions of headsets like the Quest Pro to access Horizon, a virtual reality social network made up of virtual environments for socialising, entertainment and work.

The vision here is compelling. In one direction, VR technology lets us physically enter virtual worlds and create powerful experiences. Imagine history classes around the world taking place in virtual reconstructions of historic sites, or the higher levels of remote collaboration and social connection enabled by a true feeling of shared presence. Going the other way, AR technology allows us to pull virtual elements into our physical world, opening entirely new possibilities for fashion, art and education and augmenting everything from buying new furniture to sports analysis.

The potential of Meta's new technology and platforms is as impressive as the lurching struggles the company has gone through as they try to realise this vision. Buggy experiences and unclear use cases have meant that most people who try Horizon don't return to the platform after the first month. Furthermore, more than half of previous generation Quest VR headsets aren't in use within six months of purchase. Most damning, perhaps, are the recently leaked memos from within Meta that suggest the teams building Horizon aren't even using it themselves, instead they are preoccupied with making critical improvements to basic elements of the user experience.

These struggles shouldn't be confused with a condemnation of the visions of a metaverse that Meta and others put forward. Apple is reportedly getting ready to release their own VR/AR headset. While they remain tight-lipped, Apple is no doubt expected to produce high-end hardware complete with an accompanying closed platform and marketplace for apps and experiences.

**I**n anticipation of an increased threat from Apple, Mark Zuckerberg has called this a "competition of philosophies and ideas", where they believe that by doing everything themselves and tightly integrating that, they build a better consumer experience. Meta's businesses, including Facebook and Instagram, rely on accessing the closed platforms controlled by Apple's iOS and Google's Android. Unsurprisingly, then, Meta has championed interoperability, co-founding the Metaverse Open Standards Group (Google is a member, while Apple is not) to develop mechanisms that let users seamlessly travel between different virtual worlds, complete with whatever virtual purchases they may have made.



*Imagine history classes taking place in **virtual reconstructions.***

## Will the metaverse be a system of **closed** and **proprietary** platforms?

This push for open standards, as well as the sheer number of partner organisations participating, only highlights how pervasive and motivating the idea of the metaverse is in the tech world today. Each new investment and product is being evaluated in terms of how it relates to the metaverse.

Epic Games, the creator of *Fortnite*, is proving the role that game engines and graphics-focused companies have in building the metaverse. Epic's Unreal Engine is being touted as one of the defining creative tools used in creating virtual worlds and virtual humans.

There is, of course, a role here for crypto as well. Virtual worlds built on blockchains have emerged in recent years, spurring a run on virtual real estate and playing host to massive exhibitions of NFT art.

It's a star that shines so bright that long-standing investments by established tech players also are being recast as bets on the metaverse. After the seeming failure of Google Glass, the search engine giant has planted a new flag in this arena, demoing an incredibly slim pair of glasses that offers live translation in a heads-up display.

Microsoft already has a long history of building AR solutions for industry. Their HoloLens products enable workers in heavy industry to view instructions contextually as annotations in their environments. Along with their Azure cloud platform and advancements in AI, Microsoft is also developing data-driven digital twins. These virtual copies of real-world equipment enable new levels of simulation, monitoring and preventative maintenance. Digital twins enable x-ray vision to workers wearing the HoloLens, giving them a data-enhanced view into the inner workings of complex machinery.

Taking a different approach with the potential to complicate Meta's vision, Amazon is building its strategy around what it calls "ambient intelligence". They are building on the massive popularity of their Alexa-enabled devices. Amazon hopes to create a predictive, invisible layer of computing in our physical world, and in so doing, ship what you want to buy before you know you want it.

Looking across all these examples, we see common elements that point towards a more specific definition of the metaverse. Matthew Ball, a venture capitalist and the author of landmark articles and a book on the subject, identifies a range of technologies that would require advancements to fulfil a system like the Metaverse, including consumer devices, computation and networking, digital platforms, governance, standards and payment and ownership frameworks (did someone say crypto?), to name a few.





So, the metaverse cannot be seen as a single technology in and of itself. Rather, the term should be viewed as a catch-all concept that brings together a range of technologies in different states of development. Break-downs like these help us make sense of the bold claims and grand visions coming from the tech industry, but do these visions of a future internet hold water? Can we ever really know what is coming?

As history shows, we can't fully predict what the metaverse will truly be or enable. But three core uncertainties will define the future shape of the metaverse: technology, power structures and experience.

First, we can't accurately predict what emergent properties will arise from the combination of novel and developing technologies. Will these technologies converge, allowing the metaverse to become a new dominant platform for accessing digital content and replacing the web as we know it? Or will it remain separate yet connected to today's web, simply offering new spaces and modes of interaction for us to explore?

Second, what power structures will define the metaverse? Will the metaverse represent an open ecosystem, freely accessible across devices and platforms, or will it instead be a system of closed and proprietary platforms, with limited interoperability and a high level of control resting in the hands of private companies? And on top of that, will national and regional authorities learn from early attempts at regulating the internet and take a stronger approach to governing the metaverse?

Finally, how will our personal experience of the

metaverse be? Will we spend more of our time diving into the metaverse, leaving behind our physical reality in favour of the digital, or will the metaverse come out to meet us in the physical world, fit into our daily lives and maybe even become mundane?

**D**evelopments are underway right now that will radically redefine our digital lives. The visions put forth by tech companies like Meta represent a clear image and a path to one possible future, but this future is just one among many. We can't say with any certainty what form the metaverse will take, but something is coming. Despite the uncertainties defining the future of the metaverse, we do know two things.

One, our digital lives are becoming more spatial, more human-shaped. As the lines between the digital and physical blur, we will use more of our bodies and more of our senses to interact with computers, just as computers will become more embedded and invisible in our daily lives.

And two, our digital lives are also becoming more social. Younger generations don't differentiate between their physical and digital lives, just as it's becoming harder to differentiate between what is a game, what is a concert and what is a social network.

All signs suggest that the metaverse will be far more spatial and far more social than the web we know today. Whatever shape the metaverse eventually takes, and whatever name we end up calling it, profound changes are coming. We'd best be ready.



Many different technologies and trends are part of what we call the metaverse. Schibsted Futures Lab guides us to a few that are mayor drivers for our expanded digital lives and experiences.

## Our extended realities are growing

We have seen continuous growth in the adoption of extended reality (XR). It is predicted that the worldwide AR and VR industry would reach USD 209 billion by 2022. Aside from the gaming, healthcare and education sectors, there is also an emerging demand for digitally immersive customer experiences. Interacting with the goods digitally before visiting the store, from shopping for clothes to trying on make-up, or even searching for your next dream home, has made XR crucial in the purchasing process. A hurdle to the widespread adoption of these technologies is the lack of multi-platform standards. To break down this barrier, WebXR has been introduced as the future web standard to facilitate XR experiences through a URL. It is cheaper to implement without any additional hardware or software. Not only does web XR make 3D content generation widely accessible to users, it could also be a game changer for enterprises to attract younger generations and scale up new businesses rapidly.

*Yifan Hu*

UX Designer



## Game engines help speed up development

As experiences become digitally immersive, we need a framework to provide tools and libraries for building digital worlds and physics for their interactions. This led to the idea of game engines. Unity and Unreal Engine are the clear market leaders. Since their first debut in the late 90s and early 2000s, they have evolved and expanded into other industries. Unreal Engine's metahuman creator has proved its ability of rapid avatar generation and customisation. What used to take a 3D artist months now only takes minutes. Many other industries have also begun using game engines to create prototypes and digital twins, from car companies like Porsche to architecture firms to manufacturing plants. When more and more designs get populated in UE5, how long will it take to see your digital avatar driving a Porsche 911 down the street?

*Yifan Hu*

## Synthetic media has opened Pandora's box

If you have been online at all in the last year, you've likely heard something about synthetic media. AI-enabled tools for generating text and images have exploded in recent months. In September of this year, an AI-generated artwork won the Colorado State Fair art prize, likely the first time a rural art competition has been at the centre of global controversy in the fine art world. AI tools like Midjourney, which was used to generate the winning artwork, are related to the technology behind deepfakes. Neural network AI models are trained on vast amounts of existing works, whether text, images, or, as recently released by Google, short video clips. These models can then be used to generate new works, potentially revolutionising creative industries, and in the process sparking heated debates about intellectual property and the role of human creativity. Synthetic media likely has a large role to play in content creation, not only for the metaverse, but in countless existing industries as well, not least of which is news media. Pandora's box is open. The question now is whether we can find ways to make responsible and ethical use of what's inside?

*Christopher Pearsell-Ross*

UX Designer





## Blend the real with the virtual

The scope and areas of application for digital twins have significantly expanded. A digital twin works as a digital replica of a real-world object or system. It enables you to run one or several simulations with access to real-time data. This opens the possibility of studying, tracking and monitoring multiple processes with various application areas, including urban planning, healthcare services, the automotive industry, manufacturing operations, big structures and power-generation equipment. Digital twins allow for a seamless integration between digital and physical spaces, blending the real with the virtual.

*Eline Wong*

Junior Creative Technologist



## Gaming has become social

Games are already the new social hubs for next-gen consumers. According to Newzoo's latest report, more than 90% of Generation Alpha, Z and Millennials have engaged with video games in holistic form, including live streaming, podcasting and attending in-person live events. The revenue growth for the gaming industry has exceeded USD 200 billion. Social gaming still performs at a high level of monetisation via advertising, in-game offers and virtual goods purchased by players. Minecraft, Roblox and Fortnite top the charts for Gen Alphas. These games share three key concepts: players can build worlds, host events, or go on adventures with their customised avatars. Since 2021, demand for building and creating tools has increased by 7% and is most relevant for young players in the eight to 15-year-old range. While many adults are still pondering what the metaverse is, these young master builders have already begun hammering down their proto-metaverses.

*Yifan Hu*

## Avatars will need to become more realistic

Meta's new release of the XR headset Quest Pro underlines the importance of avatars, which have surpassed their rudimentary perception as animated Memojis. Rather, live, hyper-realistic avatars will be crucial to how we express ourselves in the future. Meta's so-called codec avatars and instant avatars will allow the user to generate a photorealistic digital self through a face scan with a mobile device. These avatars should excel in the non-verbal cues, such as facial expressions and eye contact, which we rely on to enhance communication. That being said, securing your avatar, whether through encryption or an authenticated account, will become a critical challenge. Nvidia recently announced an open-source platform for building cloud-native, AI-powered avatars. From customer support agents to teaching assistants, digital humanoid interfaces will soon no longer be a fantasy.

*Yifan Hu*







## She builds a universe of football

At Stavanger Aftenblad, the 13 to 14-year-olds have become a loyal target group – thanks to Elin Stueland and Mååål (“Scoore”, in English).

For more than a year, this service has been reporting on all the local football matches in every series. The secret? A combination of robot journalism and human reporting.

“Mååål is a universe where you want to stay – it’s close to people’s lives,” says Elin as she explains the success.

As a digital editor she was on the lookout for new projects when she and her team realised that football was an obvious choice. There are more than 100 different football clubs in the area, playing more than 7,000 matches each season. The key has been to cover all matches played by 13-year-olds and older.

“Imagine being 13 years old and seeing your own picture in Stavanger Aftenblad. Now they know us as a brand.”

To be able to do this, Stavanger Aftenblad developed a robot in co-operation with the Norwegian news agency NTB. Now local trainers give input, and the robot automatically transforms it into results and content. Two reporters are also working full time to create real stories, podcasts and live studio reporting. The service also includes live streaming from more than 80 matches.

Another important thing has been to build Mååål as a concept with its own web page, social media content, and interactions.

And during the first six months, the number of subscribers who renewed their subscriptions of Stavanger Aftenblad almost doubled.

“We have shown that we take the sport and the audience seriously.”

**Elin Stueland**

Deputy News Editor, Stavanger Aftenblad  
Years in Schibsted: 16

## A hacker devoted to storytelling



Einar Otto Stangvik is a security officer at VG – and a hacker, dedicated to developing editorial tools to support news investigations and presentations.

He started out as a software developer and security consultant, but he wanted to get more out of his skills. As he investigated a politician who was hacking women to access their photos, he got in touch with VG, who helped him get the story out. He ended up getting hired and revealing child pornography on the dark net – a story that went global.

Currently, he is into 3D-maps to create a new dimension of journalistic storytelling. It started off with the insight that simple maps don’t really tell you much.

“I wanted to show how the places we write about really look and what that could mean to a story.”

In a recent story about a murder case, in which two young Norwegian girls were kidnapped and killed in 2001, maps have revealed information that indicates that one of two convicted men might be innocent.

“I am really a technology sceptical person. But I believe that our newspapers need to find out how we can use technology in the best possible way to give the readers the best possible understanding of a story.”

**Einar Otto Stangvik**

Head of Information Security, VG  
Years in Schibsted: 9

## Contextual ads don’t need to track the users



Björn Schiffler comes from academia where he specialised in cognitive neuroscience. But when he switched to data science, Schibsted became an attractive place to work – as with all its content, the opportunities to work with natural language processing (NLP) are plentiful.

Björn and his team are developing machine learning-models that support the development of contextual ads.

“It’s all based on the content itself, so we don’t need to track users or use cookies,” he explains.

Contextual ads are ads matched with relevant content, like news articles on Schibsted’s media platforms.

“For instance, if you want to sell bikes, articles about the Tour de France would be such a relevant context.”

But Björn also has his eyes on the future. He’s looking forward to developing even more advanced models that can understand the overall essence of an article and contribute with even better input to contextual advertising. Looking even further ahead, generative models could create summaries of news stories adapted to different target groups.

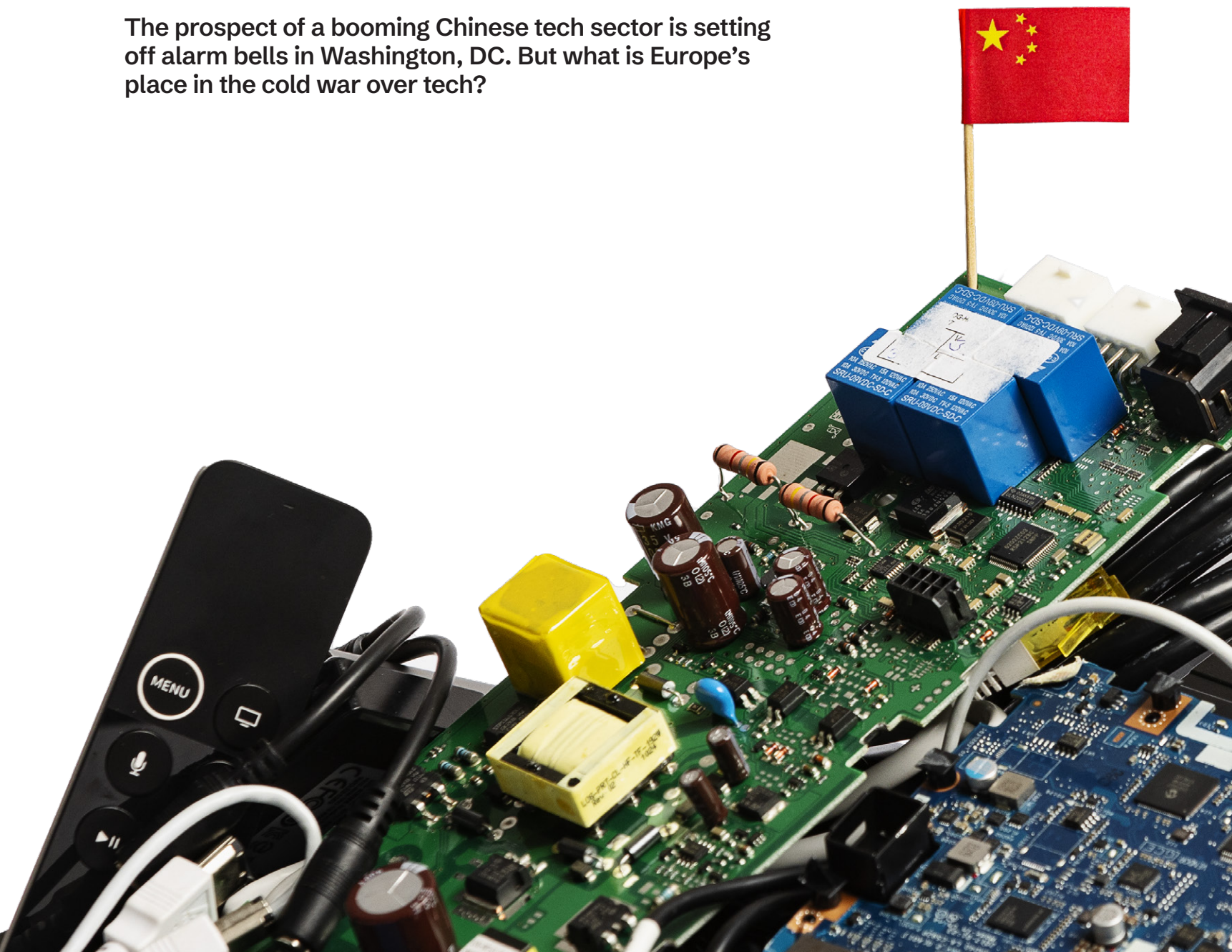
“This is how our field, in a concrete way, can contribute to making a positive impact.”

**Björn Schiffler**

Staff Data Scientist  
Years in Schibsted: 1.5

# The rise of China as a high-tech superpower

The prospect of a booming Chinese tech sector is setting off alarm bells in Washington, DC. But what is Europe's place in the cold war over tech?







**Sam  
Sundberg**

Freelance writer, Svenska Dagbladet

**I**n the early hours of a cool spring morning in Penn Valley, Pennsylvania, Temple University professor Xiaoxing Xi was awoken by someone at his front door.

BANG! BANG-BANG!

Forceful, intimidating – “Who knocks on people’s doors like that?” Xi thought before rushing downstairs.

The Federal Bureau of Investigation, it turns out, is who knocks on people’s door like that.

Xi has since testified in Congress and in interviews as to how government agents poured into his home, handcuffed him, marshalled his wife and children out of their

rooms at gunpoint and proceeded to search the family’s home in their quiet Philadelphia suburb.

It was May 2015, and the university professor had been under surveillance for months. Based on his email activity, the FBI suspected that Xi was transmitting classified details of a pocket heater – an advanced instrument used in superconductivity research – to China.

Dramatic and lifechanging, as it may be, this type of raid is now routine work for FBI agents. The bureau has officially singled out Chinese tech espionage as its top counterintelligence priority and a “grave threat to the economic well-being and democratic values of the United States”.

Over the past decade, intense counterintelligence efforts have been afoot in

Silicon Valley and at universities across the US. In 2018, they culminated in the China Initiative, launched by former President Donald Trump’s Department of Justice.

The initiative, dismantled by President Joe Biden in early 2022, was a well-funded scheme devised to foil Chinese industrial espionage in cutting-edge research and business. Because, surely, Chinese spies had infiltrated these institutions to steal American tech secrets?

One thing is for sure: China’s tech ambitions are great. In the autumn of 2020, President Xi Jinping revealed China’s new five-year plan. The plan preceding it had set growth targets for a nation still climbing out of relative poverty, and in that five-year span GDP per capita grew by 30%. Millions of Chinese were lifted out of relative poverty, and some became very rich. In 2021, GDP per capita increased in 21% in a single year.

And even if the 2022 congress says little of growth, the Chinese tech sector has proven to be a formidable engine for companies like Baidu, Tencent, Alibaba, Bytedance and Xiaomi beco-



## *Weapons technology is a **constant race** to stay ahead of the curve.*

ming to juggernauts feared even in Silicon Valley.

The objectives of Chinese innovation are diverse, but they are mainly focused on achieving the Chinese Communist Party's goals for the nation: prosperity, modernisation and self-reliance.

**I**t should come as no surprise that China wants to learn from the West. The Chinese government is actively working to counteract the brain-drain of Chinese researchers and engineers who are relocating to the US. They have attractive programs in place to encourage repatriation, and Chinese law stipulates that every citizen must co-operate if the authorities ask for assistance – or even trade secrets.

These laws are at the heart of the concerns over Chinese intellectual property (IP) theft. Over the past couple of years, these fears have led to several large Chinese tech companies being sanctioned – and crippled – by the US. Among them, the mobile communications companies ZTE and Huawei.

Another major difference in innovation strategies is the way Chinese authorities invest heavily in key areas and set long-term targets for private and public sector innovation. They have an ambitious program for conquering space, of course, but there are more strategic endeavours where

China hopes to become world leaders. The key fields of strategic importance are transistor technology, quantum computing, superconductors, weapons technology, artificial intelligence and any technology – such as social media and 5G infrastructure – that expands its surveillance capabilities.

Transistor technology, which is found in the advanced factories in neighbouring Taiwan, is a priority because this underpins all digital technologies. China is currently lagging a few generations behind the state-of-the-art in this field and some western think-tanks argue that maintaining China's dependence on other countries for advanced chips is crucial.

Quantum computing research is a race where the state that first manages to harness the technology will achieve the capability to decrypt communication today thought to be secure, along with many other exciting applications. The government lists quantum technology as the second priority, after artificial intelligence. It should be noted that this research is still embryonic and by no means a quick fix for China's chip-making problems.

Superconductors promise to revolutionise our use of electricity as they provide zero-resistance transmission of electricity. China is slowly catching up to the UK and US in this nascent and investment-demanding domain. They are already leaders in the adjacent

field of solid-state batteries which, among other things, can increase the range of electric vehicles and drones.

Weapons technology is a constant race to stay ahead of the curve, to ensure adequate deterrence against potential attacks. Currently the name of the game is drone tech, battlefield AI and cyber-warfare – all disciplines where Chinese tech is at the bleeding edge.

Social media, payments systems and communications infrastructure are examples of technologies that facilitate mass-scale surveillance. Currently the Five Eyes pact (US, UK, Canada, Australia and New Zealand) is leading this field. However, China has invested heavily in domestic surveillance, including a vast network of CCTV cameras and an equally impressive network of human informants. Recent controversies over TikTok, Huawei 5G and cell phone brands like ZTE and Huawei are indicative of western fears that ubiquitous Chinese tech exports may propel its authorities' surveillance powers on to the global stage.

**W**hile competition is fierce in these fields and beyond, artificial intelligence has emerged as the most hotly contested battleground. State-of-the-art AI – and in a possible future, artificial general intelligence, which is human-level AI and beyond – has the potential to turbocharge all other research.

Much has been made of the vast troves of data that Chinese companies could mine from the nation's almost one billion internet users. This dataset could be the key to China surpassing the AI efforts of other nations. In a recent report, the Future Today Institute

warns that Chinese companies such as Tencent and Baidu have superpowers, thanks to their access to this data “without the privacy and security restrictions common in much of the rest of the world”.

However, the recently enacted Personal Information Protection Law (PIPL) mirrors Europe’s GDPR, affording Chinese users many of the same protections as EU citizens. The communist party has further proven willing to play hardball with its most profitable companies, imposing some of the highest fines ever on its own tech juggernauts. Companies in violation of PIPL may find themselves facing fines of up to five percent of their annual revenue.

In other words, the national treasure of Chinese data is not free for companies like Tencent and Baidu to mine at their will. That level of power is reserved for the Chinese state itself.

While China’s tech ambitions are a boon to many Chinese, who have seen technology add comfort and convenience to their lives, technology always has the potential to be used for both good and bad. Surveillance is pervasive in China, with a vast network of CCTV cameras surveilling public spaces, and an immense network of human informants keeping track

of neighbourhoods throughout the country.

State surveillance is culturally ingrained, a fact of life since the cultural revolution and even long before. China’s controversial social credit system has precursors that date as far back as the third century. Many Chinese seem to accept and even welcome this type of surveillance.

But there is a high cost for minorities such as the Uyghurs in the Xinjiang province, who are systematically targeted, suspected of terrorist affiliations due to their ethnicity alone, and sent to re-education camps if found to be engaging in any sort of behaviour deemed suspicious by authorities.

These human rights concerns make China’s technological rise seem ominous, and they have been rightly criticised by human rights groups and democratic countries in the west. It is ironic then that the United States is likewise using its tech prowess to monitor and target ethnic minorities, like Xiaoxing Xi.

After the FBI raided Xi’s home, the Temple University professor was suspended from his job and he faced the prospect of spending the rest of his life in prison. Then, after four months, all charges against him were

suddenly dropped. Xi’s colleagues had convinced the Department of Justice that the schematics he had emailed to China were, in fact, detailing a widely published innovation of his own, which had nothing to do with pocket heater technology. The FBI simply lacked the scientific expertise to understand it.

For Xi, the damage was already done. Not only was his reputation shattered, the suspicion of treason hung over him like a dark cloud. He had lost his sense of belonging and security in his home country, as a naturalised citizen of the United States.

Xi’s case is far from unique. The US finds itself in a predicament in which its companies need Chinese talent to stay competitive, but the US government fears the leaking of trade secrets and intellectual property to the rival nation.

In the past decade, US authorities have targeted hundreds of academics of Chinese descent – many of them American citizens – on suspicion of possible espionage. A few cases have been tried in court. There have been convictions, mostly for the common (but illegal) practice of trying to enrich oneself by transferring intellectual property from a previous employer to a new one.

Not one case has resulted in a conviction for espionage.

As the relationship between China and the US shows no sign of thawing, European countries must decide what role they want to play in this cold war over tech supremacy. China and the US have shown that they are both willing to play dirty to win this race.

European countries will have to forge their own path, or risk ending up as collateral damage.



# Influencers might need new skills to survive

**Social media is fundamentally changing. Algorithms focusing on our interests will make us more passive, and influencers are in for a challenge.**



*Sophia Sinclair*

Tech Reporter SvD Näringsliv  
Years in Schibsted: 4



*Henning Eklund*

Tech Reporter SvD Näringsliv  
Years in Schibsted: 2

**W**e have now entered the third era of social media algorithms. This new development has major implications for some of the tech world's leading players and for our personal well-being, and is one of the trends that will affect us most in the coming years.

The first era of algorithms was simple by today's standards. We as users decided for ourselves what interested us and which accounts we would follow. Then posts from those accounts began appearing in our feeds in chronological order.

During the second era they were shuffled up so that posts from accounts

we already followed were mixed with posts our friends commented on and with accounts that resembled the ones we already followed.

Now we have entered the third era, where we don't even need to tell social media what we're interested in. It doesn't matter which accounts we follow. Recommendation algorithms are now becoming so accurate that they always give us what we want without us having to actively tell them what that is.

Just like before, it's all about consuming as much user time as possible. Time is money or, to put it more precisely, the more companies can hold our attention, the more advertising they can sell. They earn more money – and therefore more value – for their shareholders.

This era also goes to show that we ourselves don't know what we want. The companies can figure that out for themselves and then get us to spend our valuable time on them.

The principle isn't new, but the amount of money being invested in developing it is. And it's TikTok that's

leading the way. Its parent company ByteDance spent SEK 163 billion on research and development in 2021 alone. Developing a market-leading algorithm is expensive.

Algorithm development is also transforming how we use social media. Previously, users would interact with friends and acquaintances and share their everyday life with them through photos and status updates. The apps served as extensions of our social lives.

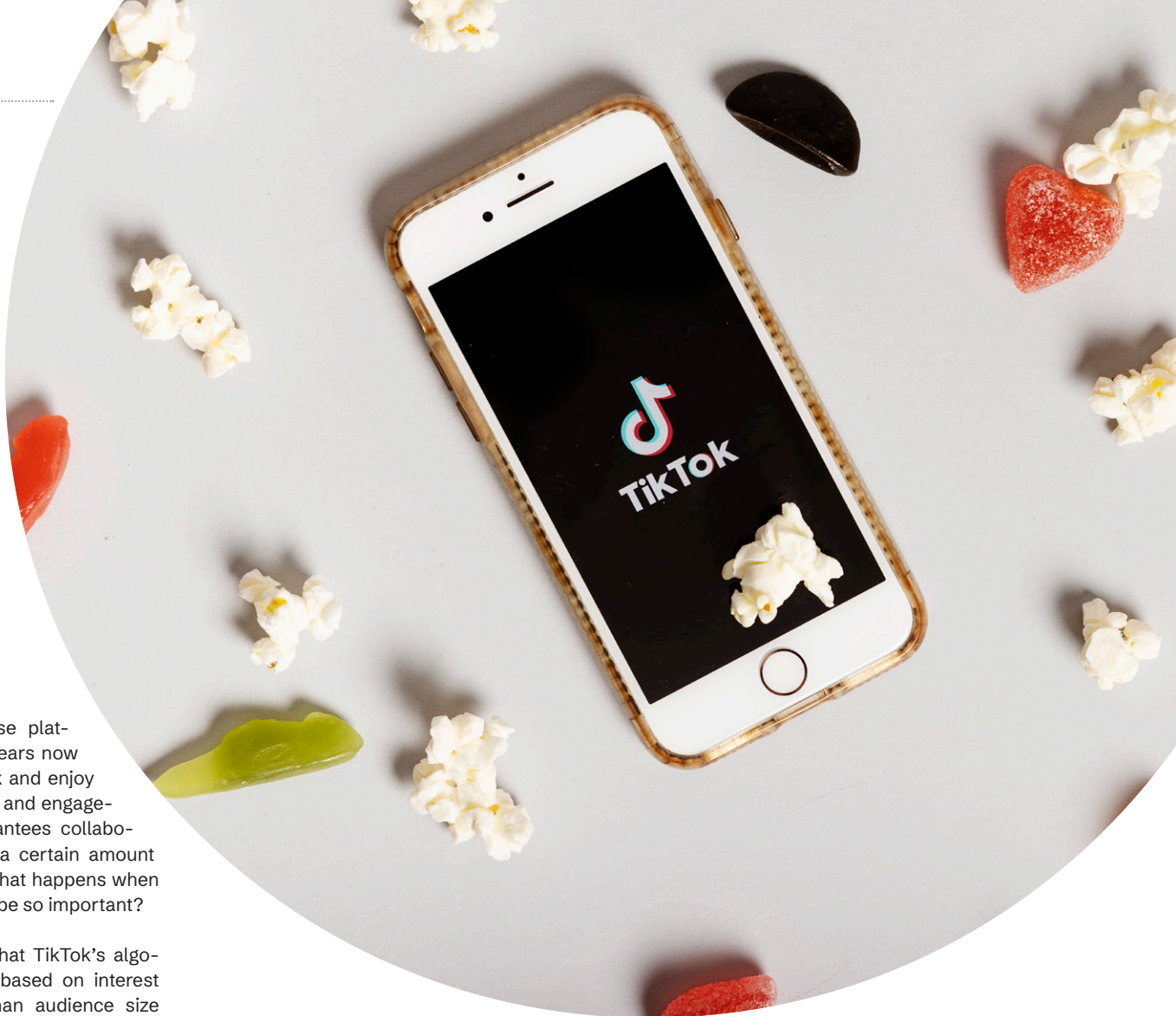
Now the focus has been shifted to entertainment. Here, too, TikTok is the one driving the change and is sitting in the driver's seat. On its platform, it's not who you follow that determines what content you view, but rather the type of content you like. The social function has been peeled away. And its competitors are following suit.

