N°5 NOVEMBER 2021 WWW.SWISSQUOTE.COM CHF 9.-

SWISSQUOTE

FINANCE AND TECHNOLOGY UNPACKED

ON
A Swiss startup challenging Nike

CARMAT
Artificial hearts can replace transplants

INFLATION
A cause for concern

DOSSIER

MUSIC A BEAMING INDUSTRY

How the streaming surge is lighting up the sector

ISSN 2296-3278

> UNIVERSAL MUSIC > SPOTIFY > HIPGNOSIS > LIVE NATION > ROLAND > YAMAHA > BELIEVE >


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The Fifty Fathoms collection embodies Blancpain's passion for the underwater universe that was originally expressed in 1953 with the creation of the first modern diver's watch.
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OMEGA

The show must go on

By Marc Bürki,
CEO of Swissquote

Let me be honest with you. I've never listened to as much music as I do now. Why is that? In the 1980s, I had a sweet collection of LPs with several hundred vinyl records. But today, on platforms like Spotify and Apple Music, I can access a catalogue of more than 70 million songs in just one click! Yes, streaming has revolutionised music by giving us all the keys to a vast musical kingdom. And it's so cheap that we don't even need to download illegally as we used to a few years ago. The popularity of streaming, further boosted by the pandemic, has hoisted the music industry back into play after years in the doldrums. Investors p. 30 have taken notice, as shown with the impressive IPOs of Warner Music Group in June 2020 and Universal Music Group in September 2021.

But these financial successes should not cover up the fact that artists, the heart and soul of the music industry, are the last in line to benefit from the streaming revolution. In fact, the current system of revenue distribution really only benefits the most listened-to artists. That means international stars like Drake or Taylor Swift, leaving behind all the others. Local performers have a hard time finding their way, as Swiss singer Stephan Eicher p. 42 explains in an exclusive interview. For example, on Spotify p. 40, 90% of performers with more than 1,000 listeners earn less than $100 a month in royalties.

The situation has become even more critical for artists, as the health crisis has deprived them for many long months of their main source of income: concerts. As a spectator, I'm delighted, as you are, that venues are reopening and festivals are gearing back up. Aware of the strong public demand, markets expect a rebound in the live performance industry. This is reflected in the valuation of the US entertainment giant Live Nation Entertainment, whose capitalisation is already above its pre-pandemic level. After two years of crisis like nothing we've experienced before, culture is back on track. And that is probably the best news in this issue. The show must go on!

Enjoy!

DOSSIER

ON

CARMAT

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AUTO

TRAVEL

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Cover
Getty Images

Photography
AFP, Keystone, Getty images, Istockphoto, Newscom, Unsplash

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PRINTING, BINDING AND DISTRIBUTION
Stämpfli Ltd.
Wölflistrasse 1 – 3001 Bern
www.staempfli.com

ADVERTISING
Infoplus AG
Traubenweg 51, CH-8700 Küsnacht
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WEMF
REMP 2020: 53,555 Ex. Print run: 60,000 ex.

FSC MIX Paper from responsible sources FSC® C016087

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EQS
THIS IS FOR YOU, WORLD.
Avec le nouvel EQS, entrez dans une nouvelle ère. Le véhicule le plus aérodynamique au monde séduit par son autonomie pouvant atteindre 776 km et ses systèmes d'aide à la conduite ultramodernes. Découvrez la première berline luxe entièrement électrique de Mercedes-EQ lors d'une course d'essai.
EQS 450+, 333 ch (245 kW), 20,4–15,7 kWh/100 km, catégorie de rendement énergétique: A.
Etiquette-énergie 2021
A
B
C
D
E
F
G
A

SCANS

air freight

AMAZON OPENS AN AIR HUB IN THE UNITED STATES

A Boeing 737-800 BCF (exclusively for cargo) from the Amazon fleet. Here, at the Paris Air Show, 22 June, 2019.

MUSTAFA YALCIN / ANADOLU AGENCY VIA AFP

The American online retail giant has built a private cargo facility in northern Kentucky on the Ohio border near Cincinnati for $1.5 billion. It is the first hub in the United States serving exclusively the 75 planes operated by Amazon Air, the group's cargo airline. Europe has had a facility at Leipzig-Halle airport since late 2020. Covering more than 2 square kilometres, the new hub can accommodate around 100 aircraft and operate 200 flights daily. Amazon says the move is mainly to speed up deliveries in North America, but the company will also gain independence from UPS and Fedex. AMZN

"European mineral potential is underes-timated"

Rolf Kuby, director of Euromines, about sourcing problems in rare land, in an interview with *Le Temps* newspaper.

virtual

NVIDIA CLONES ITS CEO

Nvidia CEO Jensen Huang's kitchen became a familiar setting for the company's keynote addresses during the lockdowns in 2020 and 2021. But four months after last April's presentation, Nvidia revealed that the kitchen and the CEO himself were completely virtual for 14 seconds. The clones were created using its Omniverse 3D tool, which can be applied to simulate factories or trains, achievements discussed in previous issues this year. The deepfake stunt is all the more impressive considering that the conference was viewed by 20 million people, including tens of thousands of professionals and journalists. And no one noticed a thing. NVDA

Jensen Huang, Nvidia's CEO, is larger than life in a live taping in his kitchen during lockdown. Or so we thought - it turned out it was a virtual sequence.

NVIDIA

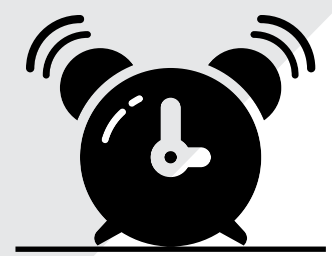
automobile

HYUNDAI AIMS HIGH WITH HYDROGEN

The South Korean car manufacturer says it will release a hydrogen version of all its commercial models by 2028. By 2030, Hyundai plans to produce fuel cells that can compete with EV batteries in terms of cost. In parallel to developing fuel cell technology, Hyundai is designing the entire ecosystem needed to make it in the hydrogen segment, including production and storage. The Asian giant also revealed the scoop on its hydrogen sports car, the Vision FK. With a range of 600 kilometres, the hydrogen powerhouse will be able to do 0 to 100 km/h in less than four seconds. But no details on the production launch were shared. 005380

Hyundai's Vision FK, a hydrogen-powered prototype.

HYUNDAI



3 hours

The time limit restriction imposed by China on online gaming for minors, in response to problems of addiction.

maritime transport

FREIGHT MARKET CONTINUES TO EXPLODE

The overheating of maritime transport was one of the unexpected consequences of the pandemic (see issue 2 of Swissquote 2021). Ship owners continue to show record profits, confirming that the trend has not yet reversed. Shipping consultancy Drewry Maritime Research estimates that carrier profits will reach $100 billion in 2021, i.e. 15 times more than in 2019. For example, the container shipping giant Maersk announced Ebitda of $9.1 billion in the first half of the year, a 183% increase on the previous half-year, and in a six-month period, the German company Hapag-Lloyd reported profits in excess of those made in the last 10 years. MAERSK-B HLAG

RANKING

TOP 10 INVESTORS IN VENTURE FUNDING FOR EUROPEAN STARTUPS
(in billions of dollars invested in H1 2021)

1. SOFTBANK VISION FUND (JP)	3.9
2. GOLDMAN SACHS (US)	2.8
3. GENERAL CATALYST (US)	1.7
4. TIGER GLOBAL MANAGEMENT (US)	1.5
5. BLACKSTONE GROUP (US)	1.2
6. DURABLE CAPITAL PARTNERS (US)	1.2
7. SEQUOIA CAPITAL (US)	1.2
8. EQT (SE)	1.1
9. INSIGHT PARTNERS (US)	1.1
10. DST GLOBAL (CN)	1

Source: Crunchbase

TOP 10 CONTAINER PORTS
(in millions of TEU containers in 2020)

1. SHANGAI (CN)	43.5
2. SINGAPORE (SG)	36.6
3. NINGBO-ZHOUSHAN (CN)	28.7
4. SHENZHEN (CN)	26.6
5. GUANGZHOU (CN)	23.2
6. TSINGTAO (CN)	22
7. BUSAN (KR)	21.6
8. HONG KONG (HK)	20
9. TIANJIN (CN)	18.4
10. ROTTERDAM (NL)	14.4

Source: Finanz und Wirtschaft

SCANS

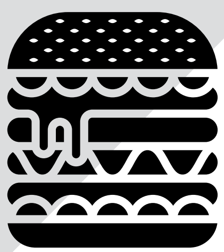
pharma

GALENICA BOLSTERED BY COVID

ISTOCK

The share price of the Swiss pharmaceutical distribution giant has been climbing steadily since March. The surge is mainly due to sales of COVID-19 self-tests, standard tests and vaccines. In the first half of 2021, Galenica's additional sales in connection with COVID-19 amounted to 70 million Swiss francs (out of total half-year revenue of 918.9 million Swiss francs). By the end of June, its 367 pharmacies (Amavita, Sun Store and Coop Vitality) had performed 80,000 antigen and PCR tests, given more than 38,000 vaccine injections, and distributed 4 million self-tests. It is worth noting that, although health insurance companies are charged for all that, the Confederation foots the final bill.

GALE



+47%

Revenue growth announced by the delivery giant Just Eat Takeaway for the first six months of 2021 compared with the previous half-year (from €1.7 billion to €2.61 billion).

recruitment

ADECCO LEANS MORE DIGITAL

The expert in temporary staffing is increasing its acquisitions of companies specialising in digital recruitment

UHAMMED SELIM KORKUTATA / ANADOLU AGENCY / ANADOLU AGENCY VIA AFP

The Swiss temporary staffing giant has been expanding steadily in 2021. In France, after acquiring Akka Technologies and BPI, Adecco has bought Qapa, a rising star and member of the French Tech 120, for €65 million. In 2017, Qapa developed a digital platform that uses artificial intelligence to rapidly match candidates with companies. The takeover of Qapa is part of Adecco's plan to develop new online solutions. With the pandemic, the market for 100% digital recruitment solutions in France has increased eightfold over the last two years to reach €350 million.

ADEN

streaming

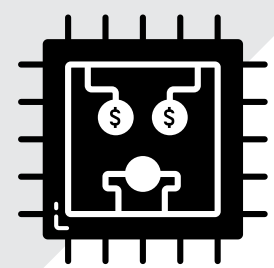
NETFLIX MOVES INTO VIDEO GAMES

Stranger Things 3: The Game was released in 2019.

DR

Feeling the threat from competitors, such as Disney+, while struggling to attract new subscribers in saturated markets such as the United States, Netflix has openly elected video games as its future growth driver. Games derived from its Stranger Things licence have already found their way to the App Store and Google Play, and will soon be available directly via its streaming platform. In late September, the US streaming giant made a key move by acquiring Night School Studio, turning the developers behind the storytelling game Oxenfree into its first internal development studio. Netflix eventually plans to offer exclusive games included in subscriptions, without ads or in-app purchases.

NFLX



80 BN

In euros, the amount Intel will invest in Europe over 10 years, starting with two semiconductor production facilities priced at €20 billion.

"The recovery in tourism will be as long as the decline was sudden"

Martin Nydegger, CEO of Switzerland Tourisme, in an interview with *Le Temps* newspaper.

KICKSTARTER

ANYCUBIC

ANYCUBIC PHOTON ULTRA

SUSTAINABLE 3D PRINTING ON A BUDGET

The Shenzhen-based 3D printing manufacturer Anycubic produces a total of about 20 models. Kickstarter is not used to companies that already have an extensive catalogue, especially Chinese ones, but the crowdfunding campaign was a success, raising nearly 2 million Swiss francs for this new 3D printer. The Photon Ultra uses Digital Light Processing (DLP) technology developed by Texas Instruments in 1987. In fact, Anycubic collaborated with the US firm to develop the Photon Ultra, which one external tester picked as the "best budget 3D printer in the world". DLP technology is indeed more accurate than the LCD technology used on most inexpensive 3D printers, even in 4k. It also has the advantage of being more durable, as LCD technology needs to be changed every 2,000 hours, compared to over 20,000 hours for DLP.

FUNDS RAISED	AVAILABLE
CHF 1,987,591	JANUARY 2022

SCANS

social networks

TIKTOK, ON EVERY FRONT

STRINGER / IMAGINECHINA VIA AFP

Chinese giant ByteDance, which owns TikTok, plans to go public.

In 2020, the video sharing app TikTok, owned by ByteDance, took over its main rivals – Facebook, WhatsApp, Instagram and Facebook Messenger – with the record for the most downloads. Now, TikTok wants to diversify. For example, it has partnered with the e-commerce platform Shopify to test a new feature that will enable Shopify merchants to create a catalogue storefront on their TikTok profile. The social media company is also taking the same strategy as its competitors Facebook and Snap in developing augmented reality. Its current testing ground, TikTok Effect Studio, will let users integrate AR effects into short videos. Meanwhile, ByteDance has acquired Pico for its virtual reality headset. Despite being more off the mainstream radar, Pico's device is currently considered one of the best on the market.

automobile

AS EU PUSHES FOR ELECTRIC VEHICLES, SWISS FIRMS ARE IN POSITION

The European Commission wants to ban the sale of new petrol and diesel cars from 2035. Last July, it proposed a regulation targeting a total of 16.3 million charging stations installed by 2050, up from only 260,000 today (the Netherlands, Germany and France currently account for 70% of the stations). If passed, this European package could be especially good news for two Swiss companies: ABB and Green Motion. Green Motion, acquired by the US group Eaton in March 2021, develops EV charging hardware and software. Meanwhile, ABB recently spun off its electric mobility business, a unit planned for IPO in 2022.

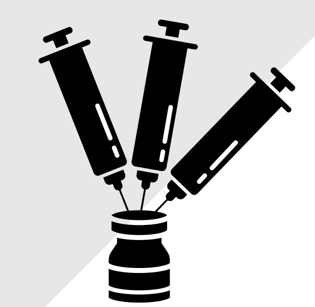
ABB ETN

THE IPO

ASTROCAST, THE SWISS STARLINK

Founded in 2014, the Vaud-based startup Astrocast made a stunning entry on the Oslo Stock Exchange with a 166% rise in its share price at the end of the first day. With the support of partners such as Airbus and the European Space Agency, this EPFL spin-off is building 5 kg communication nanosatellites to provide global satellite coverage. While SpaceX's Starlink project focuses on high-speed internet access, Astrocast leans more towards developing Internet of Things (IoT) technology to serve sectors such as goods transport, agriculture and autonomous mobility. The market could be worth as much as $1.5 trillion by 2027. The Swiss firm has already sent 10 satellites into orbit and aims to fly past the 100-unit mark by 2024.

346



7.5 BN

The number of COVID-19 vaccine doses produced by early September, with 12 billion more planned by the end of the year.

SCANS

“[…], we are operating under extreme supply chain limitations regarding certain ‘standard’ automotive chips. Most problematic by far are Renesas & Bosch”

Elon Musk, CEO of Tesla, in a tweet about the chip shortage.

well-being

NEW WAVE OF IPOs ON THE CANNABIS MARKET

UNSPLASH / BRIAN SOARES

The legalisation of recreational marijuana is spreading in the Northeastern United States. New York, New Jersey and Connecticut have all shifted to the other side since the beginning of the year, for a total of 18 states. Taking advantage of this smoking trend, about a dozen cannabis companies have gone public or announced plans to do so in 2021. IPOs launched this summer include Hempsana, CBD.io, Mary Agrotechnologies and Oxford Cannabinoid Technologies. Next up is Leafly, which asserts that women and adults over 60 are the fastest-growing consumer segments.

HMPS GRV MARY OCTP-GBJ

x5

This is how much the price of natural gas in Europe has risen since the beginning of the year. The highest amount is currently €162 (as of 6 October).

BUST

The space race and Boeing’s disillusionment

Since the 737 Max crisis, Boeing has been battered with a spate of setbacks. Will Starliner, Boeing’s space capsule, ever dock at the International Space Station (ISS)? After two consecutive failures, some experts are beginning to wonder. In 2019, Starliner failed to orbit the ISS, and on 3 August this year the capsule had to leave the launchpad before it could even take off. Boeing was forced to abandon its launch window and postpone the (unmanned) testing of its capsule indefinitely. Estimated to cost Boeing at least $410 million, the failure is good news for Elon Musk and SpaceX, which has already successfully completed two manned flights to the ISS. Both Boeing and SpaceX developed their capsules under the NASA programme, with Starliner’s contract worth $4.8 billion and SpaceX’s $3.1 billion.

BA

TRENDS

the personality

JIM LANZONE

From Tinder to Yahoo

Position
CEO

Age
50

Nationality
American

Yahoo!, the ancestor of the web now owned by the investment fund Apollo Global Management, has a new strongman at its helm. The US tech firm has brought in Tinder CEO Jim Lanzone with the hope of boosting its audience. Previous tenures held by the Californian web veteran include several executive positions at the television behemoth CBS, where he was behind the streaming services CBS All Access and CBSN. Even if Yahoo has lost some of its glory of days past, it remains a heavyweight in online advertising, boasting 900 million active monthly users. Jim Lanzone plans specifically on developing Yahoo Finance and Yahoo Sports, the latter of which could benefit from the current popularity of sports betting in the United States. The new boss will also focus on revamping Yahoo's services to enhance their appeal in design and functionality, as he successfully did for Tinder. APO

the country

EL SALVADOR

Bitcoin's bitter after-taste

This summer, El Salvador became the first country to recognise Bitcoin as an official and legal currency, alongside the US dollar. Although El Salvador is one of the world's largest coffee producers, nearly 25% of its population lives in poverty. The money sent by the more than 1.5 million Salvadorans living abroad represents over one-fifth of the country's GDP. Bitcoin was adopted to reduce commissions charged on these remittances (up to 13% on each transaction), as seven out of 10 of the country's inhabitants do not have a bank account. The measure drew its share of criticism among both citizens – some of whom have set fire to bitcoin machines – and experts. The IMF disapproved of Bitcoin's volatility, while the World Bank opposed the decision due to the lack of transparency and the environment.

Population
6,486,201 (2020)

GDP per capita
$3,798.64 (2020)

Growth
-7.944% (2020)

Main economic sectors
services, manufacturing (textiles, agribusiness, chemicals), agriculture (sugar, coffee, corn)

ROCKLEY PHOTONICS

the innovation

APPLE'S BIOSENSOR

Revolution for connected health

Manufacturers
Apple and Rockley Photonics

Available from
spring/summer 2024

Price
not disclosed

Since 2017, Apple has been working with the UK company Rockley Photonics on developing a biosensor for its Apple Watch. The new device can measure a range of biomarkers including body hydration, blood pressure, and blood alcohol and glucose levels. Rockley Photonics went public in mid-August, dubbing its system a "clinic on the wrist", and claiming that its sensor is a million times more accurate than existing technology found in other smartwatches. Its miniature spectrophotometer uses an infrared light emitted by a photonic chip, a technology that integrates optoelectronic components on a silicon substrate to send and receive optical signals. Silicon photonic chips have been around for some years but are still limited to computer optical networks, especially in data centres. The miniaturisation of this technology and its application to healthcare could revolutionise this fast-growing market, currently dominated by Intel and Cisco. AAPL RKLY

ANALYSIS

THE VIEWPOINT OF SPECIALISTS

FOCUS

Inflation fears are back

Pressure on prices is rising. Whether temporary, due to the recovery of the world economy, or caused by structural imbalances between supply and demand, economists cannot give a definite answer. But on the markets, unease is setting in.

BY ANGÉLIQUE MOUNIER-KUHN

With each season comes a different economic debate. In the spring, economic forecasters kept wondering whether the surge in commodity prices was the sign of a new, lasting or temporary "supercycle". As the months went by, the benchmark indicator on the futures markets, the Bloomberg Commodity Index, continued to rise relentlessly. But the debate in the political and economic spheres has shifted, as prices increases have spilt into different sectors of the economy. As a result, inflation is the new stumbling block for forecasters.

On one side of the debate are the worriers. They are convinced that too much monetary liquidity has triggered the vicious circle of contagion. On the other are those who remain confident. They see rising prices and supply disruptions as the logical and temporary consequences of a full-blown recovery in global activity. Adam Tooze, a prominent economic historian and professor at Columbia University, sums it up nicely in one of his newsletters: "Whether we are living through the beginning of a new inflation is uncertain. What is clear is that we are living through a great inflation debate. I cannot think of a period in recent memory, in which there was so little agreement on likely future trends."

For the time being, the US Federal Reserve and the European Central Bank are showing no reaction

Everyone agrees on the facts. Energy costs, especially the price of natural gas (up 110% in Europe this year), transport, semiconductors, food (up 33% according to the Food and Agricultural Organisation), rising consumer goods prices and rents: after three decades of moderate inflation, price increases are accelerating on a global scale. Eurostat estimated eurozone inflation at 3.4% in September, the highest rate since 2008. At 4.1%, it hit a 30-year record in Germany. In August, it stood at 5.3% in the United States, the highest level seen in 13 years. Even in Switzerland, it started climbing in April to reach an annual rate of 0.9% in August. But forecasts from the Swiss National Bank (SNB) stand at 0.5% inflation for this year and 0.7% in 2022.

For the time being, the US Federal Reserve (Fed) and the European Central Bank (ECB) are showing no reaction. "The current inflation spike is really a consequence of supply constraints meeting very strong demand, and that is all associated with the reopening of the economy, which is a process that will have a beginning, a middle and an end," said Fed boss Jerome Powell at a forum hosted by the ECB in late September. "We certainly have no reason to believe that these price increases we are seeing now will not be largely transitory going forward," said Christine Lagarde, his counterpart at the ECB.

ISTOCK

Credit Suisse economists are saying the same thing, describing the global rise in consumer prices as a "temporary acceleration". While they point to a higher risk of impact on the labour market in the United States, they believe that, in Europe and Switzerland, any inflation spiral resulting from wages or prices seems unlikely. We're hearing a similar message from BNP Paribas. Its fourth-quarter outlook report predicts less vigorous demand and loosening health restrictions on production, but expects that "supply disruptions and pricing pressures will not get a lot worse, and will not spread to other product categories". But the French bank was open enough to admit, "Yet this scenario is shrouded in uncertainty."

