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PRODUCTIVITY
Testing out the 4-day week

CLIMATE CHANGE
How vineyards are adapting

INTERVIEW
VAT Group, the Swiss gem essential for microchips

DOSSIER

The cult of beauty

Exploring the dazzling industry

ISSN 2296-3278

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CARTIER

EDITORIAL

Beauty at all costs

"How long will you love me? Until my first wrinkle, I bet..." Dreading the ageing process that would ruin his exceptional beauty, the young dandy Dorian Gray sacrifices his soul to maintain his magnificent appearance for all of eternity. More than a century after its publication, *The Portrait of Dorian Gray*, the philosophical fable from Oscar Wilde is more relevant than ever. The passing of time continues to scare us; take one look at TikTok or Instagram to see the point at which some of us are ready to do anything to maintain youth and beauty.

As a result, as seen in our issue, the beauty industry is doing better than ever. According to McKinsey, it generated approximately $430 billion in revenue in 2022 – a record – and is expected to reach $580 billion in 2027, or an annual growth of 6% over the period. But the most remarkable aspect is the sector's incredible resilience. Except for 2020 during the pandemic, sales in the beauty industry have increased year over year for the past 20 years at least, with an average annual growth of nearly 5%. Not many markets can measure up to this.

Of course, as the population ages, sales go up in Western countries; people are living longer and want to remain beautiful for more of their lives. But on the other end of the spectrum, young people are also starting to care more about their appearance at an earlier age. Skincare, for example, now starts in adolescence (and sometimes even earlier) and people often get their first Botox injections before the age of 30.

Benefiting from these structural growth factors, the Swiss company Galderma, which sells injectable aesthetic products (botulinum toxin and hyaluronic acid), went public on the Zurich exchange on 22 March. It was a success. In an interview with *Swissquote Magazine*, Dr Flemming Ørnskov, CEO of Galderma, was optimistic. Yes, the beauty industry has a bright future. Because if "time is jealous of you, and wars against your lilies and your roses", to paraphrase Oscar Wilde, it has made many companies very successful.

We hope you enjoy reading!

BY MARC BÜRKI,
CEO OF SWISSQUOTE

c o n t e n t s

i m p r e s s u m

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"I don't think [investors] morally care if we continue to do business in Russia"

Dirk Van de Put, CEO of Mondelez, justifying his decision to not abandon this market.

$25 billion

In early March, the Federal Trade Commission in the United States filed a lawsuit to block the $25 billion transaction between Kroger and Albertsons, saying that the largest supermarket merger in the history of the United States would lead to higher costs, closed stores and employee lay-offs.

The Super Bowl, won by the Kansas City Chiefs against the San Francisco 49ers on 11 February 2024, attracted a record 123.4 million viewers in the United States.

MEDIA

Sports fans turn to streaming

Traditional television channels continue to dominate broadcasting major sporting events. But this supremacy may now be at risk. In early February, Disney, Fox, and Warner Bros. Discovery announced the launch of a new streaming platform just for sports. It is expected to be available this autumn and will single-handedly broadcast up to 55% of the value of sporting rights in the United States. This is the most ambitious venture, but Amazon and Youtube are also in the ring, having already purchased rights to broadcast American football. Netflix just signed a $5 billion partnership with World Wrestling Entertainment, gaining the rights to broadcast wrestling events starting in January 2025 for 10 years.

→ DIS → FOX → WBD

RANKING

Top five largest mining companies
(according to their market capitalisation as of 10 March)

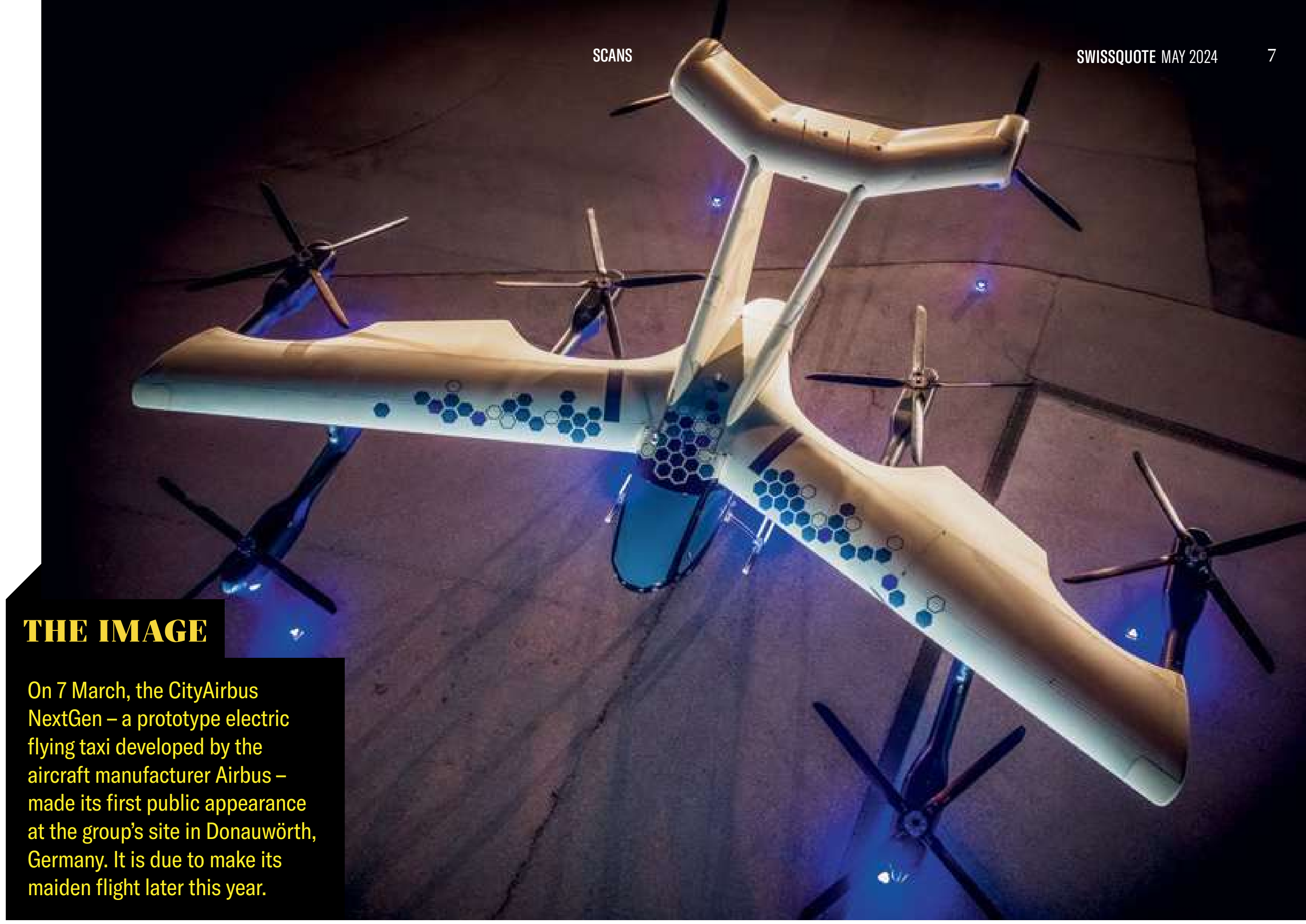
1. BHP, AUSTRALIA — **$144.99 BN**
2. CHINA SHENHUA ENERGY, CHINA — **$104.60 BN**
3. RIO TINTO, UNITED KINGDOM AND AUSTRALIA — **$102.87 BN**
4. SOUTHERN COPPER, MEXICO — **$66.70 BN**
5. GLENCORE, SWITZERLAND — **$62.41 BN**