**F**or the social media giants, video is the new gold. Instagram and Facebook are fighting to get Reels, their TikTok clone, to take off. YouTube is investing heavily in the very similar Shorts format. It's about reversing a trend where, for example, Instagram and Facebook owner Meta is seeing its first ever decline in user growth and revenues.

This trend is also redrawing the map for influencers who enjoyed huge success and earned large amounts







of money on those platforms. For many years now they could sit back and enjoy growing audiences and engagement, which guarantees collaborating advertisers a certain amount of exposure. But what happens when followers cease to be so important?

**T**he fact that TikTok's algorithm is based on interest rather than audience size means that anyone can go viral. This summer Instagram tried to roll out similar changes in its algorithm but faced fierce pushback from the most established influencers, from Kim Kardashian to Swedish Rebecca Stella. In SvD, one influencer described the new reality on the platform as "Russian roulette".

Instagram had to admit they were wrong and withdrew it, but it's probably only a matter of time before the new algorithm returns. Instagram simply can't afford not to keep up with users' changing behaviour, and has declared Reels as the future for the platform.

For many of the leading influencers around the world, this means they will have to start over, learning new tricks and understanding user behaviour on a new platform. Those who built careers on generating engagement by posting nice pictures will suddenly have to learn how to make videos

and create a different type of content. Not everyone will survive the transition,

And perhaps that's the natural process of succession; after all, it's normal in most industries for new skills to emerge and for old ones to die out, and for companies to change their strategies.

**S**o how are the platforms' new, advanced recommendation algorithms affecting us users? We're becoming less active and more passive. We're using the platforms less and less for keeping in touch with friends and acquaintances. And instead we passively scroll through infinite feeds over which we have no control. One aspect of it is how it makes us feel.

Research on psychological well-being and social media use is still in its infancy, and it's very difficult to say

anything about cause and effect, but there are some indications – and they're pointing in the same direction. A study conducted in the United States found that individuals who passively consume social media content run a 33% higher risk of developing symptoms of depression, while the same risk for active users is 15%. A study conducted in Iceland on more than 10,000 adolescents found that passive consumption correlated negatively with anxiety and symptoms of depression. The same correlation was not found in active users, even after controlling for other factors.

As already mentioned, the relationship between cause and effect is not easy to establish, but we can be pretty certain that development of the algorithms has more to do with enriching the social media giants' shareholders than it has with making life better for us users.

# “Algorithms can encourage empathy and connections”

**Could AI make us care about the climate? Or will it just bring a flood of auto-generated disinformation? It's Victor Galaz's job to find out.**



**Sam Sundberg**

Freelance writer, Svenska Dagbladet

**N**ext year, Routledge will publish Victor Galaz's book *Dark Machines*, an essay on the impact of artificial intelligence in a future of climate change. As deputy director and associate professor at Stockholm Resilience Center (and a writer for Svenska Dagbladet), he spends a lot of time pondering resilience and sustainability. Over Zoom, from his home in Stockholm, he explains what makes for a resilient society.

“It's a society with the capacity to predict, adapt to and recover from shocks. In that process, it also innovates and renews itself. For instance, the war in Ukraine and the pandemic pose huge challenges for global food systems, energy systems and so on. However, we shouldn't strive to get back to normal from this point, because we need to change these things anyway. Our societies need to evolve.”

## **How resilient is our society?**

“Different societies have different levels of resilience. A country with weak public institutions and little money is always more vulnerable than a country like Sweden. However, one difference between the world today and the world twenty years ago is that we're much more global and interlinked. A

disturbance in one part of the world rapidly spreads to other parts.”

## **Do we have the resilience needed for future challenges?**

“We can never take that for granted. Climate change and loss of biological diversity pose massive challenges. Over time, our drive to optimise and maximise has created huge values for a lot of people. But we have never lived in a time of climate change like this one, and we simply don't know yet if we can handle it.”

In his upcoming book, Victor Galaz explores how AI is cause for both hope and concern among climate scientists. He talks of a “silent tsunami” of AI seeping into all aspects of our society – more or less unnoticed.

## **Is AI a threat in itself or is it a matter of who controls it?**

“Technologies are not neutral. Some AI systems are explicitly designed to harm us, for instance through surveillance and discrimination of ethnic minorities. That said, it is a matter of control and of fair distribution of the enormous gains these new technologies bring.”

Regulating new technologies is a notoriously tough task. As the British academic and writer David Collingridge once pointed out: “When change is easy, the need for it cannot be foreseen; when the need for change is apparent, change has become expensive, difficult and time consuming.”

The challenge, then, is foreseeing the future. If we fail, AI will bring unintended and unwanted consequences, according to Victor Galaz.

**“T**here are some direct climate effects of AI, such as energy costs, social costs and environmental impacts. We are coming to terms with these. But then there are indirect, long-term effects that are even bigger, and much harder to manage. Take digitalisation of agriculture, for instance. As we use technologies to optimise and maximise food production, we get enormous monocultures, as these are the most efficient, and we see the end of small-scale farming, loss of local job opportunities and more vulnerable ecosystems. And these are just some examples. Another is mass-scale climate disinformation through social media bots.”

## **If we do solve the problem of control, how can AI contribute to a resilient society?**

“In two ways. Firstly, it will give us a better understanding of how our planet is changing, and how dependent we are on it. Secondly, it could help expand our empathy with other people and even with other species. Just as algorithms can exploit negative emotions to drive engagement in social media, they can encourage empathy and connection.”

“These and other emotions are important to bring about change. Just look at the mass appeal of Greta Thunberg. She is sad. She is disappointed. She is angry. These emotions make people care.”





Victor Galaz is deputy director and associate professor at Stockholm Resilience Center, and a writer for Svenska Dagbladet.







# Campanyon makes nature accessible to everyone

The way we travel is changing. During the pandemic the few opportunities left for travel were local and in nature, away from crowds. With tourism now back in full swing, the industry is signalling that this trend is here to stay. And Norwegian start-up Campanyon is at the forefront of it.



**Jeremy  
Sudibyo**

Brand & Content, Campanyon  
Years in the Schibsted family: 1

**W**ith over 10,000 bookable stays across more than 20 countries, the online booking platform Campanyon has already established itself as the leading platform for outdoor stays across the Nordics – only a year after launch. It's now aiming to strengthen its position across Europe.

Talk to any entrepreneur and they'll tell you that timing is critical in terms of both when to launch and to succeed with a new business. The same held true for Kristian Qvist Adolphsen and

Alexander Raknes, the two founders of Campanyon, when they decided to explore Campanyon as a new business idea in spring 2020.

The two originally met while studying at Copenhagen Business School, where they quickly became friends due to their shared passion for entrepreneurship, sports and the outdoors. They ended up working together at the digital marketing agency Precis Digital, and eventually, they both joined Google. It was there that the first ideas around Campanyon were formed.

After being sent home from the Google offices shortly after the Covid pandemic hit, the pair spotted some new and interesting trends emerging across various industries, as a direct result of the lockdown. One of the trends that captured their attention





was the increasing appetite for being in nature, as people were longing to escape isolation but were banned from travelling abroad. This resulted in new records for nature-focused and camping-related search terms and overnight stays.

Alexander and Kristian decided to do more research on this budding market and quickly realised it was extremely difficult to both find and book places in nature in a seamless way, mainly due to it being a very fragmented market consisting of small platforms with limited supply. At the same time, they couldn't find any platform in the Nordics that attempted to unlock unused private land for campers to book and stay.

"It was very clear from early on that the market and appetite for local, authentic, and nature-focused stays was growing. At the same time, there were very few established players offering user-friendly solutions – which we found interesting," Kristian says.

Being an avid skier, surfer and moun-

taineer, Alexander could relate to the trend they were observing.

"I, too, had been longing for cheaper and more sustainable options to spend the night in nature, get local tips and meet like-minded people."

Those insights led to the early-start of Campanyon, which began during late spring of 2020. A few months later, the two teamed up with former colleagues Aline Nieuwlaet, Sven Röder and Werner Huber, who all are very experienced with product engineering and UX design, and they quickly became Campanyon's co-founders, too.

Aline was just wrapping up her work on a food app when Alex called her to let her know about the idea for Campanyon, something that immediately resonated with Aline.

"I'm a passionate camper so when Alex called, I was instantly committed to join the journey! Just before that I saw an ad from another player in the

Campanyon's founders:  
Aline Nieuwlaet,  
Werner Huber,  
Kristian Qvist  
Adolphsen,  
Alexander  
Raknes and  
Sven Röder.

market and thought to myself how smart the idea was to offer private land to campers."

Funnily enough, the five co-founders are based in five different countries. The first time they met in person after they started working on Campanyon was in December 2021 – the day they signed the deal with Schibsted Ventures in Oslo and around one-and-a-half years after they began working together on Campanyon.

Being born out of Covid and having a fully remote setup from day one, the team knew this would come with both opportunities and challenges. They have been fortunate to learn from leading companies, such as Google, on how to approach and adapt to working remotely and they have introduced some of the things that worked well directly into Campanyon, while skipping the things that weren't quite as efficient.

In the early days, it was clear that too many initiatives were being launched all at once, to make everyone in the organisation comfortable with the



new setting of working remotely. This meant almost daily check-in meetings, coffee huddles, shared lunch breaks and other attempts at creating a shared working experience – which to some extent had the opposite effect.

The tech team is the perfect example of Campanyon's effective teamwork. For Sven, hiring and scaling has been a fantastic challenge and opportunity as the CTO. His team consists of a healthy mix of employees and freelancers from all over Europe.

"We have some incredible talent on board that is motivated to work in an 'always on' start-up environment. Open communication and cloud tools that support our development flow allow for rapid iterations of UI/UX and continuous updates of our services."

Campanyon has people working from nine different countries now, and nowhere is that more palpable than in the sales team. Kristian sees it as crucial to their success.

"Having local people on the ground across our key markets has been instrumental in growing both supply and demand. The local presence gives us the opportunity to establish relationships with key stakeholders and offer customer service at a different level, something that is particularly important in the Southern European markets we operate in."

Campanyon got off to a great start since its launch in 2021. Or as Kristian puts it, they've been extremely busy growing since the launch.

"Since we launched the platform last year in April, we have grown from around 100 host listings in Denmark and Norway to more than 3,000 host listings across more than 20 markets."

Alexander, who embodies the companionship that is core to the company's ethos, visits many of the newly

onboarded hosts to get feedback and foster a sense of community.

"I've already met a lot of campers and great hosts in unique places, and all of whom have stories that I want more people to hear."

Campanyon experienced a huge appetite for joining the platform early on and they have used various channels to create awareness and grow the number of hosts in efficient ways.

"We have also seen a large number of organic signups from hosts in locations we don't actively target, which is really funny and also inspiring, as we see the project resonates across so many different countries and cultures," Kristian says.

Going forward, the focus for Campanyon will remain on growing in key markets in Europe to further establish their position as the leading platform for stays in nature, while continuing to enhance the user experience to become "campers' best friend".

## THIS IS CAMPANYON

- Campanyon is a booking platform for stays in nature, where campers can find and book sites, glamping, cabins and farms.
- Launch: April 2021.
- Number of hosts: 1,500 hosts with more than 10,000 bookable units combined.
- Markets: Hosts in more than 20 markets, with a focus on a few key markets in Europe.
- Number of employees: 12.
- Schibsted made an initial investment in Campanyon in December 2021, and today owns 16.9% of the company.



# Our sonic attention is worth fighting for

While companies around the world are engaged in an intensifying battle for users' screen time, the rise of audio might be the next frontier in winning user attention.



**Karl Oskar  
Teien**

Director of Product, Schibsted  
Subscription Newspapers  
Years Schibsted: 8

Fuelled by wireless headset adoption and an ever-growing selection of content made for listening, the audio trend represents a major opportunity for any company that aims to be relevant during all those moments that users are away from their screens.

Although we cannot accurately predict how much total screen time (and news publishers' share of it) will grow in the coming years, we clearly see that time spent on audio is growing rapidly. Around the world, more and more people listen regularly, and each person listens for a longer period of time.

In Norway, the share of users listening to podcasts per month has nearly doubled, from 24% in 2017 to 43% in 2020, with Norwegian-language podcasts leading the charge. Users aged 16 to 24 show the highest adoption rates, with listeners in this group averaging nearly two hours per day on podcasts or audiobooks. Among Swedish users in general, average time spent on podcasts and radio daily already matches that of digital news consumption.

While audio as a product is nothing

new per se, there are many ways in which the current move to audio is different from traditional broadcast radio:

- It is fuelled partially by hardware adoption, led by AirPods' exponential growth, having captured more than one-third of the wireless earbuds market. And several other wearable devices have also seen double-digit sales growth over the last few years. A 2022 report estimates that three in four US teens now own AirPods. The convenience of these new devices means people now wear headphones more often and in situations they previously wouldn't – even while talking to their friends!
- Our mobile devices are always connected, enabling users to listen to any topic, any time, while doing other things. The ability to multitask is, as one would expect, one of the main reasons users turn to audio in their busy lives.
- Lastly, the sheer volume of content is growing rapidly, with an entire publishing industry transitioning to audio books, and all-time-high investments from tech- and media companies going into the podcast industry.

As users move to airpods for consuming content, we also see that several audio-first start-ups have emerged

over the past few years. In addition, industry experts talk about wearable audio as the first mass market adoption of augmented reality devices. For many young users, audio is their primary channel for news. Clearly, publishers who want to stay relevant must find their place in the audio domain.

For news organisations, understanding the opportunity that comes with audio starts with acknowledging how the newspaper landscape has changed. We've gone from a world of physically distributed newspapers, where there was little competition and a general scarcity of information, to a world of unlimited digital distribution and global competition for attention. In this world, news organisations are not just competing against each other, but rather against any company distributing their product on a screen. Those other companies include technology giants with massive budgets and a world-class ability to get users addicted to their products.

We know that tech and streaming giants dominate users' visual attention, and it seems unlikely that news publishers will turn the tide on that anytime soon. But in the audio world, news as a category gets an outsized share of users' attention, accounting for 30% of top podcast episodes despite comprising only 7% of podcasts.

However, increasing audio content production for news organisations does not come without its challenges:

- The cost for voice actors and studio time remains high.
- Recording and editing takes several



The politics podcast “En runda till” (“One more round”) with Soraya Hashim, My Rohwedder and Lena Mellin is recorded in Aftonbladet’s studio in Stockholm.



times that of actual audio output.

- There’s a risk of spending significant resources on content of low interest.
- The nature of news as perishable limits the types of content that can be produced without becoming outdated as stories evolve.

Today, publishers mostly accept the fact that investments in the audio domain are expensive, and that it will be worth the effort in the long run. But there are also ways that technology can enable production of more audio in smarter ways.

Firstly, the need for studios may soon disappear, as cheaper and more mobile recording setups hit the market. Companies like Nomono (which Schibsted recently invested in) are challenging the existing workflow as well as the costs associated with high-quality podcast production.

Secondly, for narrated articles, we might soon get rid of the need for both studios and narrators entirely as text-to-speech technology matures. A synthetic voice that can read any text input out loud offers some unique advantages. It allows for unlimited production of narrated articles with near zero marginal cost, as it converts a written text into audio within seconds. Since it is connected to the publisher’s CMS, it also enables flexibility to update and edit published stories, without ever needing to step into a studio. The fact that it can be scaled across the entire daily article output of a newspaper also means that users can rely on the feature to listen to any article they prefer and do so

while commuting or cooking at home. Since many users cancel their subscriptions because they simply don’t have enough time to sit down and read all the articles they pay for every day, solving this “bad conscience-problem” for subscribers might be a key factor in reducing the churn rates most newspapers are seeing.

**E**arly results from text-to-speech experiments in Aftenposten show that the gap between human and synthetic voices is closing in terms of listener retention, and that users opting for audio consumption complete more of each story compared to text. Plans for enabling users to save stories for later listening, as well as the ability to

queue synthetically narrated articles after premium flagship podcasts, may all lead to more widespread adoption of audio as a mode of news consumption. The result might be a significant increase in the total time users spend engaging with Aftenposten’s journalism each day – read more about it on the next page.

Looking back at the battle for users’ screen time, as described earlier, could it be that by focusing on users’ eyeballs, we miss an emerging behaviour change that may one day account for most of our time? The next frontier in winning user attention might in fact be about sonic attention, and those who make the right investments now may be on a course to become the giants of the audio world.

# An AI voice makes news accessible to everyone

**Why limit the audio presentation of journalism to podcasts? Aftenposten's cloned voice will be able to present all the newspaper's content – and by doing so, give everyone access to the same information.**



**Lena Beate  
Hamborg  
Pedersen**

Product Manager,  
Schibsted Subscription Newspapers  
Years in Schibsted: 3

**T**oday a large part of society is left out when it comes to consuming journalism. It is, in fact, a democratic problem that media prevents people from getting information about society because much content is only accessible as text. This is also a big risk for news companies, as they may be missing out on a market opportunity by not offering an audio alternative to the huge amount of written journalism produced every day.

According to Dysleksi Norge, between 5 and 10% of all Norwegians suffer from dyslexia. This means that as many as 270,000 to 540,000 children and adults in Norway are reluctant to consume written journalism. This is not the only group who have challenges with reading. People with attention deficit disorder concentrate better when listening instead of reading. Refugees and asylum seekers who are in the process of learning Norwegian also find it very helpful to

be able to listen and read Norwegian simultaneously.

When Aftenposten started looking into this, we primarily had our newspaper for kids in mind – Aftenposten Junior skole. Since this is a news product for use in public schools, we are obligated to fulfil all accessibility requirements.

We learned from teachers that 92% of them have students who struggle to read in their classroom, and we were even told that schools were not interested in buying our product if we could not offer text-to-speech.

Two important observations and findings from our research also convinced us that adults in the future will have needs quite similar to today's users of Aftenposten Junior skole.

Firstly, we observed that many kids, beyond those who struggle to read, actively chose to listen to the text. And today's kids and teenagers are potentially future subscribers who tend to bring their media habits from childhood into adulthood. After observing how popular listening is when given the choice between sound and text, we are pretty sure that we need to have a sound alternative ready for them before they grow up.

Secondly, dyslexia and attention deficit are lifelong problems. This means that people who suffer from

it will probably still prefer to listen to a long article instead of reading when they grow up, and they will not find our news products worth paying for unless we can offer more than text-based journalism.

**O**ur primary goal was to make an artificial voice with the highest possible quality. That is why we offer a cloned voice and not a purely synthetic voice. A synthetic voice is an artificial voice that is not meant to sound like a specific, real person. A cloned voice, on the other hand, is created in the same way as a synthetic voice but simulates the speech of a real person. That means that if it is a voice that is familiar to you, you will recognise the voice and may even struggle to understand that it is not a real person but rather an artificial cloned voice that's reading the news for you.

To build an artificial voice we needed speech data. Speech data in this context is recorded sentences from our newspapers. Using our past articles, our collaborator, BeyondWords, extracted 6,812 phonetically rich utterances. These sentences were recorded by Anne Lindholm, a podcast host in Aftenposten, who is now also the voice behind our cloned voice.

After processing the speech data and training a neural network, the first version of the voice was ready – and it was impressive. Anne herself could not believe how similar it had become to her own voice. Still, as with all other AI-features, we needed to train it to





improve it. By training we mean that a person listened to a huge amount of sound files that were converted from articles and reported mistakes.

A linguist from the company that developed the voice technology then made corrections to the phonemic dictionary that served as the foundation for the quality of the cloned voice. When a mistake is corrected in this way, the correction will affect all future articles in which the same words occur. Over the last few months, the voice improved a lot and we are soon ready to scale up so that you can hear the voice on many more Aftenposten articles.

When it comes to the quality of the voice, a real voice still beats the robotic one. But we have done A/B tests

between the real voice and the artificial voice, and the results indicate that the quality difference is not very high and that the benefits with a robot voice outweigh the disadvantages.

One of the benefits has to do with the nature of digital presentation of news. When a dramatic incident first occurs, like the start of the war in Ukraine, the news gets updated from minute to minute, and it is impossible for a real person to compete with the speed of updating audio files with the cloned voice. Not to

mention the cost of having a real person doing multiple recordings of an updated article, as well as the time saved for the journalists, who can instead focus on the next news article.

**A**rtificial intelligence and our cloned voice have the potential to be revolutionary and make a hugely positive impact for large groups in our society who now can access journalism they could never access before.

This is why we believe that offering a robot voice based on artificial intelligence is an important bet on the future of journalism. It shows that new technology can contribute to a more open and inclusive society where everyone has access to the same information.

# Tech Trends

If we look beyond the metaverse – what other tech trends will affect our lives in one, or five years? We gathered some of them, with help from Schibsted News Media experts.

## Techlash 2.0

In the last few years, we've seen more and more regulation hitting the tech giants and big corporations in the EU, the UK and the US. The regulations put in place by the EU are expected to eventually be copied by the US and the UK, and there will likely be more laws put in place to hold Big Tech accountable.



## Bye, bye passwords!

We are moving from endless lists of passwords and password managers will soon be replaced by biometric passkeys. The FIDO authentication credential that provides “password-less” sign-ins to online services. Already widely used by Apple, think fingerprint scanning and Face ID, it's likely that more companies will adopt the technology for using users' biometric data to create safer login processes, making password leaks a thing of the past.



## Social shopping becomes mainstream

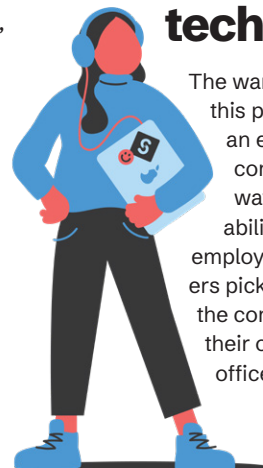
Shopping hauls and unboxings have been a social media tradition for years on Instagram and YouTube, but TikTok – and its Chinese counterpart Douyin – have taken the phenomenon into the mainstream. Businesses, from clothing brands to restaurants, are livestreaming to engage with viewers, and they are seeing increased revenues from the social shopping aspect.

## Service fragmentation will grow

We're already seeing the streaming world become severely fragmented, with new services announced all the time. Though the giants may still have the lead, the competition is growing fiercer and the consumer has more choices than ever. We will likely see these developments in other spaces as well, as social media is well on its way and new apps for podcasts are fighting for the users' attention, too. As users become more interested in niche platforms and products, the fragmenting of our digital services will follow.

## The war for tech talent

The war on talent isn't news at this point, but tech talent is an especially sought-after commodity worldwide. New ways of working and the ability to demand more from employers will have tech workers picking and choosing, while the companies work to improve their offerings, whether at the office or remotely.





## Our time is value

We're seeing an increase in the fight for the users' time, not necessarily their money. For publishers and social media, attention and usage are becoming far more important in the long run, as exemplified by Netflix's choice to make a cheaper subscription tier that comes with advertising. Of course, this is not a new phenomenon in the publishing industry, where advertising-based revenue versus subscription-based revenue has been the question for decades. The fact that a user's time is considered more valuable is becoming common knowledge, and we'll likely see that mirrored in more companies' business models in the future.

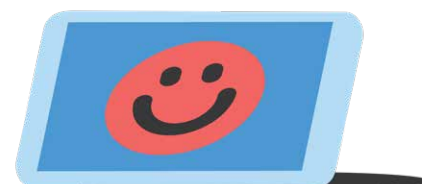


## Your home will be even smarter

Apple's development of Nearby Interaction will likely spur similar new features from other companies. Nearby Interactions allows Apple users to connect to other devices and accessories depending on their location. Recently announced Background Sessions would enable users to use their accessories hands-free. For example, you could set your music to turn on when you enter your home or a specific room, or you can trigger other actions on connected accessories. This type of technology will probably grow more popular soon, making your smart home even smarter.

## Vertical video is winning

TikTok keeps winning ground over other social media platforms, and the rest are left scrambling to keep up. The vertical video format will likely keep gaining in popularity, whether in short- or long-form. And vertical video is expected to be used in other formats as well, with its potential to make news products stronger as publishers work to engage with the medium. Many social media-forward publishers already have large teams in place for Instagram and TikTok, and there is no question that others will follow suit.



# Regulation will pave the way for the future of crypto

The crypto winter has made value sink drastically.

But Karina Rothoff Brix, from the crypto service Firi, is certain that the crypto phenomenon will be a natural part of our trading culture and system – at least, once regulations are put in place.



**Karina Rothoff Brix**

**Country Manager Denmark, Firi**

**Years in the Schibsted Family:** Almost one  
– Schibsted invested in Firi in March 2022

**T**o some people, crypto is the latest attempt to reinvent the fastest way we exchange money and goods.

And when looking back on history, the evolution of money has always been moving towards more convenience and easier transactions. But crypto is so much more. Some even define it as the next revolution – not only for money but for the entire trading culture and system in our society.

The decline we see is, in my view, a normal part of the market cycles, which influences the perceived and traded value of crypto. But the value behind the crypto projects is increasing as innovation continues. Adoption is here – look no further than the number of ATM machines worldwide where crypto is easy to purchase, or the growing number of both private and public organisations that accept crypto as payment or as remuneration.

So, how did the industry grow from small crypto “nerd” projects to its current state, consisting of more than 13,000 different cryptos and an asset that you can pay your taxes with if you live in the state of Colorado, or purchase gas with when driving in Australia?

We often hear that the story of crypto dates back to 2008, when the most well-known and oldest crypto of all was released with a





whitepaper – Bitcoin. But there were several attempts to define e-money or digital currency before Bitcoin was invented or described.

It all began in the early days of the internet when David Chaum, in 1982, wrote a dissertation paper called *Computer systems established, maintained, and trusted by mutually suspicious groups*. At that time, David Chaum was a graduate student at Berkeley and his dissertation is the first known description of a blockchain protocol. His work laid the foundation for the crypto and blockchains we know today, and it was driven by his motivation to protect the privacy of individuals. A privacy that he early on feared that governments would not be able to ensure on the Internet.

**D**avid Chaum founded a company called Digicash, Inc. in 1989. His company attempted to release an e-currency called E-cash but failed and was then sold in 1995. The world was simply not ready for the technology – as the first online payment from a credit card was made in the early 1990s.

But the phenomenon was on its way. One of the first worldwide money, or digital currencies, was created in 1996. It was called “E-gold” and was backed by gold. The transactions were irreversible and approximately five million users were registered. But E-gold was quickly adopted by criminals who saw it as a safe haven, as regulation was lacking. Soon

the currency was banned by the US government.

One of the first companies to succeed in offering a fast and paper-free transaction method using the internet was PayPal. Both PayPal and E-gold are like crypto in the sense that they use the internet to make transactions. But there’s one thing that is completely different. To simplify – cryptos are decentralised and both PayPal and E-gold transactions were controlled by a central unit.

A milestone in the crypto story happened in 1997, when a researcher from the US National Security Agency (NSA) published a paper called *How to make a mint, the cryptography of anonymous electronic cash*. It described a decentralised network and payment system.

The concept described in the NSA paper was further developed by two researchers in 1998. Nick Szabo created what he called “Bitgold”, which introduced the concept of smart contracts to the system. Wei Dai wrote *B-money, an anonymous distributed electronic cash system*, which described the fundamentals of all the crypto systems we know today. Nick Szabo later helped the founders of Bitcoin code the system based on his findings, and Wei Dai’s work was also cited in the Bitcoin’s paper. Today, the smallest unit of Ethereum (ETH) is called a “Wei”.