Given this uncertain future, several central banks in the club of advanced economies have already taken action. South Korea led the way by raising policy rates in August, followed by Norway in September and New Zealand in October. Elsewhere in the world, the spectre of inflation has prompted central banks in Brazil, Russia, Mexico and the Czech Republic to tighten up their monetary taps.

Meanwhile, bond market investors seem more convinced. Investment funds and ETFs invested in TIPS, US Treasury inflation-protected securities, siphoned $47 billion between January and August. That figure is up from $8.3 billion over the same period last year, when the global economy was stalled and the concept of inflation was still veiled in a thick layer of dust. Finally, although the global economy felt the blow from the demise of Chinese construction behemoth Evergrande, the poor performance across stock markets in September – the worst month since the beating it took in March 2020 – also showed that inflation fears are taking hold.

So, who should we believe? Wharton School professor Jeremy Siegel, famous for his unwavering optimism, who is raising red flags all over the media? He reckons that inflation will become a "much bigger problem" than the Fed anticipates, and that will put pressure on the Fed to act and trigger a correction for the markets. William Galston, a fellow at the Brookings Institution and *Wall Street Journal* columnist, believes that some of the bottlenecks are more structural than transitory in nature. "In recent decades, corporations have become dependent on global supply chains to keep the prices of labour and materials down.... The pandemic, protectionism and global tensions are forcing them to reconsider this strategy. But moving away will take time and raise costs," he writes. "You don't need a doctorate in economics to understand that when rising demand meets too little supply, the result is inflation," he says.

Perhaps the former head of the SNB, now vice-chairman of BlackRock's asset management company, should have the last word. "I think it's the wrong frame to ask if it is transitory or persistent, I think it's both," Philipp Hildebrand recently told Bloomberg TV. He then concluded, "The key point is that inflation will settle at a higher point and markets will have to get used to that." ◢

On, the Swiss startup standing up to Nike and Asics

The Zurich-based footwear manufacturer already distributes its trainers in about 60 countries. In mid-September, the company made a smashing debut on the New York Stock Exchange, and has no plans to stop there.

BY ANGÉLIQUE MOUNIER-KUHN

ON RUNNING

On launched a charm offensive on its first day of listing on the NYSE (15 September, 2021).

IN NUMBERS

$746.4 M
The amount raised in its IPO on the New York Stock Exchange.

1,000+
The symbolic number of employees reached in September.

Up 85%
The company's average annual growth over the last 11 years.

Once upon a time, a minor leaguer from Zurich had ambitions so high that it went straight to Wall Street for a listing, completely bypassing the Swiss Stock Exchange. On 15 September, technical running shoemaker On wowed the industry with its debut on the New York Stock Exchange. Initially listing at $24, its shares soared 46% on the first day of trading. Orchestrated by an entire armada of investment banks (Goldman Sachs, Morgan Stanley, UBS and Credit Suisse, among others), the deal enabled On to raise $746.4 million to finance its future development, almost $130 million more than projected in the most optimistic scenarios.

"From Switzerland, On has successfully grown into a global brand with loyal fans in North America, Europe and Asia. It was therefore logical to list On in New York, even though it remains a Swiss company with its headquarters and most of its employees in Switzerland," says Hirzel. Neef.Schmid.Konsulenten, the firm in charge of the company's communications. On has succumbed to the siren song of the US stock exchange, where it raised record-breaking funds this year. But the company has consistently drawn on its "Swissness" in building its brand image… to the point of stamping a little red flag with a white cross on its shoes sold on foreign markets.

Slick storytelling, aggressive communication strategy, everything is calibrated down to the millimetre

But aren't the products by this "startup from the Swiss Alps" primarily manufactured in Vietnam? It doesn't matter. They are designed, developed, created and tested in Switzerland, says On in the prospectus published for its shareholders. Slick storytelling, aggressive communication strategy, everything is calibrated down to the millimetre, without fear of hyperbole. "On was born with a single goal: to revolutionise the sensation of running," the company proclaims.

The style may be annoying, but the strategy is a hit. Founded in 2010, On is currently sold in 8,000 points of sale in some 60 countries. It has sold 17 million products since it was founded by three people with a love of running: Olympic duathlon champion and multiple Ironman triathlon winner, Olivier Bernhard, and his friends David Allemann, a former advertising and marketing executive, and Caspar Coppetti, a former strategy consultant who holds a PhD in economics. The trio's credo is innovation, both in terms of technical performance and design. In 2013, the founders added the skills of Martin Hoffman as CFO and Marc Maurer as COO, both of whom were named co-CEOs a few months ago. The five men are running the company as partners. They brought in a woman, American Amy Banse, on the board of directors after the IPO.

To establish its name, the brand claimed from the outset a "radical" technology that could deliver its customers "soft landings followed by explosive take-offs". The sole is made of "clouds", or hollow tubes connected to one another to provide such comfort and performance that runners feel as though they're running on a cloud. Revolutionary? Maybe not, but definitely different. This patented CloudTec technology is to the shoes of the Swiss brand what pressurised air is to Nike trainers, gel to the shoes produced by Japanese equipment maker Asics, or foam to New Balance sneakers – a way of asserting its uniqueness in the ferociously competitive running gear market.

Its technology selling point was a success. It has earned On a host of innovation awards and a spot alongside industry giants, with prices at the high end of the market compared ▷

On employees during a promotional run through the streets of New York, on the sidelines of the IPO.

ON RUNNING

with those charged by the competition. "To break into the market, On had no choice but to create something new," says Laurent Paonessa, general manager of New Concept Sports, a shop in Carouge specialised in running and Nordic walking.

"At first I totally didn't believe in the company's approach, and customers were rather sceptical about the sole," he admits. The experienced runner, who has logged a total of 22 marathons, eventually changed his point of view. At events in London and Lisbon, he tested Cloudflow, an ultra-light multi-purpose model launched in 2017 and now the brand's best-seller. The Cloudflow was also worn by Swiss athletes at the Tokyo Olympics. Verdict: "I was seriously impressed, and my initial judgements lifted," Paonessa says. "I started ordering more pairs for my customers."

While Nike or Puma are moving out of the sporting arena to draw in streetwear enthusiasts, On stands out in its determination to appeal to elite athletes. For example, the Swiss marathon record-holder Tadesse Abraham, French ultra-trailer Xavier Thevenard, triathlon legend Tim Don, or his rival Javier Gomez, the brand has added all sorts of "ambassadors" to its trophy case.

"Not a week goes by without a customer calling me to ask if I have the Federer shoe"

Laurent Paonessa, general manager of New Concept Sports

But the most pivotal turning point in On's short history is without doubt when Roger Federer bought a stake in the company's share capital in November 2019. By investing an undisclosed amount, but rumoured to be in the tens of millions of Swiss francs, the Swiss megastar athlete, who was also voted "Most Stylish Man of the Decade" by the readers of *GQ* magazine in 2019, officially became an "active co-owner" of the company. A gold mine of free publicity: from *Vogue* to the *New York Times* to Bloomberg, the news jolted through the media. On promptly left the ranks as an outsider on the premium sneaker market and became "Roger Federer's favourite brand of trainers" everywhere. An express one-way ticket to developing the North American and Chinese markets.

The shoe manufacturer launched a new product in 2020 as a result of its collaboration with the tennis champ: The Roger, a sneaker with an elegant design and CloudTec sole. Despite stepping outside the company's core business, running, the limited edition Roger is in demand. "Not a week goes by without a customer calling me to ask if I have the Federer shoe," says Laurent Paonessa.

On has been creating jobs by the hundreds and now employs more than 1,000 people. The company has opened offices in Berlin, the United States, Brazil, China, Vietnam, Japan and Australia. In December 2020, its first directly operated store opened in New York, featuring the latest technology to analyse runners' gait. In marking the event, co-founder David Allemann said, "Ten years ago, we set out to revolutionise the running experience. Today, we've reinvented the retail experience." Plans are to open a second store in Tokyo in 2022, additional stores in the United States – its most lucrative market generating almost half of its sales – and in China, where the running trend is starting to catch on.

What's next in its story? It'll be written in flamboyant letters, as if nothing should ever go against its ambition. "We're a competitive team. We don't fight to be in second place," the founders told the *Neue Zürcher Zeitung* last spring.

On plans to enlarge its customer base by expanding its collection of high-end clothing and accessories

The sportswear maker is clearly benefiting from the buoyant trends of the global market valued at $300 billion. First, running surged in popularity during the COVID-19 crisis. Second, the casual style of dress known as "athleisure" has been all the rage for years and is still going strong. "Athleisure was a megatrend before COVID-19, but the pandemic has served to further blur the lines between work and free time, and there is a rising acceptance of comfortable wear in previously more formal contexts," McKinsey said in a report earlier this year.

As a result, On plans to enlarge its customer base, its "communities" as it calls them, by expanding its collection of high-end clothing and accessories. And with mass consumption now frowned upon due to climate change, the brand also wants to firmly establish its image in the sustainable economy. Only a few actors, such as Allbirds – also Leonardo DiCaprio's darling investment currently inches away from an IPO – have started to break into this niche segment. Meanwhile, On has launched the "Cyclon", a recyclable trainer derived from castor beans sold by subscription and replaced after it wears out. It has also pledged to make all its products from recycled polyester and polyamide, and organic cotton by 2024. "We dare to dream: if a startup company from the Swiss Alps can reinvent the running shoe, what can we achieve together with our communities for our planet?" On muses in its *Impact Progress Report*. Who said the Swiss were modest in triumph? ONON

ANALYST ADVICE

A "STRATOSPHERIC" VALUATION

The hearty welcome that On received from investors for its IPO catapulted its market capitalisation over the $10 billion mark, placing the young Swiss company in the same category as clothing veterans such as Levi Strauss, Ralph Lauren or Crocs. Bryan Garnier & Co. analyst Cédric Rossi points to its solid growth (up 85% per year on average since its creation) and the strong performance of its direct consumer sales (37%), but feels the valuation of the Swiss German startup has reached "stratospheric" levels. For the first half of 2021, the company posted 315 million Swiss francs in net sales and CHF 3.8 million Swiss francs in net income, after reporting 425 million Swiss francs in net sales and 27 million Swiss francs in net losses last year. On's valuation is based on a capitalisation of 21 times sales in 2020. However, sportswear leader Nike is valued at five times its forecast revenue in 2021. Adidas has a valuation at 2.8 times, and Lululemon, the brand that has generated the most hype in the sportswear industry with its yoga gear, at 8 times. Nothing justifies the difference with On, except to factor in the "Federer premium", the expert concludes.

INTERVIEW

THE ARTIFICIAL HEART FINALLY BEATS

After a quarter of a century of R&D riddled with failure, Carmat has sold its first fully artificial hearts. This is a turning point for the French medtech company. Its CEO Stéphane Piat explains more.

BY BERTRAND BEAUTÉ

Carmat's pulse is racing. In July, the French company founded in 2008 announced the first commercial sale of its Aeson heart prosthesis. Carmat's unique technology creates a totally artificial heart that mimics the function of a natural heart. The bioprosthesis was implanted in an Italian patient suffering from terminal biventricular heart failure at the Azienda Ospedaliera dei Colli hospital in Naples. This marked a turning point. No Aeson heart had ever been implanted outside the setting of a clinical study. Since then, things have accelerated. Between July and September, five more commercial implants were performed in Europe: four in Germany and one in Italy.

These initial historic sales have enabled the company to generate revenue of around €2 million and are the culmination of more than 25 years of research and development. In parallel, Carmat has launched a clinical trial in the United States. This could eventually be the gateway into the vast US market by 2025. Stéphane Piat, Carmat's CEO, spoke with *Swissquote Magazine*.

In December 2020, Carmat received the CE marking, allowing it to be placed on the European Union market. Since then, you have performed six commercial implants with your artificial heart. How are the patients, who were operated on, doing and what will these first sales mean for Carmat?

We never communicate about the health of the people who have been operated on, because they're not our patients, but patients at the hospitals where they're being treated. Having said that, if you read the reports by the medical teams, both in Germany, where four people received implants, and in Italy, you will see that the operations went well and that the patients have recovered.

For Carmat, obtaining the CE marking and the first implants of the Aeson heart represent milestones in the company's history. It paves the way towards more large-scale commercialisation of our technology. A growing number of patients will be able to receive our artificial heart. That's a positive point for them.

CARMAT

Stéphane Piat, Carmat's CEO, holds the Aeson artificial heart at the company's headquarters in Vélizy, near Paris.

That brings me to my next point. Who are the patients who need an artificial heart?

They are people with end-stage heart failure, a condition that will cut their life short. The best treatment for these patients is a heart transplant, which gives them at least another 20 years to live. Unfortunately, there are not enough transplants for all patients. Our artificial heart is an alternative to a transplant. It has the potential to make up for the lack of human hearts and therefore save the lives of the many people who are waiting for an available transplant.

How many patients are we talking about?

Duke University Hospital (North Carolina, US) estimates that nearly 90,000 people suffer from end-stage heart failure in the United States alone, yet only 3,000 to 4,000 heart transplants are performed each year. The situation is similar in Europe. So, we're hardly a niche market. The potential is huge.

Do the health authorities agree to reimburse so many transplants – a hearth estimated to cost more than €200,000 – whereas so far your artificial heart is only indicated as a transitional solution before a transplant, i.e. while waiting for a transplant?

Patients with end-stage heart failure often live in the hospital. They can no longer stand up or move, and look 20 years older than they actually ▷

FOUNDED
2008

REGISTERED OFFICE
VÉLIZY-VILLACOUBLAY (FR)

WORKFORCE
165

REVENUE (2020)
€0

ALCAR

A TECHNOLOGICAL GEM

Heart failure is a progressive disease with a poor prognosis: less than 50% of patients will live beyond five years after diagnosis. Although heart transplantation is the gold standard for treating this disease, it presents a major problem. Donors are scarce, limiting the number of operations to about 5,500 per year. To make up for the lack of available organs, Carmat has achieved a technological breakthrough. Weighing between 800 and 900 grams, its artificial heart is composed of two ventricular chambers and is powered by miniature pumps that produce systole and diastole. To prevent thrombosis and maximise haemocompatibility, the parts in contact with the blood are made of biocompatible materials. The onboard electronics, consisting of a microprocessor and sensors, regulate heart rate according to the patient's activity and physiological needs. The whole system is connected to a 4 kg bag via a percutaneous cable, which the patient must carry with them everywhere. The bag contains two batteries that provide four hours of independent operational life.

In July 2021, a first American patient received Carmat's artificial heart at Duke University Hospital.

STEPHANIE LOPEZ/DUKE HEALTH

are. This makes them very expensive for the healthcare system. From an economic point of view, the implantation of a prosthesis, even if it's expensive, is therefore justified. From a medical point of view, our heart is indicated as a bridge to transplantation. That means that patients live with our heart while waiting for a human heart to become available. This solution has several advantages. First, it saves the lives of patients who can no longer wait. Second, patients implanted with an artificial heart arrive in better health for their heart transplant. And that increases the chances of a successful operation. But of course, our goal is that one day Carmat hearts can be implanted permanently.

Who are your competitors?
The best treatment for end-stage heart failure is still a heart transplant, but there are not enough human organs available. Many

> **"From an economic point of view, the implantation of a prosthesis, even if it's expensive, is therefore justified"**

potential alternatives have emerged over the years, such as pig heart transplants, gene therapy and stem cell injections. But there has been relatively little progress. We are the only authorised technology. Other methods are still, at best, at the stage of animal testing, and therefore 10 years behind Carmat. So we don't have any head-on competition, but we're keeping watch on technological developments.

So far, Carmat has sold six hearts in Europe. This figure is expected to reach 12 units by the end of 2021. What are your sales targets for the next few years?
Of course, we want to sell hundreds and even thousands of units. But before we can do that, we need to ramp up production of the Aeson heart. Industrialising the process is currently Carmat's big challenge. For the time being, we can assemble eight to 10 prostheses a month. But that rate will pick up significantly in 2022. To do that, we've hired more manufacturing workers at our Bois d'Arcy factory, going from about 60 people at the end of 2020 to more than 80 today. Our production process is becoming smoother and more reliable.

The first commercial implants were performed in Germany and Italy. When will a patient be treated in Switzerland?
We're mainly focusing on the German

MEDTECH SWISSQUOTE NOVEMBER 2021

market, which is larger in size and more flexible in terms of authorisations. In Switzerland, we've had informal contact with the Zurich hospital, but discussions haven't gone any further. In fact, many European hospitals have contacted us spontaneously for information about our technology, but none from Switzerland. We haven't received any requests. But we'd be happy to work with Swiss hospitals and are ready to start tomorrow!

So it's that easy to implant the Carmat heart?
We've streamlined the training process. First, we invite the medical teams to come to the Georges Pompidou Hospital in Paris. They receive theoretical training there, then perform implantations on animals. After this initial course, which lasts about three days, we don't leave them to their fate. For their first implantation procedure performed on a patient, we send four people to their hospital to assist them through the operation. About 10 teams have been trained in Europe to perform commercial implants, and 25 in all, if we count those trained for clinical studies.

When do you expect to obtain market approval in the United States?
We are currently conducting a clinical study in the United States with 10 patients, three of whom have already had surgery. According to the protocol approved by the Food and Drug Administration (FDA), the primary endpoint of the study is patient survival 180 days after transplantation. If all goes well, we should obtain marketing authorisation in the United States at the end of 2024 or beginning of 2025. But given the benefit-risk balance, if the results of the first implants are conclusive, I think it could go faster.

In September 2021, you announced that your artificial heart had been implanted for the first time in a woman. Why is that important?
Since Carmat started out, there has been an unfounded concern that our artificial heart, which is the size of two clenched fists, would be too big to be implanted in everyone. By successfully implanting the heart in a 1.55 metre tall woman, doctors at the UofL Health - Jewish Hospital in Louisville, Kentucky, have shown that the size restrictions are minimal, and that our heart is capable of becoming a therapy of choice for a broad patient population. In other words, most adults can receive a Carmat heart, regardless of their size.

In terms of mental health, how do transplant patients live the artificial heart experience, considering that, in the collective imagination, it turns them into machines?
I had the opportunity to spend a couple of hours with a 30 year old patient who lived with the Carmat heart for a few months before receiving a human heart. It was a positive experience for him. But it's true that we lack adequate hindsight to answer that question. However, what we do know is that transplants with human hearts are generally a traumatic experience. People find it difficult to carry someone else's heart. Nevertheless, patients who receive a Carmat heart undergo a mental health check-up before and after the transplant. ◢

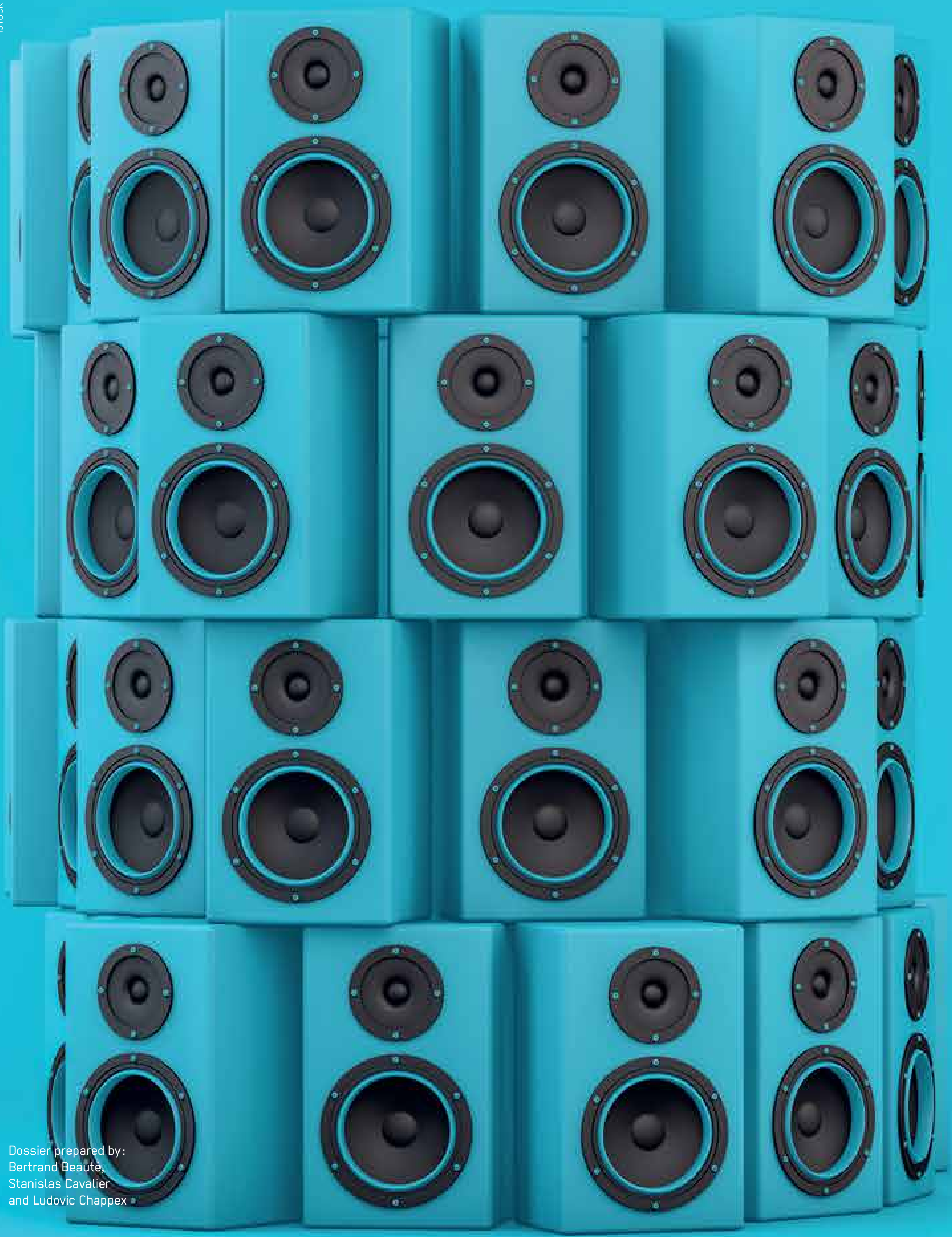
ANALYST OPINION

"THE KEY IS THE US MARKET"

Since going public in 2010, Carmat's share price has had a chequered history, mirroring the company's good and bad news. For example, in December 2013 the share price soared after the company's artificial heart was implanted in a patient for the first time. Then, 74 days after the operation, the patient's death sent the share price tumbling on the Paris stock exchange. There have been other bumps in the road since then. Most notably, in October 2018, Carmat was forced to suspend its ongoing clinical trial in Europe and production of its prosthesis due to data suggesting risks of malfunction. "These risks were unavoidable," says Stéphane Piat, Carmat's CEO. "The development of this type of high-risk device is fraught with failure. What is unfortunate, however, is that with each setback, it was a challenge to convince the authorities to resume the trials."