Sources: Companiesmarketcap

The five most "innovative" pharmaceutical companies
(based on R&D spending in 2022)

1. ROCHE, SWITZERLAND — **$14.7 BN**
2. JOHNSON & JOHNSON, UNITED STATES — **$14.6 BN**
3. MERCK & CO, UNITED STATES — **$13.55 BN**
4. PFIZER, UNITED STATES — **$11.43 BN**
5. NOVARTIS, SWITZERLAND — **$10 BN**

Source: Fierce Biotech



THE IMAGE

On 7 March, the CityAirbus NextGen – a prototype electric flying taxi developed by the aircraft manufacturer Airbus – made its first public appearance at the group's site in Donauwörth, Germany. It is due to make its maiden flight later this year.

RAW MATERIALS

Harvests upended by weather

In early March, the price of cocoa reached a record high of $7,057 per tonne, up 68% since the start of the year. Ghana and Côte d'Ivoire, the world's two biggest cocoa producers, both had disappointing harvests due to drought followed by too much rain, a symptom of climate change. This trend was made even worse this year because of the El Niño weather phenomenon. These unfortunate weather patterns also affected Spain, in the form of a heat wave, and Florida, with destructive hurricanes, which raised prices for olive oil and orange juice concentrate.

Workers collect cocoa beans near the village of Hermankono, Ivory Coast, in November 2023. This country accounts for nearly 40% of global production.

"Let them eat corn flakes [for dinner to save money]"

The CEO of Kellogg **Gary Pilnick**, generating quite a stir for his lack of empathy.

CONSTRUCTION

Arbonia will divest its “climate” division

The construction industry is struggling due to slowdowns in the Chinese market and very high interest rates in many western countries. Business in the construction sector was down 1.6% globally last year, according to estimates from Oxford Economics. The Thurgau-based group Arbonia was not spared, with revenue down 10% in 2023, reaching 1.08 billion Swiss francs. As a cost-saving measure, it will divest of its “climate” division (heating and cooling systems) by the end of the year, and it has already received several offers. Arbonia will turn its focus to its “doors” division, which has stronger growth.

→ ARBN

-16%

The drop in sales of electric vehicles in Germany in 2023. At Volkswagen, green vehicles only made up 8% to 10% of sales, compared to 11% a year earlier.

“Once you have a new interface… new hardware is also possible”

Satya Nadella, CEO of Microsoft, about new portable products without screens or keyboards that are made possible via artificial intelligence.

A worker inspects photovoltaic panels at a factory in Karamay, China, 30 November, 2023.

ENERGY

Solar energy: Europe depends on China

The installation of solar panels reached a new record in Europe in 2023, producing the energy equivalent of one nuclear plant per week. With an eye towards climate objectives, the continent plans to triple the number of solar panels by 2030. The only problem is that 95% of solar panels come from China, where they are produced up to 50% cheaper thanks to a lower-paid workforce and state subsidies. This situation puts Europe at the mercy of Beijing, which could decide at any moment to stop exporting solar panels. It also raises an interesting ethical dilemma, as more than one-third of the parts used to make solar panels come from Xinjiang, a region where much of the population has been interned at forced labour camps.

DENTAL CARE

3D printed dentures

Digitisation has revolutionised the world of dental implants and Basel-based group Straumann is leading the way. It developed an intra-oral scan that can create a 3D copy of a patient’s teeth. This data can then be used at a dentist’s office with a 3D printer to create a denture or crown. The Swiss company also recently added the Smilecloud software to its portfolio, which can create smile simulations for patients, who can see a realistic photo of the final result of a procedure. In May, Straumann will launch a new system called iExcel which can design highly personalised implants.

→ STMN

Copy of a patient’s teeth, made using a 3D printer by the Straumann group.

2,500

The number of roles that Barry Callebaut is expected to cut over the next 18 months. The Zurich-based group plans to save 250 million Swiss francs per year while investing 500 million over the next two years.

PHARMA

A treatment for food allergies

Xolair, a drug from Basel-based group Novartis that was previously used to treat asthma, can reduce allergic reactions caused by accidental exposure to peanuts, nuts, eggs, milk and wheat, according to a study published in the *New England Journal of Medicine*. Given that information, the US Food and Drug Administration (FDA) authorised its use in February for adults and children over the age of one who have food allergies. Xolair, administered as a series of injections over 16 to 20 weeks, is a monoclonal antibody that can block the activity of antibodies created by allergic reactions.

→ NOVN

THE QUESTION

Despite sanctions, the Russian economy is doing relatively well. Can you explain why it is so resilient?

Russian companies completely restructured their supply chains in the wake of sanctions. Rather than receiving goods and raw materials from the west, Russia turned to India and China. There are no shortages in these countries. As for sanctions on oil and gas exports, their effect was minimised by finding new prospects in countries that are not applying punitive measures, such as China, India and Turkey. Even Europe didn’t stop importing Russian gas entirely. It cannot do so without invoking an energy crisis. Furthermore, the Russian government provided significant funds to entrepreneurs, which are now excluded from the international financial system. These resources come from reserves that Moscow accumulated for years thanks to fossil fuel exports. So the Russian economy is not at risk. At most, growth may slow down and inflation could creep up.

Alex Settles, expert in Russian economics at Warrington College of Business at the University of Florida.

“There’s a shitshow going on in Seattle”

Michael O’Leary, CEO of Ryanair, regarding delivery delays for Boeing aeroplanes.

Huge ventilation and cooling systems are installed on the roof of Digital Realty’s ZUR1 data centre, pictured here on 18 October 2022 in Opfikon-Glattbrugg (Switzerland). Since 2013, this centre has claimed to be 100% carbon neutral, thanks to the use of hydraulic energy.

AI

ChatGPT uses lots of water

Artificial intelligence programmes consume lots of water. For each group of queries – which include between 10 and 50 requests – that ChatGPT answers, 500 millilitres of water are consumed. At Microsoft, consumption of the precious blue liquid increased 34% between 2021 and 2022, reaching 6.4 billion litres, which corresponds to the time period where it increased investments in artificial intelligence programmes, including a partnership with OpenAI. Google experienced the same phenomenon, with a 21% increase in water consumption in 2022, reaching 21.2 billion litres. Water is used to cool down the supercomputers that conduct the complex calculations and machine learning that is used in artificial intelligence programmes. → MSFT → GOOG

HEARING

Glasses with ears

The French-Italian group EssilorLuxottica is trying to break into the wearable tech market. In September, it launched smart glasses co-developed with Meta under the Ray-Ban brand. The glasses are equipped with a virtual assistant that can capture and relay whatever the wearer sees. In the second half of 2024, it will launch glasses with an integrated hearing aid that were originally unveiled at CES 2024. Intended for people suffering from moderate hearing loss, this assistive device uses technology developed by Israeli startup Nuance Hearing, acquired by EssilorLuxottica in late 2022. An artificial intelligence algorithm detects the voice of the person that the wearer is speaking to, and amplifies it via mini speakers. → EL

14 years

The number of years that nuclear power plant Hinkley Point C in the United Kingdom is running behind. Construction, which began in 2016, is now expected to be completed in 2031. The plant also saw costs balloon, going from £18 billion to £35 billion. Its developer, French group EDF, is blaming Brexit, COVID-19 and inflation.