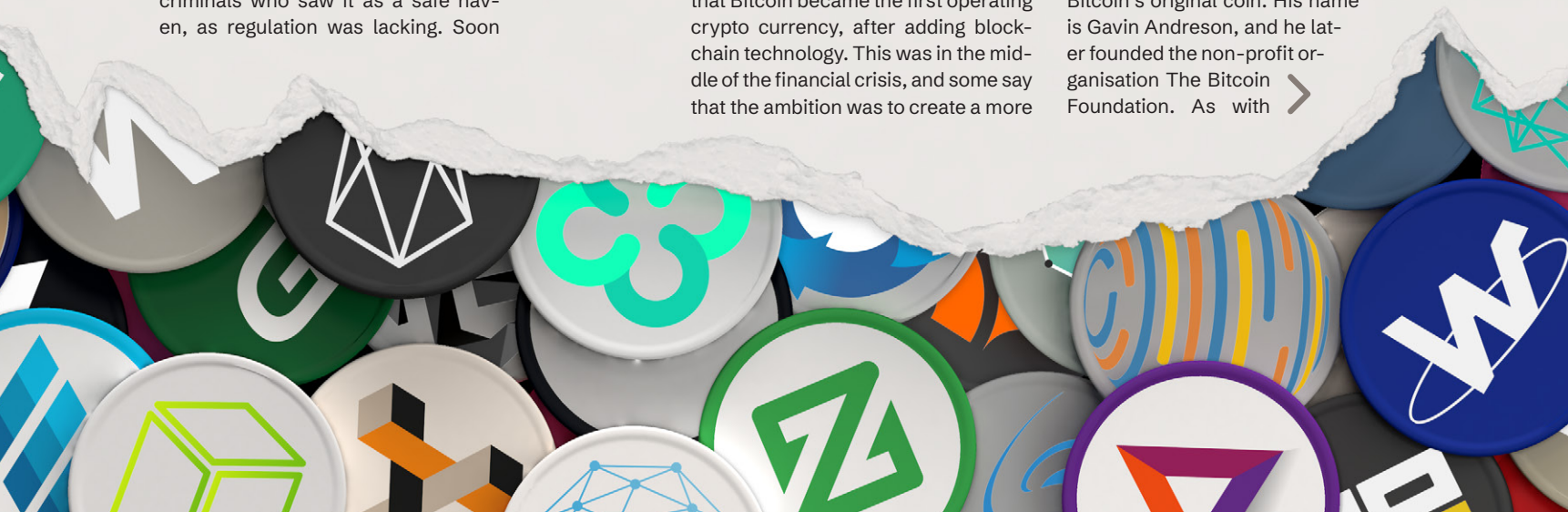
But it wasn’t until October 2008 that Bitcoin became the first operating crypto currency, after adding blockchain technology. This was in the middle of the financial crisis, and some say that the ambition was to create a more

secure and sustainable system that could not be manipulated by centralised entities. With a fixed amount of Bitcoin being produced, the mission was also to protect against inflation.

**T**he Bitcoin vision was published by Satoshi Nakamoto, and it described a purely peer-to-peer version of electronic cash that would allow online payments to be sent directly from one party to another without involvement from a financial institution. The idea was to change the protocols that the financial institutions were building on and transfer funds instantly, anonymously, and without middleman fees and governmental surveillance and control. In January 2009, the first block of the Bitcoin blockchain, called The Genesis, was made.

The first real purchase with Bitcoin was made on May 22, 2010. The pizzas purchased with it became historical because until that point, the Bitcoin did not have a value but had only been transferred between peers – and mostly for fun.

Satoshi Nakamoto was nominated for the Nobel Prize in Economics in 2015, but he disappeared shortly after making Bitcoin. No one has yet been able to identify who’s really behind the paper or who is Satoshi Nakamoto. Before disappearing, Satoshi Nakamoto chose a software engineer to oversee the building of Bitcoin’s original coin. His name is Gavin Andreson, and he later founded the non-profit organisation The Bitcoin Foundation. As with >



## THE DEFINITION OF CRYPTO

The use of the word "currencies" when talking about crypto can be misleading because crypto is much more than currencies.

A general definition of crypto is: "Digital assets on a blockchain, that can be traded, utilised as a medium of exchange and used as a store of value".

The use of each crypto can vary and be coded to enable different – or multiple – things:

- A security token where the token holder owns a part of the entity that have issued the token.
- A utility token where the token grants an option or a right to the token holder.
- A commodity token where the token represents ownership of another digital or physical asset.
- A governance token where the token represents the token holders right to vote or in another manner be part of the governance in a project.

Ethereum and its honouring of Wei, the smallest part of a Bitcoin that can be sent is called a Satoshi.

In the years that followed Bitcoin's entrance on the market, the usage spread, but not only to legitimate businesses. Once again, governments had to shut down several illegal websites. The idea that crypto is only for criminals is a sticky myth for the industry to rid itself of, and the need for more detailed regulation is growing.

With a market capital of more than USD 3 trillion at its peak in 2021, the crypto industry is becoming an asset with which our society needs to handle and interact.

Two countries have made Bitcoin their legal tender. In El Salvador, Bitcoin has been the national currency since September 2021, along with the US dollar. Every citizen in El Salvador has a digital wallet with BTC in it, and it is mandatory for all merchants to accept BTC as payment.

The small African country of Central African Republic also voted BTC as their legal tender in late summer 2022, along with the franc issued by the French government. Many among the population, primarily in African states, are "unbanked", and crypto payments give them access to trades and the basic service of securing their money and receiving payments for goods.

Close to 90 other countries are in the process of deciding the role of cryptos in their jurisdiction.

Retail crypto investors are also increasing in numbers. In 2021, 8% of American households had invested in crypto; in the Nordics it was between 11 and 15%. The growth is expected to increase with global adoption, along with the EU crypto regulation that is expected to be in place in 2024. With this regulation, institutional money is expected to be a significant part of the growth for the crypto industry going forward.

Another powerful driver for adoption is Web3 – the next generation of internet. Web3 is expected to be largely built on blockchains, meaning crypto would have an essential role as a digital asset – not only for transaction of payments. In essence, Web3 provides all industries with new virtual markets where the technologies enable people to interact and transfer ownership in virtual settings, seamlessly and conveniently.

The pure digital presence, the virtual interaction, and the gaming habits of younger generations in Western countries show us how owning digital items and being part of virtual events is perceived to be just as real and as valuable for this generation as experiences and assets in the physical world.

This, combined with technology, talent attraction and funding in this space, lays the groundwork for the innovative and disruptive businesses of the future.









42



64



18

## 42 Power for everyone

As energy has become a brick in the global power play, the need for renewable energy is growing – but no one wants power plants in their neighbourhood.

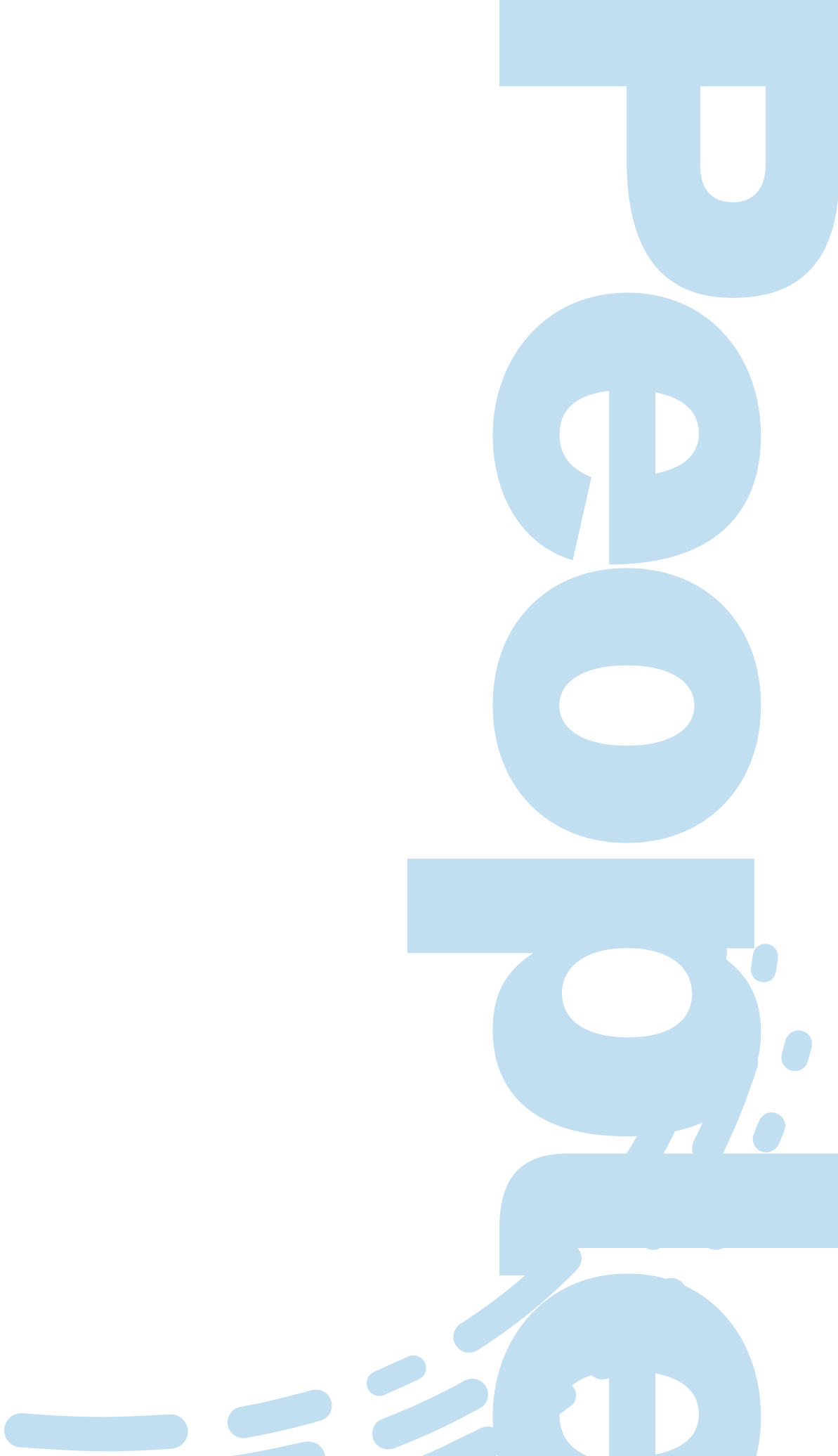
## 56 Life finds a way

Photographers from Schibsted's newspapers travelled to Ukraine to document the unfolding war. Their work shows how regular people cope in extraordinary circumstances

## 64 The magic scissors

Gene editing was made simple by the development of CRISPR-Cas9 therapy. But practical treatments for human genetic conditions are still few. The question is: Why?









# Understanding a world on fire

A war in Europe and polarised societies have set the world on fire and shaken democracies. As individuals, we have a whole new security situation to relate to. Malin Ekman, a US foreign correspondent, also reflects on the role the media have played in these new developments.



*Malin Ekman*

US Correspondent, SvD  
Years in Schibsted: 13

**T**here was a time when many risks in our corner of the world felt so hypothetical, and many discussions so abstract, that it was easy to ask oneself: “When is something going to happen?”

That time has now passed. When Putin invaded Ukraine, we were confronted with the world’s destructive uncertainty, as if world history cracked down on us, taken our temperature, and heralded a ruthless, unstoppable future where nuclear threats could no longer be dismissed and where gas pipes could be blown up.

The last time I felt like that was on 9/11. I was 14 years old and on a family holiday in Phuket, my first trip outside Europe. We were staying in a basic apartment hotel. Mum turned on the

TV set in the living room. Images of the planes colliding with the twin towers were shown over and over. I remember thinking that Thailand felt reassuringly distant, even though it seemed as if the whole world had been compressed into a ticking bomb.

That same feeling returned this spring.

My friend and colleague Per Bjurman from Aftonbladet says he intends to stand on his balcony on the 48th floor when the missiles come. If it happens, he says, we should be glad if we die; no one will survive such an apocalypse. He knows exactly how many minutes it takes for a nuclear warhead to reach Manhattan from Russia (30) and the destructive impact of a modern nuclear weapon (100 times greater than that of the Hiroshima bomb).

This says something not only about the neurotic nature of our friendship but also about the uncertainty the world is struggling to get accustomed to.

It was Per who told me about the invasion. I was heading for Orlando on a plane with a lousy internet connection when I received his message: “Oh no, Russia’s attacking Kyiv now!”

It had seemed so unlikely only a

## *As journalists, we have a responsibility to reflect on **our own role** in these developments.*

few hours earlier. Friends back home sent messages to the effect of thank goodness Trump isn't president when this happens, at least; there's no telling how things would turn out then. In the United States I heard acquaintances and interview subjects say that if Trump had still been president, Putin might not have dared to invade.

While both analyses have their merits, it's important to remember that the geopolitical differences between Trump and Biden are relatively small. Both are pushing the "America first" message.

**T**he US withdrawal from Afghanistan, initiated by Trump and implemented by Biden, demonstrated how seriously the US took that slogan. Afghans clung to aircraft wings out of fear of being left behind in a country where, every day, people were being

stripped of the rights that had slowly been secured for them under US control. Everyone was asking themselves: "Is this what American foreign policy looks like?"

The war in Ukraine complicated the answer to this question. The US was not ready to intervene at the cost of a third world war, but nor was it prepared to stand by and leave a country being invaded by a world power to its own fate. It sent weapons and imposed sanctions and formed a united front with the other Western nations.

The months come and go, and for those of us who don't have to live under constant physical threat, the fear is cyclical. One move by Putin, and the sense of security is ripped away. One threat of nuclear weapons – be it direct or indirect – and the fear returns. The geopolitical situation is so alarming and at the same time so fascinating that it's almost easy to forget the

domestic political polarisation here in the US. That, too, is prompting legitimate fears about what type of world will emerge; a polarisation which in many ways is leaving its mark all over the world and is evoking fear and concern for where our world is headed.

**T**he storming of the Capitol is a low watermark in contemporary US history. But even though it was unprecedented, some important perspectives were lost in the way the incident was reported, political parallels that help explain why it could happen.

Comparisons with the claims made by Hillary Clinton and parts of the Democratic Party establishment that Trump's 2016 election win was illegitimate are often dismissed as unfair, but they are important for understanding the political dynamics at play.

Hillary Clinton conceded the election without urging her supporters to storm the Congress and stop Trump, though she did dismiss her opponent as an "illegitimate president" and claimed "he knows" that he stole the election.

The accusations were put forward in more sophisticated ways and without directly or indirectly agitating violence, but still they have as much significance for the American people's faith in their democracy as they do for the populist





right wing's argument of a corrupt elite throwing stones from glass houses.

It didn't help that parts of the years-long reporting on Trump's alleged collusion with the Kremlin – which won The New York Times and The Washington Post a joint Pulitzer Prize – proved to be based on idle rumour and false information. Or that Hillary Clinton helped fund the report from which much of that information came. This passed relatively unnoticed, but revelations about the news media's shortcomings are important for understanding the resentment towards them and how they feed polarisation.

**T**he social media platforms also play a key role. After allowing the spread of disinformation in the 2016 US presidential election, Facebook assumed an almost self-flagellating role in the 2020 election. In response to a request from the Biden campaign, it decided to actively suppress the story about the documents found on Joe Biden's son Hunter Biden's laptop; information which I had managed to have corroborated by a Facebook employee.

Several reputable media with high credibility in established circles chose not to report the story on the grounds that the information could

not be verified. Others chose to dismiss it as disinformation; a precaution that wasn't taken in the Pulitzer Prize-winning reporting on Russia.

As journalists, we have a responsibility to reflect on our own role in these developments. It's easy to talk about the undermining of trust which Donald Trump inflicts on democracy by disqualifying election results, but it's harder to discuss the undermining of trust to which we in the media – sometimes routinely – contribute. The tendency to demonise and alienate rather than to understand and examine is also a price we pay for democracy, because it plays a part in dividing and agitating people.

In a panel discussion I recently participated in at the Swedish consulate in New York, a woman in the audience asked me: "How is it possible that so many elected Republicans seem to be ignoring the storming of the Capitol, as if they couldn't care less?" It's a relevant question.

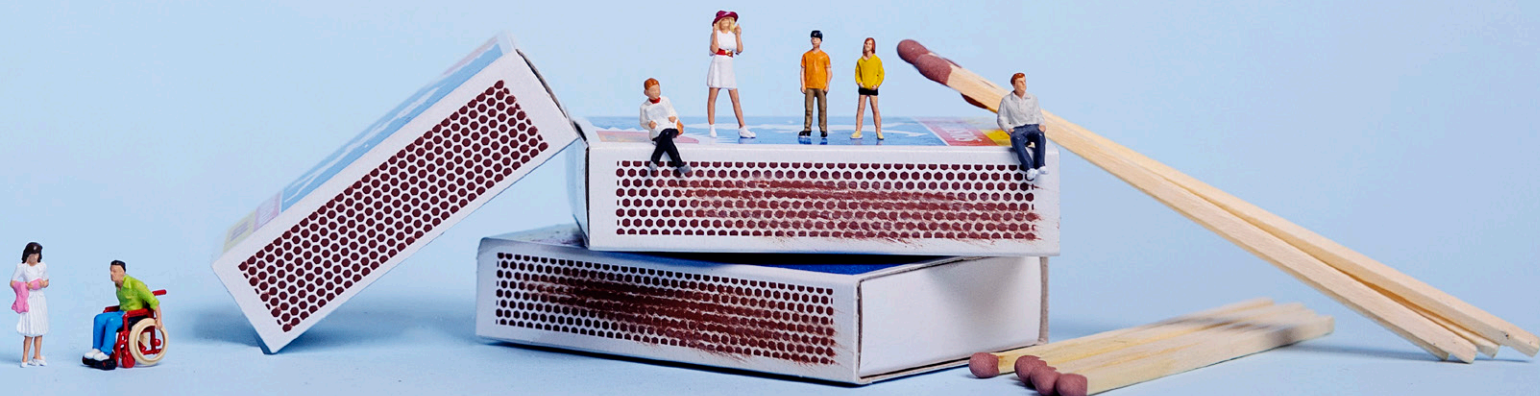
As well as having to do with crass political games – even Republicans who detest Trump need to have the support of his electoral base – the answer has to do with the resentment at how the storming was portrayed and in what proportion compared to other news items.

For those who seem to ignore the

storming, it's almost as bad or even worse that Democrats turned a blind eye when, in the wake of the murder of George Floyd in the summer of 2020, a radical left vandalised cities, tore down barricades and set fire to police vehicles. They even occupied entire blocks and forced the police out of their own buildings.

**S**till answering that woman's question: The hate for the other side runs so deep that we forgive our own side's mistakes. It's human nature and, at the same time, a form of combat psychology, a dynamic similar to that found in global conflicts. The drama playing out in the world is putting more at stake; the question is no longer: "When is something going to happen?"

For my own part, I find it hard to imagine that I won't relive the claustrophobic fear I experienced in Phuket and on that plane to Orlando, the one that comes with the feeling that the world is spinning out of control. As an individual, that's a private matter I have to deal with myself. As a journalist, it's something bigger. Our responsibility is to communicate what we see with curiosity and consequential neutrality, and to help our audience understand the world as it is rather than repeat how it is usually presented.









# NOT IN MY BACKYARD

With an energy crisis in Europe, as an effect of the war in Ukraine, the importance of power has never been more evident. But as new sources of energy emerge – old obstacles appear. Protests are stopping new projects.





*Joacim Lund*

Technology  
commentator,  
Aftenposten  
Years in Schibsted: 17

“**E**verything was different,” said my grandfather the last time we spoke. That was in the summer of 1999. Napster had just been launched and the war in Kosovo was coming to an end – as was my grandfather’s life. I was sitting by his bedside and had just asked him what the world was like for him as a child, living by a small fjord on the west coast of Norway almost 100 years ago. He paused for a moment, thinking. “We had no cars,” he said. “No planes, no TV. No radio, either.”

He didn’t mention the internet. He may have heard of it, but it never featured in his life, which might sound staggering to young people today. But then he said something even more staggering: “We didn’t even have electricity.”

### EVERYTHING REALLY WAS DIFFERENT BEFORE

I tried to imagine what life was like in those days, in a small, dimly lit house on a gravel road, with the ocean down below and the smell of dried fish, tar and sheep dung in the yard. It was hard enough for a city kid like me who grew up in the seventies, but probably impossible for my own children.

One thing the technological innovations my grandfather rattled off have in common is that they have all accelerated social development. They have revolutionised transport, information and communication, speeded up the pace of globalisation, and pushed the world forward from societies built on agriculture, hunting and fishing to ones built on knowledge, industry, technology, innovation and import and export.

But there’s something else they have in common: they need energy, and lots of it. Only since the 1950s, energy consumption has increased fivefold, and the need continues to grow. And if there’s one thing we’ve learned in 2022, it’s this: abundant energy at reasonable prices cannot be taken for granted.

### ENERGY IN EVERY DROP

My home country of Norway has been blessed with a unique supply of energy for more than 100 years. At the beginning of the 1900s, someone realised they could derive lots of cheap electricity from the country’s thousands of waterfalls, and speculators with foreign backers travelled around the country buying up those waterfalls on a large scale. This was the backdrop for developing what became known as the “panic laws”, a set of new laws that gave the state control over the country’s natural resources.

Much later, at the end of the 1960s, oil and gas were discovered on the Norwegian Continental Shelf. Once again, the Norwegian state made some smart moves, and Norway gradually became self-sufficient and stinking

rich on fossil and non-renewable energy. For my entire lifetime, Norway has enjoyed cheap energy, so cheap that my generation burn their feet on heated bathroom floors and leave all the houselights on when they go off on holiday. But now, in 2022, even the energy nation Norway is facing an energy crisis. Other nations have also prospered oil and gas, among them Russia.

### WINTER IS COMING

Over the past 50 years, Germany has made itself totally dependent on Russian gas. There’s been no lack of warnings; even president Trump warned against this dependence in a speech to the UN General Assembly in 2018, only to be met with laughter from the German delegation.

After the Russian invasion of Ukraine drove a huge wedge between Russian and Nato, it became clear that Vladimir Putin would leverage Europe’s dependence as part of his war strategy. By choking off energy supplies to Europe, he could try to pressure Western countries to lift sanctions against Russia. As an added bonus, he could expect divisions to arise among European politicians and capitalise on people’s fury at soaring electricity prices. He could destabilise and undermine his opponents.

Towards the end of the summer of 2022, the Nord Stream 1 gas pipeline, which carries most of Russia’s gas to Europe, was shut down for a few days of maintenance. Germany responded by reactivating its environmentally unfriendly coal mines to make up for some of the supplies lost. But it wasn’t enough. The dry summer had made it difficult to ship coal by river transport. Similar problems arose in the United States and China. The industry was hit by energy rationing, and European leaders wearing solemn expressions warned of a cold winter ahead for most people.

Putin didn’t reopen the gas pipeline; he would rather burn it all up than export it to Europe. Then there were the explosions of the Nord Stream 1 pipelines, late September. They did not affect the amount of gas being delivered, and whether they are part of Putin’s strategic plan, remains to be seen. But they certainly made the geopolitical tension grow even more. At this time, Norway was all of a sudden the largest supplier of gas to the European continent. If the underwater pipelines from Norway to the continent would blow up too, that would mean a cold and dark winter in Europe. On the verge of winter 2022, Russian citizens are being arrested along the Norwegian coast, flying drones with high-tech cameras over critical infrastructure. Again, we do not know if this is organized espionage. But it sure illustrates the tense situation. Even with increased energy supplies from Norway, energy rationing seems inevitable. There’s simply not enough energy to meet Europe’s needs. European



leaders have begged little Norway for more energy supplies, but Norway already supplies one-fifth of EU's gas imports and is unable to deliver much more.

### MOMENT OF TRUTH

When the war is over, few countries will have any confidence whatsoever in Russia as an energy supplier. Europe is determined to increase its energy production to make itself less dependent on Russia, but it's impossible to make up for the loss of the Russian supplies in the short term.

Norway's hydropower also supplies a lot of energy to Europe, but the levels in Norwegian water reservoirs haven't been lower for 25 years. Even when it does rain, it's not enough; the soil around the reservoirs is so dry that it absorbs whatever it can. The same applies to the rest of Europe in the wake of a record dry summer.

The European energy system is deficient and vulnerable. Everyone can see that, not least the Russian authorities – and they're exploiting it. So, what should Europe do now?

### GROWING NEED

According to the EU's European Environment Agency, (EEA), Europe's energy consumption will be 11% higher in 2030 than it was in 2005. but the need for energy development in Europe exceeds that. When Russian supplies fail, Europe must undertake colossal development of its energy production. But how?

Everyone agrees that the world has to shift from fossil fuel production. It's absolutely vital if we are to slow down global warming and everything it brings with it. On top of that, fossil fuel is one of the main sources of air pollution, which according to a recent study kills 6.5 million people annually. That's about as many as the number of people who died as a result of the COVID-19 pandemic in the course of two and a half years.

According to 2021 statistics from the International Energy Agency's (IEA), oil accounts for 30.9% of global energy production, coal for 26.8% and natural gas for 23.2%. That amounts to over 80%. Biofuels and waste, nuclear and hydro make up the rest. The green energy technologies we hear about so much – wind, solar and wave – account for just over 2% of global energy production.

The EEA expects fossil fuel to dominate for a long time to come, but that's not where the growth is happening; 60% of the growth in this period will come from renewable energy. So what will the energy market look like in a few decades from now?



### NEW ENERGY GENERATION

A lot of research is looking at new forms of energy production, and there's no shortage of good ideas. For example, the energy that solar winds hurl into space can be harnessed. On farms, cow manure and food waste can be decomposed and provide fertiliser for the soil and gas to power generators, or streets, squares and buildings can be laid with tiles that generate energy when people walk on them. Some researchers are looking at how to turn sewage into biofuel, others at how to do the same thing with algae. Clean hydrogen.

Systems are also being developed that will change how energy is distributed. For example, a new city district could have solar panels installed on all the building roofs – and in the walls for that matter. The energy from the panels could be stored in batteries. If an excavator cut a power cable from a large power plant outside the city, the power supply to that district would not be affected. It could distribute power between the buildings or even sell it. Systems like these could reduce the need for large-scale central power plants.

Combined, the newest technologies may make a



valuable contribution to the overall problem, but so far none of them can generate enough energy to meet increasing needs. That situation may change, but the need for the more conventional forms of energy production will not disappear for a long, long time.

### BACK TO THE CORE

“The time of nuclear renaissance has come,” said French president Emmanuel Macron in February 2022. He promised to build 14 new large-scale nuclear power plants in addition to a number of small new-generation reactors. The workers he was addressing (this was two months before the presidential election, the high season for making election promises) applauded. Unlike wind farms, nuclear power plants mean jobs; first to build them, then to operate them.

But not everyone welcomes the nuclear renaissance. Many nature protection organisations are fighting it tooth and nail, and understandably so, given the serious impacts of the accidents at Chernobyl and Fukushima. Moreover, radioactive waste from reactors poses a major and potentially hazardous problem. Many critics also point out that building a nuclear power plant takes years and that maintenance is costly. Moreover, the unusually warm rivers in France this summer made it difficult to cool reactors.

On the other hand, emissions from nuclear power plants and land use requirements are minimal, and they generate significant amounts of energy. For those reasons, the UN’s Intergovernmental Panel on Climate Change (IPCC) and the International Energy Agency (IEA) believe they can’t be avoided if we want to achieve net zero emission targets.

That said, even the strongest supporters of nuclear power have to admit that the world needs other technologies, too, simply because the plants – unlike alternative technologies like windmills – take too long to develop.

### WINDS OF CHANGE

Climate change agreements are key drivers of development, but profitability can hardly be overestimated.

There’s no doubt that renewable energy will grow significantly. It’s already attracting investors, and research and development financiers are now eyeing the potential to make huge profits at some point in the future. They seem to be particularly interested in five different energy sources: hydro, wind, solar, biowaste and geothermal energy.

If I were to invest in an energy production plant, I would want to know which technology can produce the most energy (revenues) over time for the total cost of building, operating and maintaining it (expenses). Or to put it

another way: how to get the most energy for my money. This is called LCOE, or levelised cost of energy.

In the summer of 2021, the World Economic Forum concluded that renewable technologies are now also the cheapest, and that the costs are continuing to fall year on year. The difference can be further widened with tax incentives and the like. This means the old coal power plants and other fossil fuel sources would lose their competitiveness.

Offshore wind energy looks very promising, but the technology is still expensive and immature. The most profitable technologies right now are solar and onshore wind, which – unlike nuclear power plants – can be quickly developed. If the coal mines are shut down at the same fast pace at the same time as new nuclear power plants are built, there is still a chance of reaching the net zero emission target in 2050.

But there are many who are tilting at windmills.

### ALL ENERGY PRODUCTION ENTAILS HUMAN INTERVENTION

Although wind energy may sound benign, the extent of human intervention involved is huge. A wind farm requires extensive land areas. On top of that come the concrete, metals and minerals needed to build the windmills and the foundations they stand on.

Indeed, in 2019 wind energy was the subject of one of Norway’s most heated energy debates. A wind farm was to be developed on Haramsøya in Sunnmøre. The developer had been granted the necessary permit, but the local community (and gradually environmental activists from all over the country) protested against what they rightly called a destruction of nature. They sabotaged construction work, chained themselves to construction machinery and took legal action to stop the development, but to no avail.