Will the CE marking obtained in December 2020, which authorises sale on European markets, signal the end of these troubles? Martial Descoutures, an analyst specialised in pharma and biotech at Oddo BHF, wants to believe so. "Carmat's artificial heart has registered conclusive results in Europe. There is no reason why clinical trials should not go well in the United States, which is a key market for Carmat. That's where a sizeable chunk of Carmat's sales will take place, which could reach $400 million by 2030 if the company gets its US market approval." The analyst has issued a BUY recommendation on the share with a target of €42, compared to less than €30 today, but highlights the obstacles that await the medtech company: "Industrialising its production process will be Carmat's main issue and challenge over the next three to four years. The company must substantially increase production without reducing quality. In 2021, Carmat produced about 10 hearts per month. That figure is expected to double by 2022."

ISTOCK



Dossier prepared by:
Bertrand Beauté,
Stanislas Cavalier
and Ludovic Chappex

DOSSIER

MUSIC, A BEAMING INDUSTRY

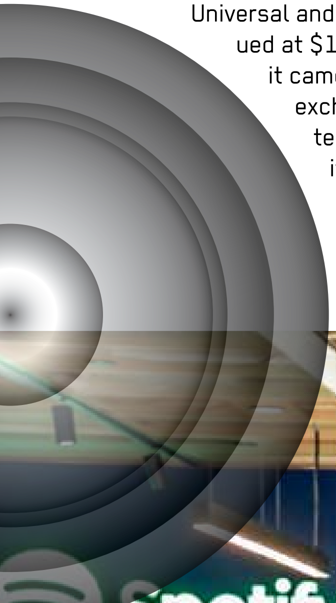
Now that concerts are back on and streaming continues to attract more users, 2022 is shaping up to be a record year for the music industry. That's a tremendous turnaround for a sector that was languishing just 10 years ago.

BY BERTRAND BEAUTÉ

Before you start reading this article, crank up the volume on your amp and listen carefully to the first notes of "Money", the timeless 1973 classic by Pink Floyd. The rhythmically clinking coins make for the perfect introduction to this special report. Because yes, music is making money once again. Despite the pandemic, in 2020 the recorded music industry generated sales of $21.6 billion, up 7.4% from one year earlier, marking the sixth consecutive year of growth (see infographic on p. 38). And this is just the beginning. "We're just now in the early stages of the music industry's renaissance," says Alexandre Phily, an analyst at Union Bancaire Privée (UBP). "The sector still has huge growth ▷

potential." Richard Speetjens, portfolio manager of Global Consumer Trends strategy at Robeco, agrees. He predicts that "music revenue will continue to grow at an annual rate of 7% to 10%".

And investors are loving it. On 21 September, the world's largest recorded music company, Universal Music Group (UMG), rocked a show-stopping IPO on the Amsterdam stock exchange. The company's stock is currently trading at around €24, more than 30% above its IPO price. A year and a half earlier, in June 2020, Warner Music's IPO was already a hit. The world's third biggest music company, behind Universal and Sony, was valued at $15 billion when it came on the stock exchange stage. Fifteen months later, its capitalisation has soared to close to $23 billion.



Not bad for an industry that was practically on its death bed 10 short years ago. Now let's back up a bit. In the late 1990s, major record labels were singing, flamboyant and carefree. But like the fabled, ill-fated cicada, they paid dearly for their short-sightedness in coping with the devastating onslaught of illegal downloads. After culminating at $28.6 billion in 1999, the global recorded music market collapsed and fell more than 50% in 15 years to $14 billion in 2014, according to figures from the International Federation of the Phonographic Industry (IFPI). Since then, the sector has slowly but surely regained strength with the emergence of a new technology: streaming, i.e. listening to music online, has provided new ways of monetising music after years of piracy.

"Paid streaming has brought people an all-new type of service," says Alexandre Phily of UBP. "One click gives consumers access to a music library, with no storage limit or download time. And that has decimated piracy. Users would rather pay a subscription fee to listen to music than download for free." Virtually non-existent in 2010, streaming generated more than $13 billion in revenue in 2020, i.e. 62% of the recorded music industry's total revenue. This breakneck growth has not been derailed by the pandemic, quite the opposite.

"WE ARE JUST NOW IN THE EARLY STAGES OF THE MUSIC INDUSTRY'S RENAISSANCE"
Alexandre Phily, analyst at Union Bancaire Privée

A €10 monthly subscription is something pretty much everyone can make, says Merck Mercuriadis, CEO of Hipgnosis Songs Fund, in an interview with *The Guardian*. "And, as has been proven during the pandemic, those subscriptions have gone up as people have gone looking for comfort." In Q1 2021, 487 million subscribers worldwide paid for streaming services, up from 341 million at the end of 2019. And Hipgnosis predicts in its annual report that the figure will exceed 2 billion by 2030. "The number of users will continue to rise," Alexandre Phily says. "Less than 15% of smartphone owners across the globe currently have a paid subscription to a music streaming platform. Growth potential is still huge."

SPOTIFY

The entrance to Spotify's headquarters in Stockholm (2018).

Labels win big

The many music streaming platforms (Spotify, Apple Music, Amazon Music, Tencent, YouTube, Tidal, Deezer, Qobuz, etc.) pay a considerable chunk of their revenue – about two-thirds – to the big three labels, Universal, Warner and Sony. The trio controls 70% of the music market and owns most of the song catalogues.

For example, world leader Spotify paid more than €5 billion to rights holders in 2020 out of its total revenue of €7.9 billion. That came out to a net loss in 2020 of €581 million for the Swedish star. Meanwhile, Universal Music, which generates revenue comparable to that of Spotify (€7.432 billion in 2020), made a comfortable profit of €1.2 billion.

"It's a very good time for music labels," says Uwe Neumann, an equity analyst at Credit Suisse. And streaming is not the only thing driving the music industry. "Although it's not their main purpose, social media such as TikTok, Snapchat and Instagram are using a growing amount of music" says Phily from UBP. "This delivers another way to make money for the music industry." And now they're all partnering up. In January and February 2021, Warner and Universal signed agreements with TikTok to reap "equitable" compensation from the platform which, until then, paid little or nothing for the ▷

WHO DOES WHAT IN THE MUSIC INDUSTRY?

SINGER-SONGWRITERS

Artists are the lifeblood of the music industry. Songwriters, also called composers, write the music and lyrics, while the performers perform the written work. They may be one and the same person. It is impossible to estimate the total number of artists in the world. Spotify alone has more than 1.2 million artists with more than 1,000 listeners. Of those artists, 870 generated more than $1 million in royalties on Spotify in 2020 and 7,800 more than $100,000.

LABELS

Previously known as record companies or record labels, labels or "majors" are responsible for managing artists' careers. Major labels held 32.1% of the market in 2020. Universal Music Group is the world leader, followed by Sony Music Entertainment (20.6%) and Warner Music Group (15.9%), according to Statista. A multitude of independent labels, such as Believe (see p. 48), split the remaining 30%.

PLATFORMS

Several hundred music streaming platforms, including Deezer, Tidal, SoundCloud and Pandora, are in operation around the world, but only a handful cover the bulk of subscribers. Midia Research estimates that the Swedish platform Spotify held a 32% share of the market in the first quarter of 2021, with 165 million paid subscribers, followed by Apple Music (16%), Amazon Music (13%), China's Tencent (13%) and Google (8%).

CONCERT ORGANISERS

Music tours are becoming more global and are increasingly organised by entertainment giants. The US company LiveNation is number one in the industry and owns the ticketing company Ticketmaster. Before the pandemic, it organised over 40,000 shows and more than 100 festivals each year. AEG, an American firm, holds second place and organises around 20 festivals a year.

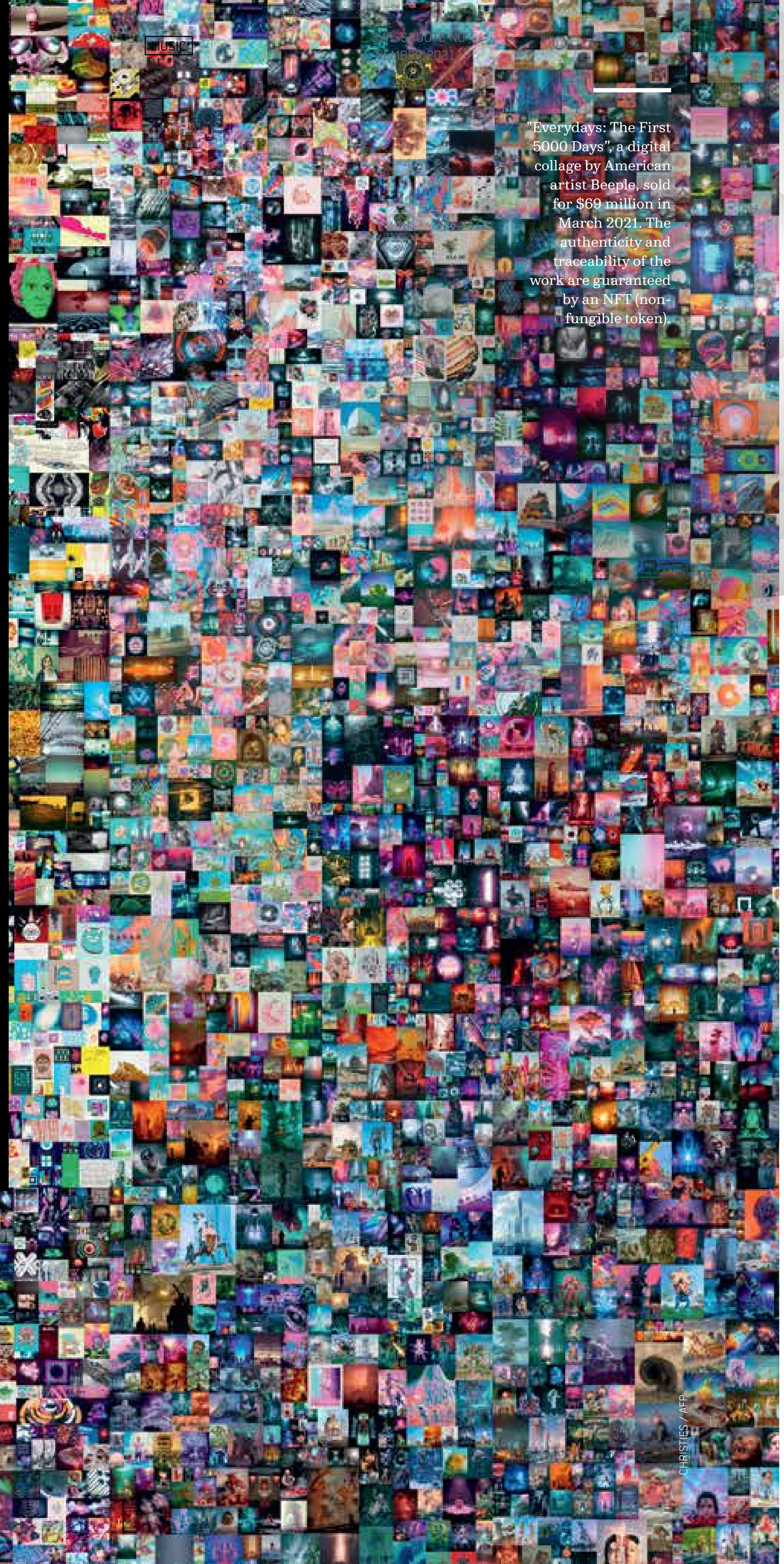
FANS

No way could anyone reliably count the number of people who listen to music worldwide. IFPI figures show that only 443 million listeners had a paid streaming subscription at the end of 2020, while YouTube's free service counts more than 2 billion users per month. In 2018, the average time spent listening to music was 18 hours per week, according to a study conducted in 19 countries.

THE NFT REVOLUTION

After exploding into the art world, non-fungible token (NFT) technology has made a grand entrance into the world of music in 2021. So what are NFTs? NFTs are digital tokens registered on a blockchain and can therefore not be forged. When attached to a work of art, they provide a sort of certificate of authenticity and can make unique what is not. For example, a digital image that can be duplicated infinitely is worthless. But if combined with an NFT token, it becomes a unique work. For example, in March 2021 a digital collage by the American artist Beeple was auctioned at Christie's for $69 million. The buyer did not actually buy the work itself but the associated NFT.

These days, songs too are digital works, like some contemporary art. And the music industry could not remain an outsider. In March 2021, electronic music star 3LAU made $11.7 million by selling 33 NFTs at various prices. The most expensive included a custom song, access to new music on his website, custom artwork and new versions of the 11 original songs on his *Ultraviolet* album. Other artists such as Lil Pump, Grimes, Kings of Leon and The Weeknd have also sold NFT tracks. Consulting firm PwC says that NFTs are a significant innovation that enables artists to address their customers directly.



"Everydays: The First 5000 Days", a digital collage by American artist Beeple, sold for $69 million in March 2021. The authenticity and traceability of the work are guaranteed by an NFT (non-fungible token).

CHRISTIES / AFP

music it plays. Then, last June, Universal signed a licensing deal with Snap, the parent company of the photo and video sharing app Snapchat. Other companies, such as smart bike maker Peloton and video game publisher Roblox, are also paying more royalties. For the first time, we're at a "point when almost all consumption is now paid for", Hipgnosis boss Merck Mercuriadis said in the investment company's 2021 annual report.

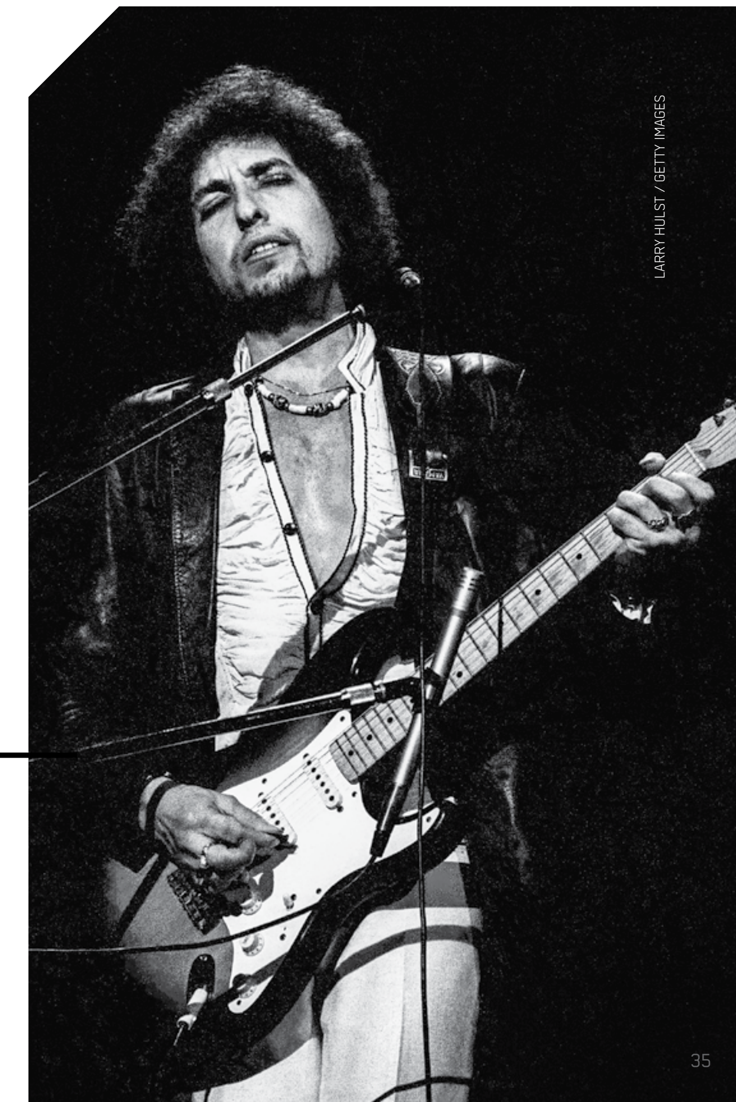
Hits never die

Music labels aren't the only ones in tune with the times. The music industry's restored financial health has attracted ferociously hungry new players – publicly traded investment funds, enticed by royalties and predictable returns. The best known is Hipgnosis Songs Fund Limited, which has been listed on the London Stock Exchange since 2018. In May 2021, the company paid $140 million to acquire the entire Red Hot Chili Peppers catalogue. These rights will further pad an already star-studded roster featuring Mariah Carey, Shakira and Neil Young. That means that now, when a commercial, TV station, or streaming platform such as Spotify plays "Under the Bridge", the biggest hit by the US rock group Red Hot Chili Peppers, the revenues generated (royalties in biz-talk) will no longer funnel into the pockets of the band members or their label, but go straight to Hipgnosis.

The British fund is not alone in this niche. Other players include the private equity firm KKR, better known for its portfolio investments, or the dedicated American fund Round Hill Music (see company profiles on p. 52 to 59). In the face of these hungry financiers, traditional labels are not sitting around idle. In December 2020, Universal bought 600 Bob Dylan songs for an estimated $300 million. Then in April 2021, Sony Music acquired Paul Simon's catalogue, which includes the hits "Mrs. Robinson" and "Sound of Silence" by the famed duo Simon and Garfunkel, for an unconfirmed sum believed to exceed $200 million.

STREAMING HAS PROVIDED NEW WAYS OF MONETISING MUSIC AFTER YEARS OF PIRACY

Naturally, these stratospheric prices are prompting more and more rock'n'roll veterans to sell their recording rights. But is this reasonable for the buyers? "Songs are more reliable assets than oil or gold. A classic song is a source of predictable income in an unpredictable world," Merck Mercuriadis, head of the Hipgnosis fund, told *The Guardian*. Here again, the streaming revolution has reshuffled everything. In the past, consumers would buy a record, and rights holders would only receive their royalties at the ▷



LARRY HULST / GETTY IMAGES

Singer Bob Dylan, here at a concert in Oakland in 1978, sold his entire catalogue of songs to Universal Music Group in December 2020, for an estimated $300 million.

Published on TikTok, Nathan Apodaca's skateboarding video revived the hit song "Dreams" by the America-British group, Fleetwood Mac.

time of purchase. As sales dwindled, so did revenue. But with streaming, royalties are paid with every listen. It doesn't matter how old the song is.

"Streaming shows that consumers like to listen to old songs," says Richard Speetjens, portfolio manager of Global Consumer Trends strategy at Robeco. "Old catalogues actually retain a lot of value." Especially these days, when internet buzz can revive a forgotten track and send it back to the top of the charts. That's what recently happened with "Dreams", the iconic hit by the British-American band Fleetwood Mac. Released in 1977 on the group's *Rumours* album, the song had a successful career, reaching number one on the Billboard Hot 100 in June of that year, before slowly fading from the charts.

Forty-three years later, in September 2020, an American dad filmed himself skateboarding down a highway while listening to "Dreams". Once posted on TikTok, his video went viral.

"A CLASSIC SONG IS A SOURCE OF PREDICTABLE INCOME IN AN UNPREDICTABLE WORLD"

Merck Mercuriadis, CEO of the Hipgnosis fund

More than 100,000 people viewed it in less than an hour. Unexpectedly, all the buzz propelled the song back into the Billboard Hot 100, where it reached No. 21 in October 2020. That convinced German music management group BMG Rights Management to buy the rights from Mick Fleetwood, co-founder of Fleetwood Mac, in January 2021. To justify its purchase, BMG calculated that, in the space of about eight weeks, "Dreams" generated 2.8 billion views on TikTok and was streamed 182 million times.

Losers of the pandemic

The music sector may be powering ahead, but it is also leaving large swathes of industry players by the wayside. Concert, festival and tour organisers, as well as venue owners, were hit hard by the pandemic. PricewaterhouseCoopers (PwC) predicts that live music revenue, which fell by 74.4% in 2020 compared to 2019, will not return to pre-pandemic levels until 2023. But that doesn't worry Richard Speetjens. "Demand is currently high for concerts," the Robeco manager says. "Musicians who haven't been able to perform for such a long time want dates, and audiences are eager to get out and see live performances after months of lockdown. The concert industry will make a strong comeback in 2022 if the pandemic is contained."

This is good news for Live Nation Entertainment, the world's leading concert company. Prior to the pandemic, it was running 40,000 shows and over 100 festivals a year,

VINYL KILLED THE CD STAR

In the first six months of 2021, vinyl sales outpaced sales of other physical formats in the United States – a feat not seen since 1986. Figures released by the Recording Industry Association of America (RIAA) show that 8.8 million vinyl records were sold in the country between January and July, generating revenue of $232.1 million dollars, up 3.6% over one year. Meanwhile, CD sales slumped 47.6% to $129.9 million. This trend is not limited to the US market. The comeback of vinyl coupled with the decline of CDs is a worldwide phenomenon.