BUST

The pick-up of the future leaves much to be desired

It looks like something straight out of science fiction, with abrupt angles and metallic shapes. Tesla's Cybertruck, the much-awaited electric pick-up truck from the California brand, arrived on the US market two years late. It was immediately subject to waves of criticism. For one, the sale price of $61,000 is more than double the $21,000 originally promised by Tesla CEO Elon Musk. Its real range (barely 400 km) is also insufficient and environmentalists are decrying such an extremely heavy vehicle (more than 3.6 tonnes), which is not energy-efficient and also very long (5.66 m long). The Cybertruck must also face fierce competition from Ford, Rivian Automotive, and General Motors, which all recently released electric pick-ups. Tesla's version is not expected to sell more than 75,000 models, according to Bernstein Research. This is well below the predictions of Elon Musk, who was hoping to sell 250,000 per year by 2025. Tesla does have one thing going for it: the audacity to produce what is probably the most spectacularly bizarre vehicle of its time... → TSLA

"China's biggest problem to me is a lack of confidence. External investors lack confidence in China and domestic savers lack confidence"

Bill Winters, CEO of Standard Chartered bank.

-75%

The drop in net revenues generated by Glencore in 2023, coming in at $4.28 billion. The Swiss firm owes the poor result to the price drop of cobalt, zinc and petrol. This comes after a record 2022, in which revenue was up due to Russia's invasion of Ukraine, which caused the price of raw materials to skyrocket.

THE IPO

The owner of Salomon went public on the stock exchange

The Finnish brand Amer Sports went public on the New York stock exchange, raising $1.37 billion and obtaining a valuation of $6.5 billion. The owner of brands Arc'teryx, Salomon, and Wilson was acquired by Chinese group Anta Sports in 2019 for €4.6 billion. Between 2020 and September 2023, it did not turn a profit. Despite its solid brands, it suffers from overexposure to a sluggish Chinese market – which now makes up 19.4% of sales compared to 8.3% in 2020 – and its debt of $2.1 billion. Funds raised during its IPO will be used to improve the balance sheet and promote growth of its brands, particularly Arc'teryx, whose high-end winter gear is still not very well-known in the West. → AS

CRYPTOCURRENCIES

Bitcoin: some post-halving scenarios

When the reward that Bitcoin miners receive is reduced by 50%, an event that happens about every four years, it has always been followed by a soaring price. Will history repeat itself?

BY LUDOVIC CHAPPEX

Barring a disaster, by the time you read this article, the much-anticipated Bitcoin halving will have occurred. In recent weeks, the event has had the crypto-currency world in a tailspin, in a context of future incredible profits for BTC holders.

The previous halvings that occurred since the creation of Bitcoin in 2009 have always led to a massive rise in price in the following year. The first halving in 2012 had a shockingly good result, with the price increasing more than 8,000%. In practice, halving reduces the profits miners receive by half (see inset) and reduces the rate at which new Bitcoins are created, which reduces the supply of Bitcoin and in turn theoretically raises the price.

But this assumption has given rise to a wide variety of predictions in the cryptosphere, and even beyond. The oracles are trying to answer three all-consuming questions: Will the price of Bitcoin increase? If so, when? And by how much?

In the short term, no one really agrees on which scenario will actually happen. This fourth halving has been so widely discussed that it has caused much more speculation than the three previous halvings. In comparison, the media coverage of the 2012 halving – when Bitcoin investing was for geeks – was virtually non-existent.

So many investors positioned themselves before the halving date. Since this event is known, it should – according to the hypothesis of an efficient market – be taken into account in the price. Several analysts have cautioned against a potential "sell the news" type scenario where investors would sell immediately after the halving, thinking that the price had reached its peak. Support for this idea comes from when Bitcoin generated a new record price above $73,000 in mid March, or more than one month before the halving.

The trend is clear: the big players, such as institutions, hold an increasing amount of Bitcoin

Also worth noting is that for many mining companies, this halving is a test of profitability. The overall opinion is that many of them are expected to sell all or some of their Bitcoin stocks to cover their costs and try to survive. This phenomenon could create downward pressure on the BTC price.

In the medium- and long-term, however, the general consensus is that Bitcoin will see glorious days ahead. In an article published on CoinDesk, the CEO of brokerage platform K33 (formerly Arcane Crypto) Torbjørn Bull Jenssen minimises the importance of the halving itself, calling this supply reduction an "almost non-event" and highlighting the essential nature of demand at a time where Bitcoin is "more accessible than ever to investors, thanks to funds negotiated on the stock exchanges in the United States". Notably, there was an important milestone in January 2024, when the Securities and Exchange Commission (SEC) approved 11 Bitcoin ETFs. The trend is clear: the big players, such as institutions, hold an increasing amount of Bitcoin, inflating a dynamic that didn't exist after the previous halvings.

In a research report dated 9 April and reviewed by Cointelegraph, the research firm Cryptoquant also believes that the key factor impacting the price of Bitcoin after this halving will be increased demand from investors holding significant amounts of BTC. The report believes that the halving is no longer the main driver of rising prices, once again stating that the total number of portfolios holding between 1,000 and 10,000 BTC are increasing considerably. ◢

What is halving, you ask?

Halving is an event predicted in Bitcoin code that happens approximately every four years (exactly every 210,000 blocks) and has a direct impact on the production of the cryptocurrency. Concretely, it cuts in half the rewards allocated to miners for each new block that is validated on the Bitcoin blockchain. Initially set at 50 Bitcoins per block in 2009, this reward has decreased as the halvings continue; the fourth halving reduced the reward to 3,125 Bitcoins per block (more than $230,000 when using the Bitcoin peak in March). This reduction seeks to control inflation and slow down the creation of new Bitcoins, since the total number of Bitcoins that can exist is limited to 21 million. Historically, halvings were associated with significant price increases in Bitcoin in the year following the event.

The halving effect

The price of Bitcoin over one year after the first three halvings.

Halving 1
28 November 2012
+8,069%
The mining reward went from 50 to 25 Bitcoins per block.

Halving 2
9 July 2016
+284%
The mining reward went from 25 to 12.5 Bitcoins per block.

Halving 3
11 May 2020
+559%
The mining reward went from 12.5 to 6.25 Bitcoins per block.