The demonstrators on Haramsøya are part of a growing international trend. They are not necessarily opponents of wind energy (though some are, arguing that Norway should continue to invest solely in oil and gas); they just don’t want to have the windmills in their local community. Protest movements like these are referred to internationally as NIMBY (“not in my backyard”). Canada has seen a number of NIMBY actions against wind energy developments in Nova Scotia. Similar actions have been carried out elsewhere, from Australia to Florida. Everyone wants renewable energy, but no one wants it being produced in their neighbourhood.

If my grandfather were still alive, he could have looked straight out at the 150-metre-high windmills on Haramsøya. Perhaps it’s just as well he was spared from that.













## “I care for our contribution to society”

“Talent is the foundation of success, so our people are, without a doubt, our most important asset,” says Grethe Malkmus, Schibsted’s new Head of People and Communication.

Grethe joined the company six years ago and has held a number of roles over the years, including Director of People at VG and in News Media.

This has given her insight into Schibsted’s different brands and diverse cultures, as well as an understanding of the opportunities and challenges in an evolving employment landscape.

“It’s never been more important, or more challenging, to attract, retain and develop the talented employees we need in order to fulfil our purpose of empowering people and serving society.”

Economic uncertainty, increasing global competition and changing attitudes to work means that there is a need to focus on multiple fronts, like identifying the right talents and making sure to give them what they need, she explains.

“It’s a tough task, no doubt, but I can’t think of a better-placed organisation in our markets to address this.”

She mentions the learning opportunities within an inclusive workplace and career opportunities across the businesses as great options to attract and retain talents.

“In my heart, I truly care for the success of Schibsted and our contribution to society. Every time I pop into the daily all-hands in our media houses and experience the enthusiastic debate around journalism, I’m always reminded of our purpose. I am really proud that what we do in our team has an impact on that larger purpose.”

**Grethe Malkmus**

EVP, Chief People  
and Communication Officer  
Years in Schibsted: 6

## They make the office feel like home



In Stockholm, around 20 Schibsted companies have their offices in the same building. The different spaces are designed with each company’s need and identity in mind – much thanks to Monika Gustavsson and Karin Nyberg Liander.

Monika and Karin belong to the facility team and take care of all surfaces to make sure everyone has the space and furniture they need.

“When we started, there were desks in straight rows, and people were disturbed without understanding why. Now we are looking into each company’s needs and then we are trying to create a nice, homely feeling,” Karin explains.

And many changes have been made lately, not least because people are working from home and don’t have fixed places at the office. New kinds of spaces are needed and the leading word is an “activity-based office”.

“Minor details matter and we try not to skip those little extra things, even when the budget is tight,” says Monika.

Another change is that now most people in the building know who is responsible for the work environment. Karin and Monika move around and talk to people.

“The best thing is that our job varies a lot,” says Monika.

“And that we get to be creative and make people feel good while being here,” Karin adds.

**Monika Gustavsson**

Workspace Managers, Stockholm Office  
Years in Schibsted: 5

**Karin Liander**

## Trust and safety make teams happy



Agnieszka Lasyk is into happy teams. She’s working as a director of engineering, based in Schibsted’s office in Krakow, Poland, and she is certain that a safe working environment is crucial for success at work.

“I really want to be part of creating the best environment possible to give employees the best opportunities to excel.”

Her interest is rooted in her former studies. She has a degree in sociology, and as a manager in Schibsted, she drew on her learnings and experiences on building happy teams in order to improve performance, on her own initiative. And she started off by spreading the message with a presentation to tech leaders, about three years ago.

“At first, I was a bit reluctant, thinking that this is common knowledge. But then I was asked to hold presentations in different teams and forums, so apparently, it’s not that obvious.”

Her main message is that happy teams perform better – and that trust and psychological safety are the foundations for building them. And that managers and leaders need to act as role models.

“Managers should make their whole team understand that they can come as they are and work to foster an inclusive and transparent culture.”

**Agnieszka Lasyk**

Director of Engineering,  
Schibsted Marketing Services  
Years in Schibsted: 9

# Welcome to the sustainable future

**While climate goals seem all the more hard to reach, experts say we need concrete narratives to show us what a sustainable future might look like. We need stories that explain what roles we as individuals can play – meet Ester in Stockholm 2050.**



**Erica Treijs**

Reporter SvD  
Years in Schibsted: 21

**I**t's the 1st of July 2050 and the sun is rising. Sunlight is slowly filtering through the reflective glass exterior, causing Ester to rub the sleep from her eyes. She asks her digital assistant for a cup of coffee before even getting out of bed, and hears the machine obligingly whir in to action in the kitchen. We call our person of the future Ester. She is a fictional character who for research

purposes is placed in a time and scenario where humans once again live sustainably and in tune with nature.

In Ester's world the amount of global emissions has been halving every decade since 2020. Reports are published of sustainable food chains, improved water quality and balanced ecosystems. And the planet is far from exceeding the 1.5-degree global temperature by 2100.

But that century is still a long way off. The sunny day has begun, and draws attention to what lies outside the solar panel-clad windows. The timers in the kitchen tick away. The roof panels and the integrated solar panels that cover

the facades and windows are all performing at full capacity.

"Should I work from home today or drive my electric bike or car to work?" Ester asks herself.

She decides to drive her small electric car, charged with self-generated electricity, to her hybrid office in the urban circle close by. Moving around the city is fast and easy because the traffic has been replaced by the new autonomous buses that provide a seamless shuttle service.

In Ester's city, no transport stretch takes longer than 15 minutes. Once known as decentralisation, this development is now regarded as commonplace. Little has been demolished to give the urban districts a chance to flourish; instead the catchword has been adaptation, and crops are now being cultivated on the rooftops side by side with solar panels.





“The 15-minute city” – isn’t that what they called it? Ester seems to recall reading about the model that was launched by Anne Hidalgo, mayor of Paris, even before the Covid-19 pandemic. But the fact that she has everything she needs within a 15-minute walk or bike ride is far from a matter of course.

**E**ster’s car has solar panels on its roof, and the car body serves as a battery. Sometimes the car sends power to the grid, other times it uses the power to top up the battery, functioning like a communicating vessel. The car is connected to the grid and can drive autonomously in the most energy-efficient and climate-smart way, but on this particular day Ester prefers to drive herself and take an alternative route because she has the time and the weather is so nice.

She enjoys the greenery. Large squares and asphalted surfaces have been replaced with rain parks and cloudburst ponds that can handle sudden precipitation events, while trees, bushes and other vegetation regulate the temperature. Tree crowns offer shade, water tables work together in a canal-like system, and fields and bushes are full of sounds of buzzing and chirping like never before.

She laughs when she thinks about the manicured lawns of the past; so rigid, time-consuming and water-intensive.

In the small urban core where houses and small office complexes are concentrated, old buildings have been renovated and modernised.

Whatever is new has been created from reuse, and circular systems mean that very few resources now go to waste.

Basement storage spaces are full of batteries and communally owned items that can be borrowed, such as tools and various types of electric bikes. There’s also a small car pool for driving distances that are too long nonetheless. Courtyards and storage facilities have been specially adapted to accommodate hydrogen storage, among other things, and on this particular day they’re all full of self-produced green energy. The turbines in the wind farm in the distance are standing still, but what does that matter on a day like this?

Ester listens to the silence of the city post-electrification. The air is high and clear despite the 25-degree temperature. The wide walking and cycling paths make it easy for her to quickly move between her home and the shops, recreational areas, cultural events, gym and office, so she rarely needs her little car in her everyday life, but she likes to know she can just take off whenever she wants to.

When it comes to food shopping, Ester can use a transport bike with an

electric motor or have it delivered to her home by a bike delivery rider or an electric truck that doesn’t need to drive so far when a large urban core is replaced by many smaller ones.

Ester dreams of taking the train to Paris for her holiday. The journey only takes a few hours now, and she has heard that Europe is greener and more beautiful than it has been for decades.

**B**ut right now Ester is planning a picnic with friends in a local park. She turns up the volume of the music in the car while a news broadcast tells listeners what it used to be like, specifically in the 2020s when almost 50% of young people said they didn’t want to have children on account of the climate crisis, and about when young people’s concerns about global warming, ice melting and severe weather events destroyed their dreams.

It’s a new era now.

Even if we don’t know what the future will be like and Ester is just a fictional figure, this story is an attempt to describe the best outcome of the sustainable development goals which the world’s leaders adopted in 2015 and which mean meeting the needs of the present without compromising the ability of future generations to meet theirs. Ester’s life may be idealistic, but it’s also a kind of vision, even though several of the planet’s limits have already been crossed.





Now let's return to our own time to meet Alexandra Nikoleris, associate senior lecturer, environmental and energy systems studies at Lund University, who has studied transition narratives, among other things. She believes that visions like the one about Ester have great value. "We need narratives that make sustainability more concrete so that we can write ourselves into narratives like these," says Alexandra and adds: "A lot of research shows that most people today take climate change seriously and want something to be done about it but don't know what, or what role they should play."

That fact that we live in a narrative doesn't have to mean that we can't change it. The power of change lies in the narratives we choose to activate, believes author Mary Alice Arthur, who calls herself a story activist.

Another believer in the power of storytelling is Christiana Figueres, the lead architect of the Paris Agreement who now runs an organisation called Global Optimism. In her book, titled *The future we choose: Surviving the climate crisis*, she writes a story similar

to the one about Ester, and in her most recent article she likens Europe's dependence on Russian fossil fuels to a smoking lung cancer patient who starts up his own tobacco plantation rather than quit smoking.

To reduce the cognitive dissonance, the inner conflict between what we know and how we act; that is where these stories fulfil a purpose. But she also realises that many will push back if the narratives are expected to result in restrictions on our freedom of speech.

"That's why collective narratives often work best. That people share their experiences on trains and when cycling together, for example," she says.

In an ideal world, Sweden's vision is to become the world's first fossil-free welfare nation, but a lot still needs to be done to achieve its climate goals and realise this vision.

The overall aim is to achieve net zero emissions of greenhouse gases into the atmosphere by the year 2045 and thereafter negative emissions. To have a chance to experience at least some of what Ester can enjoy after 2050, there needs to be an annual reduction in emissions of 6–10%.

"The pace of climate transition remains too slow, and current policy is insufficient for achieving the climate goals," writes

the Swedish Climate Policy Council in its 2021 report.

But wait a minute – Sweden's domestic emissions amounted to 46.3 million tonnes CO<sub>2</sub> equivalents in 2020, representing a record reduction of 8.9% compared with 2019, which is well inside the government's stipulated reduction range. The decreasing emission levels depend on lower generation of emissions from industry, domestic transport and electricity and district heating sectors, though, according to the Swedish Environmental Protection Agency, they also result from less activity during the COVID-19 pandemic.

Emission reductions in any one year do not diminish the greenhouse effect, either; the concentration of greenhouse gases in the atmosphere simply increases temporarily at a slightly lower rate than it otherwise would have. It is not until net emissions reach zero or are negative that the conditions will be in place to stop global warming. And to reach that point, global emissions would need halve every decade from 2020 in order to reach net zero by the middle of the century, according to the UN's Intergovernmental Panel on Climate Change (IPCC).

The real world isn't even close to Ester's. There is no point in time when all the problems disappear, but despite the problems there are some possible





solutions, a sustainable development, that is highlighted by the IPCC and the global sustainable development goals, among others things, such as:

- Replace fossil fuels with renewable energy and carbon capture and storage.
- Protect and expand the biosphere. Restore wetlands, forests and transition to sustainable regenerative agriculture and forestry practices.
- Transition from a linear to a circular economy. Complete the cycle. Reduce wastage and waste. Reuse and sharing economies.
- More equitable distribution of resources, energy and environmental space.

In a changed world like Ester's, you can imagine that it's easier to do the right thing. Ester knows that you can't buy your way to happiness, just as no one would be happy if they just wore broadcloth and ate porridge all day.

According to researchers, the transition must result in maintained or improved quality of life if a sustainable lifestyle is to appeal to enough people and remain as sustainable over time. Other stories and realities must of course be taken into account, such as those of indigenous peoples and other groups of people and of places that are severely impacted by the exploitation or extraction of natural

resources. A resilient future that can handle disruptions and still be further developed involves ecological, social and economic sustainability.

**A**fter the summer of 2022, when Europe was on fire, when temperature records were broken one after the other and when drought spread across almost half the EU – what are we supposed to think? And is this a result of the climate crisis?

Researchers, meteorologists and the media have long insisted that an individual weather event could not be linked to climate change, and sceptical voices have insisted that weather always varies.

But in recent years a new research field has emerged: extreme event attribution. Using vast amounts of data, researchers can with greater certainty attribute individual weather events to global warming, or to put it another way, they can say how much a weather event can be attributed to human-induced climate change and how much to natural variations. And when it comes to extreme rain and heat waves, there is strong evidence to indicate that they

are caused by human influence. The European Commission, acknowledging the seriousness of the situation, last year adopted a new strategy for adapting to climate change, since the impacts were already noticeable and adaptation to a warmer climate therefore had to happen sooner and be more comprehensive.

Resilience must be enhanced, and according to the IPCC, that is best achieved by countries meeting the emission targets they have set, but enhancing the resilience of cities and societies comes neither easily nor cheaply. The insurance industry in a number of countries has begun murmuring that while its business is to protect against disasters, it will be a totally different situation if the unexpected becomes the expected. "We cannot insure what we already know will occur," says Staffan Moberg, a lawyer from the industry organisation Insurance Sweden and an expert in climate-related damage.

Now back to the future. Ester doesn't think about commonplace things like sustainability and adaptation. She knows that the climate threat was considerable during the first decades of the 2000s, but it's something she no longer gives much thought to because she's busy enough living her own life. One day at a time. One step at a time. She runs her fingers through her hair, pulls down her sunglasses and hurries off.





# No human left behind

**For one year, Sumeet Singh Patpatia has been Head of Diversity, Inclusion and Belonging at Schibsted. After collecting data one thing is clear – there is a lot of unleashed potential that could spur on innovation.**



*Sumeet Singh  
Patpatia*

Head of Diversity, Inclusion and Belonging  
Years in Schibsted: 1

**I**n a rapidly accelerating world, where markets, trends, customer behaviours and needs constantly evolve, companies must evolve as well. In addition to this, we face challenges of enormous complexity and scale – the climate crisis, energy costs, an uncertain macro-economic outlook and a war in Europe.

Never has the need for different perspectives and inclusion been more urgent. With a greater range of diversity in the room comes a wider range of perspectives, ways of thinking,

understanding behaviours – and greater responsibility.

Inclusion is about the ability to unleash the potential of all kinds of people, to make everyone thrive, feel seen and translate that to better products and services. And to have the right team in place to spot the relevant, changing needs. By broadening the range of diversity in our teams, the possibility to innovate and innovate even better increases.

That's why we, for a year now, have been working on a plan to make Schibsted an even more diverse and inclusive place to work, a place where everyone should have a sense of belonging. We already do a lot, and in many ways, we are a diverse and meaningful home for more than 6,000 brave and adventurous employees. But it has also been crucial to

really understand how we can improve. During the last year, we have been traveling around and meeting employees in every corner of the company to do some extensive data analysis.

**W**e have conducted more than 100 internal interviews, three deep studies in three different organisations, and integrated the DIB-aspects in our internal survey.

Our findings show that the majority of our employees find that we have an inclusive culture. But when 89% say we have a culture that is free from bullying, harassment and discrimination, you also need to consider that some still disagree.

And when in another survey, 9% find the environment evasive and passive and 3% say it's segregating, you also need to acknowledge that people belonging to a majority feel more included than people belonging to minority groups.

It's sometimes easy to be satisfied with big numbers – but in order to really find out what is needed, you have to dig





deeper. For instance, we also found out that there is a lot of hidden diversity expertise that is rarely or never taken into account. Such as people who have lived abroad, or perhaps people who are married to someone with a different culture experience.

No doubt, people do see the need for diversity and inclusion, and its connection to improved product development – and that curiosity is a key behaviour to support this.

Our next step is to go from data to action, and to translate those perspectives into tangible value. We have also established local DIB groups in Finn, Blocket, Lendo, Aftenposten and our data and tech department already, and more will come.

And we have a DIB strategy in place – these are some of the actions we are focusing on now:

- Developing inclusive employee life cycle processes, starting off with creating an inclusive recruitment process playbook.
- Introduce programs and trainings to develop culture and competence within DIB.

- Implement a DIB maturity index – to really understand our state much deeper.
- Get insights about and understand customers that we don't reach today.

But most important is to build competence throughout the organisation. In the end the responsibility to include all rests on both colleagues and leaders.

Because as humans, we exclude people consciously and unconsciously all the time. And being excluded is painful. It actually impacts our brain in the same manner as physical pain. Whether we weren't selected in the football team as kids, never invited to the prom, or we find out that our friends, who we thought were close, got married and didn't invite us. Whatever it is doesn't matter – it all hurts.

People around us may go to work and feel excluded every day. Having a feeling that they need to fit in to a specific culture, where you must park your unique perspectives in order to thrive. Perhaps not daring to share ideas in the product development room,

lifting perspectives in the team meeting or always feeling misunderstood, because the context you are in doesn't understand your angle.

**W**e know that when we feel excluded, we limit ourselves. We might be afraid of opening up or sharing our perspectives or ideas. So, creating a culture in which everyone dares to share boils down to the responsibility of the leader and the colleagues. For colleagues, it is about our ability to invite and include perspectives (competence) of our colleagues with different experiences when we write or develop products. For leaders, it is about their ability to understand the full potential of everyone and making sure those perspectives are visible and that you as a leader listen to them.

Our vision in Schibsted is to develop the best workplace, a place where you can be you. And that is our main tool to empower all kinds of people in their daily lives. To make that happen, we need to keep on investigating, learning and following a clear plan.





# LIVING IN WAR

When Russia invaded Ukraine, hundreds of thousands fled west – and millions remained to defend themselves and continue their lives. Future Report has collected some of the best pictures from photographers employed by Schibsted's newspapers who has visited the warzone.





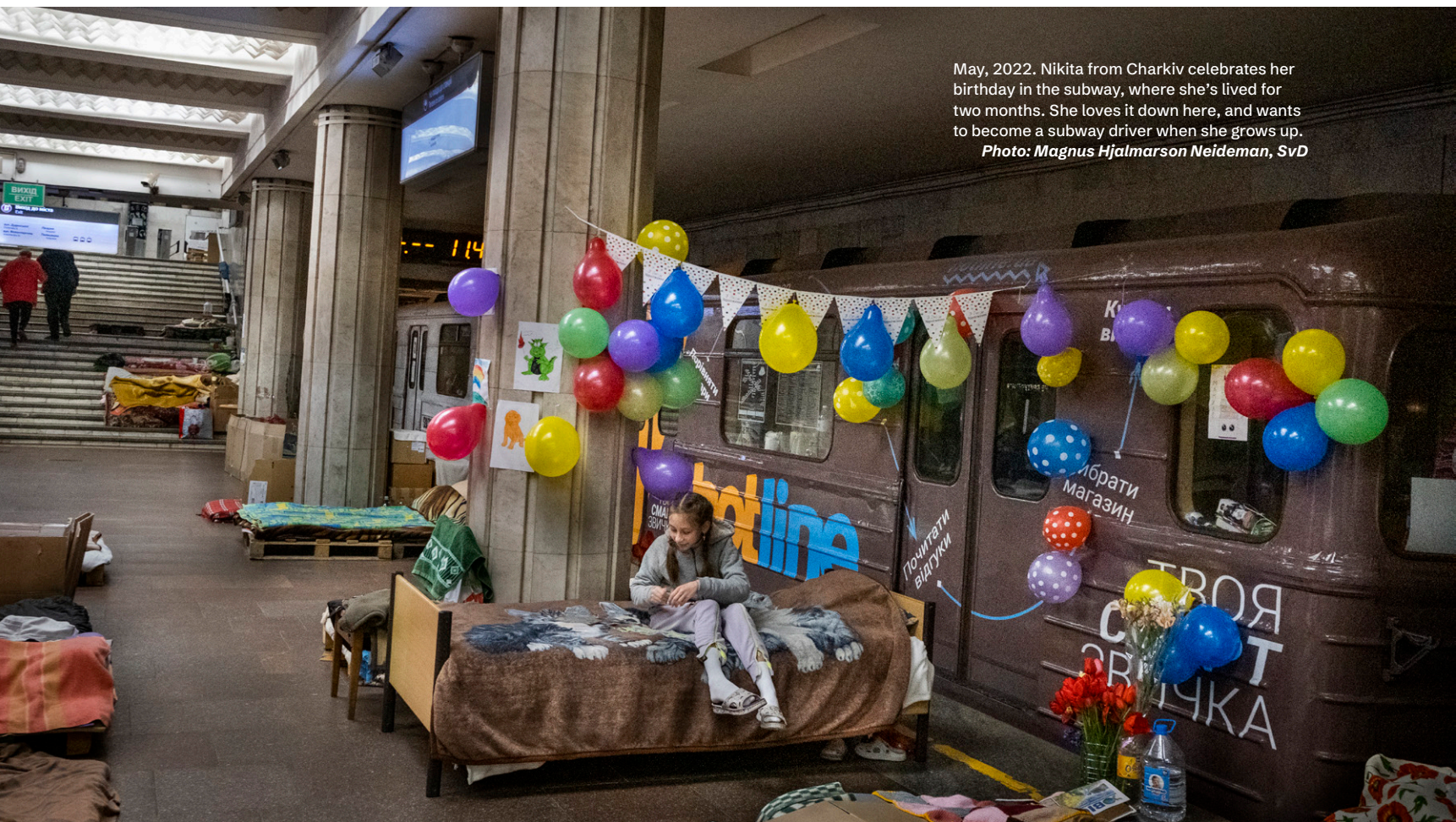




April, 2022. After enduring weeks of Russian bombardment, only a few residents remain in the Saltivka area in Charkiv. *Photo: Harald Henden, VG*



September, 2022.  
“Only my children, or my grandchildren, will see the end of this war,” says sniper Oksana.  
*Photo: Linus Sundahl-Djerf, SvD*



May, 2022. Nikita from Charkiv celebrates her birthday in the subway, where she's lived for two months. She loves it down here, and wants to become a subway driver when she grows up.  
*Photo: Magnus Hjalmarson Neideman, SvD*



March, 2022. Women in the Isidia clinic give birth while bombs fall outside. At 7 pm every day, staff, mothers and newborn move down into the basement for protection. *Photo: Nora Savosnick, Aftonbladet*





September, 2022. A refurbished SAS airplane transports injured Ukrainian soldiers to hospitals in Western Europe, mainly in Germany and the Netherlands.

Photo: Jan Tomas Espedal, Aftenposten







July 2022: Captain Dmytro Pletentsjuk  
inspects the destruction in Mykolaiv.  
*Photo: Paal Audestad, Aftenposten*



September, 2022. Six kilometres behind  
the frontline near Cherson, Ukrainian  
artillerymen return fire at the Russian positions.  
*Photo: Harald Henden, VG*



March 2022.  
Olha Shymyal, 20,  
says goodbye  
to Volodymyr  
Moliadynets, 24,  
as he's leaving  
for the warzones  
in the east.  
*Photo: Krister  
Hansson,  
Aftonbladet*









September, 2022. When Aftenposten visits the military graveyard outside of Charkiv, workers have just started using excavators instead of digging by hand.  
*Photo: Jan Tomas Espedal, Aftenposten*



# Are we dreaming big enough?

CRISPR-Cas9 has given us tools to rewrite life. The discovery on how to edit our genes is said to be the holy grail of science with possibility to fix gene disorders and improve people's lives. Yet, not that many treatments or applications has been developed. How come?



**Mikaela Åkerman**

Editor, Omni  
Years in Schibsted: 8

A few years ago, American biochemist and Nobel prize winner Jennifer Doudna was working on her laptop in an airport lounge in New Jersey, when a couple walking by with their two boys caught her attention. The younger boy made his way on crutches, displaying signs of a hereditary disease called muscular dystrophy.

"Generally manifesting in childhood, the disease steadily robs those who have it of their ability to walk.

Eventually, I knew, the crutches would no longer be





enough,” she recalled in an article in *The Atlantic*.

Doudna had just come from a meeting where a cure for the boy’s disease appeared possible, using CRISPR technology to rewrite the DNA of kids just like him.

“Imagining how the technology I’d helped create could change this boy’s life, I was overwhelmed with emotion. Beyond hope and wonder, I was filled with a sense of fierce urgency to expand CRISPR’s impact to the people around the world who need it most,” she wrote.

In 2020, Jennifer Doudna and Emmanuelle Charpentier received the 2020 Nobel Prize in Chemistry “for the development of a method for genome editing”, known as CRISPR-Cas9. As with many great scientific achievements, scientists before them had made ground-breaking discoveries that paved the way for their work.

In 1987, Japanese molecular biologist Yoshizumi Ishino and his colleagues discovered a protein named Cas9 found in the *Streptococcus* bacterial “CRISPR” immune system that co-operates with guide RNA and works like scissors. The protein slices up the DNA of viruses, preventing them from infecting the bacterium. This natural

defence system was later characterised by the Spanish molecular biologist and microbiologist Francisco Mojica. However, it was Doudna and Charpentier who showed, in 2012, that they could use different RNAs to program the protein to cut and edit different DNA. The potential of their discovery seems endless.

“It’s a little scary, quite honestly,” Doudna told *The New York Times* about the possibilities of our CRISPR future. “But it’s also quite exciting.”

Our DNA is called the blueprint of life. It contains the genetic code, which is essentially the instructions for creating an organism. By altering our DNA, we can, in a sense, rewrite the rules of life. Our eye colour, hair colour, height and the size of our noses – it’s all determined by our genes. Unfortunately, errors in our DNA can cause severe diseases. Sickle cell disease, Cystic fibrosis, Down syndrome and Huntington’s disease are examples of genetic disorders.

“If we could go in and fix these mistakes, we could save many, many lives and get rid of these diseases,” philanthropist Bill Gates has explained. Editing DNA with precision has, as he puts it, been the holy grail for scientists for decades. His foundation is funding

work to see if CRISPR can be used to knock out mosquito populations dramatically, as well as to make better seeds, help with very accurate diagnostics, and lead to cure for HIV and things like sickle cell. CRISPR has also been used to enable T-cells (a part of the immune system that focuses on specific foreign particles) to find and destroy cancer cells.

As Gates points out, using the CRISPR gene editing tool for curing diseases isn’t very controversial. The idea of changing the DNA that determines your baby’s eye colour or skin tone, however, is another story. Most scientists agree that this is something we should not do. But where should we draw the line? And how do we make sure we don’t cross it?

In her article, Jennifer Doudna writes that the advances made so far – and those still to come in preventive medicine, diagnostics, agriculture, biomanufacturing and synthetic biology – promise to improve the lives of millions of people. They’ve also launched companies and helped existing ones break new ground. This growing CRISPR economy was estimated at USD 5.2 billion in 2020. Venture capitalists poured more than USD 1 billion into the growing ecosystem of genome-editing companies in 2021 alone.





"Sometimes, when I think about my part in all this, I am overcome," Doudna writes. At the same time, she asks: Are we dreaming big enough? Moving quickly enough?

Her answer is "no". She compares it with cell phones, which went from a niche luxury technology to outnumbering the human population, creating new economies and changing the way we live. For the CRISPR technology to be widely adopted, it needs a push, just like mobile phones did, Doudna argues.

"Realizing CRISPR's full potential will require many more of us

to come together. (...) Academic scientists, industry researchers, investors, policymakers and members of the public each have a role to play," she concludes.

**A**fter reading Doudna's article, I couldn't help but wonder why more wasn't being done to make sure we seize this possibility to improve the lives of so many people. Here we have a pioneer of her field, waving her incredible tool, urging the world to see its potential and use it. I was curious to know if she had received any reactions to the article. Had it been the wake-up call she might have hoped?

In an e-mail, Doudna's Lab Coordinator Keana Lucas assured me that the reactions to The Atlantic op-ed were positive.

"At this 10th-anniversary mark, it's clear that CRISPR tech has made remarkable

progress. Winning the Nobel has only brightened the spotlight and amount of investment and engagement in a technology that promises to positively change our health and the health of our world," she told me.

**W**hat about Emmanuelle Charpentier? Where does she stand on all this? Emmanuelle Charpentier is a French professor and researcher in microbiology, genetics and biochemistry. As of 2015, she has been a director at the Max Planck Institute for Infection Biology in Berlin. Between 2009 and 2017, she worked as a research director and guest researcher at Umeå University in Sweden. In a video clip on the University's website from 2015 – five years before she received the Nobel prize – Charpentier explained her discovery as "a Swiss Army knife that allows repairing genes".

"If you want to discover something important, you need to ask maybe crazy questions. It is when I came to Umeå that I developed a project that was to somehow bring together two different mechanisms that became the CRISPR-Cas9 mechanism," she says, adding that her ultimate wish is that the technology be used to treat serious genetic disorders.

In 2019, Charpentier founded a company called CRISPR Therapeutics. In 2022, the company published preliminary results from a clinical trial showing that 15 patients with beta thalassemia – a severe type of anaemia that requires lifelong reliance on blood transfusions – had gone months without needing transfusions after receiving a drug that edited the gene that caused the disease. In an interview with El País, she explained that she is focused on looking for new forms of gene editing to combat antibiotic-resistant infections. She also said she believes that one of the greatest dangers we face is that the basic sciences are no longer attractive to young people, people who will need to invent new treatments and medicines in the future.