For 2020, the International Federation of the Phonographic Industry (IFPI) calculated a 23.5% increase in global revenue for the vinyl record market, while CD revenue continued to fall (down 11.9%). The US consultancy Imarc Group, which valued the vinyl market at $1.3 billion in 2020, predicts that growth will continue until 2026, at an annual rate of 6.8%. The new craze for analogue sound has revived the vinyl pressing industry – a boon for the Czech company and world leader GZ Media, the Australian company Implant Media, and the French group MPO. None of them are listed on a stock exchange. But even amid a resurgence, vinyl only represents a small fraction of the music industry's total revenue (5% in the United States), which is dominated by streaming.

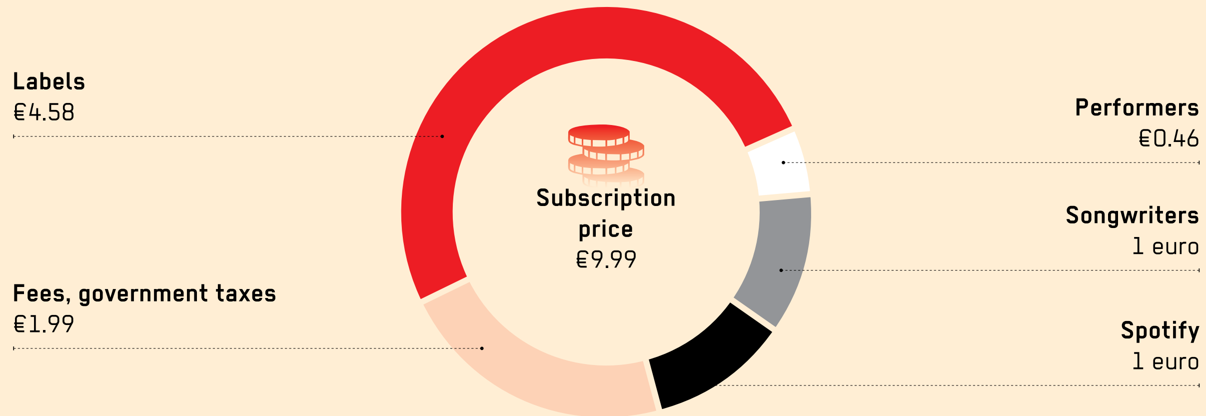
selling 500 million tickets. "The popularity of live performance did not abate during the pandemic. Many festivals are already sold out for next summer," says Alexandre Phily, the UBP analyst. The recovery of live performances will be fuelled even further as labels push their artists to tour, because the experience of live music creates fans, which leads to more listening on streaming platforms – therefore more income for labels." Abba, who in 2021 released their first album in 40 years, will agree. The interstellar Swedish band will be touring again in 2022, to the tune of their iconic hit "Money, Money, Money". The song came out in 1976, but has lost none of its relevance in the music industry.

After being cancelled in 2020 and 2021 due to the pandemic, the Paléo -Switzerland's largest open-air festival - should hold its 45th edition from 19 to 24 July, 2022.

A FAST-GROWING INDUSTRY

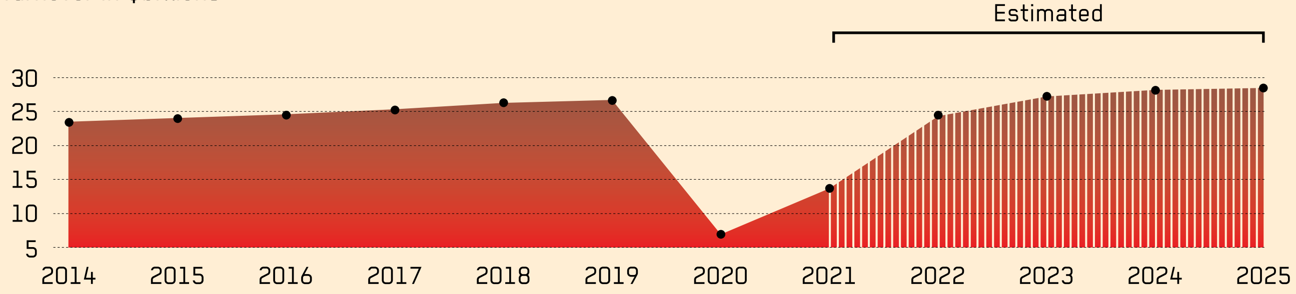
STREAMING: WHERE DOES THE MONEY GO?

Average distribution of revenue generated by a Spotify subscription



EXPECTED RECOVERY FOR POST-PANDEMIC CONCERTS

Turnover in $billions



SIX KEY FIGURES

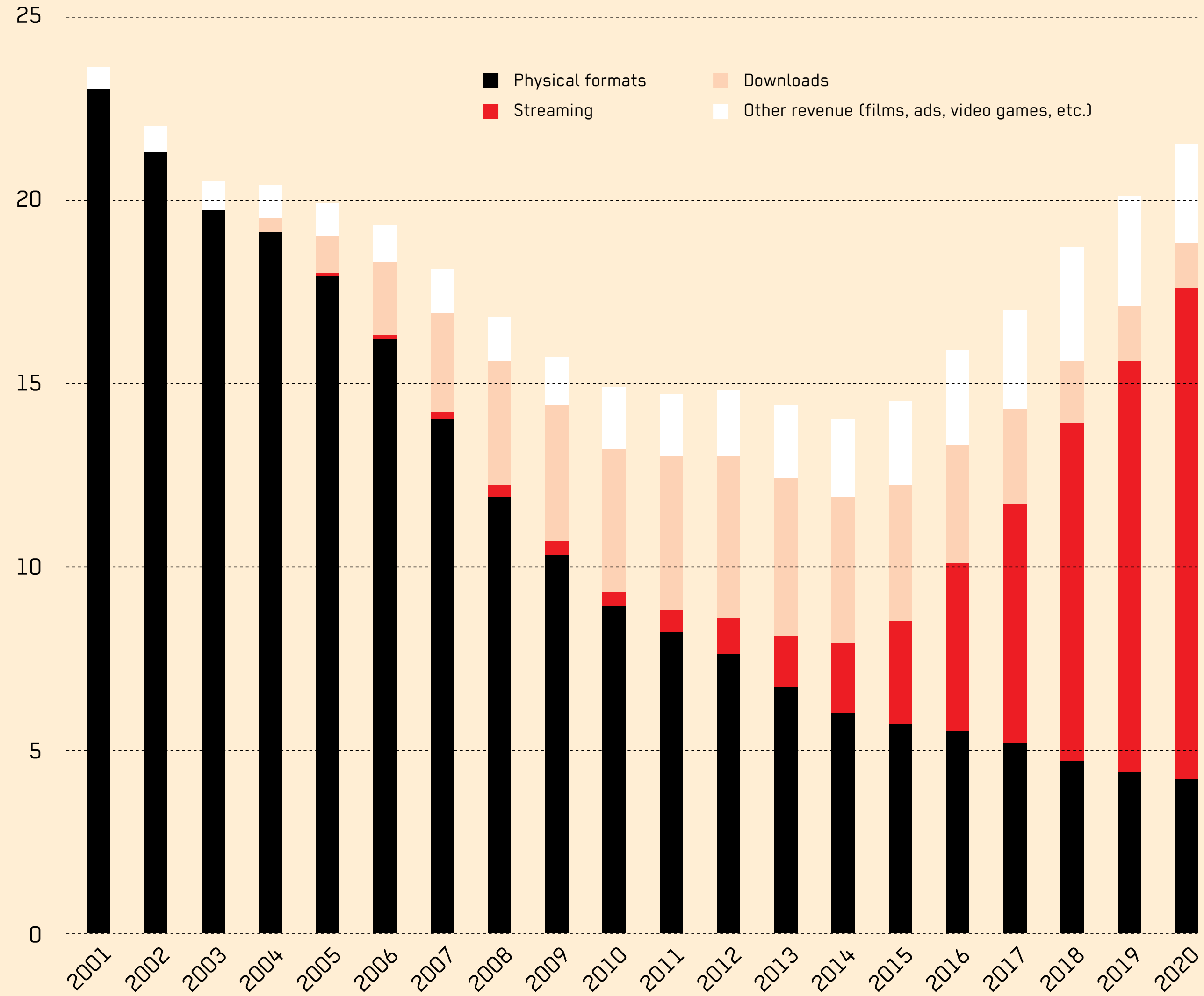
+19.6%
Streaming revenue growth in 2020 to $13.4 billion.

+30%
Increase in the number of paid subscribers to streaming platforms in 2020, i.e. 443 million users versus 341 million a year earlier.

-11.9%
Drop in CD sales between 2019 and 2020.

EXPLOSION OF STREAMING

Recorded music revenue in billions of dollars



+23.5%
Rise in vinyl sales between 2019 and 2020.

-74.4%
Freefall in revenue in the live performance industry between 2019 and 2020.

+90%
Increase in the number of performers that generated more than €1 million in royalties per year on Spotify between 2017 and 2020.

Sources: International Federation of the Phonographic Industry (IFPI), PricewaterhouseCoopers (PwC), Spotify, *Swissquote Magazine*, Pay Performers

ARTISTS IN A RAGE

Due to criticism about the streaming revenue distribution model, Spotify has launched a website to explain how much money goes to artists. Its competitor SoundCloud has gone as far as change its system.

BY BERTRAND BEAUTÉ

Are musicians being left behind in the music industry's renaissance? On 15 March 2021, artists around the world demonstrated in front of Spotify's offices in the United States, Europe, Asia and Australia, in a campaign launched by the US Union of Musicians and Allied Workers (UMAW). They are upset about how music revenue is distributed and believe the current system is unfair. "Spotify has long mistreated music workers, but the pandemic has put the exploitation into stark relief," UMAW artist Mary Regalado told US music media outlet *Pitchfork*. "The company has tripled in value during the pandemic, while failing to increase its payment rates to artists by even a fraction of a penny."

> **"THE COMPANY HAS TRIPLED IN VALUE DURING THE PANDEMIC, WHILE FAILING TO INCREASE ITS PAYMENT RATES TO ARTISTS BY EVEN A FRACTION OF A PENNY"**
> **Mary Regalado**, member of UMAW

To calm things down, Spotify launched the website *Loud and Clear* in March 2021 to promote transparency on its payment model. As indicated on the website, Spotify does not pay artists directly, but the rights holders. Spotify claims that it pays an average of two-thirds of its revenue to rights holders: "As of 2020, Spotify has paid over $23 billion in royalties to rights holders – including over $5 billion in 2020 alone." Of this amount, 75% to 80% goes to recording and 20% to 25% to publishing the lyrics and music, i.e. the copyright, according to Spotify data. The Swedish company then puts those figures into context. Once that money leaves Spotify's coffers, an artist or songwriter's remuneration depends on their agreement with the rights holders, and each agreement is different, it notes. That is a clever way of offloading the problem onto labels and other rights managers. Although the royalties that artists are paid do vary depending on the agreement they have signed with their labels, it is nevertheless the platforms' payment system that has aroused the ire of musicians. Known as "market centric", the structure is based on the number of total listens to distribute the income. In practice, for a song streamed 10 times, Spotify pays 10 times more money than for a song streamed once. This system favours big international stars like Drake and The Weeknd over others. For example, while the Spotify platform hosts more than 1.2 million artists with more than 1,000 listeners, 57,000 of them account for 90% of the streams, the company's figures show.

What's wrong with that? Let's take the purely theoretical case of two music lovers who like two different bands. In the days of physical media, both fans would have bought a record by their favourite artist, and each artist's income would have been roughly the same, depending on the contract signed with their label. However, with streaming, there can be a stark contrast in the amount of money paid to each artist. Let's imagine that both listeners have the same Spotify subscription for €10, but one listens to his favourite singer compulsively (nine times a day), while the other listens only once a day. Of the €20 Spotify receives in total, two-thirds, or about €13, goes to the rights holders. But since this sum is distributed between the labels based on the number of listens to their respective darlings, one will get almost all of the money, almost €12, while the other will receive only €1. The two artists are paid as agreed in the contracts they have signed with their labels. In other words, one gets a fraction of €12, and the other a fraction of €1.

GETTY IMAGES

An artist protesting outside Spotify's headquarters in Madrid, 15 March, 2021. Protesters are demanding that the streaming giant pay artists properly and make public the contracts signed with the labels.

MUSIC SWISSQUOTE NOVEMBER 2021

To counter this model, the German platform SoundCloud adopted a "user-centric" payment system in March, based on individual subscriber listening. This means that someone who does not listen to the songs of superstars such as Drake or The Weeknd will not see the money generated by their subscription (or by advertising) fall into their already deep pockets, but into those of the artists they do listen to. According to a study conducted by the National Music Centre (NMC) in 2020, if all platforms were to move to a user-centric model, a global star like The Weeknd – who benefits from the traditional pro-rata payment system used by Spotify and the other big platforms – would lose 15% of his revenue. But only a small proportion of the artists on the listening platforms would benefit from this redistribution of earnings. The top 10,000 tracks would see a significant increase in revenue, while the others would continue to split the remaining crumbs. ◢

SHARES OF DISSONANCE

In 2008, when the major record labels allowed Spotify to play their song catalogues, in exchange they were secretly given stakes in the startup. This was an open secret that was never denied or confirmed until 2012. The affair sparked the ire of artists, embittered for being left in the lurch. After Spotify's IPO in 2018, Warner Music sold all its shares for $504 million and gave $126 million from that sale to its artists. Meanwhile, Sony Music sold half its stake for $768 million, handing $250 million to artists. So what about Universal? The company has never sold its shares. Several sources estimate that Universal now owns about 3.5% to 4.5% of Spotify, a position valued at between $1.5 billion and $2 billion. Universal stated in 2018 that if it sold its stake, it would pay artists their share.

INTERVIEW

"IT'S IMPORTANT TO TALK ABOUT MONEY"

With an international career spanning 40 years, the Swiss singer has experienced the music industry revolution from the inside. He therefore understands all its inner workings. In this interview, he speaks openly and honestly with *Swissquote Magazine*.

BY BERTRAND BEAUTÉ

GETTY IMAGES

MUSIC SWISSQUOTE NOVEMBER 2021

It's an October morning, and Stephan Eicher arrives 10 minutes early. He apologises for being tired and orders a cappuccino. He thinks it's funny that the room chosen for the interview, located in the basement of a Geneva hotel, looks like a bunker. He would have preferred a bright place with windows. But it doesn't matter. Once he gets going about music, the magic happens. Even in a closed space. Even when he's tired. In his 40-year career, Stephan Eicher has gone through all the changes in the music industry. And when it comes to talking about it, he can't stop. He's often funny, sometimes firm, always heartfelt. In the space of almost two hours, he takes the time to tell us about the history of music, from the troubadours to modern times, interjecting economic data, poetry and philosophy. It's all here, in this interview.

What do you think are the most important changes in the music industry?

I get the feeling I've been through three big earthquakes in my profession. The first was digitalisation, with the invention of MP3s in 1995. You know, I was around in the golden age of music, when you could make a living, even a very good living, from making records. And then MP3s came. At first the sound was mediocre, but it improved and I realised quite quickly that it would be a tidal wave. I bought an iPod and calculated how much it would cost to fill it. It was in the thousands of euros. Of course nobody did it. As illegal downloading increased and CD sales fell, concerts became the main source of income for artists. So we had to go back out on the road to play concerts, like the troubadours in their time.

The second life-changing moment was of unspeakable violence and came on 13 November 2015. It was a fracture. That day, an audience had come to a concert at the Bataclan in Paris. And then the horror happened. Ten days later, I was scheduled to play in Fribourg, but I couldn't get up on stage and act as if nothing had happened. I decided to go and greet the audience as they entered the venue, shake each hand, to create a physical connection and thank them for having the courage to come to a concert. In France, concert-goers didn't overcome the trauma until 2018-2019.

"FOR THE RECORD INDUSTRY, STREAMING IS THE ULTIMATE ELDORADO"

Finally, the last shake-up has obviously been the pandemic. Performance venues were the first places to close and the last to reopen. When they reopened, playing for 15 to 50 people in venues at half-capacity made no financial sense. We did it, but at a loss.

You don't mention the emergence of streaming, which is the most widely used way of listening to music today.

For the record industry, streaming is the ultimate Eldorado. We don't sell music, but rent it. The idea is genius! The good thing about this new way of consuming music is the vast selection available. Personally, I listen to a lot more music than I used to. That's very positive for me as a music fan. I have playlists that inspire me tremendously, that make my life richer.

But as an artist, it's terrible. Most of the revenue from streaming goes to the record industry, while artists, composers and songwriters are left with the crumbs. Making a record requires two inputs: creativity and funding. Splitting the revenue in half, 50-50 between artists and labels, seems fair to me. So let's talk numbers. Since 1991, I have received 14% of the royalties for the *Engelberg* album. With Spotify, we're used to talking about the famous €0.0046 per listen. But 14% of 0.0046 is €0.000644. In the end, the 17.5 million streams that "Déjeuner en paix" has generated so far represents about €10,000 for the artist. Luckily, I only have to share with my management at the time, who takes 50% on the song, but think about how a 4-piece band could survive on a hit like that! Fans should leave Spotify, Apple and Amazon and go to platforms like Tidal that pay labels and artists better. Plus the sound is higher quality.

For big international stars, however, streaming is more lucrative…

It's not international stars like Drake and Taylor Swift that have made the music industry rich. It's the recordings (masters) by local and middle-ground artists. But when a fan buys a Spotify subscription to listen to Stephan Eicher, I don't get any money. All the revenue is pooled and redistributed according to the number of listens. That favours ▷

the few stars who get millions of streams at the expense of everyone else. Let's do the maths. There are between 35,000 and 40,000 people who are fans of the music of Jean-Louis Aubert, Étienne Daho, Véronique Sanson, Les Innocents, Alain Souchon and Stephan Eicher (according to the data on my artist page, which I can visit on Spotify). This audience signed up for €9 per month per person to listen to this particular style of music, not to listen to Drake. If we split this revenue in half with the label (which sounds fair enough to me), after deducting 20% for Spotify, we could split the rest between these artists. We would then get between €10,000 and €12,000 per month, which is very different from what's happening now.

Some platforms, such as Deezer and SoundCloud, have changed their model so that the income generated by their subscribers really goes to the artists they listen to. Is this a positive development?

Deezer is trying to do that. To me, it makes sense. If someone is a fan of Stephan Eicher or a speed metal band, the money they pay should go to that artist, not to another. That's what they call a "user-centric" system. I think other platforms will shift towards this model when they are really ashamed of what they're doing to us, or when journalists like you talk about it more.

Spotify is highly criticised. But the company still paid 5 billion euros to rights holders in 2020. It shifts the responsibility of distribution to the labels…

(cuts off) What? The labels and Spotify aren't in agreement? That's hard to believe, because they own Spotify! In 2008, the platform was just an empty bottle. Warner, Sony and Universal filled it with their artists' catalogues. But they didn't ask for money in return. They were smarter than that, they were given shares in Spotify. As a result, we musicians didn't get paid for our catalogues being rented out, because the labels didn't receive cash, but shares. The Spotify IPO was done to rid them of this problem. Sony was almost legit. After the IPO, it sold some of its shares and paid the artists (see inset on p. 41). What did Universal do? They didn't pay anything! Vincent Bolloré personally made €7 billion by taking Universal public in September. I imagine he'll keep the money for himself. He doesn't care about artists.

"I'VE ALWAYS BEEN NAIVE ENOUGH TO BELIEVE THAT BY CREATING YOU'LL ALWAYS BE OKAY"

Oddly, as streaming has grown in popularity, vinyl has made a comeback…

Stop. That must be a joke. Vinyl represents 5% of the physical market, which is dead. It's the record industry, its spokespeople and the media shining a light on a mouse in the corner to hide the streaming elephant in the same room. Vinyl is beautiful. I buy it and have a huge collection. But hardly anyone listens to vinyl.

How did the pandemic go for you?

I spent the first lockdown in France. I had to fill in forms to do my shopping and I was sheltered at home for three months. Then concerts briefly started back up again and stopped at the end of October. I came back to Switzerland. My mother passed away, and six weeks later my father succumbed to the coronavirus. It was unbelievably brutal. Three days after he was buried in line with inhumane health regulations, I was operated on due to a problem near my vocal cords. These three events convinced me that I had to go back to doing something artistic, play with other musicians and in front of an audience to get my head above water.

Is that why you launched your "Le radeau des inutiles" tour?

Like the head of a company, I also felt responsible for the 10 or so people who depend on me: my musicians, my technicians, the back office, managers, etc. At the end of 2020, we thought that 2021 would be even worse, and I was going to have to let everyone go. We didn't receive much help, and when we did, it was at a later stage. I cut my income in half. Some musicians were in a state of depression that scared me even more than my own. That's when I figured that we really needed to play. So I initiated "Le radeau des inutiles" (raft of the useless), a title that refers to an unfortunate expression coined by a European head of state. I've always been naive enough to believe that by creating you'll always be okay.

Why did you go through crowdfunding to finance this tour?

With pandemic restrictions, we could only perform outdoors and in front of a limited audience. So I looked for beautiful venues, like we have in Switzerland. But paying for musicians, technicians, equipment, transport, meals, travel, hotels, performance rights (SUISA) and everything else comes to between 12,000 and 18,000 Swiss francs per date. That cost remains constant, but audience size had to be smaller due to the virus. Usually, a ticket to see Stephan Eicher costs 60 to 65 Swiss francs, but that wasn't enough to cover costs in these conditions. So, as people were saying that they missed cultural events, we wanted to ask them what it was really worth to them, by allowing them to give what they want (or can) to attend an Eicher concert.

You managed to raise 388,362 Swiss francs on the platform Wemakeit. A success?