SOURCE: COIN METRICS

VAT: THE CHIP MAKER

URS GANTNER
CEO of VAT

INTERVIEW

© VAT GROUP

The St. Gallen-based company is the world leader in the manufacture of vacuum valves, an essential device for the production of semiconductors. Its market is set to double over the next 10 years. Interview with CEO Urs Gantner. BY LUDOVIC CHAPPEX

In the complex world of semiconductor manufacturing, a discreet Swiss company has emerged as a key player. VAT Group, based in Haag (SG), is by far the world leader in high-performance vacuum valves, an essential component in producing the electronic chips that power our computers, smartphones, cars and other microprocessor-equipped devices. These vacuum valves play a critical role in maintaining the perfect vacuum conditions needed to manufacture contamination-free chips (see company profile on p. 18). This expertise makes VAT the preferred supplier to the world's leading manufacturers of semiconductor production machines.

Sales fell considerably for the St. Gallen-based company in 2023, but this was to be expected, given the cyclical nature of the semiconductor industry. Urs Gantner, VAT's new CEO, who was appointed in January, granted us a video interview from the company's headquarters.

You overwhelmingly dominate the global market for vacuum valves for semiconductor manufacturing, with a market share of over 70%. What sets you apart from your competitors?

Our situation is typical of a Swiss tech company that has found its niche market. We operate in a highly specialised sector, where we have always aimed for excellence, with a strong emphasis on research and innovation. One of our strengths is that we have been designing vacuum valves for almost 60 years. When we started out, there was virtually no market for this type of product. Our main customers were with universities or the European Organization for Nuclear Research (CERN). This is, in a way, where our roots are. Then, we entered the semiconductor market in the late 1980s. Nobody really knew what was going to happen. The media didn't pay much attention to this new sector. Everything was slower back then. But we clearly knew that we wanted to gain this vacuum valve market. We continued to innovate and gradually forged very close relationships with our customers built on trust, so much so that today we enjoy a fairly unique position. For example, we are the only company in the world that can measure particles in a vacuum environment. We are the single source for all the major OEMs (original equipment manufacturers).

What are the technological challenges facing this sector?

There are many challenges, and foresight is essential. Chip manufacturing requires either ever-higher or ever-cooler temperatures, and the gases used are very aggressive for the materials. In fact, materials expertise is one of our core competencies. Pressure on manufacturing costs is also a determining factor. It's easy to innovate on an unlimited budget, but we have to keep costs under control. Everyone wants to have a better smartphone, but for the same price... or even less, despite the fact that the equipment used to produce the chips continues to gain in efficiency.

> **"Everyone wants to have a better smartphone, but for the same price... or even less"**

What's more, the technology race has prevented our customers from being able to produce many of the components of their machines →

CLIMBING THE RANKS IN-HOUSE

Urs Gantner was appointed CEO of VAT in January 2024, but he is hardly new to the Swiss firm, which he joined in 2004 as product manager and development engineer. Since 2022, he has held the position of executive vice president of the Semiconductor Solutions division. Before joining VAT, Urs Gantner worked as an R&D engineer at Hamilton Medical. He also worked at the Paul Scherrer Institute (PSI) in Switzerland as a scientist in charge of the overall evaluation of energy systems. He holds a Master of Science in Mechanical Engineering from the Institut fédéral suisse de technologie (ETH).

A VAT employee assembles a module at the group's Swiss factory in Haag (SG).

Preparing for battle

"An excellent company with a strong position in a growing market." That is how analyst Robin Seydoux from Research Partners sums up the strengths of VAT, which has firmly positioned itself as an essential part of the semiconductor industry. The Swiss firm's vacuum valves are crucial to the production of the electronic chips that end up in our phones, computers, cars and so many other devices.

The company, based in St. Gallen, has taken advantage of the lull to carry on with its investment programme

To manufacture these chips, perfect conditions are required, i.e., an air-free environment to prevent contamination by foreign particles. Basically, VAT's vacuum valves act like gates that control the entry and exit of materials and gases into the vacuum chambers where chips are manufactured at an extremely miniature scale. For example, the latest Apple smartphone runs on a chip containing 19 billions of transistors.

This expertise makes VAT the undisputed leader in its segment, with market share of around 70%. But the Swiss company operates in a cyclical market. After three years of unprecedented growth, during which semiconductor stocks hit all-time highs, most notably in the memory sector, especially flash memory (NAND), investment in chip production worldwide plunged 11.2% between 2022 and 2023, Gartner reports.

VAT's annual results, published in March, reflected this significant drop in demand compared with the record levels of 2022. Net sales fell by 23% to CHF 885 million. EBITDA (earning before interest, tax, depreciation and amortisation) fell by 32.3% to CHF 270.9 million, while net profits plummeted 38% to CHF 190.3 million. Free cash flow decreased to a lesser extent (down 17.3%) to CHF 188.8 million. The dividend per share was CHF 6.25.

The company, operating out of St. Gallen in German-speaking Switzerland, has taken advantage of the lull to carry on with its investment programme, as CEO Urs Gantner explained in the interview. R&D investment increased by around 7% compared to 2022, amounting to CHF 54 million, or 6% of net revenue. In addition, the company achieved a record 120 specifications, i.e., 21% more than in 2022.

The new production facility being built in Penang, Malaysia is expected to boost installed annual production capacity to more than CHF 1 billion, on top of the annual capacity of around CHF 1 billion in Switzerland. That should cover the demand forecast over the next few years. Some studies predict that the semiconductor market will double in size over the next decade to $1 trillion. Analysts expect a slight improvement this year, before a boom in 2025.

"One of VAT's differentiating factors is certainly its dominant market share. Substantial sales in a range of basic products result in economies of scale and generate significant cash to invest in R&D and maintain its technological leadership," Robin Seydoux says. The Research Partners analyst has issued a HOLD recommendation, considering that the stock's valuation is already high. Bank of America analyst Didier Scemama has upgraded his recommendation from NEUTRAL to BUY, in the belief that this high price should not deter investors. His target price is set at CHF 578. He notes that VAT is a unique stock with many growth opportunities and that the share deserves to trade at the top end of its historical range.

→ VACN

themselves. They're introducing more and more critical components into the supply chain. This is one of our growth drivers. We don't limit ourselves to valves, we also develop what are referred to as adjacent products, critical components that keep our customers on track with their roadmap.

You expect your results to improve in 2024, before a record year in 2025. What makes you so optimistic?

Consensus says that the semiconductor market, which is worth around $500 billion, is set to double over the next 7 to 10 years to reach $1 trillion. This is a growth period. Currently, more than 95 semiconductor manufacturing plants are under construction worldwide, most of which are expected to come on stream within the next two to three years. Demand is driven by several technological advances, including artificial intelligence, the Internet of Things, smart grids and, more generally, automation. More and more data is being generated by machines, not just humans.

VAT IN NUMBERS

CHF 885 M
2023 revenue, down 23% on 2022 due to the global slowdown in the sector.

CHF 54 M
R&D investment in 2023, a record for the company, representing 6.1% of sales.

2,666
Number of employees.

Will you be able to meet this demand?

Absolutely. In this sector, it's crucial that we are ready when the rebound comes. You can't start investing in capacity when recovery is imminent. So we continue to invest heavily while business is slow. We must be prepared as soon as our customers need a product.