"I think we all – and especially young people – need to ask ourselves what





kind of world we want to live in,” she told the Spanish newspaper.

Marcus Jarås is a Swedish associate professor at the Department of Clinical Genetics at Lund University. His work focuses on using CRISPR to find new targets for cancer treatments. Using CRISPR to better understand the biology behind different diseases is the most common way of using the technology today, he explains. Swedish scientists were quick to start using the CRISPR technology, but as far as Jarås knows, it hasn’t led to any new treatments yet. That isn’t surprising, however, considering that it normally takes ten years from discovery to approval of a new treatment.

Use of CRISPR as a gene therapeutic treatment is further complicated by the fact that there are patents in the field that require licenses for technical commercial services, Jarås adds. In part, he shares Doudna’s analysis that CRISPR needs a nudge.

“More can always be done, but I still think that CRISPR has very quickly established itself as a powerful new tool for gene editing, not least in biomedical research. On the other hand, things are slow with CRISPR in plant breeding due to the GMO debate that led to EU legislation that makes it difficult to use this technology. In this area, CRISPR could really use a push,” he says.

**B**ut if CRISPR can fix errors in our DNA code, could it also accidentally cause them harm? According to Swedish researchers at Uppsala University, who’ve experimented with editing the DNA of zebrafish using the tool, the answer is “yes”. Their studies show that there were several types of unexpected changes to the fish DNA.

Sometimes, larger parts of the DNA than intended were changed. Other times, the edits were made in the wrong part of the genetic material. The researchers also saw that the mutations could be passed on to future generations of zebrafish since they had occurred in fertilized egg cells. The techniques currently being developed for humans, however, are

not using reproductive cells. There is, in other words, no risk that the changes – good or bad – can be passed on to the offspring.

The point of the research, according to the scientists, is not to suggest that gene scissors are an unfit tool for treatment. Only, that it needs to be handled with caution. The Uppsala University team is now focusing on improving the safety of CRISPR-Cas9 therapies, where cells from a patient are genetically enhanced outside of the body and reinserted as a treatment.

“Such treatments are now being developed for a wide range of diseases. Our aim is to develop efficient methods

to screen for unwanted mutations in the genetically modified cells,” says Adam Ameer, Associate Professor at the Science for Life Laboratory at Uppsala University.

**S**o, the question remains – are we using this tool to its full potential – and if not, what possible advancements are we missing out on when it comes to decreasing pain and suffering? Is it the idea of rewriting the rules for life that is holding us back, or is it simply the time it takes to make sure we get it right? Not even the inventors of the technology seem to know the answer.



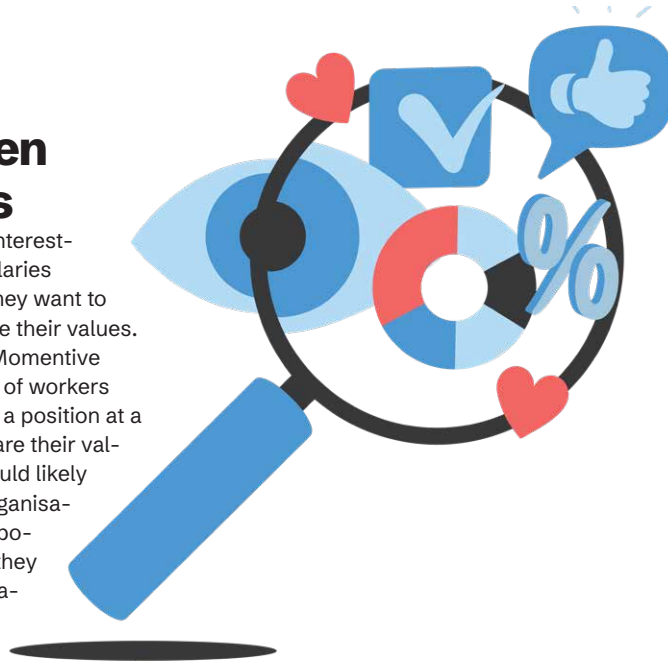


# Workplace trends

The world of work has changed dramatically in the last few years. Employees are more vocal about what they need from their employers, and companies must work harder to both attract and retain this elusive talent. These are the trends we believe will grow in the coming year.

## Value driven employees

Today, employees are interested in more than high salaries and decent benefits – they want to work for firms that share their values. Research from CNBC/Momentive shows that the majority of workers wouldn't even consider a position at a company that didn't share their values, and about 40% would likely quit their jobs if their organisations took a stand on a political issue with which they do not agree. For companies, that means that being transparent about drivers and values can be hugely beneficial when hiring.



## Fostering diversity, inclusion and belonging

Following the previous point – creating a workplace in which diversity, inclusion and belonging are crucial factors creates organisations where people are happier to work. And happy people make for good employees. Diversity of talent, backgrounds and personalities fosters innovation and mirrors the world your company is targeting. Making sure everyone feels comfortable being who they are at work will also open new opportunities and ideas that might otherwise have been overlooked or stifled.

## Upskilling and reskilling

Utilising people you already have in your organisation is not only more important than ever due to the war for talent in many spaces, it also creates a stronger organisation. Seeing and nurturing the underutilised skills of your employees, as well as developing new skills within your workforce, will create more skilled teams and likely more engaged employees. Not only that, hiring externally is difficult and expensive – something most organisations can't afford in the current economy.

## Inclusive leaders are in demand

What's required of leaders is also changing, and companies need to take this into account. Democratic and empathic leadership is in demand. Successful companies need leaders capable of managing a diverse workforce made up of people with different needs and talents. Leading teams without discrimination and bias has always been important, but for many, the work has only just begun. We've seen in the previous trends that employees want their unique needs met, which means thriving companies must take this into consideration when choosing and training their leaders.





## Talents have global opportunities

During the pandemic, many companies realised the benefits of remote or hybrid ways of work, and though many big organisations are clamping down on working from home, others see its potential. The competition for talent now extends beyond the regions of your offices, as companies can hire exceptional talent regardless of distance. This means that talented individuals will have more job opportunities no matter where they are located – but it also means that the war for talent is far more competitive as the talent in question will have more choices.

## Develop management in-house

Developing your management – not only your executives – is critical to success. Promoting talent without thorough management development can result in poor performance and dissatisfied teams. By developing the talent you already have in-house, you're not just making use of a lot of existing knowledge, you are also more likely to retain them. Management development helps close skills gaps at an organisational level and increases your human capital: the knowledge, intelligence, and experience within your workforce.

## Finding the right hybrid model that fits all

Continuing with trends borne out of the pandemic, employees are craving more flexibility in the way they work. That does include where to work – whether from their home, an office, or even on a sunny beach somewhere – but also when and how they work. A lot of people who started working from home in 2020 found that they could be more effective and enjoy their work more if they had more flexibility to decide when they worked best. For some, that still means a nine-to-five workday in the office, but for others, it may mean splitting their workdays into chunks of two or four hours, enabling them to pick up kids from school and spend time with their families during the afternoon, and then get a couple of hours of work in after the kids have gone to bed – for example.

## You need to offer personal growth

Following the big shifts in the job market over the last couple of years, whether you want to call it the great resignation, the big quit or the great re-shuffle, a lot of potential employees want and expect more from their workplace. The need for growth in the workplace now goes beyond professional – people are looking for personal growth as well. Being able to facilitate this in your organisation, through mentorship programs, soft skills development or other offerings, will make you far more attractive as an employer. The future of work is also about employee well-being. Staying healthy and happy at work is in many ways crucial.





# A strong community that built a strong business

**Tori is Finland's largest and most popular peer-to-peer marketplace. As a beloved brand the company will have an important role in Schibsted, to make circularity the obvious choice.**



**Laura  
Ruokola**

Communications Manager, Schibsted  
Marketplaces Finland  
Years in Schibsted: 1

**O**n Tori, you can buy anything under the sun – from furniture to hobby equipment, and from cars to apartments. Each month, more than 3.4 million Finns use Tori. There are over 500,000 deals closed, and more than 2.5 million contacts made between buyers and sellers.

Over the past 13 years, Tori has grown to be an integral part of the Finnish way of life and is currently the 11th most visited website in the country with more hits than Instagram. The marketplace has been instrumental in radically changing the way Finns consume and buy things. Used goods are

no longer bought solely to save money or for ecological reasons. Rather, it makes sense to prolong the life cycle of quality products by passing them on to new owners online.

Tori was founded in 2009 by Schibsted, based on its successful Swedish sister brand Blocket. With Jussi Lystimäki leading Tori from its launch, the brand quickly became a significant player in Finland, overtaking previously established e-commerce brands. After four years of operation, Tori became the market leader in online second-hand trade in early 2013, and has since maintained that position, growing steadily through the years.

"When we started, Tori was a disruptive model in Finland. It was free to list ads, users didn't need to register and we offered instant good deals, which made buy and sell a much easier experience than leading competitors were offering," says Jussi Lystimäki.

"All of this created a viral movement and when the inventory was in place radical marketing finalized the success", he adds.

**N**ow Tori has become an institution and a beloved brand in Finland, which is reflected in the way people use its name in creative ways. We can, for example, use it as a verb "to tori" (Finnish: "torittaa", to browse Tori or trade on Tori), or refer to our purchases as "Tori finds".

But while Tori has had great success in the Finnish market and the volume of visitors and deals is high, there is still much more potential in the field of second-hand trade – not just in terms of business opportunities, but also in that it offers a real solution to reduce people's consumption.

Circular consumption is at the core of Tori's business

Tori is the hub of Finnish second-hand trade, and according to the Schibsted Second Hand Effect report, its users have a significant impact on sustainable consumption. In 2021, Tori users potentially saved almost





Joonas Pihlajamaa  
and Jenni Tuomisto  
at Tori's office in Helsinki.





Max Salmi & Hoang Pham takes the opportunity to play a card game on their break.



## THIS IS TORI

- Tori was founded in 2009.
- More than 3.4 million users visit Tori monthly.
- Approximately 50 employees in Finland (out of 250 in Schibsted Marketplaces Finland).
- 1.8 million second-hand items are for sale at any given time, and 13,000 items are sold daily.

172,000 tonnes of CO<sub>2</sub>e emissions, 6,411 tonnes of plastic, 31,085 tonnes of steel and 6,844 tonnes of aluminium – just by selling and buying second-hand and thus reducing the need for new production.

Circular consumption is important to the Finnish people, who are putting increasingly more emphasis on choosing second-hand products and other sustainable alternatives. And in 2022, Finnish consumers perceived Tori as Finland's most sustainable e-commerce brand in the Sustainable Brand Index™ brand study.

In 2016, Jussi Lystimäki took on a new role in Schibsted's Emerging Markets business. He was succeeded in his role at Tori by Juha Meronen, who steered the company for several years. In 2020, Schibsted grew its business in Finland by acquiring Oikotie, a leading online classifieds business from Sanoma, and Jussi returned to the CEO position of the new Schibsted Marketplaces Finland.

With its three marketplaces (Tori, Oikotie and Rakentaja), Schibsted Marketplaces Finland became an even stronger player and Tori continues to be Finland's leading brand in second-hand trade, while Oikotie holds the second place in the jobs and real estate verticals.

The legacy of the brand and its culture over the past 13 years is strong, but it has been renewed over the years with the addition of new employees, including the Oikotie team, in the company.

"Tori has always been a community of empathetic and curious people, and that hasn't changed over the years. Our culture nurtures trust, learning,

and is also challenging the status quo when needed," says Jenni Tuomisto, Director of Tori.

"We are doing impactful business, and that keeps us motivated in our job to deliver great products for a more sustainable future."

Tori's long history, stable position in the Finnish market, and strong culture are accomplishments in their own right. But as the world keeps changing, Schibsted Nordic Marketplaces is adapting its course to stay relevant to meet new customers' needs.

A journey has begun to set the different marketplaces' verticals free – and to find synergies across countries. Read more on page 86.

In this, the work done over the course of a decade in Finland becomes even more important. Throughout the process of setting a new direction, it has been stated that two things cannot be copied from Tori, and those are the people and the culture, and the strong market positions.

Just as with all the marketplaces brands within Schibsted, Tori will remain the familiar institution that users have grown to love and continue to meet in their everyday lives. But behind the scenes, things will be slightly different.

"We are going through a shift both mentally and on a very practical level. We need to adjust our thinking to meet the demands of the changing environment and learn to work in new and smarter ways," says Jenni Tuomisto.

"We have a strong market position and expertise, but also an equally strong community – and this will work to our advantage as we fulfil our common purpose to make circularity the obvious choice," she states.





Heidi Tukiainen, Henna Hietalahti, Jessica Nguyen & Topi Elomaa enjoy their meeting – maybe it's the Schibsted branded socks that keep their spirits up?





# “People don’t want to be obligated to go to the office”

**After the pandemic, the hybrid model has been adopted in many offices. But how it affects work and how to apply it is still unclear. American writer and journalist Anne Helen Petersen is certain – it’s not a quick fix.**



**Ann  
Axelsson**

Senior Project Manager,  
Strategic Communication  
Years in Schibsted: 24

“**T**his is hard work. Sometimes people think we’re going to come up with a quick policy on hybrid work. But we are fundamentally changing the way that we work. It’s going to be hard and it’s going to require continued work,” says Anne Helen Petersen.

She has focused a lot on how we work. She was working as a senior culture writer and correspondent for BuzzFeed when she started to take an interest in the subject. Along with her partner, she wrote the book *Out of Office: The big problem and bigger promise of working from home*, published in 2021, and today she has her own a newsletter, called Culture Study.

When the pandemic hit Ann Helen already had been working from home for several years. She moved from New York to the rural state of Montana to work more on stories about work.

“I experienced a lot of the benefits, which included being able to go for a run at 1 p.m. just because I wanted to. I also experienced a lot of the drawbacks, such as the ability to work almost all the time.”

Now, as we have formed new habits again, the question is if the future will stay flexible.

Data collected by Slack, from surveys with more than 10,000 respondents across ten countries, shows that people working in flexible scenarios or in fully remote scenarios have a greater sense of belonging.

“This is the opposite of what most people would assume. People think that when you’re at the office you feel more of a sense of belonging with your co-workers,” says Anne Helen.

Other numbers from Slack show that employees who perceived their companies to be good at communicating about why and when to come back into the office have twelve times higher job satisfaction than those who don’t feel that their companies are transparent about it.

“To me, this means that transparent companies are cultivating much healthier office cultures.”

Overall, Anne Helen is convinced that most people want a mix.

“They want to have the office as a source of collaboration and community. It’s a place to go to that can add structure to your day and your week. But people don’t want to be obligated to go when they don’t want to and when it’s not necessary.”

Those are also the indications from within Schibsted. Internal surveys show that 75% of the employees prefer

to work in a hybrid or fully remote model. But there are some challenges. Globally, many managers are pushing back on remote work. Schibsted’s statistics indicate the same – managers are slightly less fond of the idea. But Anne Helen doesn’t think it’s because they don’t like it.

“Many leaders’ way of doing their job is really based on meeting other people. There is a managing style that I call “walking around” – they understand if someone is doing a good job by actually seeing them and starting a conversation.”

**T**his is what she believes will lead to one of the drawbacks and what she calls “pre-sentism”. A presence bias that means that the people who are present in the office all the time are the ones who get elevated within the organisation.

“In the US, there’s a real preference for the men to be in the office, so the fear is that we are going to take a lot of steps back in terms of gender equity and leadership.”

But once we do meet in the office, how do we spend that time? Anne Helen believes that we will see a larger understanding of being with one another, like when going to a conference, being with a larger group of people and cross-pollinating ideas. And on the smaller team level, we’re going to see more concentrated retreats – where teams socialise but also do planning and get close collaboration work done.

“To bring in people to plan and brainstorm and then go out and do the work is smart, especially if you are a distributed team.”



This text is based on a conversation between Anne Helene Petersen and Schibsted's former Head of People and Communication, Mette Krogsrud, at Bergen's Media Days 2022.







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78



12



86

## 78 Getting back on track

A decade ago, Formula 1 was a failing sport, with media access tightly controlled. New owners changed the strategy and thanks to a Netflix series, the sport is more popular than ever.

## 86 Transforming sales

As user needs change, online marketplaces must change with them. Schibsted has started that journey. Learn about the ideas and goals, and how to get there.

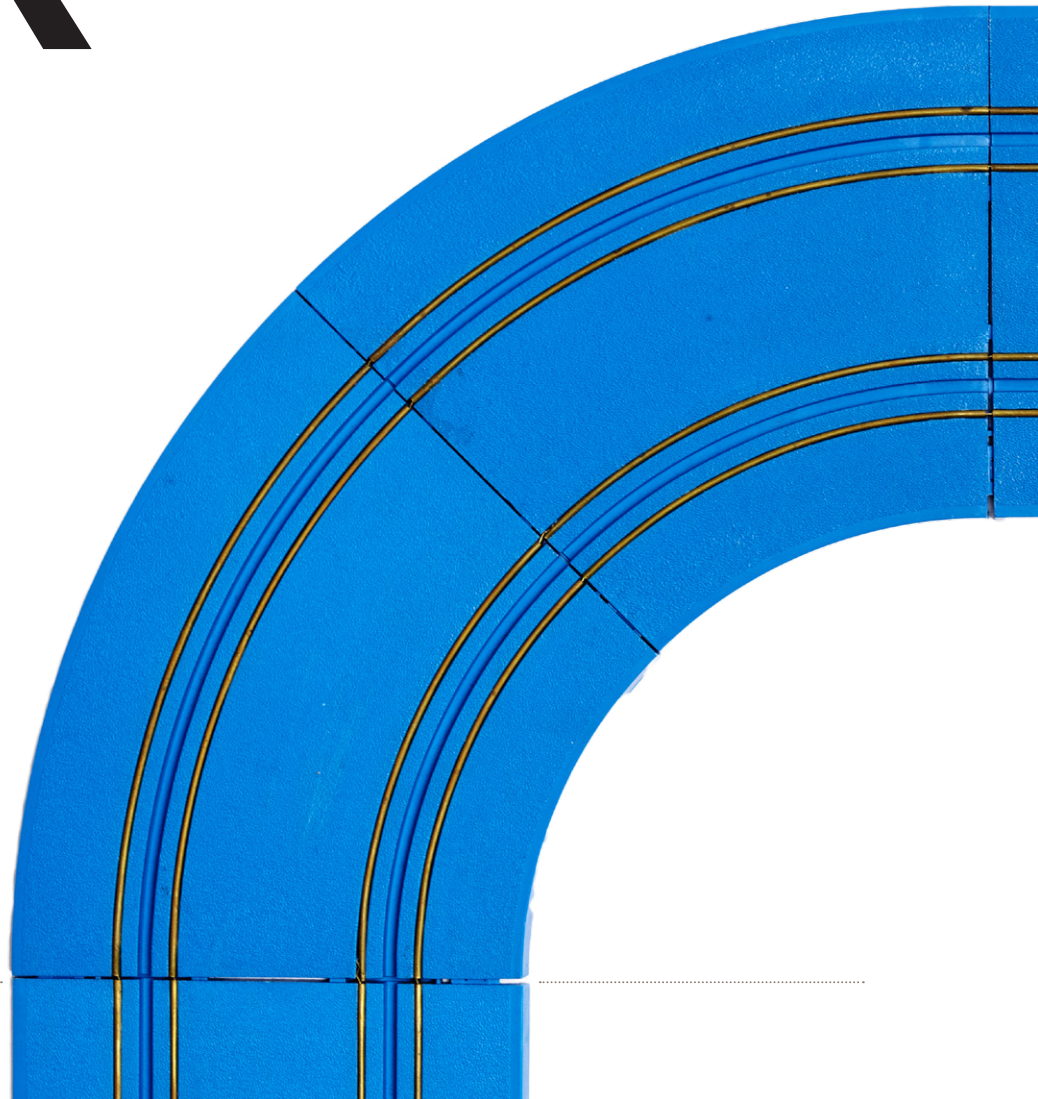
## 96 The generation gap

Digital journalism has never been more profitable. But publications still face one large problem – reaching and understanding the digital-native generations.

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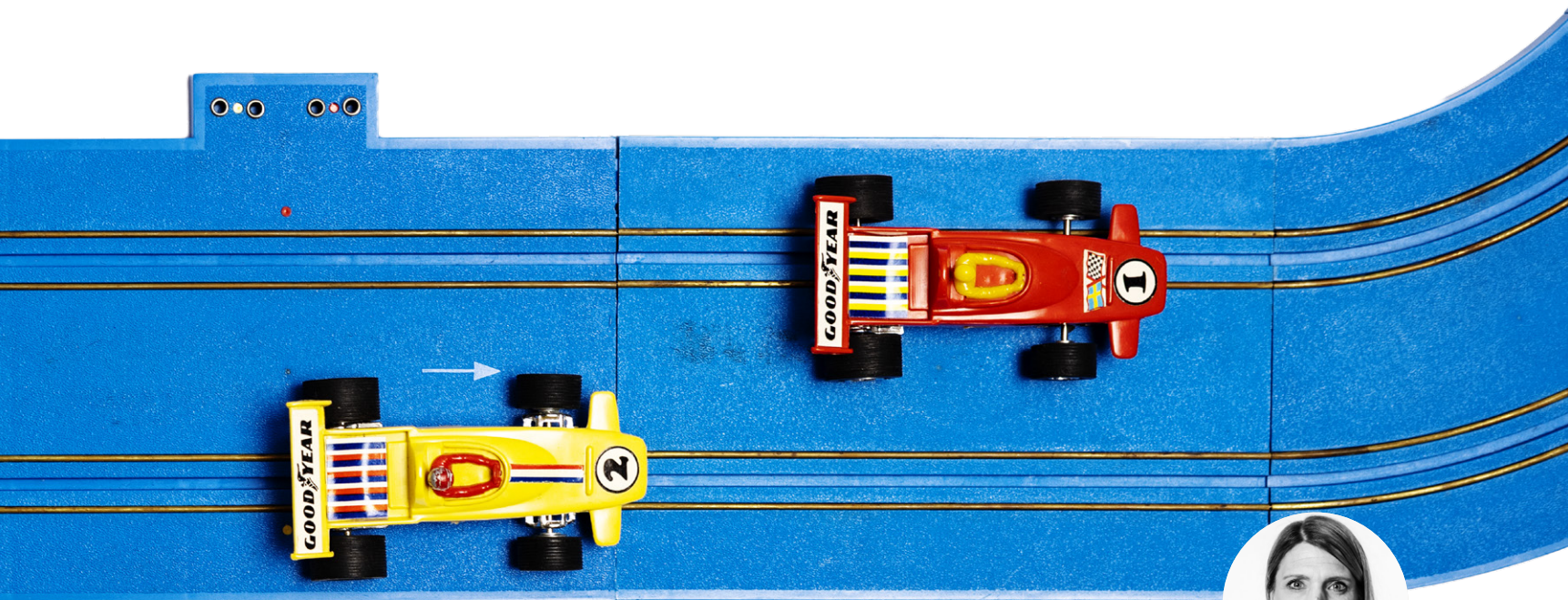


# FORMULA 1 GOT ITS GROOVE BACK





In just a few years, F1 has transformed from being a closed world into a global phenomenon. Thanks to the Netflix series *Drive to survive*, and drivers who have become influencers, a new young audience has discovered the sport.



**I**t all began as a duel of man against man and car against car in 1950. After 67 years, Formula 1 seemed to be on its knees. But now, just a few seasons later, the sport is more popular than ever – and has become an industry that provides entertainment, develops new technology, creates jobs and attracts millions of fans of all ages and from all parts of the world.

To find out how it happened, we need to turn the clock back to December 2016. Nico Rosberg, son of the former world champion Keke Rosberg from Finland, had just won the world championship title in Abu Dhabi. After an intense battle with his childhood friend and team mate

Lewis Hamilton, he managed to win the title in the final race of the season. The entire season was like something out of Star Wars, full of tension, collisions and internal conflicts, but all the drama went unnoticed by the general public. Only the hardcore fans saw the fireworks display that lit up the night skies as Rosberg crossed the finish line. It was a telling moment; one of the most exciting F1 seasons for many years was over, but the audience were failing and Nico Rosberg couldn't really care. He was done.

A few seconds after crossing the finish line, he decided that enough was enough; his ten-year career in

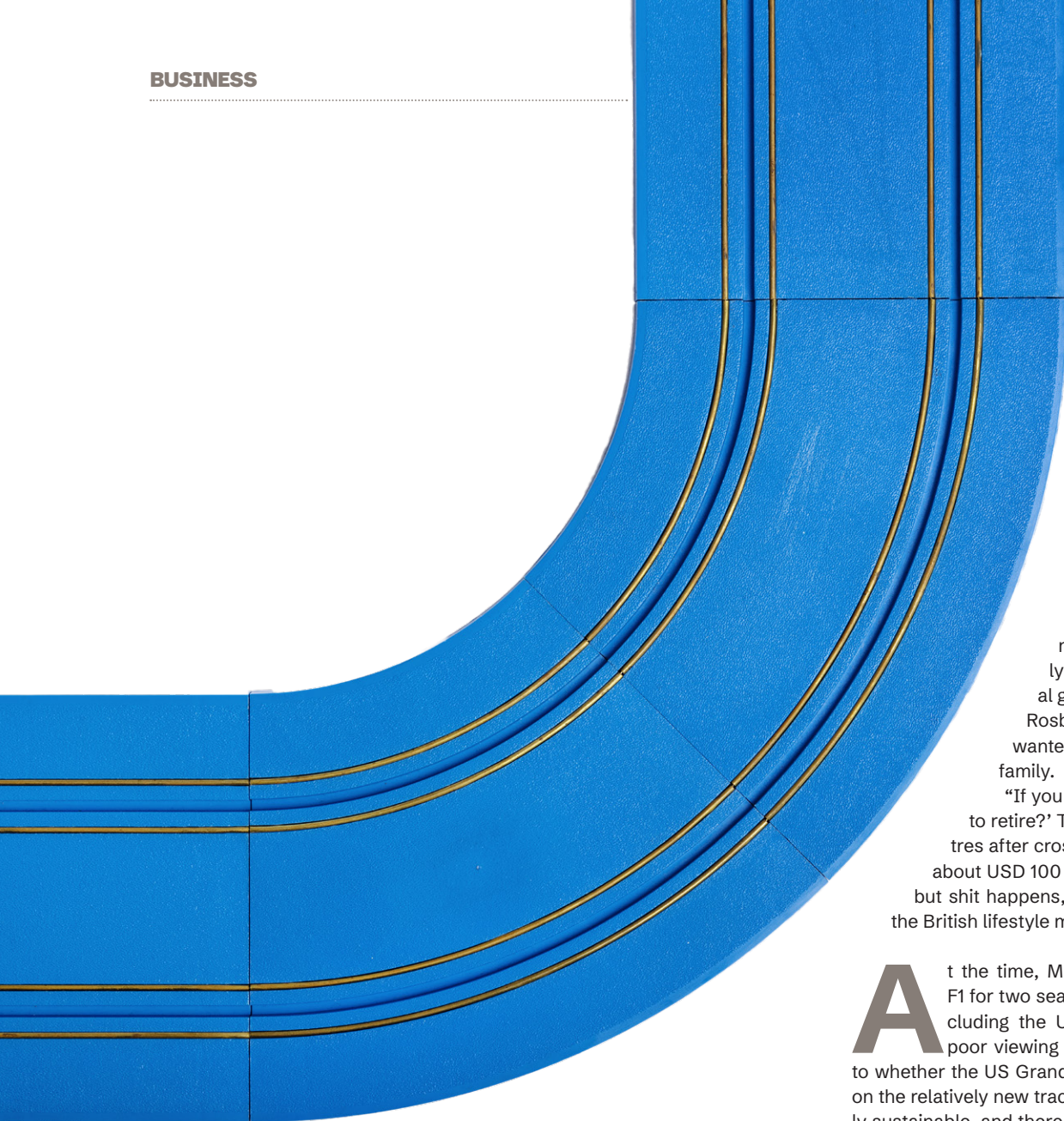


**Anna  
Andersson**

F1 reporter,  
Aftonbladet  
Years in Schibsted: 26







the F1 circus was over. Pre-season included, the season, lasted for eleven months. A life of travelling between race tracks on five different continents and in different time zones, combined with fulfilling sponsor commitments and having a factory based in England and a home in Monaco, took its toll both physically and mentally on a sportsman who had to perform his best every time he got into his car. A Formula 1 driver who is not completely focused not only loses sight of his professional goals; he also risks his life. Nico Rosberg was tired of competing and wanted to spend more time with his family.

"If you ask me, 'When did you decide to retire?' That was the moment, two metres after crossing the finish line. There was about USD 100 million going down the drain ... but shit happens," said Rosberg to *Squaremile*, the British lifestyle magazine.

**A**t the time, Mercedes had been dominating F1 for two seasons, and several markets, including the United States, were delivering poor viewing figures. There were doubts as to whether the US Grand Prix, scheduled to take place on the relatively new track in Texas, would be financially sustainable, and there was a lot of talk of how F1 had yet again failed to win the US market. As it turned out, it was not F1 that drew audiences to the US Grand Prix, but singer Taylor Swift, performing her only concert in the country that year, and the fact that the USD 150 concert tickets included admission to the F1 race. This helped increase the number of spectators compared to the previous year, but the question is how many ticket holders actually stayed around to watch the race, which was billed as the main event. NBC, which had held the F1 rights since 2013, reported that the race in Austin, Texas drew fewer viewers than the figure skating championship broadcast prior to the Grand Prix and the national Nascar truck series. For F1's part, the US market seemed to be hopelessly lost, but somewhere along the line, things took a turn, one that was as unexpected as it was decisive for the future of F1: the sport managed to conquer not only the United States, but the whole world, and attract a whole new audience.