A disaster (laughs). We had a cursor that went up to 140 francs per spectator to cover our costs. The event included a concert, a meal and wines (from Domaine Wannaz in Lavaux, a friend of mine who is a winemaker and restaurant owner, and who also suffered from the pandemic). But it didn't work. One person even paid a franc to attend the concert, have dinner and drink excellent wines! For others, it was 10 francs, 20 francs, etc. In total, 3,800 spectators paid between 1 franc and 1,250 francs, averaging 102 francs. The tour cost 700,000 Swiss francs – to build the travelling theatre, the raft set, an open-air stage and the furniture to accommodate between 15 (at first) and 200 people per concert. That came to a loss of 200,000 francs. Thanks to the Swiss Grand Prix for Music 2021 award that I received and the "Transformation" project in the canton of Vaud, the hole is expected to shrink to about 26,000 francs.

Do you think that people no longer have any idea of what culture is worth?

When my musicians and I go on stage, we're happy. I don't ask the audience to pay me for the two hours I play, because it's a pleasure. But the 22 hours of creation, organisation, rehearsals, travel, preparation, etc. have to be paid for. For a long time, it was hard for me to talk about money, because society teaches us to be discreet about it. But that's a mistake. It's important to talk about it. When I ask a musician to go on tour with me, I require him not to see his family, to put his personal career on hold. Basically, I'm buying his time. That's what paying wages amounts to: buying someone's time. That's no small thing. Especially since there are not many jobs where you're asked to be ready at 10:00 in the morning, finish after midnight or 1 a.m., be available at weekends, travel a lot, use your equipment on stage, all to be paid 500 to 650 francs. So I think it's important to talk about it, so that people realise what's involved.

After this "disaster", are you going to give up on crowdfunding?

Definitely not. I think it's a potential solution. In the past, troubadours would sing for kings, church officials and powerful people. And then, after World War II, music became a thing of the people. That was the golden age. I know what I'm talking about because I lived through the last moments of this golden age at the end of the 1980s. The last 45 single recorded at Phonogram, which is now called Universal, was "Déjeuner en paix". After that they switched to CDs and the rest.

Today, we are experiencing a hyper-democratisation of music. No one buys anything any more. Everything is becoming affordable and available for rent. For artists, there are two potential outcomes. The first is that musicians, like many other professions that no longer feed their employees, should be financed by taxes on the machines that replace us. The second, which I believe in, is crowdfunding 2.0 or the "Patreon" system (ed. note: sponsorship). An audience that likes an artist makes it possible for that individual to express themselves artistically. We don't pay artists to own their art. We pay them to have enough time to create art.

But financially, it doesn't seem to work…

Crowdfunding is still in its infancy. It's a method of financing that will develop. Besides, we don't necessarily do it for money. On this tour, the people who hosted us fed me, gave me a bed, a place to set up the stage and play… Sometimes, I dream of never having money in my pocket again, of never receiving any, but also of never giving any. I think that accepting money for art is slightly pornographic. Give me something other than money, attention, for example. That's why I'm not devastated after losing 200,000 francs. I received a lot of attention on the tour. I wanted this project to show people that there is real value in what we do. And we felt that value throughout the tour. We didn't make any money, but we came back totally fulfilled, with stories, experiences and encounters. ◢

POLYGLOT AND POLYMORPHOUS

A national monument in Switzerland, Stephan Eicher was born in Münchenbuchsee (Bern) in 1960. He began his career with the electro-punk band Noise Boys. But his first success was with the band Grauzone in 1981, with the release of the song "Eisbär". He then embarked on an extraordinary solo career, with songs mainly in French, but also in English, German, Italian and Bernese dialect. His music has continued to attract a large audience in both Switzerland and abroad. Over the course of his career, the artist has produced over 15 albums. His latest, *Homeless Songs*, was released in 2019. His biggest success is the legendary *Engelberg*, an album released in 1991 which features the hits "Pas d'ami (comme toi)", "Déjeuner en paix" and "Hemmige". In 2021, he presented his latest project, "Le radeau des inutiles", on stage and received the Swiss Grand Prix for Music award 2021.

HOW STREAMING IS CHANGING THE DNA OF MUSIC

After changing the way we listen to music, streaming is now changing the structure of songs.

BY BERTRAND BEAUTÉ

Would the 1971 song "Stairway to Heaven" – one of the most famous songs by the British band Led Zeppelin – be a hit today? Of course, we can't ever truly be sure. However, what we do know for certain is that "Stairway", the 8-minute masterpiece with its long intro riff, does not line up with today's standards. In the age of streaming, the most popular songs are short and hook the listener from the very first notes. The reason is money. On most streaming platforms, royalties depend on the number of listens, which was not the case in the CD era.

From there, it's easy to understand. The shorter and more addictive the song, the more likely listeners are to press replay and the more revenue artists and majors receive. As a result, the average length of the most popular songs in the British charts, asserts a study conducted in 2019 by the British record company Ostereo, has been cut by almost a minute in 20 years, from 4 minutes and 16 seconds in 1998 to 3 minutes and 3 seconds in 2019, with the same ranking. The same thing is happening in the US. The average length of tracks on the Billboard Hot 100, the benchmark music chart in the US, shrank by 20 seconds between 2013 and 2018, according to a study by the American magazine *Quartz*. In a December 2020 statement, Korean tech giant Samsung said, "At the end of the decade it's predicted that the average song will be a maximum of 2 minutes, putting the old three-minute pop song cliché to rest."

THE AVERAGE LENGTH OF THE MOST POPULAR SONGS HAS BEEN CUT BY ALMOST A MINUTE IN 20 YEARS

Furthermore, on most platforms, a song has to play for at least 30 seconds to generate a royalty payment. So now artists cram all the catchy parts into the intro of songs. "If I'm writing a song that is for another big pop artist… chorus within the first 30 seconds," said Charlie XCX, a singer-songwriter who has written for Rihanna, among others, in an interview with US website *The Verge*. "No weird self-indulgent intro… Hook at the top in the intro, maybe even start with the chorus, under three minutes."

Artists use another trick to maximise listening: collaborations, featuring other musicians. Forming a duo on a single track allows them to capitalise on each other's reputation. For example, a fan of the French electronic band Daft Punk probably won't spontaneously click on a track by the Canadian pop star The Weeknd. However, they would happily listen to the song "I Feel It Coming", a collaboration by the two in 2017. The same goes for rapper Kendrick Lamar's invitation to veteran rock group U2 on his album *DAMN*. Two fan bases from different worlds discovering the same song means twice as many listens.

If streaming platforms have changed the very structure of songs, does that mean no more long musical intros and never-ending solos? Exceptions are always possible. When "Bohemian Rhapsody" was released by the British band Queen in 1975, it already broke prevailing rules at the time by mixing genres, and without a chorus. An oddity that did not keep it from being a planetary success. ◢

TIKTOK the new star factory

The Chinese social network has become essential in the music ecosystem.

BY STANISLAS CAVALIER

South African DJ Master KG, whose song "Jerusalema" went viral on TikTok, at the Sand Music Festival held in Malawi in November 2020.

GEORGE NTONYA / GETTY IMAGES

This is the story of a song that practically no one in Switzerland would have heard in the age of vinyl and CDs. Released in November 2019 in relative anonymity in South Africa, Master KG's single "Jerusalema" did not necessarily have the workings of a global hit. But that was before TikTok, the now ubiquitous 3- to 180-second video app. In February 2020, a group of Congolese dancers launched the hashtag #JerusalemaDanceChallenge on the Chinese platform, along with a video of them dancing. The "challenge" spread throughout Europe. "Jerusalema" has since racked up 450 million views on YouTube and more than 300 million streams on Spotify. This emblematic TikTokian fable is no exception. Like Olivia Rodrigo (and her hit "Driver's Licence"), Lil Nas X ("Old Town Road") or Wejdene ("Anissa"), countless success stories start out on TikTok.

With its current usership of 800 million, the social media says that 70 artists who started out on TikTok signed with major labels in 2020, including Claire Rosinkranz, Dixie D'Amelio, Powfu, Priscilla Block and Tai Verdes. TikTok has become a phenomenon in the music industry. This is where new names emerge and new trends are born. Because TikTok is more than just about launching careers. The social media can also revive old songs, such as Fleetwood Mac's "Dreams", which was brought back to the top of the charts 40 years after its release. That's why Sony, Universal, Warner and Believe have all signed contracts with TikTok in 2020 and 2021. ◢

BELIEVE

INTERVIEW

"TECHNOLOGY IS ESSENTIAL FOR MANAGING ARTISTS"

The music industry insurgent Believe wants to wield its expertise in algorithms to compete against record company majors. We interviewed the young label's CEO, Denis Ladegaillerie.

BY BERTRAND BEAUTÉ

Rumour has it that in 2017, Sony put €400 million on the table to take over the startup Believe. But the deal didn't go through. At the time, turning down the offer might have come across as a bold choice. Now, four years down the road, no one doubts that it was in fact a wise one. In June 2021, Believe raised €300 million at its IPO in Paris, valuing the company at nearly €2 billion. In those four years, the French unicorn grew exponentially, driven by the tremendous growth of streaming. Its revenue nearly doubled in two years, from €238 million in 2018 to €441.4 million in 2020. Growth like that is enough to bring down the majors.

Founded in 2005, Believe started out distributing digital music, at a time when industry giants – the likes of Universal, Sony and Warner – were still trying to save the CD. By harnessing algorithms used on streaming platforms such as Spotify, Apple Music and Tencent Music, the company has attracted more than 850,000 artists, including stars such as the Icelandic musician Björk and the German group Milky Chance. Denis Ladegaillerie, Believe's CEO and co-founder, explains more.

Global music revenues almost reached record levels in 2020. Can they grow any further, to the point of exceeding the peak of the early 2000s, before the music industry crisis?

In 10 years, the peak of the 2000s will be perceived like a distant hill, because music industry revenue will continue to grow. Even by 2030, we won't have hit our peak. In fact, digital technology is increasing the number of people who pay to listen to music. In the early 2000s, sales of CDs, vinyl and cassettes were concentrated in three markets: the US, Europe and Japan. Monetisation was non-existent in the rest of the world, because physical media was copied illegally. Now with streaming, Asia, South America and Africa can be monetised. And that will boost the music industry's revenues.

In Scandinavia, 45% of people currently have a paid subscription to a streaming service. That figure is 30% in the United States, United Kingdom and Australia, 15% in the rest of the EU, but only 2% to 5% in Asia, and less than 1% in Africa and the Middle East. Therefore, in both developed and developing countries, revenue from streaming services has room for substantial growth.

This growth potential explains why several labels (Warner, Universal and Believe) have decided to go public in the past two years...

I can't speak for the others, but for Believe it was definitely the right time, due to the industry's outlook. When sales were at their highest in the 2000s, the average music consumer basket was about two CDs a year. These days, with digital technology, we're moving towards an average subscription basket of $65 per year, equivalent to about five CDs. The average spend is climbing, and on top of that, the number of music streaming subscribers will continue to rise. Music for commercial use is also booming. In the past, film and television were key vectors for promoting a piece of music. Today, platforms such as TikTok, Instagram and YouTube provide new ways of doing that.

The music market is therefore showing very strong structural growth, which is attractive to investors. ▷

THE LAWYER NOW CALLING THE TUNE

Nothing could have predicted that Denis Ladegaillerie would make a name for himself in the world of music. Born in 1969 in Limoges, he is the son of an oil industry executive and a guidance counsellor. He studied law in Rouen and management in Paris. After that, he travelled to the other side of the Atlantic and graduated with a master's degree in law from Duke University in 1997, before starting a career as a business lawyer in New York. But the end of the millennium was burgeoning with enthusiasm. Rather than sit quietly at his law firm, the young lawyer preferred to give in to the beckoning new economy. In 2000, he joined the Californian company MP3.com, the forerunner of MySpace and SoundCloud, which had just been snatched up by the French company Vivendi. That's where he learnt about the music industry and the incredible potential of the internet. But the bubble was deflating. It was time to wake up from his American dream and leave the beaches of California. Denis Ladegaillerie returned to France with the drive to start his own company. In 2005, he founded the online music distribution label Believe with Arnaud Chiaramonti, who formerly worked with Sony Music and understands the music production side, and Nicolas Laclias. It was a bold move. In 2005, digital accounted for less than 5% of the music industry's revenues. But Denis Ladegaillerie pulled out all the stops. Now, 15 years since it was founded, Believe's capitalisation is close to two billion.

Figures from the International Federation of the Phonographic Industry (IFPI) show that streaming accounted for 62% of the music industry's revenues in 2020, compared to less than 1% 10 years ago. What are the consequences of this shift to digital formats?

The main advantage of digital is that it diversifies the musical landscape. The music market was very linear in the 2000s. For an artist to make it in the industry, labels had to produce a CD and then promote it on TV and radio. Only one band out of 10 would usually break through. To offset the cost of those failed attempts, as well as the cost of manufacturing and distributing records, the majors had to sell high volumes. That's why they only focused on their top artists. In each country, about 200 artists accounted for 70% to 80% of record companies' revenue.

However, in the digital world, distribution costs are considerably reduced, which lowers the barriers to entry and gives rise to significantly more diversity. All musicians can have access to the market, because all they have to do is post a song on a platform to reach an audience. Artists are no longer at the mercy of labels and artistic directors, who would apply subjective criteria in deciding who was allowed to make music. The industry is much healthier than it used to be, and value is distributed more evenly. I think the top 200 artists will eventually only account for 20% or 30% of revenue in the music industry. The middle of the ranking, i.e. from the 200th to the 10,000th artist per country, will account for 50% of the value, and amateur artists (below the 10,000th spot) will divvy up the remaining 20% to 30%.

If anyone can put their music online on their own, won't music labels disappear?

No, we shouldn't underestimate the importance of labels in supporting musicians. But the business is changing. It's no longer about partnerships with TV and radio stations, but about how a label uses the algorithms applied by Spotify, TikTok and other platforms. For example, if you post a song on YouTube, it will get lost amid the countless other videos. Practically no one will see it. That's where we come in. Our know-how in data analysis and digital marketing gives us the capacity to improve the visibility of our artists. On YouTube, our solutions can increase monetisation of a song by up to 150% over three months.

On a platform like Spotify, the algorithm that makes personalised recommendations to subscribers is what contributes to the success of a song. Three-quarters of listens are generated by recommendations. What's key for labels to understand is how the algorithm works, so that their artists' tracks are included in recommendations to listeners. Technology has become an essential aspect of managing artists.

> "IN THE FIRST SIX MONTHS OF 2021, OUR REVENUE GREW TWICE AS FAST AS THAT OF UNIVERSAL"

Is that Believe's advantage over giants like Universal, Warner and Sony?

Historically, traditional record companies have supported a very small number of artists in great depth – the said top 200 per country. But this type of service is very expensive and is not adapted to that middle segment of artists. Our advantage is that we've developed technological solutions to support not just a few dozen artists, but hundreds of thousands of them, along with services adapted to their monetisation levels. As an example, lesser-known musicians can benefit from our fully automated service called TuneCore. For €10 per year and per track, they can be included on more than 150 streaming services worldwide, while retaining 100% of their royalties. Then we have more personalised services for better known artists. Believe is unique in that its range of solutions has always been structured by segment.

Since acquiring the US company Ingrooves in 2019, Universal now offers services similar to yours. Just like Warner and Sony, for that matter…

Yes, there's competition and that's a good thing. In the 2000s, the music industry was an oligopoly made up of six major record labels: Universal, Virgin, Emi, Warner, Sony and Polydor. Then the record industry crisis led to concentration in the market, and 70% of today's global market is dominated by three players (Universal, Sony and Warner). With the market growth, I think that within the next few years we'll again be seeing six to eight major actors. Our goal is to be one of them.

What are your advantages over the competition?

We are the most advanced in digital technology, and our competitors are forced to keep pace with us. In the first six months of 2021, our revenue grew twice as fast as that of Universal, in terms of recorded music. In July 2020, we signed a new type of partnership with TikTok, nine months before the major labels. On YouTube, our tools allow artists to monetise their content two to three times more than the incumbents, especially because we're the only company to partner with YouTube to conduct econometric research. Finally, in July 2021, we also signed an agreement with Spotify to experiment with its new Discovery Mode feature that enhances artists' visibility on the platform. By working in such close collaboration with different platforms, we can better understand their algorithms and know when and how to release a track to find its audience.

> "THE NEW GENERATION CAN MAKE A LOT OF MONEY FROM STREAMING, BUT IT'S TRUE THAT THIS IS OFTEN NOT THE CASE FOR ARTISTS WHO'VE BEEN AROUND LONGER"

The streaming platforms themselves understand the algorithms best. Aren't you concerned that they will expand into digital distribution, like Spotify, which has bought a stake in the US digital music distributor DistroKid?

Spotify took a few steps forward in distribution, and then a few steps back. But I don't think you can be a streaming platform and a distributor at the same time. That would create a conflict of interest. As a distributor, our mission is to serve artists by maximising their audience and their revenue. The aim of platforms, however, is to provide the best experience for their customers. But serving consumers and serving artists are, by definition, conflicting roles. For example, Believe negotiates with Spotify every two years. As a distributor working on behalf of artists, our goal is for Spotify to pay as much as possible, while they of course want to pay as little as possible.

That's the problem, distribution of income. Many artists complain that they don't make enough from streaming. Do you think that's justified?

Older artists complain and that's natural. For example, from 2010 to 2020, the two artists who sold the most records in France were the rocker Johnny Hallyday and the rapper Jul; each sold about 5 million albums. For Johnny Hallyday, 98% of revenue was from CDs sold in supermarkets, but 80% of Jul's earnings come from digital. When Johnny (ed. note: he died in 2017) looked at his income from streaming, he obviously probably felt he didn't make anything from it compared to CDs. On the other hand, the revenue Jul generates via streaming is extremely significant and equivalent to what a top artist would receive in the physical world. The new generation can make a lot of money from streaming, but it's true that this is often not the case for artists who've been around longer. If we look at the figures, from a CD sold for €10, the record company gets about €6, of which 25%, or €1.5, goes to the artists. Out of a digital subscription of €10, €6 to €7 goes to the labels, and 40% to 60% of that goes to the artists. So the breakdown between industry players remains more or less the same.

What type of artists does Believe focus on?

We're not looking for the next Ed Sheeran. We focus on local artists from all over the world. In the United States, 97% of the music listened to is American, and in China 85% of the music listened to is Chinese. The figure stands at 80% in Russia and 70% in France. We were the first to enter fast-growing emerging markets such as India and Russia, where we are leaders. Our most streamed "top artists" of the moment include the group Scriptonite in Russia, the Swiss rapper Loredana in Germany, Jul in France and Ultimo in Italy. ◢

BELIEVE

THE FIRM WORTH 100 BILLION STREAMS

Things got off to a rocky start. Introduced onto the Paris Stock Exchange in June 2021, Believe's share price fell nearly 18% on its first day of trading. Its shares are still trading slightly below the IPO price.

But that's not enough to worry analysts, most of whom recommend buying the stock. Nor is Denis Ladegaillerie, Believe's CEO concerned, "I'm extremely confident. We just need to explain to investors more about what we do and what our technology is." And the company can support its argument with its spectacular growth. In the first six months of 2021, Believe's revenues rose 33% to €260 million. The company works with more than 850,000 artists from over 50 countries. Swiss musicians include Andreas Vollenweider, Kadebostany, Klischée, LCone, Loco Escrito and Loredana. In 2020, Believe artists generated over 100 billion streams on Spotify and 375 billion views on YouTube.

FOUNDED
2005

REGISTERED OFFICE
PARIS (FR)

WORKFORCE
1,500

REVENUE (2020)
€441 MILLION

BLV

THE COMPANIES SETTING THE TEMPO

After years of sluggishness, the music industry has returned to growth. A turnaround that benefits many companies. Our selection.

BY BERTRAND BEAUTÉ AND LUDOVIC CHAPPEX

YAMAHA

THE ROCKSTAR OF MUSICAL INSTRUMENTS

Behind the name Yamaha are two distinct companies. The first, Yamaha Motor, is famous for the roaring mechanics of its motorbikes, scooters and boat engines, while the second, Yamaha Corporation, specialises in making music, literally. Founded in 1887 by Torakusu Yamaha as Yamaha Fûkin Seizōsho (which translates as Yamaha organ factory), the small keyboard factory has grown over the past century into the world's leading musical instrument manufacturer. In 2020, more than one in four instruments sold on the planet came from the Japanese firm. Allied Market Research estimates that Yamaha's musical instrument division alone brought in $2.47 billion in 2020, in an overall market estimated at $9.8 billion.

Its domination emerges most clearly in its traditional business. The company produces 39% of all classical pianos sold worldwide, 50% of the digital pianos and 52% of the synthesizers. But Yamaha wants to shine beyond the world of keyboards. In the late 1950s, the Hamamatsu group embarked on an industry-wide diversification strategy. Since then, it has introduced line-ups of guitars, flutes and trumpets. Today, it holds a 31% share of the market in wind instruments and 9% in guitars. Yamaha's well-rounded positioning is what makes it an instrument powerhouse against famous specialists in guitars (Fender and Gibson) or pianos (Steinway).

Yamaha Corporation makes 64% of its revenue from musical instrument sales, 28% from audio equipment (amplifiers, software, mixing consoles, etc.) and 8% from industrial machinery, electronic equipment and automotive components. Most analysts recommend holding Yamaha shares, whose revenue fell by 4.6% in 2020 due to the pandemic. Note: despite their separation in 2001, Yamaha Corporation remains one of the largest single shareholders in Yamaha Motors and still owns 4.47% of its shares.

Famous jazz pianist Marcus Roberts, here playing on a Yamaha piano, at the Clearwater Jazz Holiday festival in 2009.