We've invested in expanding our capacity and setting up supply chains in Europe and Asia. For example, we have a new factory in Malaysia. At our headquarters in Haag, we have begun building a new innovation centre, which will open in early 2025. Investment in R&D is essential in these times of downturn. We develop and approve new products with our customers, who have more time on their hands than during periods of high demand. That is how we've won a record number of contracts in recent months.

Your customers are OEMs, as you mentioned (original equipment manufacturers), for firms such as Samsung, Intel and TSMC. Are you also in contact with these tech giants?

Yes, particularly for our service and maintenance businesses [ed. note: around 20% of revenue]. Our valves have a long service life but require frequent maintenance, and we have built a strong reputation in the area. We have more than 1.6 million valves installed worldwide – and that number is growing.

"We have more than 1.6 million valves installed worldwide – and that number is growing"

But we're also working with these big-name companies on future technologies, and on the products they'll need in the future. This cooperation takes place at imec, a top research centre headquartered in Leuven, Belgium. Imec plays a crucial role in semiconductor innovation, connecting a large number of companies, universities and research institutes around the world. This gives us a view of where the industry is headed 5, 10 or 15 years down the road. →

What are the underlying trends that are impacting you?

The semiconductor industry is moving towards more sophisticated transistor designs, which require more and more vacuum processes. The next generation of transistors, called Gate-All-Around (GAA), will require 30% more steps than the so-called FinFET technology, and most of these steps will take place in a vacuum. That is exactly what we do.

Several countries are looking to boost their semiconductor production capacity to reduce their dependence on foreign suppliers, especially Asian suppliers. At the end of March, the United States invested in a $20 billion aid package, including specific grants for Intel. What impact does this geopolitical context have on your business?

The sector has become strategic not only for the United States, but also for China and many other countries. Even India and Europe are working on determining how they can better control these technologies. For us, however, it doesn't really matter where the investments are made. It's simply important that investment is being made.

Around 100 fabs are currently under construction, which shows that the ecosystem is changing. Previously, the trend was towards globalisation, but now we're seeing more regionalisation. We're lucky in that we have the capacity to deliver our products to every region.

Is it plausible that China will decide to completely internalise chip manufacturing, to gain end-to-end control over the production chain?

The Chinese government's ambition is certainly to have its own semiconductor ecosystem. They've started with fabs, and the next stage will involve materials and equipment. But if they were to set up their own supply chain for all the critical components, it would delay their technology by several years. So they're perfectly willing to work with Western companies to keep their access to the latest technologies. Otherwise, their roadmap would lag behind schedule. ◢

An aerial view of the VAT headquarters in Haag (SG). A second production site is currently under construction in Penang, Malaysia.

© VAT GROUP

The beauty business: more than just looks

Showing growth of about 5% per year, the global beauty industry dazzles investors with its stunning consistency. But this linear growth conceals several revolutions under way in the sector.

BY BERTRAND BEAUTÉ

"Mirror, mirror, on the wall, who is the fairest one of all?" In the traditional 19th century fairy tale by the Brothers Grimm, the evil queen in *Snow White* made sure to ask her reflection that question every morning. But how does that work today? If we are using social media as a modern magic mirror to feed our narcissism, our obsession with appearance is all the more alive and well in today's societies, judging from the beauty industry's excellent performance. "The market is doing well," says Delphine Le Louët, an analyst at Société Générale. "The COVID-19 pandemic actually strengthened the industry. After living in pyjamas all day for a while, people emerged with a need to be coquettish and look after themselves." →

According to a report by McKinsey published in May 2023, the global beauty market – defined as skincare, fragrance, make-up and hair care (see also p. 32) – generated around $430 billion in revenue in 2022. That record is expected to be broken in the near future. The US consultancy expects that the market will grow to $580 billion by 2027, representing growth of 6% per year.

“What does beauty mean to you?” Almost 50% answered “looking healthy”

Respondents reply to a “Voice of the Consumer: Beauty Survey” conducted by **Euromonitor International**

These projections are perfectly in line with performance in previous years. “The beauty market is growing structurally. It has been growing at an average rate of 5% a year for the past two decades,” says Paul Rouvière, analyst for investment bank Bryan, Garnier & Co. “Except for 2009 (up 1%) and 2020 (down 8%), impacted by the 2008 crisis and COVID pandemic respectively, the industry behaves independently of the economy. In 2023, its growth reached 8%, despite inflation, following 6% growth in 2022.”

What does that mean? “The beauty industry is a good long-term investment, because it will continue to grow over the next few years,” says Alyssa Cornuz, an analyst in charge of the Sustainable Healthy Living Equities strategy at Robeco. Marine Dubrac, co-manager of the Wellness strategy at Thematics Asset Management, agrees, “I’m confident about the future of the beauty market. Its growth is set to last for at least another 10 years.”

Several structural factors explain this trend. “The use of beauty products, such as cosmetics, perfume and skincare creams, is a marker of social status in emerging countries,” Marine Dubrac explains. “That means that the development of the middle classes – especially in Asia, but also in South America, the Middle East and, to a lesser extent, Africa – drives growth in the sector.” The French group L’Oréal estimates that the global beauty market is set to grow, with an additional 600 million consumers by 2030 (see infographic on p. 28 and read more on p. 36).

In developed countries, the ageing population is a strong contributor to sales. “Longevity is a ground spring,” Alyssa Cornuz says. “People are living longer and want to stay beautiful longer. They don’t hesitate to spend more and more on anti-ageing products and therapies.”

But this fundamental growth should not mask the transformations at work in the industry. “For a long time, beauty was seen as superficial,” Cornuz continues. “That’s no longer the case today. A person’s beauty increasingly reflects their state of health and is no longer just about their appearance.” Paul Rouvière shares this view. “Consumers are paying more and more attention to the health and protection of their skin, as shown by their demand for products recommended by dermatologists,” he says. “This phenomenon is reinforced by an ageing population and an increase in skin diseases generated by pollution, stress and sun exposure, which now affect more than one in four people worldwide.”

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← American influencer Huda Kattan is a real life internet phenomenon. The 40-year-old, famous for her beauty tips, has more than 54 million followers on Instagram and 4.1 million subscribers to her YouTube channel. The success has allowed her to launch her own brand, Huda Beauty, now sold at Sephora. She is pictured here in Paris, in July 2023, during Huda Beauty’s 10th anniversary.

In its “Voice of the Consumer: Beauty Survey”, Euromonitor International asked respondents, “What does beauty mean to you?” The results, published in May 2023, found that almost 50% of them answered “looking healthy”, making it the most frequently chosen definition, while the answer “Keeping a youthful appearance” garnered less than 30% of votes.

This shift from beauty associated with appearance to beauty associated with wellbeing has tangible consequences. Historically, cosmetics dominated the market in Western countries. This is no longer the case. Make-up has been replaced by skincare. L’Oréal reported that in 2023, products labelled as “skincare” accounted for almost 40% of the global beauty market, compared with 17% for make-up.

And now that beauty is a question of health and wellbeing, 85% of consumers are prepared to pay more for beauty products with proven efficacy or benefits, Euromonitor asserts. “While the consumer goods segment continues to generate high volumes, we’re seeing premiumisation at work, with consumers spending more and →

Barbara Lavernos, deputy director of L'Oréal, pictured here at CES in Las Vegas, the most important trade show dedicated to technological innovation, in January 2024. The French giant is betting on new technologies to revolutionise the beauty sector.