The explanation may sound simple, but it had to do with F1 boss and guru Bernie Ecclestone's exit from the

## THIS IS FORMULA 1 RACING

Formula 1 is a world championship for single-seater formula cars built according to rules set by the Fédération Internationale de l'Automobile (FIA). Teams must construct their own cars in order to participate. The races are driven on asphalt tracks on five continents in the course of one season. The world championship first took place in 1950 and has been staged annually ever since. Nowadays, 10 teams and 20 drivers compete in a race weekend which usually consists of three

practice sessions, one qualifying session that determines the starting order for the race, and one Grand Prix race. Two titles are awarded during a world championship: one to the best driver and one to the best constructor.

The 2021 championship was won by the Dutch driver Max Verstappen for Red Bull, but British driver Lewis Hamilton and German driver Michael Schumacher have won the most titles, with seven each, for two different teams.



sport. Ecclestone was born in 1930 and was already involved in the sport in the 1950s. He gained an increasingly tight grip on Formula 1 as the sport grew in popularity in the 1970s. While stars like Niki Lauda, Ronnie Peterson, James Hunt and Emerson Fittipaldi risked their lives competing, Ecclestone gained control of the TV rights and, together with Max Mosley, later president of the Fédération Internationale de l'Automobile (FIA), laid the foundations for the modern Formula 1. They created a world championship that raked in huge sums of money, became high-profile public figures, and expanded into new markets, particularly in Asia. Simultaneously, Formula 1 was becoming increasingly closed, media access was increasingly restricted, the drivers were hidden behind their helmets and Ecclestone got involved in a string of dubious business deals at the same time as he controlled the championship with an iron hand. During the 2000s he made headlines by praising dictators and Adolf Hitler and talking about his friendship with Russian president Vladimir Putin.

**A**s the times changed, the problems began to pile up, he was indicted for bribery and faced growing criticism. In 2016, the same year that Rosberg won the championship for Mercedes, Ecclestone sold Formula One Group to the US company Liberty Media. By that time he was 86 and had controlled the commercial rights to F1 for 40 years. Even though he still held a formal role in F1 for a further season, he had lost his power base. Liberty Media, a media company owned by millionaire John Malone and whose portfolio includes baseball team Atlanta Braves, has a strong interest in the US market. An organisation was quickly set up with people like Chase Carey, who had experience from Fox Corporation, ESPN's Sean Bratches, and the former team boss Ross Brawn, who won F1 world championship titles with three different teams. As social media became an increasingly important marketing platform, the new owners looked for new ways to increase awareness of the sport and let the public see more than just helmet-clad drivers and cars swishing past. They looked for a totally new way of bringing fans behind the doors which Ecclestone had fought hard to keep closed. After a conversation between marketing boss Sean Bratches and Paul Martin, a film maker who had made several sports documentaries, an idea for a whole new concept was born.

"There was an idea about whether it would be possible to do a behind the scenes with just one F1 team across the season. Sean really liked the idea, but just felt like he wanted to do something that was bigger, that focused on as many of the teams as possible, that was going to show Formula 1 in a completely different light and introduce it to a completely different fan," says Martin, executive producer of *Drive to survive*, for Formula1.com.

A year after Liberty Media took over the rights to Formula 1, the work began on creating the hugely suc-

cessful *Drive to survive*, a reality-based series that is broadcast on Netflix and that takes fans into the garage and lets them hear the drivers' stories and follow them both on and off the track. The series provides viewers with a close-up view of conflicts, contractual squabbles, tragic accidents and emotional wins, a series that not only brings fans into the pits but also behind the drivers' visors, and gives a picture of all the different personalities that work in Formula 1.

The series was first broadcast in 2018, but without the big teams like Ferrari and Mercedes. When the first season proved to be such a hit, however, all the teams signed up, and interest in the sport has snowballed ever since. At the same time as F1 managed to complete almost a full 2020 season despite the Covid-19 pandemic and introduced a new concept of sprint races in 2021 and a whole new set of rules in 2022, interest in the sport has only grown.

Aftonbladet, which in the autumn of 2020 decided to reduce its F1 coverage, changed its mind, and in the course of 2022 has built a brand new platform with live reporting from all practice and qualifying sessions and Grand Prix races, expanded its F1 blog and launched an F1 podcast. The same trend applied worldwide. In The Netherlands, interest in Formula 1 grew by more than 80% in 2021, thanks largely to driver Max Verstappen, who broke Mercedes' Drivers' Championship record of seven straight wins. Interest in the United States has grown by 58%, and in 2021 Formula 1 was the fastest-growing sport on social media platforms. In the same year, the number of followers on Facebook, Twitter, Instagram, YouTube, TikTok, Snapchat, Twitch and Chinese platforms grew by 40% to 49.1 million, and three weekend races drew more than 300,000 spectators.

**W**eekend races drew 365,000 spectators in the UK (Silverstone) and 371,000 in Mexico, and a record-breaking number in the United States, where only four years previously it had depended on the Taylor Swift concert to help draw a crowd. More than 400,000 spectators attended the event in Texas, many of them for the first time. Compared with 2019, the number of spectators increased by more than 130,000 for the weekend race in the US alone.

This led to two Formula 1 races being staged in the US in 2022: one in Miami, which was attended by a host of celebrities and drew an average of 2.6 million TV viewers



**Bernie Ecclestone was  
indicted for bribery and  
faced growing criticism.**



– the biggest ever TV audience the sport has attracted in the US – and the other in Austin, Texas. A new event will be added to the US programme in 2023 in the form of an urban race to be held on The Strip in Las Vegas, and interest is growing among other American racing teams to join America’s only F1 racing team, Haas F1, in what is known as the royal class of motor sport.

For Formula 1 this means a shift in its target market from the traditional European market towards the financially stronger US market. For the drivers it means that, as audiences grow, so will their possibilities to influence people on issues that interest them. In recent years, seven-time Formula 1 world champion Lewis Hamilton has spoken out on human rights, four-time world champion Sebastian Vettel has spoken regularly on climate issues and the right for everyone to have the same right to love, and Lando Norris, a favourite among young fans, has talked publicly about mental health issues.

Moreover, the sport has shifted away from its fossil-fuel dependency towards setting a comprehensive sustainability strategy. By 2030, Formula 1 aims to be net-zero carbon, and from 2026 it will increase the proportion of engines powered by electricity and 100% sustainable fuel. The fuel used by F1 cars already contains 10% ethanol, and only 0.7% of the carbon footprint generated by the sport comes from the combustion engines used by the ten teams in the course of a season. On top of that, the cars contribute to developing an entire motor industry.

Formula 1 is one of the world’s most technologically advanced and innovative sports, optimising performance and developing advanced efficiency improvements that drive innovation forward, from racetracks to passenger car manufacturing. Together with engine partner Honda, manufacturers like Ferrari, Renault, McLaren, Mercedes and Red Bull apply their know-how on the track while thousands of passenger car drivers benefit from their developments in their everyday life.

“AI and ML are big categories that are emerging and that are going to play a key role in the future,” says Red Bull team boss Christian Horner to motorsport.com.

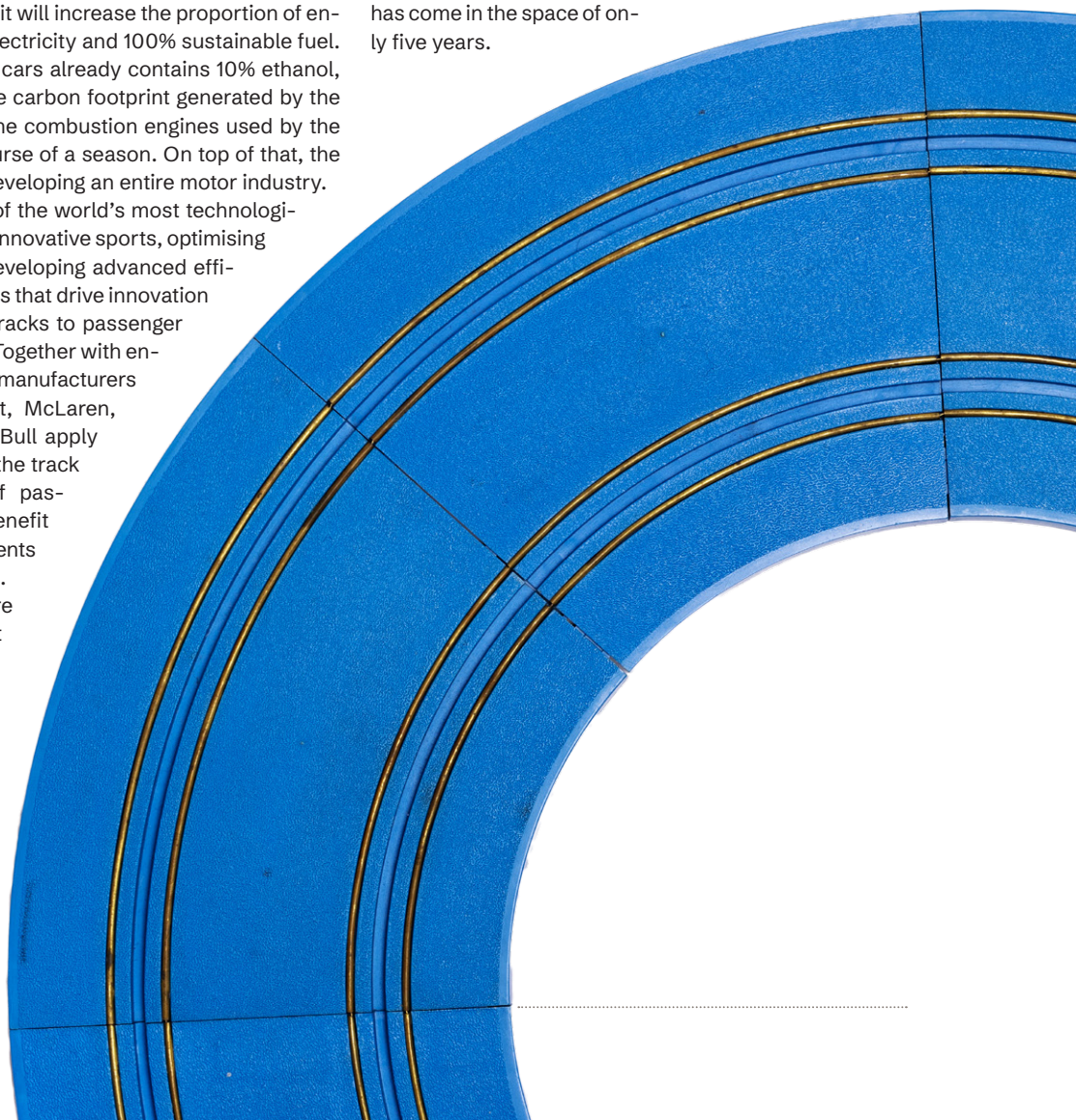
“Data and the way that we operate, it’s

our lifeblood. We just generate so much of it. And it impacts everything we do: the way we run a race, the way we develop a car, the way we even analyse drivers and driver selection.”

For a single F1 team with several hundred members working both on and off the track and in the factory, AI helps with everything from designing a car to deciding in which direction the car should be developed during a season, choosing the pre-race setup and planning the race strategy. This is even more important when F1 is now operating under a budget cap to limit the spending gap between the teams and boost excitement on the track.

“Making the best decision you can to develop your car cost efficiently, so cost-effective performance is absolutely crucial for us as we move forward with the lack of testing, says Horner.”

Twenty-three races are planned for the 2023 season, representing a new record. Several teams are lining up to take part, and Netflix has signed a contract for two new seasons of *Drive to survive*. Nico Rosberg’s comment about flushing close to a billion down the drain when he crossed the finish in Abu Dhabi in 2016 was likely an understatement; that’s how far the sport has come in the space of only five years.





# A formula for growth in Schibsted Sports Platform



Tord  
Overå

Product Manager,  
Schibsted Sports Platform  
Years in Schibsted: 1.5

**In March 2022, Schibsted's sports platform added a new sport for the first time in many years – Formula 1. Behind the decision was a true product strategy to engage younger users, create long-term growth and do something unique.**

**I**n Schibsted Sports Platform, we build three products: VG live, Aftonbladet Målservice, and the Sports APIs. VG live and Målservice together serve around 1.5 million unique weekly users across Norway and Sweden with live sports results, videos and statistics. With over 35 million weekly page views, these services generate more than NOK 45 million for VG and Aftonbladet each year.

Our Sports APIs serve as a one-stop-shop for sports data in Schibsted.

But for years, our main offering has stayed the same: football, handball and ice hockey. To expand our audience and do something truly new, we wanted to extend that offering. The result was our new Formula 1 service, launched in March 2022.

Our F1 service enables both new and seasoned fans of the sport access to:

- Live predictions of who will win the races and world championship.
- Live position of the cars on a race map (usually 30 seconds before you see it on TV).
- Video clips of overtakes, pitstops and other key incidents from the race.
- Journalistic coverage on what's going on, both on and off the racetrack.

When we launched our service, F1 was the world's fastest growing sport (199% fanbase growth from 2020 to 2021).

However, the project started out

with three fundamental questions:

- How can we engage younger users?
- Where can we invest our efforts to show long-term growth potential within our markets?
- What can we do that others have not yet perfected?

These questions led us into a very open product discovery process, including multiple sports. But in the end, F1 stood out as a golden opportunity for us. Here's why:

## F1 ENGAGES YOUNGER USERS

According to research by the motorsport network, 63% of F1 fans are 34 years or younger. Much thanks to the Netflix show *Drive to Survive*, F1's fanbase is close to that of e-sports in terms of demographics.

## WE SEE LONG-TERM GROWTH POTENTIAL IN OUR MARKETS

The main hype around F1 has not been driven by a Swedish or Norwegian rising star. Hypes based on an individual do not necessarily guarantee the popularity of that sport beyond the success of the national star. F1 has become popular as a sport, although there are key individuals boosting that popularity as well.

The F1 articles in VG and Aftonbladet also showed a growing volume of unique readers per article.

Despite the sudden hype, F1 is an old sport, with a significant and loyal fan base in our markets, especially in Sweden, a country that has fostered a total of ten F1 drivers throughout history. The combination of it being a proven sport, with a clear format, with a fresh new hype connected to it, gave us faith that it was worth the investment.

## GREAT POTENTIAL TO DO SOMETHING THAT OTHERS HAVE NOT PERFECTED

If you want to make a new live football service in 2022, you are in for a tough fight. E-sport is efficiently captured by Twitch and YouTube, golf has the PGA Tour app. Tennis is available in multiple services. Because of the limited interest in F1 until recently, there are few live sports services that cover it. Looking through our Schibsted lens, this was a wide-open blue ocean in front of us.

## THE END-PRODUCT AND RESULTS

So far, F1 is generating 600,000 monthly user sessions, and we have established ourselves as a go-to destination for the sport.

After 15 Grand Prixes in 2022, we've reached about 150,000 unique users and 400,000 page views on average, per Grand Prix. Although we are very happy with these numbers, and they exceeded our targets by about 15%, we still believe that the real potential of F1 lies ahead of us. There are users who are still discovering that we have launched a new sport, even though there are no Norwegian or Swedish drivers participating (yet!).









## “People hold companies accountable”

Schibsted's sales organisation in Sweden conducts surveys to help their customers understand their target groups better. The latest is about people's view on sustainability – and it's their most downloaded report so far.

One interesting finding in the survey is that 87% of the respondents point to companies as most responsible for solving the climate issue.

“This shows that people actually do hold companies accountable, not only the politicians,” says Ricki Rebecka Petrini, Head of Marketing and Communication.

At the same time, people understand that many companies find the climate important and want to make a difference – but they also say that they don't find the companies to be credible when communicating about these issues.

For Ricki Rebecka, it's important that her team keeps doing this type of research to serve as a platform for communication and insights.

“I think it's very important that we get to know the target groups that we so eagerly talk about. Really talk to them instead of only looking at what they are clicking on.”

The next step is to look into the trade-offs people are willing to make to help prevent climate change.

“There is often social pressure to say that you are willing to act, but our coming study asks ‘at what cost?’ How many people are actually willing to lower indoor temperatures or pay more taxes? These are the fundamental questions that many brands and societal institutions are trying to answer in order to understand what drives their target group,” Rebecka explains.

### *Ricki Rebecka Petrini*

Head of Marketing and Communication,  
Schibsted Marketing Service  
Years in Schibsted: 1

## One subscription unlocks eight Schibsted brands



For the first time, readers in Norway can get full access to content from several of Schibsted's media brands – with just one subscription.

Marcus Tøstie is the project leader for Full Access, and he's been working on it since March 2021.

“There is an overall trend that people want access to more and more content. At Schibsted, we have so many strong media brands that complement each other well. Based on this, our idea has been to offer these brands as one super bundle, for a good deal,” he explains.

And it's a broad offer. People who already have a Schibsted media brand subscription can get access to all digital content from Aftenposten, VG, Bergens Tidende, Stavanger Aftenblad, PodMe, Magasin +, Dine Penger and E24, for an extra cost that varies depending on their current subscription.

Marcus and his team has found that Full Access can increase both revenue per user and loyalty.

One of the challenges has been to unify different brands to work on one common Schibsted product.

“We have been able to gather the brands and work towards this common goal. And they have learnt a lot from each other's business models,” says Marcus.

### *Marcus Tøstie*

Business Developer,  
Schibsted Common Products  
Years in Schibsted: 8 years

## Users need to get ads that are relevant to them



Louise Lai Wiinholt has gone from being an account manager selling advertisements to a product manager developing advertising products at Schibsted in Denmark. She now supports sales and commerce.

With revenue decline in advertising, Louise and her team are running several discovery processes to understand the sweet spot between users, advertisers and the company's overall goal.

“We need to better understand how to make ads more relevant for the users, while not losing revenue,” Louise explains.

To do so, they are exploring questions like “which ads are perceived as most intrusive by the users?” and “are there any placements they can remove?”. The aim is to find ways of making ads more relevant, integrate them better within content, and look into different formats. They also plan on using machine learning for monetisation and are working to increase programmatic sales.

“It's an important project both to us and the advertisers – we will all learn from this. It's so essential to get fundamentals like this in place. It will basically enable us to serve ads in a much more efficient, relevant and smarter way,” she explains.

### *Louise Wiinholt*

Product Management Balance Squad,  
Schibsted Marketplaces Denmark  
Years in Schibsted: 11 years



# A BOLD CHANGE TO MEET OUR USERS' NEEDS

Schibsted Nordic Marketplaces is starting a journey to meet the need for more specialised services. At the heart of the change is the ambition to be a force for positive change – for both society and the planet. Christian Printzell Halvorsen is leading this journey, knowing that the greatest risk is not daring to change.



*Christian  
Printzell  
Halvorsen*

EVP Nordic Marketplaces,  
Distribution and eCommerce  
Years in Schibsted: 15

**I** joined Schibsted in 2007, mostly because of the people. I loved the engagement and energy you get when you bring together journalists, engineers, product and salespeople.

I was also inspired by the bold decisions that Schibsted's management dared to take. After all, our history is one of bold moves, often in difficult times. Just think about it: We set up FINN in 2000 to compete against our own newspapers. We bought

Blocket a few years later and rolled it out across the globe, to 36 countries, knowing most would fail, but betting that some, like Le Bon Coin in France, would become incredible successes. Sometimes, you must dare to fail in order to succeed.

Today, we know that this fearlessness paid off. In 2019, we spun off our international marketplaces, creating the company Adevinta – which in 2020, bought eBay Classifieds, concluding the transformation from a newspaper company to the world's largest online classifieds operator.

Now we're taking a similarly bold step for our Nordic marketplaces, setting up for the next decade while daring to challenge our success formula for the last 20+ years. We are setting the verticals free and using the combined strength of our Nordic

organisations in a whole new way – all to provide our users with the best possible service in each category.

Things were relatively easy for us in the “classifieds days”, when marketplaces were all about ads and an ad was an ad regardless of what you were selling.

**N**ow users and customers are demanding more and more sophisticated solutions. This gives rise to the specialists, the companies that create beautiful user experiences by investing deeply into solving a very specific problem and then scale the solution across countries.

Marketplaces are also changing and moving towards so-called “next-generation models” which solve more of the users' needs, like payments, shipping, insurance and financing. As we move in this direction, Schibsted's marketplaces must also become specialists. The way you sell a t-shirt is very different from the way you sell a house, and obviously this requires very different solutions. But the way you sell a t-shirt is not that different country-to-country.



Because every action we take today



impacts whether our children and grandchildren will have the opportunity to live in a sustainable world.

Having been in this business for a long time, I sometimes joke and say I have dedicated my life to ads for t-shirts and used cars, but we are so much more than that. As a salesperson working in one of our marketplaces, you may think you're simply selling advertising solutions. As an engineer, you may think your job is to write code. And if you work in customer service, you may think your purpose is to solve problems. But whatever your role in Schibsted Nordic Marketplaces is, you are part of our shared mission to make the sustainable alternative the obvious choice.

**K**nowing what we can achieve is one thing. Actually doing it is something else. We have realised that we have to operate very differently to achieve this new, great ambition. To set our verticals free to evolve more independently, we must think differently around both technology and organisation.

For the last 20+ years, our success formula has been local brands with local organisations and local technology platforms, where the solutions for the different verticals have been highly intertwined.

To let each vertical develop independently, we would have to break the dependencies between them. A person working in real estate shouldn't have to rely on or coordinate with someone in mobility. And that means the technology solutions for each vertical must be separate.

At the same time, if how you sell a t-shirt is similar across countries, we should be able to use that same technology solution across countries. And similarly for mobility, real estate and jobs. That, however, requires us to have a cross-Nordic view within each vertical to decide which common solutions and business models to deploy.

Finally, while we want as much vertical independence as possible, we share certain assets across verticals, like the valuable and loved FINN, Blocket, Tori, Oikotie, DBA and

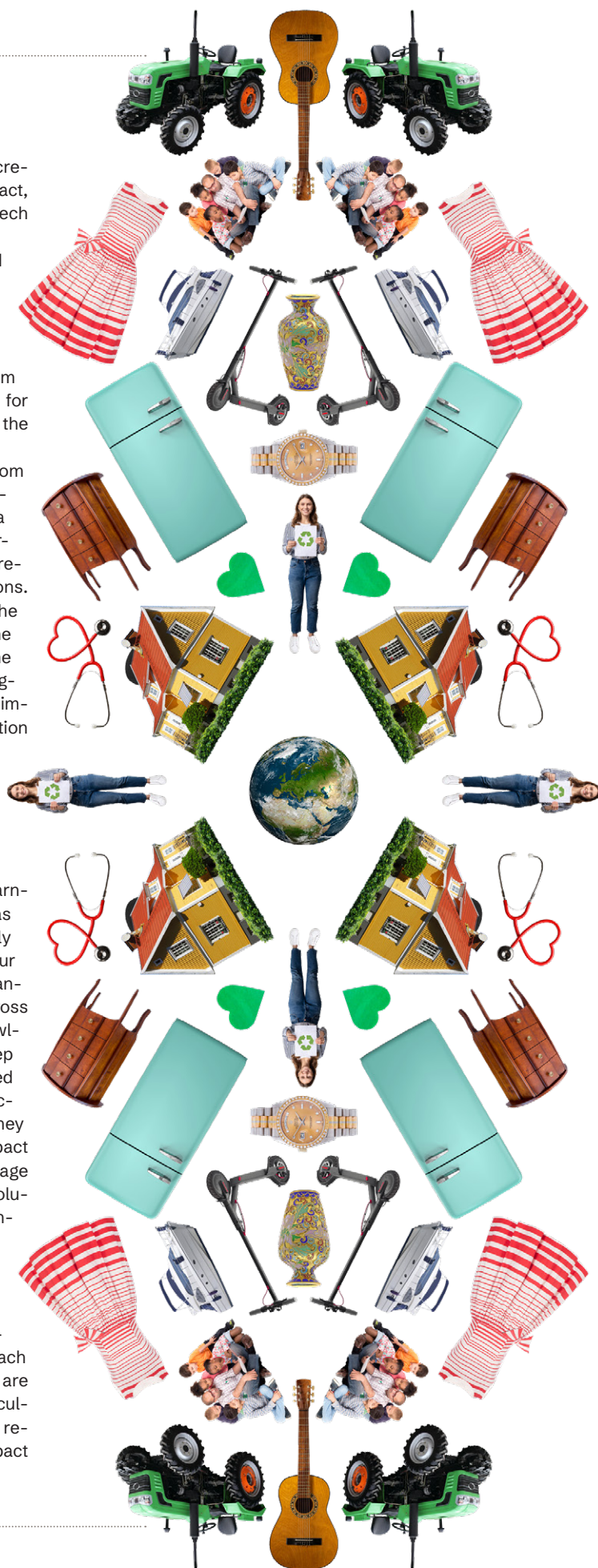
Bilbasen brands. We also need to create strong areas of expertise to attract, develop and retain talent in sales, tech and marketing, for example.

In conclusion, we have decided to move to a matrix organisation with cross-Nordic verticals as the driving force, supported by functions. Similarly, we are moving towards a technology platform where we separate the solutions for each vertical, but where we use the same solution across countries.

This is a fundamental change from how we have successfully operated for more than 20 years. It's a massive change project with inherent risks both technically and with regards to people and market positions. A natural question to ask is: "are the risks too high?" We have taken the opposite view. Staying the same while the world around us is changing is perhaps even riskier. Most importantly, a successful transformation will set us up for the next decade, enabling us to deliver better solutions to consumers and professional customers – and to society.

**B**eing aware of and learning from our history has made one thing extremely clear. Our people are our most important competitive advantage – well over 1,000 people across the Nordics with exceptional knowledge about marketplaces and deep insight into our markets. To succeed we must create an even more attractive future for them, one where they can succeed and have more impact than today. If we are able to engage our people in finding the best solutions, the other risks will be manageable. That's why we have put people at the front and centre of the transformation.

We have just started this journey, so the outcome is not guaranteed. But we do think our approach is reinforcing everything that we are proud of today – our people and cultures, our brands, our financial results, and more than ever, our impact on society.





# A historic disruption in mobility – and the Nordics are leading the way

The car is perhaps the category within Schibsted Marketplaces that is changing the most, and it's happening fast. The Schibsted mobility team takes us through the major trends behind the change.

**A**fter talking about the electrification of the global car fleet for more than a decade, we are finally seeing it happen. And the Nordic markets are leading the way. In Norway alone, 65% of all new cars sold in 2021 were electric (compared to 17% in Europe) and the other Nordic countries are rapidly catching up.

New consumer needs and behaviours have prompted car manufacturers to digitalise their user journeys, thus side-lining the professional car dealers to a greater extent with an “agency model”. In the future, the purchase process will be digital, taking place online and offering frictionless services and subscriptions to consumers. The Nordics are among the top five countries in Europe in terms of willingness to buy cars online.

This shift is causing several ripple effects, including these five impactful, underlying trends:

## 1 CAR DEALERSHIPS CONSOLIDATE

Future consumers expect and demand a digital relationship to the car industry, both in relation to car buying as well as access to mobility. For the professional car dealers, this is a golden opportunity to move online and harvest the results of a transactional buying process – including reduced costs and increased revenue per sale. To remain relevant, dealers will need to invest heavily in new technology. The industry's landscape is changing

dramatically, and the winners are the players who offer the best holistic digital buying experiences, as well as new services for alternative car ownership models.

## 2 CARE-COMMERCE REACHES NEW HEIGHTS

The digital maturity and expectations from both consumers and professional customers are increasing at an accelerated rate. And cars are no exemption. The market for digital car buying is expected to grow to NOK 9 billion in 2026, as the online share of used car sales increases. While both internal combustion engine cars and electric vehicles (EV) transactions will migrate online going forward, EVs are especially well positioned for digital car buying, as these models are not tied to the same legacy business models.

## 3 CONSUMERS STRIVE TO ELIMINATE PAIN-POINTS

Car sales have begun to shift from consumer-to-consumer to consumer-to-dealer (or C2B in business lingo) at an increasing rate, as a growing number of consumers are willing to pay for convenience and want to eliminate the pain points of selling directly to another consumer. According to Schibsted Nordic Marketplaces projections, around 15% of the overall car flow from consumer-to-consumer sales is expected to convert to C2B sales by 2026.

## 4 THE RISE OF NEW OWNERSHIP MODELS

Today we see the rise of new ownership models. The growing sustainability considerations among consumers, coupled with the global production halt of new cars, has pushed even more people to consider “access” versus “ownership” when it comes to their mobility needs.

The leasing market is expected to grow in the coming years and key players are quickly moving to consolidate. And the same goes for car subscriptions. Already today, between 18% and 30% of Nordic car customers have considered, to some extent, accessing a car through a subscription model.