ALAN JOHN AINSWORTH / NEWSCOM

FOUNDED 1887
HEADQUARTERS HAMAMATSU (JP)
EMPLOYEES 20,200
REVENUE (2020) $3.31 BN
7951

GOOGLE

THE BLACK BARON

Considered a bit of a vampire in the music industry, due to the hefty advertising revenue generated by YouTube which circumvents both labels and artists, Google is trying to re-glorify its image. In June, the giant from Mountain View announced that it had paid out $4 billion to the music industry in the previous 12 months. Will that be enough to convince artists that Google is now on their side? Perhaps not. But Google's tightening grip on music is causing unease among its rivals. With more than 50 million subscribers to its paid services as of last September, up from 30 million a year earlier, YouTube is showing dizzying growth and is amping up to compete more seriously with Spotify.

FOUNDED: 1998
HEADQUARTERS: MOUNTAIN VIEW (US)
EMPLOYEES: 135,300
REVENUE (2020): $182.5 BN
GOOGL

AMAZON

THE PRIME POWER

Amazon is even good at music. In January 2020, the last time the e-commerce giant reported on its performance, its Amazon Music platform noted 55 million users, ranking the service third worldwide behind Spotify and Apple Music.

FOUNDED: 1994
HEADQUARTERS: SEATTLE (US)
EMPLOYEES: 1.3 M
REVENUE (2020): $386 BN
AMZN

HIPGNOSIS

THE RETIREMENT PLAN

Royalties are generated every time a song is played legally, anywhere in the world. These revenues are basically divided into two parts: royalties for composers and lyricists, and recording rights. Until recently, record companies were mainly interested in the second part. As producers, they own these rights by definition. Plus, the rights represent a larger chunk of the pie (between 75% and 80% of the total, according to Spotify). But in the past three years, more and more players want in on the royalties. This phenomenon was initiated by one man, Merck Mercuriadis.

A former manager of Elton John, Iron Maiden, Guns N' Roses and Beyoncé, Mercuriadis launched Hipgnosis Songs Fund in 2018, which is listed on the London Stock Exchange. His firm buys back songwriter rights in exchange for royalties. Mercuriadis made a simple observation, "Hits never die". And more importantly, times have changed. In the days of CDs, songwriters made money through radio play and a percentage of record sales. That income dwindled over time. But that was then. With streaming, songs continue to generate lucrative royalties even years after their release.

For example, "Wonderwall", the famous Oasis song released in 1995, is streamed an average of 750,000 times a week, generating $1 million a year on Spotify alone, according to *Rolling Stone* magazine. "These great, proven songs are very predictable and reliable in their income streams," Merck Mercuriadis told the BBC in October 2020. Since its creation, Hipgnosis has picked up tracks by Shakira, Neil Young, Blondie and the Red Hot Chili Peppers, who reportedly cashed in $140 million when they sold their catalogue to Hipgnosis in May 2021. For rock veterans, selling their rights is a way of building a comfortable nest egg, with their life's work becoming readily profitable. In contrast, the pandemic stripped them of their main source of income – concerts – for many months.

As of 31 March 2021, Hipgnosis owned 64,098 songs, most of them purchased during the pandemic. Out of these thousands of tracks, 36 have been listened to more than 1 billion times on Spotify. This "Billions Club" had 156 tracks on the Swedish platform in March, which is an indicator of how far Hipgnosis has already come. Most analysts approve of the Hipgnosis business model and recommend buying shares.

FOUNDED
2018

HEADQUARTERS
LONDON (UK)

EMPLOYEES
35

REVENUE (2021)
$138.389 M

SONG

Co-founder of the Hipgnosis fund, famous guitarist-composer Nile Rodgers, who produced the hit "Like a Virgin" for Madonna, has also ceded his rights to the fund run by Merck Mercuriadis.

PHIL LEWIS / NEWSCOM

A key figure in electronic music, with more than 80 million albums sold, Jean-Michel Jarre is used to playing on Roland keyboards. He is pictured here at a concert in Toronto in May 2017.

SPORTSWIRE / NEWSCOM

FOUNDED
1972

HEADQUARTERS
HAMAMATSU (JP)

EMPLOYEES
2,601

REVENUE (2020)
Y64 BN ($563.7 M)

7944

ROLAND

CULT KEYBOARDS

"Be the best rather than the biggest." Roland's motto appears to be a thinly veiled jab at its competitor Yamaha. The Japanese brand, which generates 85% of its revenue internationally, made a name for itself around the world with its electronic keyboards. Roland, which claims to be the only purely digital player in musical instrument design, has widely expanded its range since it was founded in the early 1970s. Keyboards still make up 28% of its revenue, but equipment for electric guitars and amplifiers bring in almost as much (26%), followed by electronic percussion instruments (23%). Remaining revenue is split between synthesizers and various audio products for making music.

Pandemic-induced lockdowns around the world led to increased demand for electronic instruments that could be played at home. In fact, despite the closure of several brick-and-mortar shops, Roland's revenue was not only stable in 2020, but even increased slightly ($563.7 million compared to $556.7 million a year earlier). For the current financial year, the company is doing well and after revising its growth forecasts upwards in early May, it expects revenue to increase by more than 20% and earnings to increase by nearly 80% in the financial year. The US and Europe represent more than 60% of sales, but China (12% of sales) is now leading the strong growth. Analysts expect this trend to continue and most recommend purchasing shares.

MADISON SQUARE GARDEN

THE LEGENDARY VENUE

As its name suggests, the US firm Madison Square Garden Entertainment manages Madison Square Garden, the iconic New York venue that has hosted myriad stars such as The Doors (1969), Elvis Presley (1972), Prince (1988), Guns N' Roses (1991) and Ariana Grande (2017). The company controls other venues in the United States such as the Chicago Theatre and organises the Boston Calling Music Festival. Madison took a beating during the pandemic, seeing its revenues plummet 76% in the 2021 financial year ended June 30 compared to the previous year.

FOUNDED: 2020
HEADQUARTERS: NEW YORK (US)
EMPLOYEES: UNKNOWN
REVENUE (2019): $180.4 M
MSGE

APPLE

THE QUIET STREAMER

The tech superstar has not disclosed the number of Apple Music subscribers since 2019. At the time, it had 60 million. What about now? The number has most likely increased, especially since Apple has not sat around idle. In August 2021, the firm acquired Primephonic, a well-known classical music streaming service, to integrate new features into its own streaming platform.

FOUNDED: 1976
HEADQUARTERS: CUPERTINO (US)
EMPLOYEES: 147,000
REVENUE (2019): $274.515 BN
AAPL

SPOTIFY

THE GAME CHANGER

Published in July 2021, Spotify's quarterly results were disappointing. Founded in Stockholm in 2006, the Swedish company is showing signs of slowing growth. Over the first six months of 2021, the number of paid subscribers increased by only 6.5% to 165 million, compared to 155 million at the end of 2020. The thing is, the company had accustomed analysts to double-digit growth. And now music streaming's historical leader faces increasingly fierce competition in a market where it is becoming complicated to stand out. "Music services are not like video streaming platforms, such as Netflix and Disney, because their content is not distinctive. They all have the same catalogues, which mainly come from the three major record companies: Universal, Sony and Warner," says Richard Speetjens, portfolio manager at Robeco. Offering more than 70 million tracks available at the click of a button – the equivalent of 400 years of uninterrupted listening – Spotify says it has exactly the same number of tracks as its competitors Apple Music and Amazon Music. But unlike these giants, the Swedish firm does not have the luxury of offsetting losses with other activities.

Despite that, Spotify is trying to set itself apart by expanding its offer, for example by investing in more podcasts. It now has over 2.9 million podcasts, compared to 500,000 at the beginning of 2020. The company has also announced that it will launch a high-resolution music catalogue (CD and studio quality) by the end of the year, following the example of platforms like Tidal and Qobuz.

Despite operating in 178 countries, Spotify has yet to make a profit, posting a loss of €581 million in 2020. Although Spotify has not predicted when it will be profitable, the analysts we consulted are betting on 2023. Most of them recommend buying shares, which, after peaking at nearly $365 in February 2021, have since tumbled back below $250.

FOUNDED
2006

HEADQUARTERS
STOCKHOLM (SE)

EMPLOYEES
6,550

REVENUE (2020)
€ 7.88 BN

SPOT

GETTY IMAGES

American singer Billie Eilish at the launch party for her second album *Happier Than Ever*, organised by Spotify in July 2021.

MARECHAL AURORE / NEWSCOM

A leading figure in the Warner Music stable, songwriter Ed Sheeran, here on stage at Global Citizen Live in Paris in September 2021, has released four studio albums.

WARNER MUSIC GROUP

TWITCH'S NEW ALLY

The world's third-largest music label behind Universal Music and Sony Music Entertainment, Warner Music Group has made quite a comeback. Like its rivals, the label is emerging from a decade on high alert, as plunging CD sales sent it reeling into the abyss. Since then, the firm has gone beyond rising from its ashes. After a triumphant IPO in June 2020, its growth is currently exploding (up 32.7% over a year, in the third quarter of 2021). This is because the US record company, which features dozens of superstars in its catalogue (Ed Sheeran, Madonna, David Guetta, The Doors, to name a few), has benefited handsomely from the growth of paid streaming, which generates royalties.

But Warner Music is looking further ahead and now wants to capitalise on social networks. At the end of September, the group announced that it had signed a momentous partnership with Twitch, the Amazon-owned live video streaming service. Warner Music plans to launch channels dedicated to its artists, to give their fans new ways to interact. Twitch channel subscriptions cost $5 a month, and 50% to 70% of that amount goes to the channel owner, depending on the number of subscribers. Streamers can also earn money from viewer "tips", a feature that allows viewers to make their comments more visible. Plus, channel owners can run ads during live streams.

Most analysts recommend buying or holding Warner Music shares.

FOUNDED
1958 (WARNER BROS.)

HEADQUARTERS
NEW YORK (US)

EMPLOYEES
5,500

REVENUE (2020)
$4.46 BN

WMG

CTS EVENTIM

THE GERMAN ORGANISER

German group CTS Eventim specialises in live performances and ticketing. Its revenues were wiped out by the pandemic and successive lockdowns. In 2020, its revenue tanked by more than 80% to €256.84 million, down from €1.443 billion a year earlier.

FOUNDED: 1989
HEADQUARTERS: BREMEN (DE)
EMPLOYEES: 2,049
REVENUE (2020): € 256.840 M
EVD

KAWAI

THE OTHER JAPANESE PIANIST

With Yamaha, Japan is the land of the world's leading musical instrument manufacturer. But the archipelago is also home to smaller manufacturers, such as Kawai Musical Instruments. Founded in 1927, the company has been making classical pianos for almost a century, and now more and more electric pianos and synthesizers.

FOUNDED: 1927
HEADQUARTERS: SHIZUOKA (JP)
EMPLOYEES: 2,813
REVENUE (2020): $595 M
7952

CASIO

THE ELECTRONIC KEYBOARD

Formed in 1957 to introduce the world's first electric calculator, Casio Computer now produces many other items such as watches, payment terminals and electronic musical instruments.

FOUNDED: 1957
HEADQUARTERS: TOKYO (JP)
EMPLOYEES: 11,193
REVENUE (2021): $2 BN
6952

ALFREDO ESTRELLA / AFP

Nicknamed the "Prince of Reggaeton", Colombian singer J. Balvin, produced by Universal, was in 2018 the most streamed artist in the world on Spotify, with 48 million monthly listens.

UNIVERSAL MUSIC

A FLAMBOYANT IPO

Asked in 2017 about the ideal timing for Universal Music's IPO, Vincent Bolloré replied, "IPOs are like cheese soufflés. You have to take them out at just the right time." In other words, when the dough has risen as far as it will go before it collapses. Today, no one has any doubt that the French billionaire, majority shareholder of Universal Music's owner Vivendi, got his recipe right. Universal was listed on the Amsterdam stock exchange this September with a valuation of €33 billion, i.e. four times its value in 2013, when the Japanese company Softbank offered Vivendi €8.5 billion to buy it.

In the 2010s, UMG nearly died out. Today, with its star-studded catalogue featuring Elton John, Paul McCartney, the Rolling Stones, The Weeknd and Eminem, the company is back, centre stage, as consumers have moved over the past decade from illegal downloads to streaming. In 2020, Universal Music generated €3.8 billion in revenue from streaming platforms, up from €3.3 billion in 2019. This segment now accounts for more than half of its total revenue of €7.4 billion. However, the music industry giant remains cautious. "There can be no assurance that this growth pattern will persist or that digital revenues will continue to grow at a rate sufficient to offset and exceed declines in downloads and physical sales," the group articulated in its lengthy listing prospectus for the Amsterdam stock exchange. In fact, Universal and other labels find themselves increasingly dependent on the algorithms of Spotify, Amazon and Apple, which can make or break a track.

Today's recorded music leader, ahead of Sony and Warner with market share of more than 30%, Universal Music believes that its financial success "depends and will depend on its ability to sign new artists". Currently, 54% of the label's revenue is generated by its back catalogue of music (more than three years old). "One of the risks is that in the future artists will end up reaching consumers directly, without going through labels," says Richard Speetjens, a portfolio manager at Robeco. That could happen via current streaming platforms or via emerging technologies such as NFTs (see also p. 34). "Technological advancements are rapidly changing the marketplace in which UMG competes and the nature of UMG's competition," states Universal's IPO document. Despite these challenges, most analysts recommend buying shares, which has already jumped 35% from its IPO price.

FOUNDED
1998

HEADQUARTERS
HILVERSUM (NL)

EMPLOYEES
5,000

REVENUE (2020)
€7.4 BN

UMG

LIVE NATION ENTERTAINMENT

LIGHT AT THE END OF THE TUNNEL

After several months at a virtual standstill, the global leader in concert and venue promotion is recovering with a promising future ahead. Driven by the return of concerts, particularly in the United States, Live Nation Entertainment's revenue rose sharply in Q2 of this year, reaching $575.9 million, compared to $74.1 million over the same period the year before. When these results were published in early August, the group's CEO Michael Rapino was optimistic: "Average ticket prices have been 10% higher than 2019 and most of our major festivals sold out in record time. Live music fans are eager to gather after more than a year in quarantine."

Live Nation Entertainment is an industry giant. Before the pandemic, it organised approximately 40,000 shows and more than 100 festivals per year, which adds up to 500 million tickets sold in total. As proof of its new-found confidence, the group reached an agreement in September to acquire Mexican event promoter Ocesa, another industry heavyweight, for $450 million. Live Nation Entertainment will take a 51% stake in Ocesa, which dominates the Latin American market for live concerts and streaming music. With this transaction, Live Nation Entertainment now has power over a very large market in which it was not previously present – having already successfully conquered Europe, Asia and Australia.

The company's share price has increased sharply since a low point in March–April 2020, now hovering around $100. Most analysts recommend keeping shares, as they are already well valued.

FOUNDED
2010 (MERGER OF LIVE NATION AND TICKETMASTER)

HEADQUARTERS
BEVERLY HILLS (US)

EMPLOYEES
8,200

REVENUE (2020)
$1.86 BN

LYV

TENCENT

THE CHINESE OGRE

Asia's online behemoth bought 10% of the Universal Music Group label in December 2020, increasing its stake to 20% of the share capital. Midia Research ranks Tencent Music as the fourth-largest streaming platform in the world, holding 13% market share.

FOUNDED: 1998
HEADQUARTERS: SHENZHEN (CN)
EMPLOYEES: 85,858
REVENUE (2020): $74.8 BN
0700

SIRIUS XM

THE US WEB RADIO STATION

After acquiring the American streaming platform Pandora in 2019 for $3.5 billion, then buying a stake in the German platform SoundCloud in February 2020, the US satellite radio leader SiriusXM continues its shopping spree. In July 2020, the company secured itself the US podcast pioneer Stitcher for $325 million.

FOUNDED: 2008
HEADQUARTERS: NEW YORK (US)
EMPLOYEES: 4,500
REVENUE (2019): $8.04 BN
SIRI

Mexican-American guitarist Carlos Santana at the historic "We Love NYC: The Homecoming Concert", organised by Live Nation on 21 August, 2021 in Central Park, New York.

DEBRA L. ROTHENBERG / NEWSCOM

THE LUCRATIVE BUSINESS OF STOCK MARKET INDICES

Nasdaq, SMI, DAX, CAC 40, and so on. As measures of what's happening on the stock market, indices are essential tools for investors. But what most people do not realise is that this segment of the financial industry brings in billions of dollars. We take a closer look.

BY ANGÉLIQUE MOUNIER-KUHN

On 20 September, the DAX got a new look. To reflect the German economy more accurately and, especially, the strength of the tech industry, the Frankfurt Stock Exchange's star index expanded from 30 to 40 companies. The DAX redesign was implemented by Qontigo, the Deutsche Börse Group subsidiary in charge of indices. Along with the new composition, criteria for admission were tightened (quarterly reporting requirements, disclosure of audited annual earnings, etc.) in response to the bankruptcy of the German blue chip Wirecard in 2020.

While movements within indices are an everyday occurrence on the stock market, transformations of this magnitude are rare. But this big bang was announced far in advance, leaving asset managers time to prepare, and therefore it did not disrupt operations. At the very least, it gives us the opportunity to explore this relatively unknown facet of the financial industry: the index business. Below are eight questions for further clarification.

1 WHAT IS A STOCK MARKET INDEX?

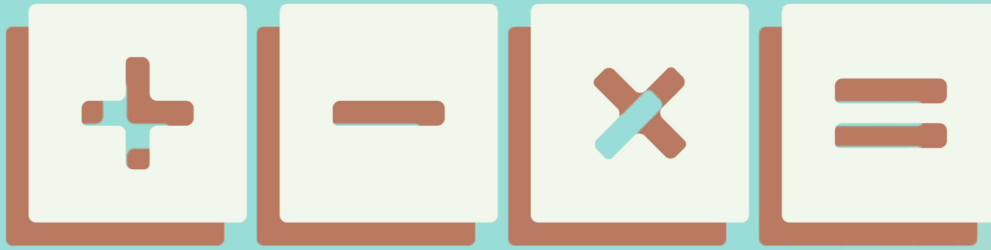
An index reflects the price performance of a "basket" of listed stocks. The securities included in the basket are selected to represent a specific stock market, type of company (large or small cap), region, or industry. The number of stocks in the index, depending on how representative or comprehensive it is meant to be, is a key characteristic.

Anything that affects the company is likely to change the composition of an index: exclusion or inclusion of companies because they have crossed certain capitalisation or revenue thresholds, dividend payments, splits, acquisitions, mergers or spin-offs, etc.

2 WHERE DO STOCK MARKET INDICES COME FROM?

The first stock market indices were created by financial newspapers to inform readers about the stock market performance of the companies in which they owned shares. The very first daily index, mainly dedicated to railways, was created in 1884 as the Dow Jones Railroad Average in the *Customers' Afternoon Letter*. This daily financial newspaper published by Dow Jones & Company, the agency founded by journalists Charles Dow and Edward Jones, eventually became the *Wall Street Journal*. This newspaper is where the Dow Jones Industrial Average (DJIA) first appeared in 1896. Similarly, the first indices of the London Stock Exchange appeared in the *Financial Times* (1935) and those of the Tokyo Stock Exchange in the *Nihon Keizai Shimbun*, the forerunner of the financial daily *Nikkei*.

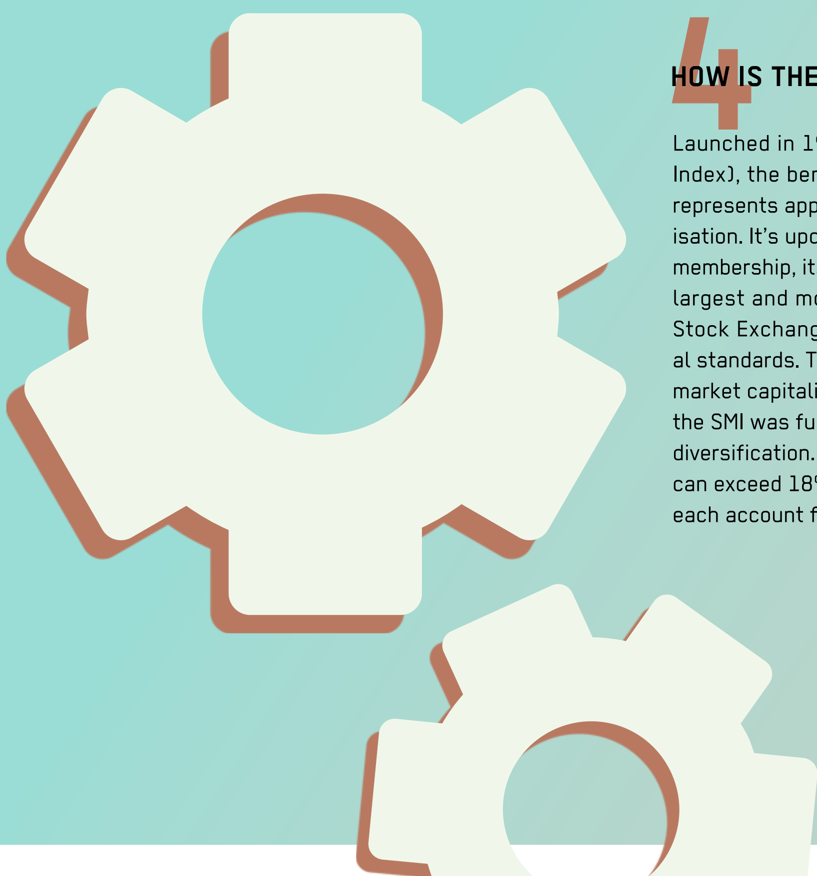
The Dow Jones initially consisted of 12 companies and aimed to cover the broadest possible range of US industry. In 1928, the index was expanded to 30 stocks, the famous "blue chips". Today, it is still one of the most prominent stock market barometers in the world. The same is true of the Standard & Poor's 500, a sample of 500 companies representing the main sectors of the US economy; the Nasdaq-100, which tracks the 100 largest domestic and international non-financial companies listed on the Nasdaq market; the Russell 2000, which measures the performance of the 2,000 smallest companies listed in the United States; and the Wilshire 5000 Total Mark, which measures the performance of the entire US stock market.