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more on increasingly high-end items," says Delphine Le Louët of Société Générale.

> These days, customers go to influencers: "The role that social media now plays in the beauty sector is unrivaled "
>
> **Delphine Le Louët**, analyst at Société Générale

In recent years, for example, the dermocosmetics segment (products recommended by dermatologists, generally sold at higher prices in pharmacies than in large retail formats) has outperformed the overall beauty market. According to L'Oréal, dermocosmetics showed growth of 13% between 2022 and 2023, while the beauty industry as a whole grew by only 8%. "Consumers are less naive than they used to be," says Tancrède Amacker, CEO of Cellap Laboratoire, a small Vaud-based cosmetics company. "They're no longer going to buy a product because they saw on TV that Julia Roberts or some other actress is using it. They want to be sure that it really works, that its effectiveness is proven with scientific studies."

Consumers also want safety and are paying more attention to product composition. "Skin care is not viewed like any other consumer product. Buyers place a great deal of importance on quality and safety," Paul Rouvière says. "You're not going to put just anything on your skin."

For Tancrède Amacker, this marks a huge change. "Ten years ago, consumers didn't care about product composition," says the CEO of Cellap Laboratoire, which has been producing cosmetics since 1987. "Nowadays, every time we change an ingredient in one of our products, our customers ask us about it. They want to know why, what it changes, and whether it's safe. So, we remove any ingredients with a bad reputation or poorly understood effects and put priority on natural compounds, which are in high demand from consumers."

And where do customers go these days to find out about the harmfulness of ingredients or product effectiveness? Influencers. "The role that social media now plays in the beauty sector is unrivaled," Delphine Le Louët says. "Even big brands are forced to form alliances with Instagram lightweights."

Tancrède Amacker sees this shift as positive. "How things work with social media is extremely interesting. Serious influencers are knowledgeable people who help consumers understand and learn about the products they use." Cellap's boss makes no secret about often bringing influencers into the company's laboratories to relay the message he wants to get across.

Social media has therefore enabled the emergence of a plethora of small brands. Taking advantage of a buzz on the internet for one of their products, they carve out a spot for themselves without spending billions on marketing. "Social media is a growth vector for small players," confirms Marine Dubrac of Thematics Asset Management. But that is not enough to worry industry leaders such as French giant L'Oréal, the Anglo-Dutch firm Unilever, the US company Estée Lauder or Germany's Beiersdorf (see company profiles on p. 38 to 51). "Large groups have the capacity to buy up small brands that have managed to capture a market trend," Alyssa Cornuz says.

For example, L'Oréal acquired the Australian brand Aēsop in 2023, US company Skinbetter Science in 2022 and Japan's Takami in 2021. The German group Beiersdorf, which owns brands such as Nivea, Eucerin and La Prairie, announced in February 2024 that it was buying Clinique La Prairie in Montreux – an establishment renowned worldwide for its expertise in longevity. Meanwhile, in 2023, US group Estée Lauder finalised the acquisition of the Tom Ford brand for $2.3 billion, whose Tom Ford Beauty division (make-up and fragrances) continues to grow.

> "Large groups have the capacity to buy up small brands that have managed to capture a market trend"
>
> **Alyssa Cornuz**, analyst in charge of the Sustainable Healthy Living Equities strategy at Robeco

But social media is like the witch's magic mirror in *Snow White*: one day, people will change their mind. Unlike the textile or food industries, the influence of brands is fairly limited in beauty. Consumers follow trends or innovations. And that happens even faster if bad buzz spreads quickly online. But there again, big brands have another advantage. "Brands or products can frequently be shot down on social media, and that can be devastating for a small company," Marine Dubrac says, "whereas industry giants have the marketing tools to control bad publicity." In other words, a way of silencing a mirror that would dare to say, "There is one fairer than you."

Spotlight on luxury brands

In February 2023, the French group Kering, the world's second-largest luxury goods group, announced the creation of Kering Beauté. The new entity aims to develop its activities in the sector by launching cosmetics and fragrances for the Bottega Veneta, Balenciaga, Alexander McQueen, Pomellato and Qeelin brands. Kering chose Raffaella Cornaggia, a former executive from US cosmetics giant Estée Lauder, to head-up the new division.

And Kering is not the only one. The entire luxury goods industry is gearing up to capture a slice of the beauty market. In September 2023, Swiss group Richemont announced that it was setting up a perfume and beauty division, and the Italian ready-to-wear powerhouse Prada launched Prada Beauty in 2022. Back in 2020, French leather goods maker Hermès, which already had fragrances in its portfolio, moved into make-up. The world's number one luxury goods group, France's LVMH, is also the world's fifth-largest beauty player, generating revenue of over €8 billion in the sector in 2023.

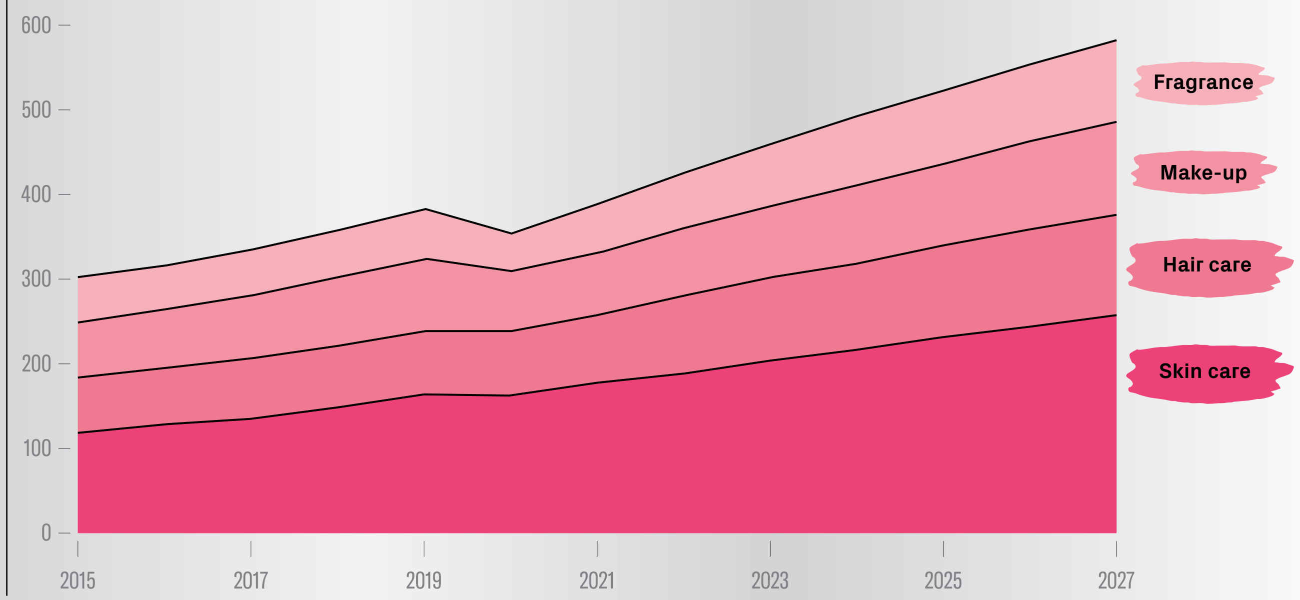
For the luxury goods industry, beauty must be "a growth driver", as Kering puts it. In other words, the segment should broaden their customer base without harming their image. At least once in their life, almost everyone can afford an CHF 80 Hermès lipstick. But this is not necessarily true for bags, with price tags often on the high side of several thousand Swiss francs.