## 5 CONTENT IS KING (OR QUEEN)

Cars are extraordinarily complex consumer goods and when viewed in combination with the electrification boom, that complexity is multiplied. Range anxiety, charging speed, home and away charging are a few of the new concepts to which consumers are adapting, and as a result, the use of online information during the purchase process is increasing.

Today, over 90% of Nordic car buyers go online in connection with a car purchase, according to Schibsted's 2022 Nordic Car Buyer Study. A huge trend, or perhaps better phrased as an opportunity, that spans all the mentioned trends above, is the doubling down on mobility content – content that guides, engages and inspires as we all navigate this historic market disruption.







# A separate hub will dare to challenge





**As Schibsted Nordic Marketplaces transitions towards the next generation marketplaces, a separate unit will find, nail and scale tomorrow's winning business models. The Nordic Accelerator Unit will make sure that Schibsted has the ability to innovate and challenge itself.**



**Rob  
van Sundert**

Incubation Director  
Nordic Accelerator Unit  
Years in Schibsted: 4

**S**chibsted has developed world leading marketplaces and is the largest on-line classifieds group in the Nordics. Now, as we are facing our largest transition in 20 years: going from a horizontal operating model, with strong brands embracing many categories, towards a new, vertical,

specialised operating model, it's time to make change possible.

This transition is fuelled by evolving user needs, leading to disruption which creates great opportunities. New business models and new user segments will emerge, enabled by new technologies that will deliver frictionless experiences.

This urges us to find, nail and accelerate initiatives to build relevant new positions that deliver upon these users' needs. We need to act, both on short term opportunities by sustaining innovation in current verticals, as well as on the longer term

with potentially disruptive innovation. Successful companies invariably face the "innovator's dilemma": navigating between catering to customers' current needs, while adopting new innovations and technologies to fulfil their future needs.

**T**he Nordic Accelerator Unit is our response to this dilemma. Its sole purpose is to find, nail and scale tomorrow's winning business models which help create a more sustainable future. It will separate and accelerate key initiatives to build a relevant, systematic flow of new initiatives. The ambition is to deliver two new businesses that exceed the size of Schibsted's core marketplaces today.

There are great examples of more specialised, niche marketplaces around the globe. They address the needs of a smaller user segment, typically by





increasing convenience. Target users are often “non-consumers” today, either because they lack the financial means or skills to buy the traditional product. Gross margin per unit, certainly at start, will be significantly lower compared to a traditional model.

Established incumbents, like Schibsted, have difficulties as to why they would tap into this. After all, they deliver good value to current users, the new segment is rather small and margins in the new model are not even close to current operating models.

**B**ut as history has shown, small things can get big. Netflix started as a DVD-by-mail rental service. Blockbuster, at the time the video distribution market leader, could have responded to the new competition, but why would they? Netflix was only serving a small user segment that

Blockbuster didn’t serve anyway, and there was no big money in this niche.

The hesitance to respond is logical as Blockbuster had a different profit formula compared to the newcomers. Airbnb and Uber are similar examples, closer to our own focus areas. Needless to say, Airbnb exceeded USD 2 billion revenue and 700 million EBITDA in Q2 2022.

The Nordic Accelerator Unit will make sure we deliver upon the next growth curve and enable proven cases to scale fast. Experimenting with new ideas, building up a pipeline and scaling proven cases fast requires a different way of allocating resources than we do in our core business. It also requires a different governance structure, with other processes and an independent profit formula. The unit will make sure to support the verticals in the best way possible and deliver upon our common ambition.

Research shows that setting up an accelerator increases our chances of success; the survival rate of companies nurtured in a business incubator is 87% versus 44% for unassisted enterprises, so odds are in our favour.

**W**e will start by adapting five cases that are already part of our marketplaces’ brands today. They all have a potential to grow big and will benefit from being part of the accelerating hub.

Qasa (a modern way to rent and let out houses), Pliq (preloved fashion), Nettbil (C2B car auction), Honk (car subscription platform) and Nybrukt (refurbished electronics platform) have nailed their concept and will get the attention, help and governance needed to accelerate quickly whilst benefiting from being (partly) part of Schibsted.





We will also benefit from the experiences of the Future Nordic Marketplaces team in FINN, which will be part of the hub. They build Honk and Nybrukt and bring people and learnings that are now anchored in the strategy going forward, into the hub.

This together with learnings from other accelerators show that there are other important principles to take into account:

- Partnerships are key; Entering into new business areas requires different competences and people. Partnership, especially with start-ups with experience in the area, can create win-win opportunities.
- Try-and-learn culture; A success ratio of 10% is not strange for start-ups. Therefore it's important to celebrate failure, share and embed learnings and stop initiatives in time when KPI's are not met, without blaming the people working on it.
- Current assets to experiment, new assets to scale; With great brands and technology and a fantastic user base, we can very quickly experiment with hypotheses by creating first versions of ideas and learn fast whether they have potential. However, when the MVP is proven, the MVP should most often be thrown out and built up separately to scale. This increases speed, and decreases dependencies on core technology and brands.
- Success requires efforts from the whole organisation; With a small high-autonomy, cross-functional team (which is the way to go for creating MVP's) you can achieve a lot. But without strong co-operation with the core, success rates will rapidly drop. Alignment of ambition and strategy, the ability to get help from experts, access to users and customers and using the brands

are our competitive advantage compared to a start-up. Advisory groups of experts within the organisation that help new initiatives fly is a best practice here.

- Start small but enable scaling; Ideas are often great on paper and can engage users and customers when asked for interest in a survey. Securing the first paying customers in is a different story. Getting an MVP out in the market as soon as possible provides a quick indication of the size of the opportunity.

**T**hese are only part of the principles that we embedded within our strategy going forward. The most important differentiator to succeed, however, will be the people. Building upon Schibsted's tradition of great entrepreneurial mindset, we will be a fearless force for change.



# 8 rules for successful innovation

**A separate hub is one important thing. But there are more aspects to consider for large companies with the ambition to be innovative. Sven Størmer Thaulow shares a set of rules.**



**Sven Størmer Thaulow**

**EVP Chief Data & Technology Officer**  
Years in Schibsted: 3

**I**nnovation has been one of the most used buzz words for decades. In any group of people discussing the topic there will always be different opinions on the definition.

In Schibsted, we have established a common vocabulary around innovation based on the curriculum of Harvard and Professor Clayton Christensen. Christensen defines sustaining innovation and disruptive innovation in the following way:

Sustaining innovation occurs when a company creates better-performing products to sell for higher profits to its best customers. Typically, sustaining innovation is a strategy used by companies already successful in their industries.

Disruptive innovation is the second type of innovation and the force behind disruption. It occurs when a

company with fewer resources moves upmarket and challenges an incumbent business.

In a large company, establishing new sustaining innovation (i.e. a new product towards the same customers) is not easy. It's even more difficult to execute well on disruptive innovation. And God forbid – if you are disruptive against your own core business – then you are in for a real treat.

At the root of this problem is the nature of all innovation compared to the nature of a cash flow generating core business with healthy margins. Innovation means tons of experiments – of which 90% fail. Innovation often equals a long “hammock” of negative financials before hopefully some of the experiments start generating significant financial returns. Innovation = risk appetite + stamina/endurance + entrepreneurial mindset. In many large companies these are scarce resources.

The ability to succeed with innovation in such an environment is dependent on advanced corporate

organisational engineering and hard, cool headed top management. And based on my own experiences in both operating and acting as the custodian of innovation units in large companies, I have concluded on a set of rules that can give some guidance on how to make it work.

These rules are of course not an exhaustive list and many have done the same. In Schibsted, we try to learn and continually improve our efforts to stay a highly innovative company.

## 1 SET EXPECTATIONS RIGHT AND AVOID OVERLY COMPLEX PROJECTS

Large companies are used to large projects and programmes. When innovating, that is not the way to do it. Fire off many small experiments with clear hypotheses about what problem you are solving and for whom. And towards your corporate stakeholders – be crystal clear that nine out of ten experiments will fail. At least!

## 2 GET THE RIGHT PEOPLE WITH THE RIGHT ATTITUDE

Recruit externally primarily and hire only the right people. It's better to grow slow and well versus fast and mediocre. Be careful with too many staff coming from the core business. Why?



They bring with them the corporate way of working and rarely have the risk appetite you need. On the other hand, to not lose touch with the mothership, you do need a few from the core business in the team.

Attitude is also important. When you disrupt your core business, many colleagues in the core will react negatively to what you set out to achieve due to collision of objectives. If this is not the case, then you're not stepping hard enough on the gas. To succeed with disrupting the core business within the same company, you will have to ask for forgiveness, not permission, and not get bogged down in the corporate way of operating. If you do, you will move too slowly.

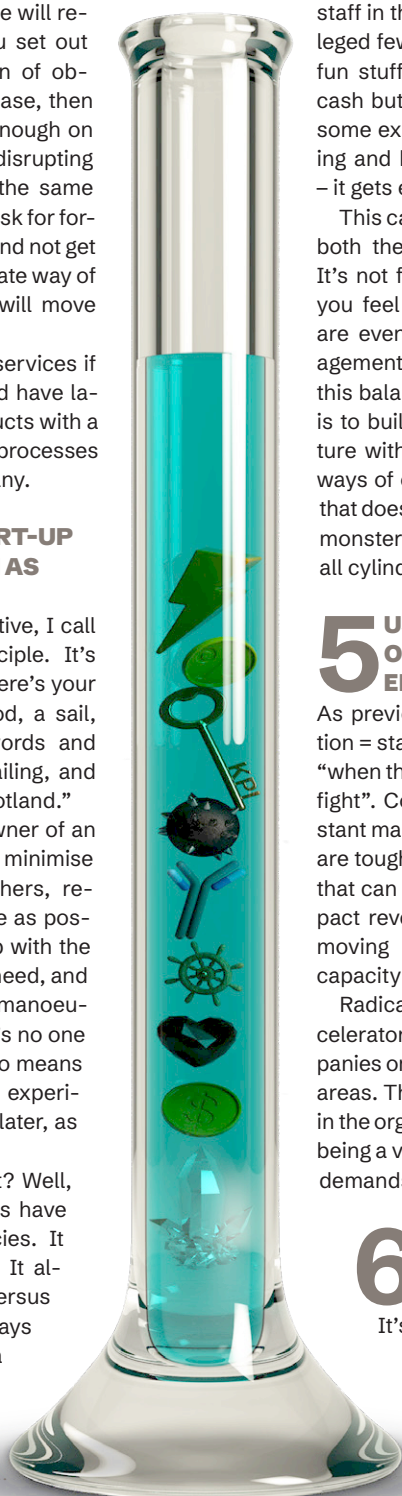
Only use the corporate services if you need them. You should have laser focus on creating products with a market fit, not on following processes designed for a huge company.

### 3 MIMIC THE START-UP SETUP AS MUCH AS POSSIBLE

From the owner's perspective, I call this the viking ship principle. It's when you tell the team: "Here's your ship. It's stacked with food, a sail, some pocket change, swords and ores. Now you guys go sailing, and we hope you make it to Scotland."

In other words, as an owner of an innovation project, try to minimise their dependencies on others, remove as much barbed wire as possible for them, set them up with the amount of resources they need, and give them the authority to manoeuvre. And this means, there's no one to blame! In practice, it also means establishing these radical experiments, sooner rather than later, as separate legal entities.

Why is this so important? Well, in a corporation, the teams have "gazillions" of dependencies. It slows development down. It also pulverises authority versus responsibility. There is always someone to blame. That's a recipe for disaster for an innovation project.



## 4 YOU NEED A SPECIAL CULTURE TO BE ABLE TO OPERATE AS AN ANTI-BODY INSIDE A MONSTER

When you want to run many experiments, you will most likely do it in an accelerator-like setup. The accelerator can quickly be perceived by the staff in the core business as the privileged few, the ones who get to do the fun stuff and the ones spending the cash but not earning anything. And if some experiments are about disrupting and hence cannibalising the core – it gets even more toxic.

This can become a vicious circle for both the core and the accelerators. It's not fun to work in a place where you feel that you are not wanted or are even worked against. The management needs to constantly manage this balancing act. One way to do this is to build a resilient accelerator culture with its own rhythm, rituals and ways of operating. But also, a culture that doesn't become so strong that the monster's immune system fires off on all cylinders.

## 5 USE GOVERNANCE AND ORGANISATIONAL ENGINEERING

As previously stated, radical innovation = stamina. The problem at hand is "when the manger is empty the horses fight". Core business is under a constant margin pressure and when times are tough it's natural to hunt for costs that can be cut in areas that don't impact revenue too much. Hence – removing long term experimentation capacity is an easy target.

Radical innovation activities as accelerators must be organised as companies on the side of the core business areas. They should also be as high up in the organisation as possible to avoid being a victim of core business margin demands and priorities.

## 6 UTILISE YOUR CORE BUSINESS FOR SCALING PRODUCTS

It's often tempting to use the core business for scaling new products and services. The classic scenario

is to cross sell or bundle a new product to the existing customer base of the core business. It might be smart but very often it's done way too early. Make sure the product market fit is well-proven as a separate service before you start "plugging" it into the core machine. Nothing is worse than selling something too early to too many customers. You only have one shot and if you fail, churn is brutal.

What's even more difficult is to use the core business to scale a disruptive and cannibalising service, but it is possible. Schibsted did it with FINN on classifieds back in the early days of the internet. If that's your preferred way of boosting innovation, you must deploy a combination of heavy communication about why this is important towards the core business brute force, top down-style governance, along with heavy, asymmetric incentives for the core business.

## 7 MAKE SURE TO USE THE RIGHT KPIS AT THE RIGHT TIME

It's obvious for people who have worked in a start-up that you use different metrics at an early stage of the company compared to at a later stage. For example, pirate metrics (AARRR) are well known when you work in the venture capital space. But in a core business of a corporation, there are often other metrics, like market share, gross adds, EBITDA, revenue growth, capex to sales, etc., that are dominant. Applying these types of metrics to early-stage radical experimentation is obviously highly dangerous.

## 8 SERIOUSLY CONSIDER EMPLOYEE OWNERSHIP

When you establish innovation activities as separate legal entities, you should seriously consider setting aside 10% to 15% of shares for employees. Being a part of such endeavours is much higher risk than being an employee of a large company. It also takes extreme efforts to succeed with start-ups. Hence, it should be rewarded accordingly. It's good for both employees and the owners that the employees have a significant stake in the upside.



# A world divided

In many ways, journalism is at a peak: media reaches more digital readers, viewers, and listeners than ever before, and digital revenues have reached record levels. Still, Ola Stenberg, Product Director at VG, is concerned. The problem: the digital-native generations expect completely different things from media.







**Ola  
Stenberg**

**Product Director, VG**  
**Years in Schibsted: 18**

**W**hy are the new needs from younger generations a problem? Because what we, as a media company, did in the last decades will not work in the years to come. Our success with creating habits for our users will not continue without us rethinking pretty much everything.

Our average user, male 50, was born in the 70s. Those users remember the walk from home to the local store to pick up the newspaper from the stand in the morning. They remember linear television, the rise of cable TV and that we actually rented a video cassette player for 24 hours at the rental store. They remember when Steve Jobs told the world not only about a smart phone where the keyboard was replaced with a touch screen, but that it was a phone with a music player! And a breakthrough internet communications device! We were all amazed.

Today, it is a story that young people do not even understand. A music player?

What's good enough for him (50) is not even close to good enough for her (20). For him everything just became better when the internet, desktop and smartphones evolved. To her, born and raised in a digital world, almost everything he considers radical innovation is unknown history.

"Why are you saying flat screen, dad?" or "why are you talking about buying a new smart TV?". Have you ever gotten that question from your kids? I get them. They think my language is strange. I understand why. For me that very flat TV is still amazing because I remember the big ones. But my kids

have never seen anything else, and they are not particularly impressed by the smartness of remote controls or a screen you can't even touch or talk to.

I also struggle to get my son to pick up the phone when I call. Why not send a text or voice message on snap? Or you could ask a 20-year-old today how many numbers they have saved in their contact list.

These are our new users.

They are Gen Z, gen Alpha or the TikTok-generation. Just consider TikTok and their position for a second: 1.2 billion active monthly users spend an average of 52 minutes per day in the app. They are crushing other social media platforms on engagement rate, and I don't even want to think about TikTok engagement metrics vs traditional media.

While this is enfolding, direct traffic on VG is still great. We still hold the position as the number one news source in Norway. We've pretty much been growing on all metrics since we went online in 1995. The big question: will this continue?

We were successful in shifting our users' habits from physical newspapers to news sites, but what lies ahead of us might be an entirely different story. User habits are changing dramatically and faster than ever before. We will have to go the extra mile to keep up this time. >

I believe we





## The new era is about users with a *different mindset* and ways of living their lives.

are in our biggest shift so far. A shift in users. And mindset.

The prospect of facing a total re-think keeps me up at night. Will we be fine with adjusting and iterating over time? I don't have the answer yet, other than the fact that we invest heavily in understanding our new users.

**F**irst, we need to understand the fact that the world ahead is divided.

When we (old people) talk about entering a web site or the internet, our new users live their lives online. It's a natural part of their life, their habits. It's basically a cornerstone in their social life, in the way they celebrate birthdays, shop, learn, experience, entertain or being entertained – how they connect with the world.

And the ones shaping their habits are not news sites like VG or others. That is done by gaming platforms, chats everywhere and social platforms like TikTok. A video and visually driven experience where short, snappy content – served to you by addictive algorithms – all connected by who you follow and what your friends like and share.

That is not what the media serves today. You can argue that journalism is something different. Our ethical standards are different, and we can't be fully personalised. At the same time, we know through years of user research that what our competitors and especially social media platforms manage to do well – we fail at. We also know by research that the young users will find us when the news story is big enough. But what about all the other days? Again, we struggle with daily habits and loyalty. So we need to step up our game.

To turn headaches into success we must understand our new users and their digital lives. TikTok is one thing but I hear parents talk about hours of gaming or too much screen time being a problem. It might be for some but we also need to understand that gaming, watching TikTok for an hour or chatting with friends is more than playing a game or wasting time on a screen. It's a totally normal social life for young people.

My point is this: the new era is about users with a different mindset

and ways of living their lives – which all feel unnatural for a 40-year-old like me. I still don't talk to my phone, while my kids try to talk to every device there is. They give me that strange look if I ask stupid questions of why they want to spend 100 dollars on a pair of virtual sneakers. Yes, Nike recently bought a company making virtual shoes and it's already a multi-million-dollar industry.

**W**e need to listen to this generation. They will probably not win an A/B test on our site today but they will for sure be the ones to serve in the future. And our big challenge is to serve them. Otherwise, we should expect to slowly drive ourselves out of business.

One way to understand the job to be done, is to continue our investment in user research and listening to the users we have, and those we don't have. But I believe there is one more thing we have to do: Hire them.

If you do that, you get the mindset in-house. We need to get the people who can dream it, and then build it, too. Young people today are more skilled than ever. They grew up with the internet and a never-ending opportunity of learning by themselves – online.

And then, hiring is one thing – to lead is another. Some years back I could go into most rooms and bring value to the table. Now, I try to lead with this in mind: everyone in the team is there because they are better than me. And you must let the quieter voices come through. The youngest journalist or the apprentice have mindsets and skills that are crucial for your future success. But because they are fresh hires, they may not know it. So, tell them, every day and keep the door open to the management and board room and let them speak their minds.

She (20) is our key to the future.



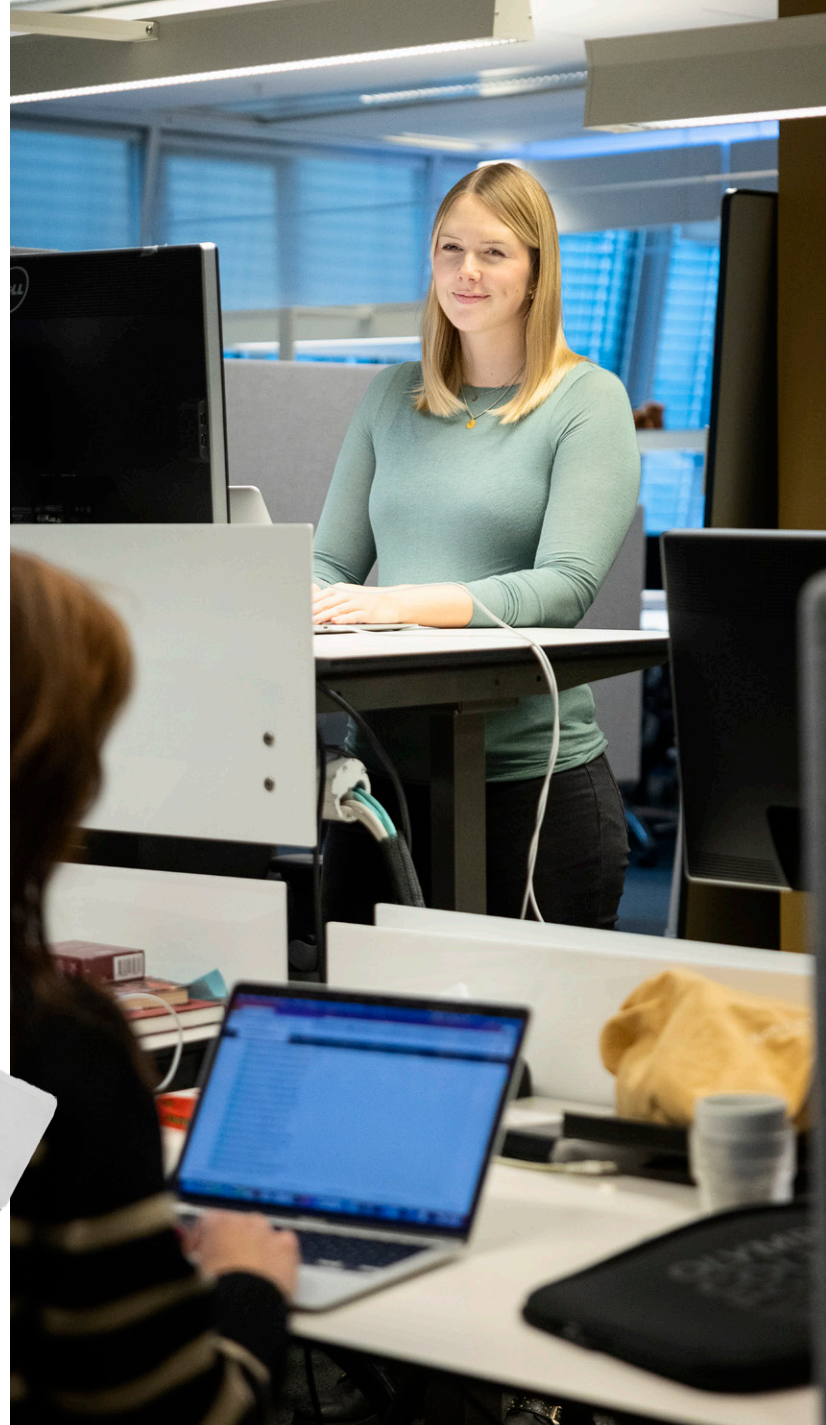




VG has a team called Z, that is the frontrunner for “young content” – they also handle the social media production, distribution and strategies. In 2016 VG partnered with Snapchat and started to build channels for news and entertainment on their Discover-feed. This has become a huge success with 900,000 users subscribing for VG content. The content produced for Snapchat, TikTok and Instagram are also used on VG.no and experiences from the social platforms are shared with the newsroom.



To explain news to kids, both Aftenposten and Svenska Dagbladet have newspapers for children – Aftenposten Junior and SvD Junior. Aftenposten also has a school project where teachers can use the digital content in the classrooms. This content was also the starting point to make news from Aftenposten accessible to all – through a synthetic voice. Read more about this on page 28.



Nathalie Mark is Future Editor at Aftenbladet. She works with the editorial teams on how to attract young audiences with news stories, helps developing formats for social media platforms and she is always on the lookout for future news media- and tech trends. Today Aftenbladet has a thriving TikTok account with over 100,000 subscribers and four different Snap Shows with several 100,000 unique viewers each week – starting from zero when Nathalie started in January 2022.

## Schibsted projects that bridge the gap

Although there is a generation gap in news consumption there are many initiatives to reach young people at Schibsted’s newspapers today. Here are a few successful examples – and don’t miss the story about IN/LAB on the next page.



# IN/LAB is using experiments to reach news outsiders

For a long time, the Scandinavian countries have been ahead of the game when it comes to freedom of speech and of the press. But today, large groups in society don't consume fact-based journalism. To reach these "news outsiders" Schibsted and Tinius Trust established IN/LAB.



**Belenn  
Rebecka  
Bekele**

Community Researcher, IN/LAB  
Years in Schibsted: 0.5



**Agnes  
Stenbom**

Head of IN/LAB  
Years in Schibsted: 4.5

**A**ccording to the 2022 edition of the Digital News Report (DNR) by the Reuters Institute for the Study of Journalism, 38% of global media consumers avoid the news (up from 29% in 2019). In Sweden and Norway, these numbers are 32% and 28%, respectively.

Independent news journalism plays a crucial role in serving people with fact-based information about the world around them. But if that journalism isn't getting through to diverse

groups in society, we have a big problem.

To help Schibsted reach groups in society where the current consumption of independent news journalism is low, Schibsted and the Tinius Trust (Schibsted's majority owner) established a joint venture in 2022: IN/LAB.

IN/LAB is here to prototype possible new(s) futures. To do that, we believe that we must dare to engage with truly divergent perspectives – not to legitimise, but to understand.

We use design thinking to turn insights about perceived pain points into future opportunities. In this, we are optimistic about emerging technologies and the opportunities they present for journalism. However, using it is not an end in itself. Our goal is to establish a trustful and constructive dialogue with groups we do not reach today and genuinely listen to their perspectives.

We work with specific target groups of news outsiders for various experiments. These groups vary in scope and size, based on factors such as

age and gender, level of education and socio-economic status typically going into our scoping process.

**O**ur first target group has been young people living in the multicultural outer city areas of Stockholm. These are areas characterised by, among other things, lower-than-average socio-economic status and residents with lower degrees of trust in society's institutions compared to the national average.

Trust in Swedish media has been reported as increasing in the areas – but not among younger residents, who make up approximately 90,000 (under the age of 25) of the more than 250,000 people living there. We believe that this often expressed discontent and distrust in the media can have major negative consequences for the democratic and societal participation among this large group of young people.

We decided to work with 15- to 25-year-olds in the outer city areas who express a critical attitude towards news media. What are their perspectives on news journalism? What would we need to do differently to attract them as future consumers?

We have conducted in-depth interviews at local cafés, playgrounds and park benches and run creative workshops – always encouraging





participants engage and express themselves in ways that are comfortable and relevant for them.

Through our research, we have identified three pain points in our target group's current perspectives on news journalism:

- They think that the news media shares unfair and inaccurate depictions of their residential areas and topics of importance to them.
- They argue that there are too few perspectives, and too much opinion,

IN/LAB, a new initiative within Tinius Trust, running a workshop about future news experiences with summer workers from the local media house Fanzingo.

in current news journalism. They want to make up their own minds based on facts – and not be fed other people's opinions.

- They have an instrumental approach to news but find the tools to be broken. If they can't trust nor use what's in the news, why consume it?

While in some ways a niche target group, we believe their expressed attitudes are critical to consider also from a broader Gen Z-perspective.

Fundamentally, IN/LAB is concerned with the role that independent journalism plays in a liberal democracy. Because, as phrased by Hannah Arendt: "what makes it possible for a totalitarian or any other dictatorship to rule is that people are not informed".

We want to turn insights about the realities of current news outsiders into future opportunities for Schibsted, our brands, and our users. To do that, we believe that empathy is our most important skill.

# A curious mindset makes us thrive in dark times

Schibsted has a history of thriving during periods of disruption and when times are tough. Andrew Kvålseth, Chief Investment Officer, believes that the secret behind this success is an entrepreneurial culture that takes calculated bets and is willing to disrupt itself.



**Andrew Kvålseth**

EVP, Chief Investment Officer  
Years in Schibsted: 1

**I**n California there are forests with tens of thousands of mighty redwood trees that have stood there for hundreds – and sometimes thousands – of years.

Slightly less common, but even mightier, are the sequoia trees. Some of them have been standing proud for more than 3,000 years in the Sierra mountains. The world's most famous tech VC firm, Sequoia Capital, had a pretty good reason for picking their name from the famous tree. Sequoia has been an early investor in companies including Yahoo!, Google, YouTube, LinkedIn and WhatsApp, and an investment from them is considered an honour that often triggers a cascade of other investors wanting to join the investor ranks.

So, how do you live for thousands of years?

Well, the trick is almost awkwardly obvious. You don't die. If you never die, you live forever.

And the redwoods and the sequoias

have a trick up their sleeve: A tannin in their bark that is flame retardant. That is, some weird scientific potion that helps them survive the forest fires that typically plague any large forest every 20–50 years or so. Besides this amazing chemical compound, their bark can be up to 12 centimetres thick. They're like the tanks of the forest, almost impossible to kill.

So let's bring this wooden metaphor home to Schibsted and the tech scene in the Nordics. Schibsted is a company with a number of valuable assets (including Aftenposten in Norway and Aftonbladet in Sweden) that were born in the 1800s, after the printing press but before the car was invented, and roughly 100 years before the humble transistors paved the way for the digital revolution. These companies survived the great depression in the 1930s and dozens of recessions in their 100+ year lives.