3 HOW ARE STOCK MARKET INDICES CALCULATED?

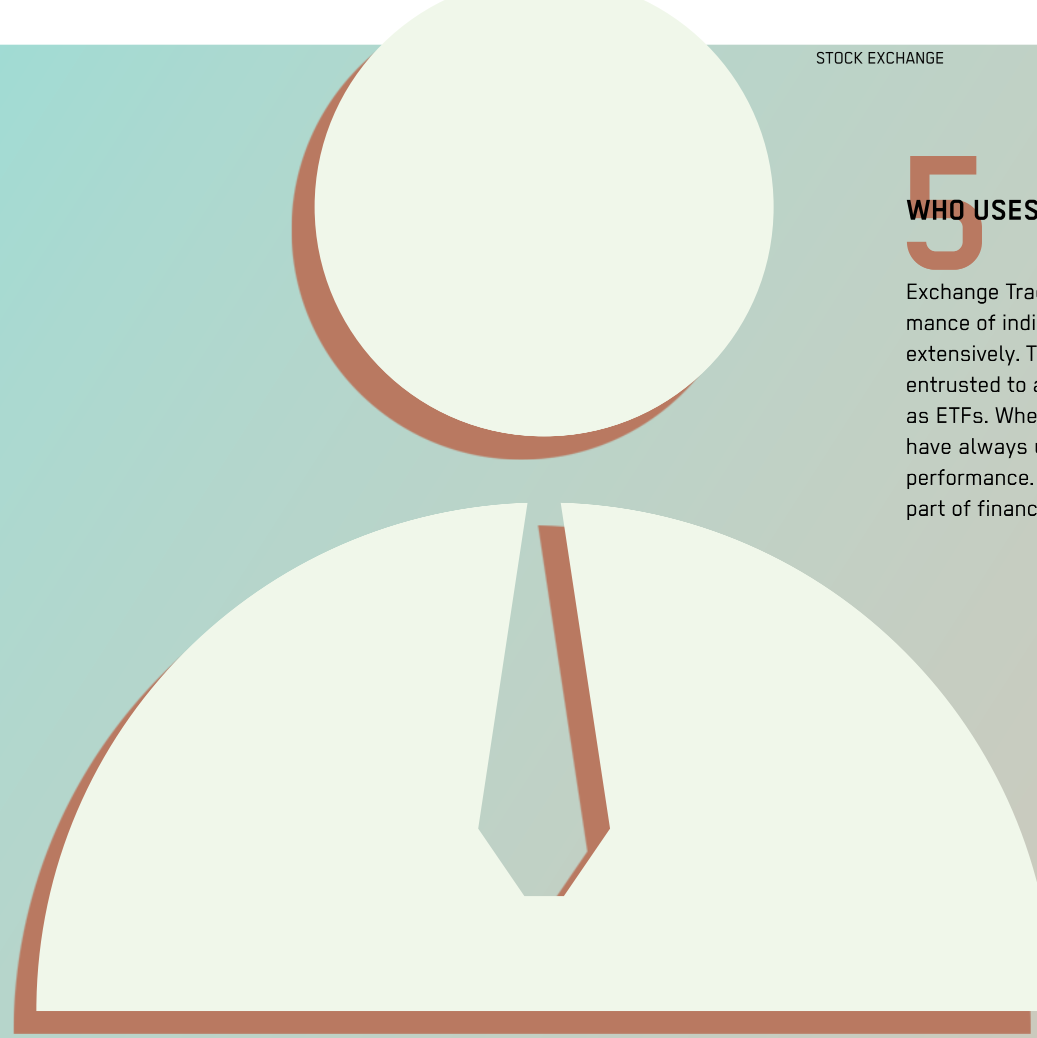
There are about as many calculation techniques as there are stock market indices. Each has its own special characteristics and intricate workings. But broadly speaking, several approaches emerge in the construction of indices, which are not mutually exclusive. The most common indices are weighted by the market capitalisation of the companies in their composition, while others only take into account the share price. Examples of this latter approach include the Dow Jones or the Nikkei 225, the index of the 225 blue chips on the Tokyo Stock Exchange. Other indices use free float as a criterion (the percentage of shares actually on the market) and/or trading volumes, and some include dividends paid to shareholders as if they were reinvested in the stock market. These are known as total return indices. The DAX, including its revamped formula, is one of the few top indices in this category.

The possible combinations of criteria are endless, and the number of indices has soared over the decades. In 2020, the Index Industry Association counted 3.3 million (including bond indices, of which fewer exist), but the World Bank counted “only” 43,248 listed companies worldwide.



4 HOW IS THE SMI CONSTRUCTED?

Launched in 1988 at 1,500 points, the SMI (Swiss Market Index), the benchmark index of the Swiss Stock Exchange, represents approximately 80% of the country’s market capitalisation. It’s updated once a year. After a period of fluctuating membership, its composition was capped in 2007 at the 20 largest and most actively traded companies on the Zurich Stock Exchange, a relatively small sample by international standards. These stocks are weighted by their free float market capitalisation (share of outstanding shares). In 2017, the SMI was further revised to match European standards for diversification. Now, the capitalisation of no single constituent can exceed 18%, and since then, Nestlé, Novartis and Roche each account for 18% of the index.



5 WHO USES STOCK MARKET INDICES?

Exchange Traded Funds (ETFs) aim to replicate the performance of indices, so by nature they use stock market indices extensively. This is also the case for index funds, mandates entrusted to active managers to be managed in the same way as ETFs. Whether or not institutional, active fund managers have always used indices as benchmarks to assess their performance. In other words, everyone uses indices – they are part of finance.

6 WHO CALCULATES STOCK MARKET INDICES?

Stock market indices are calculated by stock market operators themselves, or by index providers, which, despite operating quietly in the background, have gained considerable weight in the world of finance. Following a series of mergers, the sector is now highly concentrated. Equity index markets are dominated by S&P Dow Jones Indices, MSCI and FTSE Russell. Meanwhile, Bloomberg is relatively active in bond indices. Outsiders such as Morningstar and CRSP, as well as a steady stream of newcomers, are trying to gain market share by operating in niche segments.

These companies aim to develop the most relevant and representative indices possible. The more widely an index is recognised by investors, the more asset managers and ETF issuers will buy licences to use it and pay fees proportionate to the amount of assets comprised in the index. Index providers also make money from the financial data they sell through subscriptions.

THE 10 NEW ENTRANTS TO THE DAX

AIRBUS
Aircraft manufacturer

BRENNTAG
Chemicals trading

HELLOFRESH
Meal delivery services

PORSCHE
Car manufacturer

PUMA
Sportswear manufacturer

QIAGEN
Biotechnology and diagnostics company

SARTORIUS
Pharmacy and laboratory equipment and accessories

SIEMENS HEALTHINEERS
Medical technology

SYMRISE
Fragrance and flavour producer

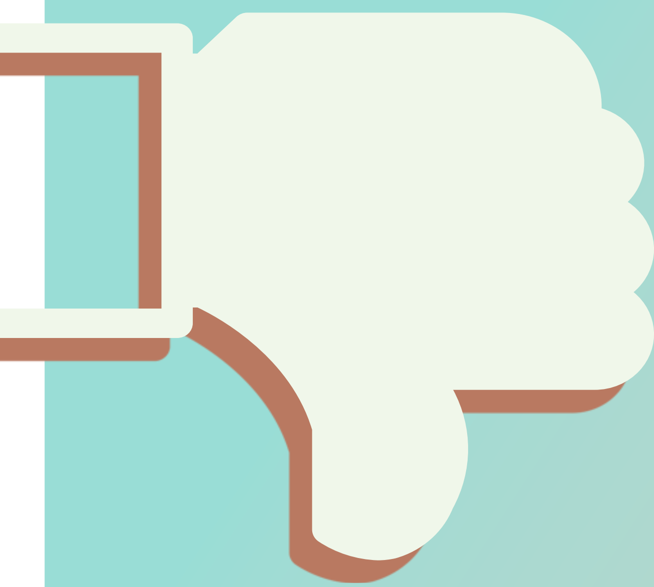
ZALANDO
Online clothing retailer

7 WHY ARE INDEX PROVIDERS CRITICISED?

Index providers have seen their business grow tenfold with the explosion of passive management, which has reached 20% of assets under management in Europe and 40% in the US.

These firms have built up considerable power, regularly raising criticism and calls for stricter supervision. They are criticised for their high operating margins (nearly 60% at MSCI), the opacity of their fee structures and their methodologies. And most of all, index providers are criticised for exercising exorbitant power, virtually political in nature. They and they alone define the criteria that allow a given company or stock market to be included in their indices.

In a study published in 2019 by the British University of Warwick, researchers concluded that index providers now act as a "private authority" on the financial markets. "They have a significant impact on global investment flows and corporate governance standards," the report said. The inclusion of Saudi Arabia in the MSCI Emerging indices in 2018, followed by the inclusion of Saudi major Aramco in the equity indices in 2019 with exemptions from certain rules, has seen billions of dollars flow into the Riyadh Stock Exchange. Senator and former candidate for the US Republican nomination Marco Rubio, meanwhile, was upset in 2019 about MSCI's decision to increase the weight of mainland Chinese stocks in its indices. "We can no longer allow China's authoritarian government to reap the rewards of American and international capital markets while Chinese companies avoid financial disclosure and basic transparency, and place US investors and pensioners at risk," he fumed.



8 WHAT ARE THE NEW TRENDS IN THE INDEX MARKET?

Like the financial industry as a whole, index providers are currently riding the wave of sustainable and socially responsible investment. In 2020, the number of environmental, social and governance (ESG) indices published jumped by 40%, 10 times faster than any other index category, according to The Index Industry Association. The umbrella organisation also notes that thematic and sectoral equity indices are on the rise. Another trend is new indices, notably at S&P, used to track the performance of cryptocurrencies.

INVESTMENT INSPIRATION WIDGET

Driving your investment ideas

Swissquote has developed a widget that offers personalised recommendations to its investor clients. Nataliya Capon, head of the project, explains.

Swissquote has designed a new tool to help its clients come up with investment ideas. What does the solution offer?

The Investment Inspiration widget was designed using artificial intelligence. Activated from the widget panel, the option is available for our clients who have a trading account.

Every day, clients are presented with a personalised selection of company stocks that is compiled based on their investment history. Our assumption is that clients with similar investment behaviour are likely to find the same investment ideas attractive. So, for each investor, we recommend securities that match their lines of interest and even stretch those boundaries. More than 9,000 of our clients have begun using the widget since it was rolled out in June.

How did you come up with the idea for this product?

We wanted to transpose certain characteristics specific to the financial advisory services provided by a traditional bank into our universe. Traditional banks generally work with analysts who share their research with relationship managers, who in turn transform this research into proposals for customers, based on their expectations and profiles.

> "The point is to deliver a relevant selection for each investor profile"

Instead, what we do is take the large volume of anonymous data at our disposal to define very specific categories of investors. We can use this wealth of information to benefit our clients, if they agree to it. This is a first step towards automated digital customer relations.

How do you go about that, technically?

We have identified about 20 factors that reflect investor preferences, such as importance given to dividends, short-/medium-/long-term yield and volatility, fundamental analysis ratios, etc. For each client – provided the individual has a long enough trading history – we can then establish a sort of investor genetic map. This shows the person's priorities when choosing an investment security. For example, one person will be greatly influenced by dividends, medium-term return and market cap, but another by long-term volatility and price-to-book ratio, and so on.

The system will first compare similarities between a client's historical choices with historical choices of other clients to generate a list of securities likely to be of interest to that individual. Then it will filter the results based on the investor's genetic map. The client ends up with a selection of securities that match their investment philosophy, provided the person has a long enough trading history (see inset opposite).

However, it is important to note that this system is not a crystal ball and does not predict an uptrend in share prices. The point is to sort the information and deliver a relevant selection for each investor profile. Also, this does not mean that you don't need to learn more about the companies and analyse the market situation before making an investment decision.

How would you like to develop the service?

We would like to integrate additional recommendation algorithms into the system, for example by using economic news data and descriptions of each company's business activities. If the client agrees, their browsing history on our site (securities searched using our search engine, the news they have read, etc.) is another extremely relevant source of information. We're also trying to find ways to integrate user feedback into the recommendation process.

DR NATALIYA CAPON
DATA SCIENTIST
QUANTITATIVE ASSET MANAGEMENT
SWISSQUOTE BANK

HOW THE WIDGET WORKS

STEP 1

Pre-selection

Each day, the system identifies clients that have selected the same stocks as you and compiles all the securities purchased by those clients.

STOCK A
STOCK B
STOCK C
STOCK D

STEP 2

Identification of your trading habits

If you have a long enough trading history, the system identifies trading patterns, i.e. the characteristics you tend to consider when choosing a stock (high dividends, high volatility, etc.).

HIGH DIVIDENDS
HIGH VOLATILITY
HIGH RETURN

STEP 3

Cross-analysis of your trading patterns against pre-selected shares

From the stocks pre-selected in step 1, the system displays the investments that best match your trading profile on the current date, highlighting the most relevant choices.*

STOCK A
STOCK C
STOCK D

* If your trading patterns are not yet clearly determined, the system will suggest three stocks from the list generated in step 1. This selection is personalised but may not accurately reflect your preferences. If you're just starting out in trading, or if your approach to investing in the stock market is more passive, the system will suggest three of the most popular stocks on the market.

SWISS STARTUPS IN THIS EDITION

BY GRÉGOIRE NICOLET

AELER

SMART, SUSTAINABLE CONTAINERS

Selected as one of the 1,000 innovations identified by the Solar Impulse Foundation to combat global warming, the shipping containers developed by the Vaud-based startup Aeler are lighter, sturdier, better insulated and more aerodynamic than their current counterparts. Originally designed in the laboratories of École Polytechnique Fédérale de Lausanne, Aeler's containers are well positioned as a solution to support the industry's efforts to reduce its environmental footprint. The containers are produced in Eastern Europe and are embedded with sensors that offer not only tracking capabilities but also real-time information on the quality and security of the contents. All these solutions are part of the worldwide logtech revolution.

Fifty of these new containers left for the port of Hamburg during the summer to go aboard industry heavyweights such as Maersk and MSC, and demand is soaring. "We are aiming to have 3,000 containers deployed in 2022," says one of its founders, Naïk Londono. Its latest funding round involving a currently undisclosed amount will go towards expanding the company. "We aim to double our workforce over the next six months."

Number of employees
24

Founded
2018

PLANTED FOOD

THE SUSTAINABLE KEBAB

Winner of Venturelab's Swiss Startup Awards 2021, Planted Foods prides itself on recreating the structure and taste of meat and fish using plants, without additives. Founded in 2019, the company offers a range of products, including kebabs, minced chicken and pulled pork. For its latest feat, this summer Planted Foods broke the world record for the longest vegan breaded schnitzel made from peas, measuring 119 metres.

Planted Foods admits that it is still limited in terms of the thickness it can give to a piece of meat, but it is improving the taste and consistency of existing products in small steps, while polishing its storytelling: "Our products are updated in versions, just like software," says Eric Stirnemann, one of the company's co-founders. "For example, our chicken 3.0 is a new variation that will be available soon."

The increasingly successful ETH Zurich spin-off sells its products in Switzerland, Germany, Austria, France, Italy and the UK. It aims to cover the entire European market in the medium term, but still needs to ramp up its production capacity. As such, it is automating its Kemptthal site to optimise its production processes.

Number of employees
130

Founded
2019

FAIRTIQ

A RECORD-BREAKING SUMMER

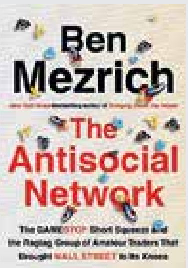
SBB, SNCF and more than 60 other public transport companies across Europe have adopted Fairtiq's online ticketing solutions. Passengers can use its application to check in before boarding a public transport vehicle and again when exiting. The application uses a smartphone's GPS to calculate the best fare for the journey. And if several journeys are made on the same day, only the maximum daily ticket price is paid.

With lockdown restrictions easing, Fairtiq has seen the number of journeys explode, exceeding 35 million in early October, and over 10 million processed between May and September 2021. The Bern-based startup has racked up awards, including a nod from the International Association of Public Transport (UITP) in 2019, one of the most prestigious honours in the industry. "As public transport is often over capacity, and in light of the success in recent months, we are convinced that growth will accelerate," says CEO and founder Gian-Mattia Schucan.

Number of employees
86

Founded
2016

TO READ, TO DOWNLOAD



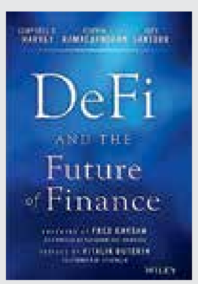
Grand Central Publishing, 2021
CHF 45.-

THE ANTISOCIAL NETWORK

THE GAMESTOP SHORT SQUEEZE AND THE RAGTAG GROUP OF AMATEUR TRADERS THAT BROUGHT WALL STREET TO ITS KNEES

By Ben Mezrich

The Antisocial Network is the story of the biggest financial hold-up of the year, when a group of Internet trolls organised on a subreddit called WallStreetBets, short-circuited the US Stock Exchange and brought down one of the largest hedge funds on Wall Street. With the story unfolding like a nail-biting thriller, *The Antisocial Network* offers a unique glimpse into these extraordinary events, its heroes and anti-heroes, and what this historical victory of retailers over professional traders could now mean for markets.



John Wiley & Sons, 2021
CHF 25.-

DEFI AND THE FUTURE OF FINANCE

By Campbell R. Harvey, Ashwin Ramachandran, Joey Santoro, Vitalik Buterin (preface), Fred Ehrsam (foreword)

The 2008 financial crisis showed how financial infrastructure failed and highlighted the inefficiency of the monopoly held by traditional banking institutions. At least that's the theory put forward by the authors in this book, prefaced by Vitalik Buterin, a co-founder of Ethereum. In it, the authors intend to demonstrate how decentralised finance based on cryptocurrencies, i.e., "DeFi", is revolutionising how we think of savings, lending and trading. Chock-full of concrete examples of innovative protocols such as Uniswap and Compound, DeFi and the Future of Finance is your go-to book for understanding the challenges that have arisen due to cryptocurrencies.

Google Play
Free, in-app purchases

ROUTINERY

THE ANTI-PROCRASTINATOR

Routinery is the type of little app that you try out, and it makes your life so much easier that you can't live without it. With the app, you can plan your life (exercise, eating, study habits, etc.) cleverly and easily thanks to routine management mechanisms based on artificial intelligence and psychology research.

Google Play
Free, in-app purchases

REMOVE.BG

EDIT PHOTOS LIKE A PRO

Photo clipping, or removing the background of a photo, is no longer just for pros. As its name suggests, Remove.bg lets you meticulously remove the background image of photos using artificial intelligence.

App Store
Free, in-app purchases

LOGO MAKER

CREATE YOUR LOGO, FUSS-FREE

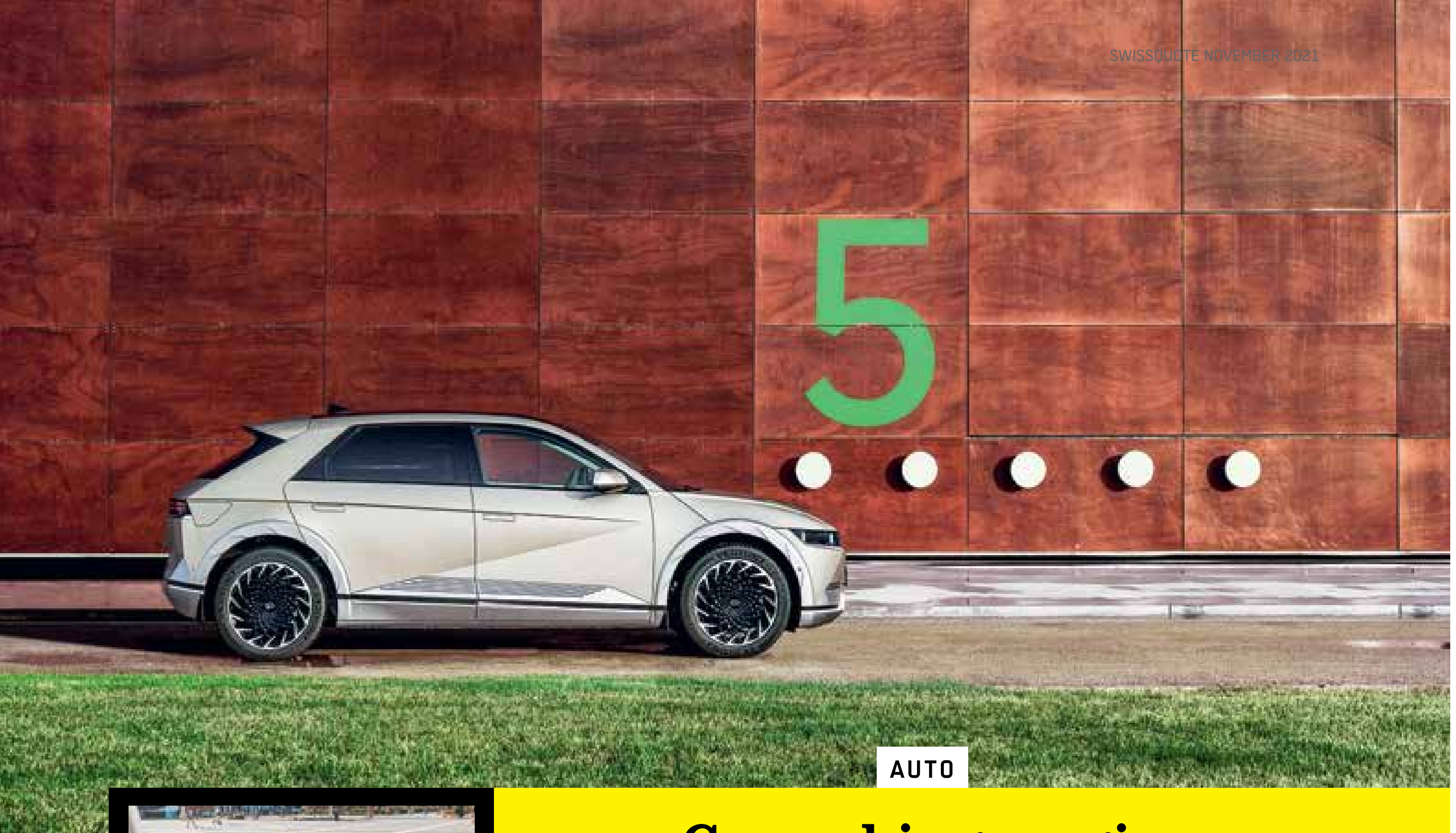
Logo Maker is a very complete app used to design brand and product logos with thousands of templates to choose from and a wide range of editing tools. It offers a worthwhile alternative to launch your brand or avatar without going through an agency.