Beauty market: looking good

The cosmetics industry has been growing steadily for the past two decades. And studies suggest that this performance is set to last.

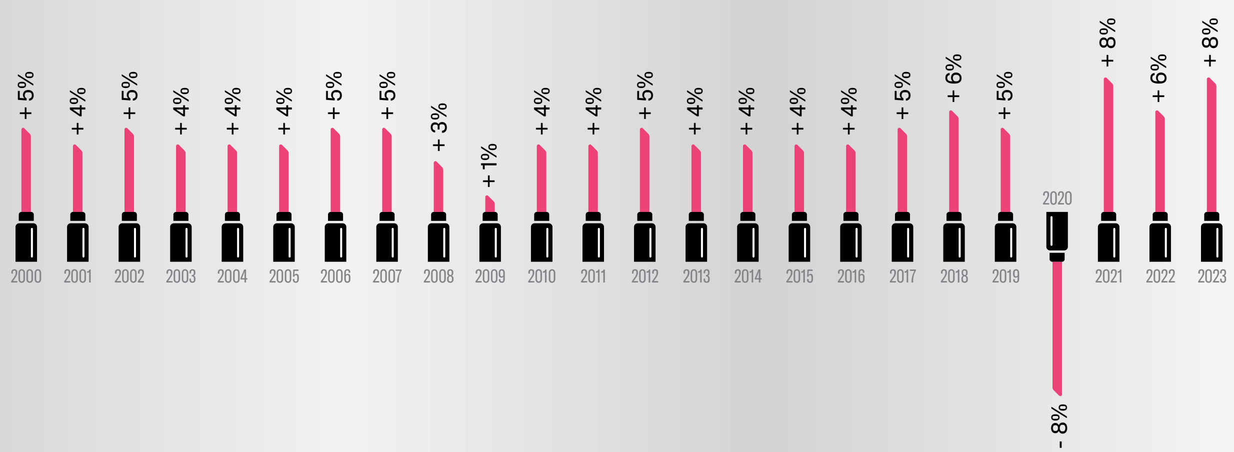
Ever higher, ever brighter

The beauty market is expected to grow from $430 billion in 2022 to $580 billion in 2027.



The only hitch in 20 years: COVID

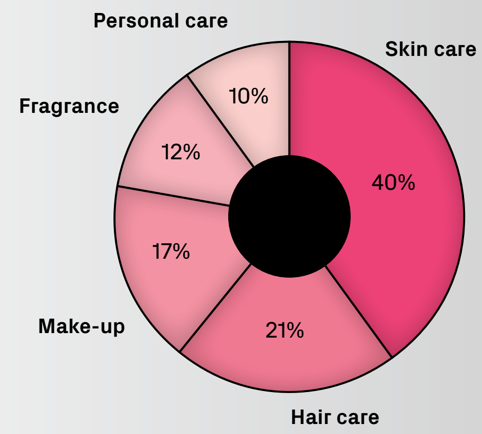
Since 2000, the beauty industry has grown at an average annual rate of 5%.



SOURCES: EUROMONITOR, MCKINSEY, L'ORÉAL, WWD

Beauty sectors

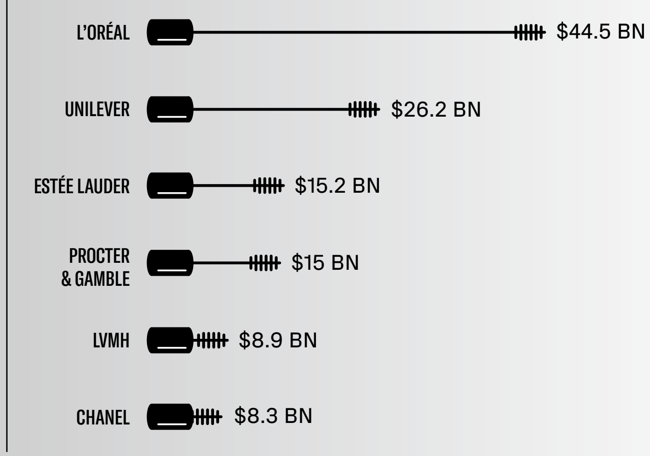
Skin care generates 40% of industry revenue.



L'Oréal, the undisputed leader

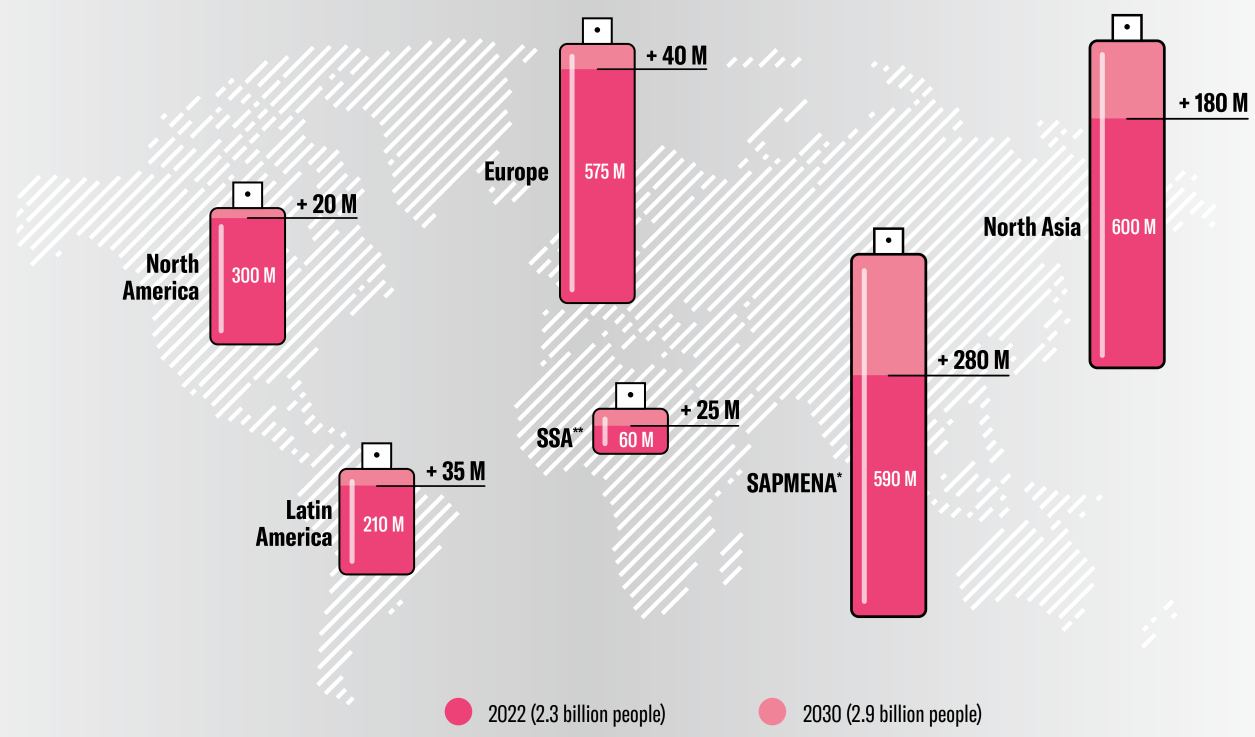
The French giant remains the No. 1 beauty player worldwide, well ahead of its competitors.