In late 1990s and early 2000s, these companies formed the foundation of a massive digital transformation taking place inside of Schibsted: The creation of our early, online marketplace business and a culture around innovation where we started partnering with some of the best entrepreneurs in the

Nordics, both inside and outside of our company.

And it all could have ended there. The dotcom crash, our own version of a forest fire in 2002–2003, was so severe that some pundits back then actually thought that the Internet itself would contract and potentially disappear. But at the same time, consumers kept on moving online, kept on adapting to digital news consumption patterns, and they bought and sold their stuff online at a pace that led to continuous, massive changes in consumer behaviour.

**S**chibsted understood this. The mega trends and changes in consumer sentiment are for real and permanent. Revenues will come back. So will profits.

So, we doubled down on our marketplace business and in the next year, we began replicating our marketplace platforms globally.

The Lehman crash of 2008 was another massive forest fire in our industry. Ad revenues plummeted and many of the tech VCs that survived the dotcom crash were wiped out.

What did Schibsted do?

We invested in and built some of the most attractively valued and best-run tech assets in the Nordics and beyond, including Lendo, Kundkraft (sold to Tibber) and Leboncoin, to name a few. These and other organic and inorganic investments made during that time have created enormous value.

And now we're here again. There



are dark clouds over the global economy and perhaps even darker for us in Europe as we face compounded humanitarian crises with unstable energy markets and rising inflation.

But Schibsted sees opportunity during these times. And I think we might have found our secret formula for survival: A curious mindset that explores opportunities when few others see any. An entrepreneurial culture where we choose to take carefully calculated bets on those opportunities. And a culture of coming together to save money in different parts of our business to fund the new opportunities we see.

Based on our learnings, these are our five key strategies, when investing during hard times:

## **1 THINK LONG-TERM -FOR REAL!**

Booms and busts come and go but mega trends in consumer behaviour sometimes stretch across decades. Invest in long-term ideas and in people who never lose sight of their vision. Most companies you see turning into unicorns today were actually conceived 10-15 years ago and lived a quiet life outside the hype (as was the case for all our marketplace businesses at one point in time).

## **2 STICK TO WHAT YOU KNOW AND FOCUS WHERE YOU CAN ADD MORE VALUE THAN OTHERS**

Schibsted has tons of experience embedded in our various teams in the



Nordics. We also have strong brands which reach the majority of the Nordic population daily. This is the time to use those assets and experiences and invest in ideas where we can help accelerate them beyond what other owners can.

## **3 REVENUES ARE VANITY, PROFITS ARE SANITY**

A start-up or new organic business doesn't necessarily need to be profitable in the near term. But your unit economics need to be! That is, selling a customer a product for 1 USD that costs you 2 USD to acquire is not a sound business model (it's scary how often founders miss this).

## **4 LOVE YOUR FOUNDERS AND LEADERS WHO CAN ADAPT TO CHANGING CONDITIONS**

If the world changes, your plans need to change with it (although the vision can remain). Smart founders and lea-

ders are the ones who are ready to pivot and change both strategies and short-term plans when customer sentiment rapidly changes or when the funding environment or technology evolves.

## **5 UNDERSTAND THAT COMPANIES ARE BUILT, NOT BORN**

If you've built, or supported, an entrepreneur from company conception to success, you know that success truly is a factor of thousands of grueling fights and mistakes. In a start-up, you chew glass and barbed wire for breakfast, but you always make sure to make one good decision for every two bad decisions.

You also incorporate those tiny feedback loops from your customers into corporate strategy and culture on a weekly basis. Over months and years, those tiny, accumulated improvements could be tomorrow's category winner.

# *“These leaders know how to manipulate journalists”*

**Few journalists have interviewed as many extremists as Norwegian Vegard Tenold Aase, correspondent for New York-based VICE News. He urges colleagues not to take the task lightly.**



**Gard Steiro**

Publisher, VG  
Years in Schibsted: 22

“I know nothing about sports. That’s why I don’t write about sports. I don’t review operas either. Naturally, editors don’t send amateurs on those kinds of assignments. They understand that knowledge is the key to critical journalism. Yet extremism seems to be an exception. It seems they think any reporter is qualified to interview a fascist,” says Tenold Aase.

Vegard Tenold Aase faced a pistol pointed at his Adam’s apple at a Klu Klux Klan gathering. He was caught in the crossfire between neo-Nazis and anti-fascists wielding bricks. For several years, he lived close to American extremists, resulting in the book “Everything you love will burn: Inside the rebirth of white nationalism in America” in 2017.

“It started with me writing a thesis at Columbia University’s School of Journalism. Then I heard that there were neo-Nazis living in my neighborhood in Brooklyn. That was strange, I thought, being someone from orderly and tolerant Norway,” he says.

His first articles suggested that he was more fascinated than appalled by the extremism he was describing. That all changed on 22 July 2011, when

terror attacks by a right-wing extremist left 77 people dead at home in Norway.

“I saw the need for deeper understanding, and I became more aware of the dangers of poorly founded journalism about extremism.”

When Trump’s then-adviser Steve Bannon was invited to Nordic Media Days in 2019, Tenold Aase was among those who warned against it. It may seem paradoxical that a journalist who had published interviews with countless conspiracy theorists and demagogues was critical about others giving the same kind of people a speaker’s podium.

“I’m not opposed to interviewing extremists, but we must know why we are doing it and we must understand how to do it. These leaders are calculating. They know how to appear more harmless than they are. They know what it takes to manipulate journalists,” he says.

Tenold Aase finds it disturbing to read cozy “fluff” interviews with neo-Nazis in major American newspapers.

The basis seems to be that “these people could have been like you and me”.

“When I started covering extremists, they were as naive as I was. The majority weren’t used to the news media. So, it was easy for me, a bald and innocent foreigner from Bergen, Norway, to gain access. Now many extremists are professional communicators. In the

United States, a new form of extremism has turned the country upside down.”

**What can journalism contribute? What should we do to fight extremism?**

“We need to take a step back. Here in the US, we experienced the storming of Congress, we have the QAnon movement, and a deep division in the population. But we must not assume that everyone who was there in Washington on January 6 were fascists and extremists. We need to explain where all that anger comes from.”

**But is it possible for us – many people will think that we haven’t earned their trust; that liberal, privileged and urban journalists don’t understand their own era?**

“That is correct here in the United States. The press hasn’t done a good enough job. I think the death of community journalism has had a big impact. People need journalists close to them who understand everyday life. We know that many white people are furious, they feel let down by the system. There are people who feel that they are deprived of opportunities. Such currents are far more journalistically interesting than interviewing individuals who have found answers in extremist ideology.”

**What about the future here in the Nordics? Any advice?**

“I have noticed the election results in Sweden and that certain circles are on the rise. My advice would be to understand why people are angry. There can be legitimate reasons for deep dissatisfaction. This is what journalism should highlight.”





Vegard Tenold Aase grew up in Norway's second city, Bergen. He has written for Norwegian newspapers, as well as such American publications as Rolling Stone magazine and the New York Times. The Emmy-nominated journalist lives and works in New York and he's specializing in extremism.

# A local news focus brought BT back from the brink

In only six years, Bergens Tidende went from crisis to “digitally sustainable”. A clear local focus, live reporting and investigative journalism have made the readers happy.



**Liv Skotheim**

Managing Editor, Bergens Tidende  
Years in Schibsted: 17

**B**ergens Tidende's business had been booming for decades. At its peak, the newspaper reached about 260,000 readers every day, with 100,000 copies in circulation. The paper, as it was said, “printed money”. But as the media crisis hit, the glory days soon vanished. By 2015, BT was facing the wall. The model wasn't working.

Six years later, in December 2021, the tables had turned yet again. Øyulf Hjertenes, the director of Schibsted Kyst and Chairman of the Board at Bergens Tidende, declared BT to be “digitally sustainable”. He explains:

“If BT closed down the printed edition tomorrow, digital revenues from

subscription and ads will uphold a strong newsroom. The paper will still be able to keep holding power to account in Bergen. Back in 2015, most people didn't believe this would be possible,” Hjertenes says.

What made this comeback possible?

Back in 2015 subscriber numbers were dropping fast, and the economy was in a bad shape. Print revenues kept falling, and a digital business model mainly based on ads and pageviews were not producing sufficient results. Costs of NOK 50 million had to be cut. The printed Sunday edition was shut down and one out of five journalists had to leave. The financial forecasts were bleak and nowhere near digital sustainability.

Something had to change.

The turnaround was enabled by a clear and ambitious goal: 50,000 digital subscribers in three years. In the BT newsroom, it became known as the “50k strategy”. It drastically changed

BT's way of working, priorities across the whole newsroom, consumer business and product and technology.

The strategy outlined new priorities for everyone and set up ten pillars for improvement. BT would prioritise live reporting and longform quality journalism – and do less of the “in-between”. There would be fewer stories, stronger focus on unique local reporting, while letting go of most generic national and international stories. BT wanted to bolster its position as the primary news destination in Bergen. The entire organisation was tailored towards being subscriber-centric.

**I**n the coming years, new tools for live reporting, storytelling, data analytics, debate and reader involvement were introduced. Algorithms were implemented on the frontpage, and data and insight capabilities were introduced in the newsroom. Cross-functional work became the norm, performance numbers were posted front and centre at the offices, and staff started celebrating major shared milestones.

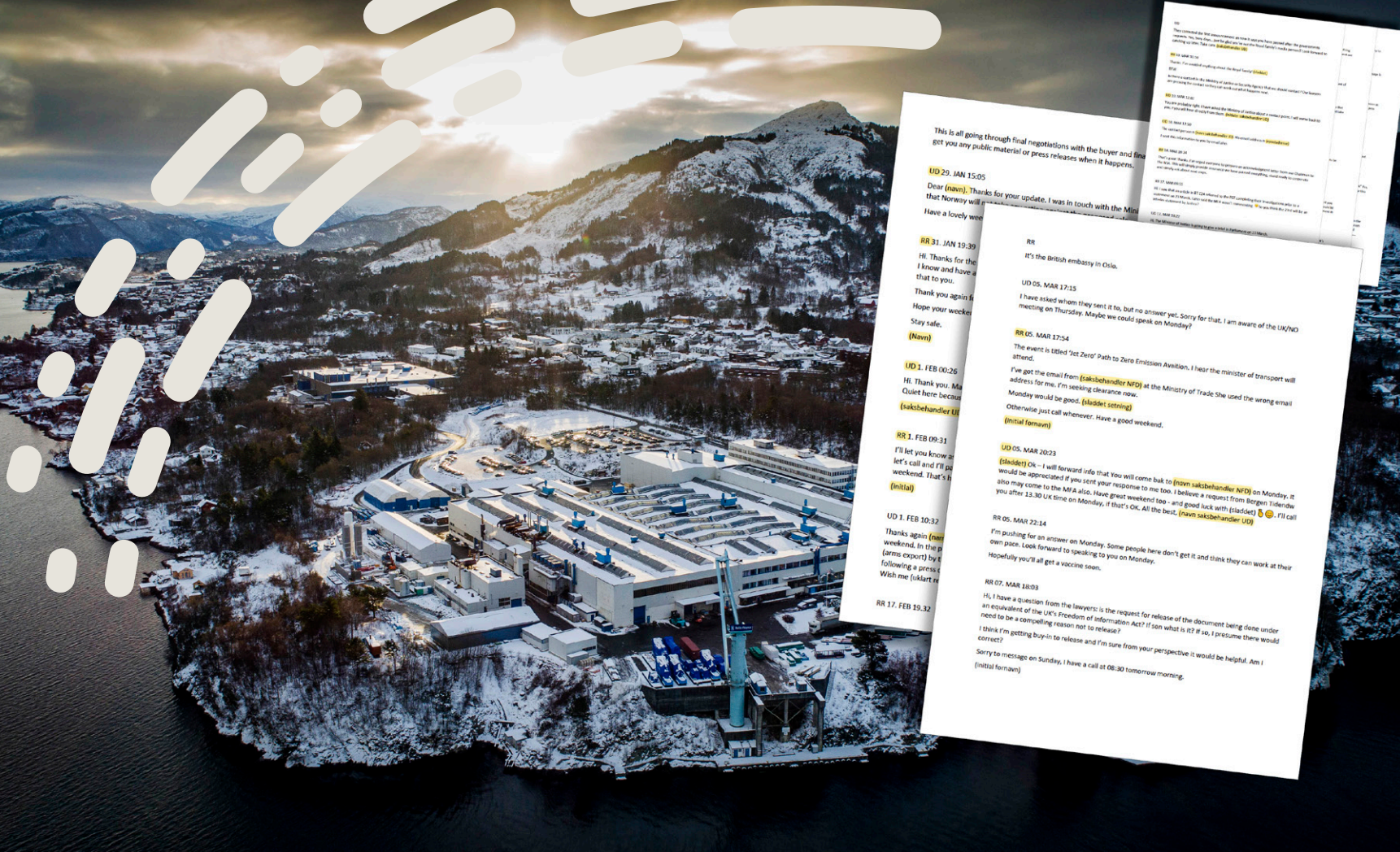
Live reporting became especially important. A specific improvement point identified in 2015 was to find better











## THIS IS BERGENS TIDENDE

- Bergens Tidende is Norway's fourth largest newspaper, and the country's largest newspaper outside Oslo with 226,000 daily readers and 83,000 subscribers.
- It was founded in 1868.
- BT was published in tabloid format from 2006.
- Part of the Schibsted family of digital brands since 2009.
- The paper was awarded the European Newspaper of the Year in the regional newspaper category by the European Newspapers Congress in 2011.
- In 2021, Bergens Tidende won the "Newspaper of the Year" prize in Norway.

Starting in 2021, Bergens Tidende published a series of investigations on Rolls-Royce's sale of Bergen Engines to a Russian holding company. The newspaper was awarded Norway's most prestigious journalism award for the reports.

ways to convey brief, developing news to readers. The news feed "Trafikken direkte" (Traffic Direct) was established to meet the needs of the users for live traffic reporting.

Bergen is a city with a vulnerable infrastructure. One accident in the main road tunnel is enough to make half the population late for dinner. Instead of spreading a few short news items across the BT.no front page, these updates were gathered in one place, harnessing traffic data for added value. This has become BT's best-selling digital product.

"We were quite early to use live news studios. In fact, the tool first developed here has now been adopted in several parts of Schibsted," says Liv Okkenhaug, head of breaking news.

In addition to a manual newfeed with information about accidents, rush traffic or cancelled trains, BT integrated several automated services, such as traffic data from authorities, web cameras and queue maps. Input from commuters is also important.

From the beginning, BT has constantly worked on developing its live studio format, setting up several such news feeds.

"Our journalists pride themselves on reporting rapidly and thoroughly on everything from major catastrophes to tunnel or road closures. Quick, precise information is the main goal."

**I**n Okkenhaug's view, people are much more willing to pay for these live studios than commonly expected.

"This is about providing people something that is useful in their day-to-day lives. Finding out how long they can expect to be stuck in traffic, for instance. Whether you are a nurse on your way to work, or if you are a professional driver, our traffic studio is helpful."

According to Okkenhaug, the editorial staff is constantly looking for the next theme where readers could use a hub. In the summer of 2022, it was the transport chaos throughout





The staff at Bergens Tidende celebrate a new record number of subscribers.

Europe. In the autumn, the staggering energy prices.

For her, the point is to build a culture of innovation that puts the users' needs first. Live reporting helped change BT's game. By Christmas 2019, the number of digital subscribers had passed the number of print subscribers, bringing overall subscription numbers to an all-time high.

In 2020, Frøy Gudbrandsen became editor-in-chief and continued to position BT as the readers' "guide". She pushed for new digital formats, investigative journalism and new subscriber options.

The effort for investigative journalism paid off. One of the paper's most acclaimed projects, are the award-winning stories about Bergen Engines. The series of almost 100 articles are described as almost a spy thriller. They focus on how oligarchs close to Vladimir Putin almost took over a Norwegian engine company of vital national security importance.

"Our journalism resulted in big

consequences. The sale of Bergen Engines was stopped, and the Norwegian government received strong criticism in Parliament," says Eystein Røssum, BT's head of investigative journalism.

According to him, BT is a self-aware and ambitious newsroom, and that it's natural for them to set a national agenda.

"Investigative journalism is part of the cornerstone of the entire BT project and is integrated into all journalistic work. We put together teams according to the case we are working on. It's something everyone is involved in, not limited to an "elite group" of privileged journalists," says Røssum.

**T**he bleak prospects of 2015 have been turned around to a solid economy while still providing award-winning journalism. The paper has 85,000 subscribers, a 37% increase since 2015.

Øyulf Hjertenes believes that a common understanding of the situation

and clear strategies and priorities were crucial for the organisation's turnaround.

"The journalists and editors in the BT newsroom have high ambitions, and they don't look back. There is a willingness to let go of who we are, for what we might become, and with such a mentality there is basically no limit to what we can achieve," says Hjertenes.

He believes this ambitious culture is the explanation behind why BT is punching above its weight both in investigative journalism and in product development.

In 2021, Bergens Tidende won the "Newspaper of the Year" prize in Norway. The jury was impressed by how BT over the past year had increased its efforts in innovative and investigative journalism, close to people's everyday lives. The jury noted that BT clearly "plays with technology and challenges the way stories are told", and that "readers get an impressive journalistic product that is both important and entertaining."

# Do you know what kind of brand you're building?

**As technology enables new user habits and needs, new brand categories evolve. For brand builders, it's crucial to get one thing right when communicating a product or service – what is it?**



**Kirsti  
Rogne**

Partner and General Manager,  
Mars Brand Strategy  
Friend of Schibsted as a brand consultant

## THE NEW WORLD

There was a time when competition was mainly a battle for market share in a familiar and fairly predictable arena. Brand building was a matter of establishing that this brand is better than that other brand. Today, it is not so much a matter of which brand is better, but whether we trust the brand enough to be influenced to do new things together. New tech-enabled product and service categories emerge and fade out of the picture at a rapid pace. People make use of brand relationships as they navigate these new and messy competitive arenas.

## THE OLDBRAIN

But while the world changes rapidly, the way our brains work does not. This presents some new challenges to brand builders in our time. How can innovators best find or create subcategories in which to position and grow new brands? And how can brands navigate category shifts in line with

shifts in the competitive arena, and still maintain existing brand relationships?

Brand building starts with understanding the phenomenon of categorisation. We used to think that the brain perceives something by first becoming aware of it, then evaluating it and assigning it to a category. On the contrary, according to scientists today. We categorise before we evaluate. Things that don't belong to a known category can seem almost invisible to people, and that is not a great starting point for brand building. Acquiring new categories takes time and is pretty hard work for the brain. To make it simple for us to see them, successful brands like Vipps, MobilePay and Klarna, focus on a single feature – peer-to-peer payments, pay with your mobile, and smooth transactions – even if all these brands have a wider portfolio of things that they offer.

## SUBCATEGORIES

New brands have a few options. Some innovative brands take advantage of changes in trends and behaviours by defining new subcategories that propel them from niche to mainstream. Beyond Meat, for example, does this by insisting that its plant-based product is meat. Why would they do that? As a category, "meat substitute" is

niche. It is relevant and visible primarily to people who don't eat meat. Some people are eating less meat, for a variety of reasons related to health, the environment or animal welfare, but many of us are not that conscious as consumers and eat what we are used to eating. Simply by saying that there are different categories of meat – meat from animals and meat from plants – Beyond Meat enters the large competitive arena for all carnivores. Granted, there are other expectations as to the versatility and juiciness of a meat product than just being a meat substitute. But this is a challenge Beyond Meat seems happy to take on to play in the big league by placing its plant-based meat subcategory firmly inside the big meat category.

## ANCHOR AND TWIST

Another option for a new brand is to create a new category and position its brand inside it in one go. This is hard work. Oatly is an example of a successful anchor and twist manoeuvre. The brand does not say that it is milk, but by saying that it is like milk, the brand is anchored in a familiar category. The twist that separates the new category from the old is explained by saying that unlike milk from the cow, which is for the calf, oat milk is made for people.

Another type of anchor and twist is when a tangible product (such as an electric scooter) becomes a service provided through an app (such as Voi), similar to how music CDs were



replaced by streaming services. We have learnt how this goes, so new categories of this kind are readily available to us (and our brains) when presented as a product-to-service scenario.

### NAVIGATING CATEGORY CHANGE

But what happens when a brand's category has become obsolete through disruption? Is the brand destined to become obsolete as well – like Kodak? Not necessarily. Some brands succeed and grow stronger by maintaining relationships through category shifts, and we allow them to introduce new business models and present us with new ways of providing value. Consider Netflix. Netflix had built a strong brand as a DVD sales and rental company and was able to maintain its relationship with its customers, as well as reach new ones, as it transitioned to streaming. When it further expanded its brand from content distribution to content production, that was another way of strengthening that brand relationship. As long as a brand is able to cater to people's evolving expectations, the relationship endures even if the category changes.

### MORE OF THIS, PLEASE

Strong brands that navigate category shifts and find or build new categories



are easy to spot when we look at how technology has led to changes in how people consume and find entertainment.

Other categories cry out for the same level of brand building innovation to help us see and understand the relevance and value of innovative products and services. Education, health and finance seem to be particularly ripe for clarifying subcategories, meaningful identities and business

models we can understand and trust – basically, brands.

The choice of category is a strategic one and should be based on establishing which category will give a brand the best possible chance of playing a part in people's lives, now and in the future. The opportunities for creating strong brands that can take significant positions are clearly there. But make sure you can answer this question clearly before you go any further – what is it?



# Sales and marketing trends

How do you handle marketing in times of crisis and how energy efficient is your business? These are some topics identified by Schibsted's sales and marketing team in Sweden.

## User traffic is shifting in new ways

New social media platforms like TikTok now have more traffic than Google. Snapchat is struggling to attract the youngest users. And at the same time, traditional news media is breaking readership records. The disruption in user traffic and readership is no longer linear from legacy to social media, but we now see it shifting in totally new ways. The media landscape has evolved (yet again) and those with the most social affluence attract the most users, readers and advertisers. This power shift can also be seen elsewhere. For example, digitally savvy individuals are now showcasing their affluence by recommending brands they like to unforeseen audiences. For companies, this means that influence is fluid and not particularly tied to those with the deepest marketing pockets.

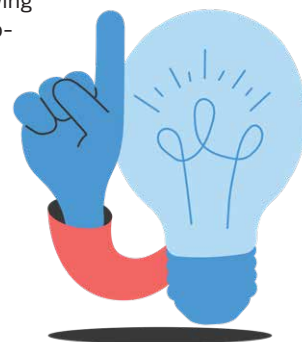


## The value of first party data

Everyone, from tech companies to publishers, is working to capitalise on their first-party data. As big tech and regulations are clamping down on third-party tracking and cookies, many are finding that they need to harness the data they acquire from their users themselves. Building their own first-party data systems lets companies own the entire value chain, establishing better control and increasing trust with users. So, what does it mean going forward? Well, since brands have long anticipated this change, their first-party data is richer than ever. Media outlets are naturally doing the same, and Schibsted is now, for example, offering brands to “match” or “unmatch” their first-party data with Schibsted data, to get that bespoke targeting. This product is simply called Schibsted Match since that’s exactly what offers – to reach your own designated target group in our brand-safe context.

## Be transparent about your sustainability

The sustainability issue for brands is spilling over into media, collaboration partners B2B solutions. Brands now look across the entire food chain, from subcontractors, media channels, contexts where you are seen, etcetera, to make sure that their values are mirrored by all their business partners. Most companies realise that it’s not enough to simply communicate consumption. You also must communicate value creation and sustainability. What you produce and offer is as important as “why” and “how”. Especially in times when the solution we all hoped would be the answer to our prayers, namely the electrification of society, now turns out to be more complicated than we previously thought. It will require greater transparency across the board and throughout the entire network of collaborators. Prepare yourself to answer the following question when approached by a new B2B client: “How energy efficient is your business when producing the products and services that you offer?”





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## Marketing in a crisis context

Most companies are used to having a more reactive approach to crisis communication. Now we're seeing a shift towards an "always on" mindset where you must put your planned marketing messages in the crisis context. Communication in times of crisis calls for contingency plans for imminent issues, such as a pandemic, social divide, climate change or war between nations. Being able to communicate your value in this context is of utmost importance and will come to characterise the successful companies with loyal customers and growing audiences.

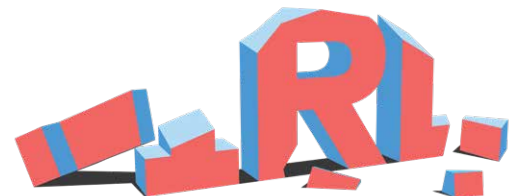
Research from Schibsted's sales and marketing organisation shows that most people live as usual during times of crisis but many choose to consume less of what they don't really need. Established news channels become more important and people turn more often to credible news sources to stay up to date.

## Back to brand marketing

We live in times where targeting is a challenge, but still very much desired among advertisers. Back into the spotlight comes brand-building marketing. We see a rise in demand for formats that put the brand front and centre, leaving the users and readers with some breathing space. Long have we filled the digital space with conversion-driven advertising that people sometimes find intrusive. With the return of the brand-building messages, advertising becomes fun again, creative and content-based. Research shows that emotional communication is the most effective way to build a brand and stay in the mind of the audience. Campaigns that succeed in creating impact do so because they have succeeded in reaching out, reaching in, as well as creating change and influence.

## The end of IRL

Are the days of meeting and mingling with industry professionals over? Business events struggled to fill their seats this past year as we all try to make sense of the post-pandemic world. What about the chatty atmosphere of the office landscape? This last year has indeed shed new light on the office space in general, and we're not as inclined to pop by anymore simply because we miss our colleagues. The webinars and the digital meetings are here to stay. Hate them or love them – it seems that we hate commuting even more and that the love for the independence of our home offices trumps even the greatest of office atmospheres.





Chasing the latest marketing trends might not be the best way to curate growth for small companies. It will mean that you waste time and money. And even if “no size fits all”, there are a few basics to have in mind, says Mari Aldrige Øverland at Schibsted Ventures.



**Mari A  
Øverland**

Marketing Manager Schibsted Ventures  
Years in Schibsted: 0.5

#### **IT'S NOT ONLY FUN THINGS ON TIK TOK**

The first step is acknowledging that marketing is much more than just buying media and creating ads. Of course, that is a big part of it, but far from everything. Marketing is also about product (or service), price, placement (distribution) and promotion (sales today and sales tomorrow). It is not only the colouring-in department, that does

some fun things on Tik Tok every once in a while.

It's important to remember the whole bouquet of the marketing flower and not to jump the gun discussing tools x and channel y straight away! Marketing strategy is where you play and how you win. How to deliver on the chosen strategy and execute is what we call the tactics. First have clarity on who, what and when – and then you can start to think about the specific channels and tools.

#### **KNOW WHAT DRIVES SALES**

It might not be important for customers that you are the cheapest, the most

innovative, the smuggest challenger or even the greenest. What will yield the most growth is focusing on the key drivers that are important to many people. This might not be what you think. Understand and adapt to customers' actual wants and needs, rather than differentiate from competitors just for the sake of it. Figure out the drivers and barriers in the category and learn what actually drives sales and how you and the players in the category score on the different drivers. In effect, this will help you find and choose a profitable position that will make you known for something customers want to buy and, most importantly, are willing to pay for.

#### **LEARN HOW TO SAY NO**

Strategy is said to be what you don't do. Smaller brands with smaller budgets must dare to say no, make extreme choices and prioritise. Make sure everyone is running in the same





direction and that they are empowered to make decisions to get there fast.

Let's be honest, there are loads of drawbacks as a small brand, but there are definitely some benefits to it too. The proximity to the customer, the creativity you can unravel and the short road to decisions make up some of its appeal. Your resources are so much more limited and precious than in the big companies, so use them wisely.

### YOUBEYOU

It's easy when you enter a category to unconsciously be coloured (literally) by how the other players look and feel. Don't, it's a trap! Make, build and measure your distinct assets, such as colours, slogans, sounds, characteristics, music, graphic elements, etc. If something with your brand can be attributed to another player in the market, then it will be completely useless to spend time or energy on it. Ask

yourself if this element can be attributed to your brand or to no brand at all. If so, then this is a good space to continue to build or start building a new asset.

Make sure it is easy for existing and potential customers to find, think and buy your brand once they enter the category. Stand out and make sure you are not driving sales for your competitors. This will make your marketing efforts more cost-effective, which is key when budgets are limited.

### BOTH LONG AND SHORT

We've all heard the 60/40-rule indicating that one should use 60% on long-term brand building and 40% on short-term sales activation. This is impossible to copy paste for most start-ups, as it will take years to get back. There's good research backing

the idea that the equation should be almost reversed for smaller brands: 35% on long-term and 65 % on short-term. This might not be right for everyone, so rather ask yourself "how much can I carve out of my budget, with a good degree of certainty, to use on long-term brand building?". Go with that and start the brand building process, and then gradually bump this up. Just make sure you are hitting enough revenue targets to stay in business along the way.

There are no quick and easy shortcuts but if you can get these things (and other basics such as market research, segmentation, targeting, objectives, product, price, tactics and distribution) right, you have helped set up your brand for success. And remember, always do the strategy before the tactics.



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### PRINT

Göteborgstryckeriet  
**PAPER** Arctic Matt and Munken Kristall

Produced by Schibsted Group  
Communication, November 2022

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# FUTURE REPORT

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