App Store, Google Play
Free

DEEPSTASH

THE LIBRARY OF GOOD IDEAS

Deepstash is like a digital index card box with ideas, thoughts or suggestions shared by users of the app. Information searches can be by keyword, topic, hashtag, etc. Ideal for keeping up to date with the latest developments in your industry or if you're looking for inspiration.



AUTO

Carmaking magic

BY RAPHAËL LEUBA

Hyundai wreaks havoc in the EV market with this one-of-a-kind IONIQ 5 – also known as the perfect balance between originality and versatility.

Forget the boring Accent and Sonata of the early 2000s. These days Hyundai isn't afraid of anything, and it shows! Since the release of the Veloster coupe with its asymmetrical windows 10 years ago, the South Korean carmaker has developed an insatiable taste for adventurous design. This is now captured, for example, in the distinctive Tucson and Bayon crossovers, or the futuristic Staria minibus. Then there's the IONIQ 5, which looks like nothing you've seen before.

MISLEADING PROPORTIONS

Perhaps in the photo, you might say a Giugiaro concept car from the 1970s or 1980s, a sort of VW Golf 1 pumped up on Delorean steroids. But when you see the IONIQ 5 in real life, you can't be too quick to judge. This fake compact car is actually as big as a medium-sized SUV, i.e. 4.64 m long, 189 m wide and 160 m high! The body is also loaded with exciting details such as large 20-inch kaleidoscope wheels, pixel-design taillights, flush door handles and a solar panel roof. In their lavish extravagance, the designers have moved up all the notches to the point of becoming grotesque, not to mention forgetting the rear windscreen wiper. But you can't say they lack audacity. Or practicality. The IONIQ 5 is not just disruptive, it is first and foremost comfortable.

THE FIVE-SEATER OF CHOICE

For once, the charging cables (including the vehicle-to-load adaptor which delivers electrical energy outside the vehicle to power external devices) do not clutter up the boot but are tucked into a space reserved for them under the bonnet. In terms of spaciousness, the interior is modular by means of an electrically adjustable rear seat, making it as generous for passengers as it is for luggage. The front seats recline into cots with footrests during the charging phase and blow cool air down your backside if temperatures rise. With no centre tunnel, and given the width of the cabin, the front could have been designed for three seats, but the interior designers opted for a sliding multi-storage console. Also, they decided not to go for all touch control. The multi-task touchscreen is still reasonably sized and user-friendly, as long as you're willing to stretch your arm. Perceived quality is not compromised by the use of recycled materials. Not quite premium standards, but it is on par with the VW ID.4 and Tesla Model 3.

HUGGING THE GROUND

The E-GMP platform accommodates the large-capacity battery (72.6 kWh in the test model) with a flat floor in the sub-structure and the engine on the rear axle. The more powerful four-wheel drive version (305 hp and 605 Nm) has an additional engine in the front. As is often the case with the latest generation of electric cars, the wheel base is built as broad as possible and the weight concentrated downwards to provide perfectly stable and balanced handling, as well as seamless driveability. With 217 hp, the IONIQ 5 rear-wheel drive has a lot of drive despite weighing two tonnes. Overtaking is quick and easy, and the instant feedback system in the instrument panel is displayed every time you move the indicator. The overzealous lane-keeping assist system gets a bit annoying, but that is rapidly quelled by the ambient sounds of the forest or the seaside. Bumps are not filtered as well as road noise. But that doesn't alter the experience of utter peacefulness felt at the wheel, in a semi-high position that should suit all body types.

In addition to its fine road performance, the IONIQ 5 has a reassuring range of 451 km in the WLTP cycle, for energy consumption of 17.9 kWh/100 km. This test resulted in a fairly accurate "real" reading (18.8 kWh/100 km) which, combined with the shortened refuelling times thanks to the high charging power (up to 220 kW), makes this strange bird much more credible than it looks.

HYUNDAI IONIQ 5

ENGINE:
SYNCHRONOUS ELECTRIC, 72.6 KWH
POWER:
160 KW (217 CH), 350 NM
ACCELERATION:
0 –100 KM/H IN 7.4 S
RANGE (WLTP):
451 KM
PRICE:
FROM CHF 48,400.-

THE ALTERNATIVES

FORD MUSTANG MACH-E

This sturdy, stylishly designed five-door crossover attempts to bring the sportscar myth in line with new technology and family virtues. Several versions are available with two- (rear-wheel drive) or all-wheel drive. Power output ranges from 269 to 487 hp, supported by high-capacity batteries (75.7 and 98.7 kWh).
From CHF 49,560.-

MERCEDES-BENZ EQA

The EQA is the entry-level model in Mercedes' EQ electric crossover range. Crafted with premium elegance and modelled after the GLA, the vehicle weighs in at more than two tonnes despite its compact size. All three versions come with a 66.5 kWh battery pack. You can choose between front- or four-wheel drive, with a power output of 190 to 292 hp.
From CHF 48,900.-

TRAVEL

Five one-of-a-kind spas in Switzerland

Switzerland offers a flourishing range of exotic treatments. Read on for more details.

BY GAËLLE SINNASSAMY

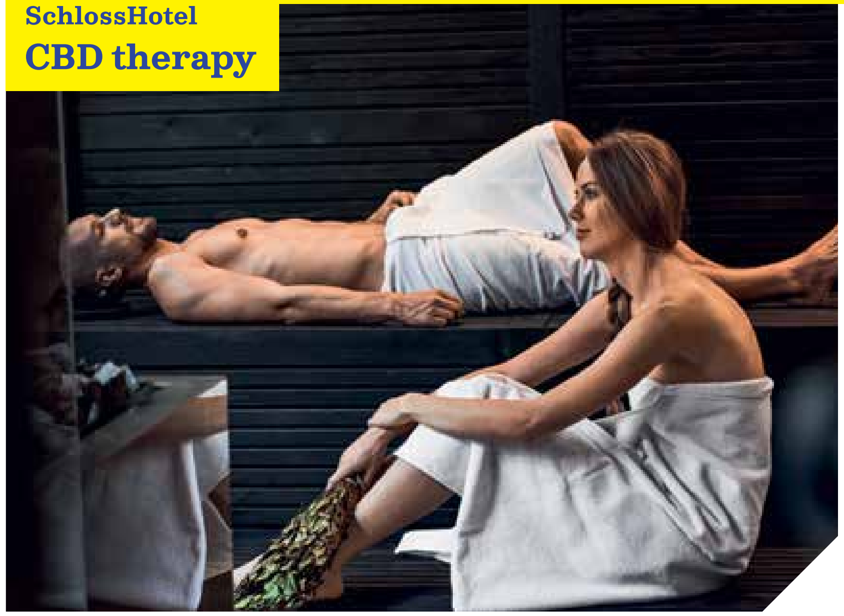
KURHAUSCADEMARIO

Kurhaus Cademario Hotel
The five elements

Located 850 metres above sea level with a stunning view of Lake Lugano, the DOT SPA at the Kurhaus Cademario Hotel promises its visitors a sensory journey featuring a distinctly new age vibe. Designed around the principles of geomancy, the location was chosen more than a century ago by Dr. Adolf Keller, its founder, to enhance the mental, physical and spiritual well-being of patients through its energetically favourable position. With rituals inspired by Chinese medicine, the spa offers to restore the balance between the five elements essential for life and symbolically present in every human being through five complementary treatments. Magical Wood works around a deep tissue massage; Fire Connection combines a cold bath and guided meditation; Mineral Earth highlights a mud body wrap; Precious Metal draws its benefits from gold treatments, and finally The Secret of Water alternates warm and cool compresses topped off with a draining massage. You don't have to be into the philosophy to leave feeling utterly relaxed.

LUGANO (TI)
KURHAUSCADEMARIO.COM
+41 (0)91 610 51 80
FROM 185 SWISS FRANCS

SchlossHotel
CBD therapy



SCHLOSS HOTEL

The SchlossSpa in Zermatt is pioneering spa treatments that draw on the benefits of CBD, the natural active substance derived from hemp. "We are the first hotel in Switzerland to use cannabidiol at our spa. Unlike the better known THC, this compound does not produce the euphoric effect and is completely legal. Studies have shown that it has great medicinal and cosmetic potential and also suggested that it has relaxing, analgesic, anti-inflammatory and anxiety-reducing properties," says spa manager Martina Bernsee. The 630-square metre spa offers a 60-degree sauna where guests can breathe in the vapours of the ancient therapeutic plant, get a treatment with Alpine herbs applied in a delicately warmed CBD pack, or have a scrub and a cannabidiol body wrap, experienced on a floating bed. More severe addicts can opt for the spa's signature treatment. Touch, scent, sight, hearing and taste are all stimulated in this 80-minute session, to reach a state of deep relaxation.

ZERMATT (VS)
SCHLOSSHOTELZERMATT.CH
+41 (0)27 966 44 00
250 SWISS FRANCS FOR THE SIGNATURE TREATMENT

La Vigne
The Chasselas wine bath

LA VIGNE

With La Vigne, you can immerse your senses in the world of wine in the heart of one of Switzerland's most beautiful landscapes. Its nomadic bubble moves from vineyard to vineyard around Lavaux according to the season. Currently located at the Domaine de Bovy in Chexbres, the pop-up spa lets you explore the virtues of vinotherapy in the heart of a UNESCO World Heritage Site. "We will be here until late November, depending on the weather, but we know that Lavaux is resplendent with autumn glory at that time. Other projects are planned for the winter," says Christian Jacot-Descombes, the wine spa's co-founder. The treatments – including a hot bath with a tasting of one of the host winegrower's wines, a grape pulp scrub, a body wrap in Chasselas lees, and a face and body massage with grape seed oil – use products left over from the previous harvest. The polyphenol-rich residues, though valued in cosmetology for their anti-ageing, toning and moisturising properties, are not usually used. La Vigne offers a luscious experience while contributing to the Canton's circular economy.

CHEXBRES (VD)
LA-VIGNE.CH
+41 (0)78 222 09 61
FROM 190 SWISS FRANCS

TRAVEL SWISSQUOTE NOVEMBER 2021

Alpina Gstaad
Tibetan retreat

ALPINA GSTAAD

Perched atop the most jet-set town in the Bernese Oberland, the Alpina overlooks alpine pastures, forests, mountain passes and snow-capped peaks. This breathtaking setting is where guests of this five-star hotel can replenish their soul thanks to inventive themed stays. One of the themes is the Tibetan Healing Retreat: three days and four nights to relieve stress and forget the troubles of everyday life. Opening with a 60-minute consultation with a wellness screening based on Tibetan philosophy, the programme includes daily meditations, yoga and several traditional treatments, such as a singing bowl session, a Ku Nye massage using salt packs, cups or stones, and a Kundalini back massage. The last day features a Tsa-Lung therapy session, which "viably restores the subtle wind and energy flow to allow blocked channels to regain their normal function," says Antonis Sarris, head therapist at the spa. In short, a motionless journey to reconnect with the serenity of a Buddhist monk.

GSTAAD (BE)
THEALPINAGSTAAD.CH
+41 (0)33 888 98 88
PRICES ON REQUEST

Nira Alpina
Sink into the forest

NIRA ALPINA

In the land of the rising sun, wandering through the undergrowth is not just a simple hobby. The activity even has a name: shinrin-yoku, literally forest bathing. It is said to have countless virtues, such as reducing blood pressure, reducing stress, improving cardiovascular and metabolic health, and strengthening the immune system. And you don't have to go all the way to Japan to enjoy its benefits. Anne-Marie Flammersfeld invites guests at the Nira Alpina, just a stone's throw from St. Moritz, to join in the experience. "Shinrin-yoku is more than a regular walk. It is the key to regaining both your self-esteem and your understanding of your place in the world by immersing yourself in nature with all your senses. "You can do it in any season, even in winter in the snow," the coach says. Forest bathing is the opportunity for the curious to venture into the most beautiful forests of Upper Engadine and to be mindfully present in the peace emanating from these places.

SILVAPLANA (GR)
NIRAALPINA.COM
+41 (0)81 838 69 69
FROM 170 SWISS FRANCS FOR A ONE-HOUR SESSION

BOUTIQUE

SOUND AND DESIGN

American hi-fi specialist Klipsch continues its collaboration with the automotive manufacturer McLaren, coming out with a new version of its wireless earphones, the T5 II True Wireless ANC. Signed in carbon and papaya orange colours, the high-end device now offers active noise cancellation and can be controlled just by moving your head. And it all comes with an elegant induction charger.

klipsch.com

From CHF 250.-

SHORT CIRCUIT

iWood.Care designs solid wood furniture, sells it online, and has it produced by the partner carpenter closest to the customer, using processes that combine digital cutting with craftsmanship. The furniture is made to order (type of wood, colour and size) in a few weeks. We especially love the Whatever bench for its sleek lines, created by the designer from French-speaking Switzerland, Adrien Rovero.

iwood.care

From CHF 479.-

THE SWISS-MADE SWEATSHIRT

The very young Vaud-based brand Bacier makes clothes from organic fabrics, on demand at workshops in Lutry. The clothing is then distributed in line with the short-circuit concept. Launched in 2020 as an alternative to the traditional textile manufacturing model, Bacier produces stylish sweatshirts available in four colours (Pistachio Green, Organic Burgundy, Indigo Blue and Navy Blue).

bacier.com

CHF 119.-

MAKE ALL MEETINGS GREAT

Meeting Owl Pro is a smart camera that automatically focuses on the person speaking at the table during a meeting. Compatible with videoconferencing tools including Zoom, Google Meet and Teams, the device itself looks like an owl and features a 1080p resolution sensor and speaker offering 360-degree sound.

owllabs.com

CHF 1,193.-

WAKING YOU UP OR DOWN

To turn the alarm on, the ON side must be facing up. To turn it off, you must see the OFF side facing up. That's what people love about the Lexon Flip, which has recently been made into a premium version. New features include colours finished with aluminium detailing and a luminous LCD screen that comes on with the snap of a finger thanks to its built-in sound sensor.

lexon-design.com

CHF 59.90

GENTLEMAN DRIVER

Water-resistant up to 100 metres with a calfskin strap, Breitling's new Top Time Classic Car Capsule Collection honours ever-elegant 1960s sports cars. This trio of racing timepieces is inspired by three legends from American muscle car culture: the Chevrolet Corvette, the Ford Mustang and the Shelby Cobra. The watch cases proudly bear the car logos.

breitling.com

CHF 5,250.-

SNUG FEET IN ANY WEATHER

With their durable rubber sole and elastic laces, the Sky Wooler high-top sneakers are a lesson in elegance. Designed in Switzerland, the shoes are made in Portugal from a traditional, tightly woven wool fabric called burel. Whether it's hot or cold outside, its natural properties keep feet at the right temperature.

baabuk.ch

CHF 125.-

SHUTTERSTOCK

TRIED AND TESTED

CONCERTS, BUT NO AUDIENCE

BY GÉRARD DUCLOS

As part of the fallout of the pandemic, more concerts are taking place entirely online, with no physical audience anywhere nearby. We take a closer look at what's out there for concert-goers.

Despite some baby steps towards recovery in recent months, the live entertainment and sports performance industry has been devastated by the COVID-19 pandemic. With bans on public gatherings in effect in almost every country in the world, the industry has had to reinvent itself in an attempt to salvage what it can of the business.

Like working from home, streaming remote performances online quickly became a thing. The downside for the viewer was that these concerts lacked the jubilation felt at public events, but in exchange offered the comfort of not leaving the couch.

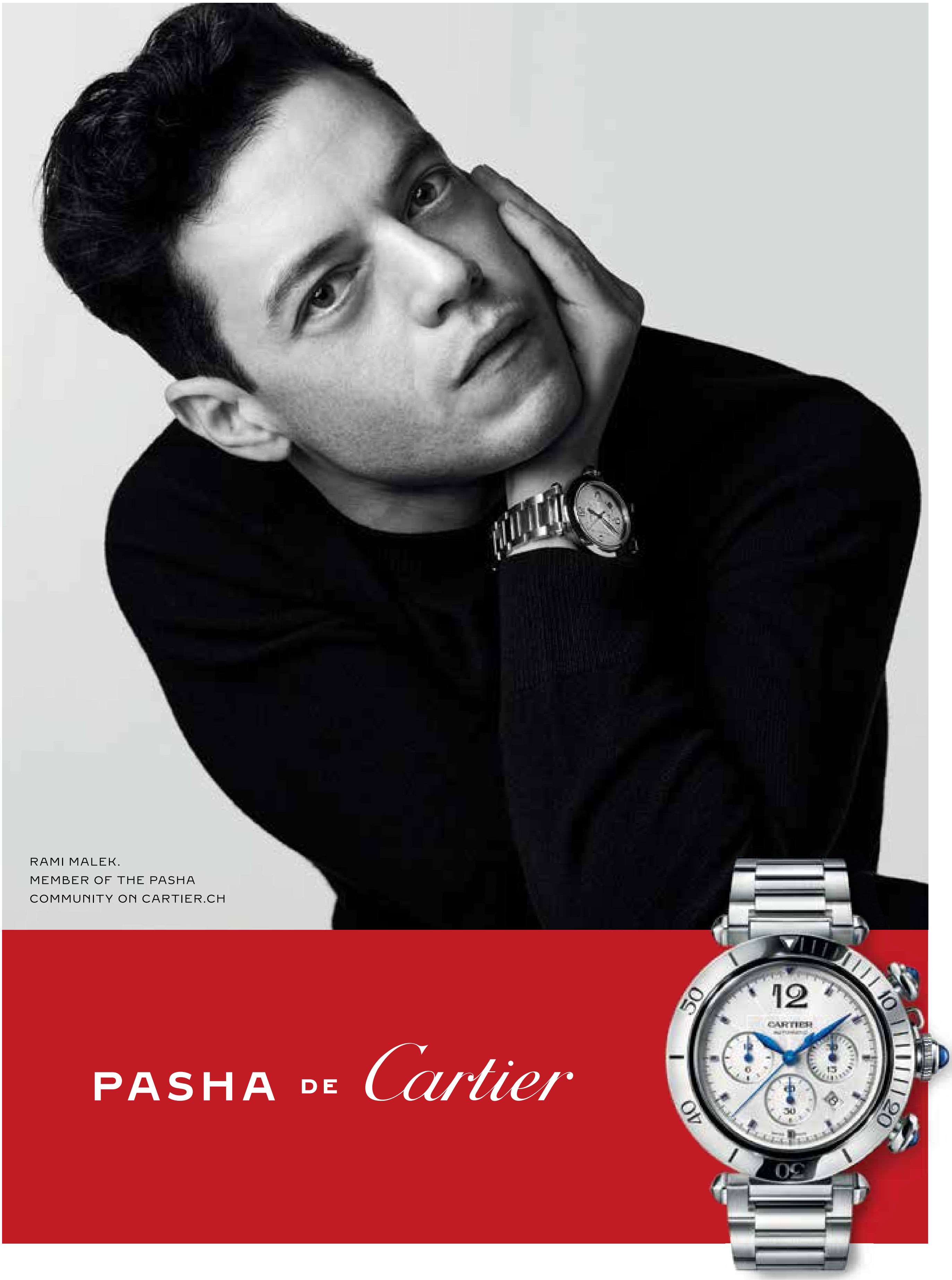
At the time of writing, we should point out that the offering of concerts and festivals available online is highly varied, especially in North America. Many specialised websites list upcoming events, so if you look around a bit, you'll find that there's practically always something on, no matter what time, live, and just a click away. The first surprise is that many artists, often unknown to the mainstream, perform for free on YouTube and Twitch. Sometimes they too are in their living room and interact with their audience who comment and encourage their live performance. That creates a warm feeling of closeness with the performers, not unlike that felt when gamers are streamed. The experience provides the opportunity for these musicians to start building a close relationship with their community while developing it and fostering loyalty.

The more famous and popular the artists who perform online are, the more disengaged the viewer feels

Of the wide range of concerts available, we went for Dj_MrV, a super likeable house music DJ, who performs live from his living room on Twitch. By registering for free on the platform, you can watch the artist and interact with him, even give him financial support or suggest a particular track. The experience was pleasant and refreshing, reminding us of chefs who greet customers right at their table and cook in front of them. We were also able to enjoy the power of GrayBeat, who makes experimental electronic music infused with psychedelic 3D graphics. Although his audience remains relatively small for now, the interactions were lively, and the artist enjoys a devoted, faithful audience.

Concerts with better-known artists or artists on exclusive contracts are streamed on dedicated platforms, which often require paid access. These events generally take place in traditional infrastructure (concert halls, festivals, etc.). There may even be a real audience, though of course small, to comply with social distancing restrictions.

We believe that, unless you're a diehard fan, watching a celebrity perform on stage without being there takes most of the fun out of it. What's worse, the feeling that you're missing out on something amazing by watching from afar can be frustrating, especially if you've paid for it. You might as well watch the MTV Video Music Awards to see all the stars at their best, and for free. ◢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