Estimated 2023 sales revenue in the beauty sector



More, more, and even more customers

The number of beauty consumers is expected to rise to 600 million by 2030.



*South Asia, Pacific, Middle East, North Africa **Sub-Saharan Africa

Beauty gets all dolled up with the help of AI

In order to win the attention of increasingly volatile consumers, the beauty industry has become extremely innovative, particularly in implementing solutions from the tech and biology sectors. BY BERTRAND BEAUTÉ

↑ At CES 2024 in Las Vegas in January, L'Oréal CEO Nicolas Hieronimus reaffirmed the French group's ambition to become the world leader in beauty tech.

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After medtech, biotech, foodtech and edtech, a new "tech" word has entered the scene: beauty tech. "Many cosmetics brands are now at the Consumer Electronics Show (CES) every year in Las Vegas, presenting their tech products," said Alyssa Cornuz, analyst and head of strategy for Sustainable Healthy Living Equities at Robeco.

In January at CES 2024, L'Oréal presented its "Beauty Genius" application, which uses artificial intelligence to provide beauty tips, diagnose skin concerns, and allow users to virtually try on make-up products (lipstick, foundation, eyeshadow, etc.) and skincare. Last year, in November 2023, the French giant used the China International Import Expo in Shanghai to unveil its Kérastase K-SCAN, a smart camera for hairdressers to analyse the hair and scalp of their clients with the help of AI in order to suggest the most effective products. The competition is also quite innovative, with Japan's Shiseido presenting its "Beauty AR Navigation" at CES 2024.

> "In the years to come, we will see more advanced technologies and AI that can provide more individual skincare information"
>
> **Marine Dubrac**, co-manager of the Wellness strategy at Thematics Asset Management

And this is only a small sample of the dozens of smart beauty devices that are now invading tech conferences, such as masks equipped with sensors that can create a complete map of your face's hydration levels and suggest personalised skincare recommendations. "The personalisation of skincare is still in its infancy, but it's a strong trend in the industry," said Marine Dubrac, co-manager of the Thematics Wellness strategy at Thematics Asset Management. "In the years to come, we will see more advanced technologies and AI that can provide more individual skincare information." As early as 2019, Shiseido launched Optune in Japan – a device, that concocts a cream specially formulated to match a person's skin based on a photo analysed by a specific algorithm.

As technology gradually invades the beauty sector, the industry continues to invest in more traditional R&D. This is a necessity, according to Paul Rouvière: "Beauty is a market of supply, rather than demand," said the Bryan, Garnier & Co analyst. "Brands need to convince consumers to purchase their products, hence the significance of innovation." A view shared by Alyssa Cornuz: "It is incredibly difficult for the beauty industry to win the attention of of consumers, who are increasingly informed about product features and benefits. The industry needs to be constantly innovating."

There are many innovations in development, but anything involving the skin microbiome is particularly of interest. "Studying the microbiome will allow us to put revolutionary products on the market," said Tancrède Amacker, CEO of Cellap Laboratoire. "In five to ten years, we will be able to identify bacteria that are useful for your specific skin and suggest ultra-personalised treatments." An example of this investment is L'Oréal's licensing agreement signed in 2020 with Dutch biotechnology firm Micreos, which specialises in the skin microbiome, followed by the acquisition in December 2023 of Danish company Lactobio that is developing a method to identify the most safe and effective bacterial strains. With these transactions, L'Oréal hopes to develop new cosmetics based on more powerful and personalised living bacteria (probiotics). Once again, AI will play a key role in decoding and analysing the skin microbiome.

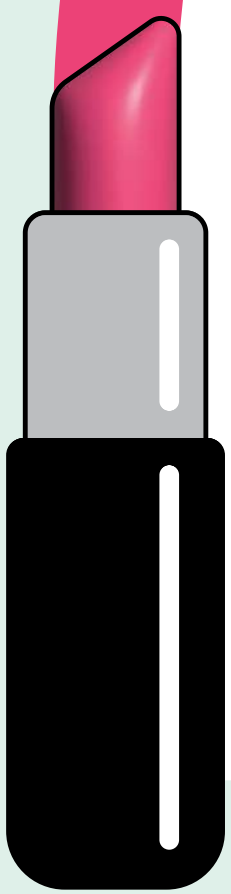
Similarly, in cosmetic medicine, several innovations have come to light in recent years. In addition to injections of botulinum toxin (widely known under the name Botox), hyaluronic acid, platelet-rich plasma, and stem cells, now exosomes are piquing the interest of specialists. "Exosomes are small vesicles that contain various elements such as amino acids, lipids, growth factors, and peptides, that will revitalize the skin and make it look younger," said Dr Nicolas Chami, specialist in plastic, reconstructive and cosmetic surgery. "Some studies show that exosome injections have lots of benefits for the skin, but they currently remain banned in Switzerland." Though injections are banned, many exosome creams are already available on the market. ◢

7 sectors to watch

From cosmetics to plastic surgery to oral hygiene, the beauty industry can include many sectors depending on how it is defined.

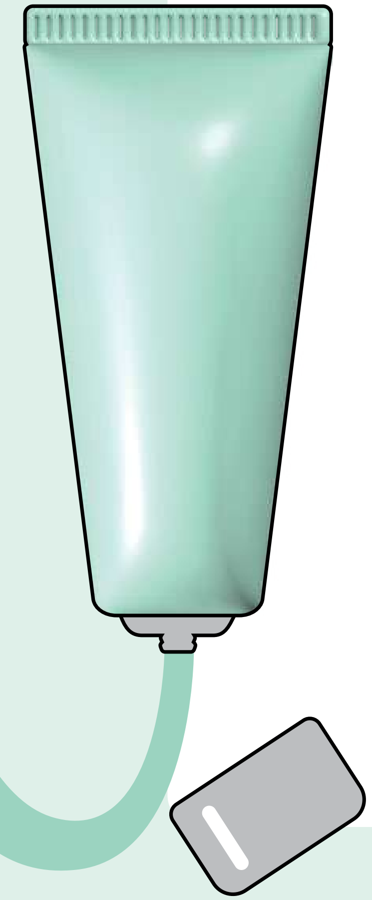
BY BERTRAND BEAUTÉ

$430 billion. This is the revenue generated by the beauty industry in 2022, according to a study by McKinsey. But the numbers vary depending on the researcher. For example, consulting firm Precedence Research notes that the beauty market brought in $378 billion in revenue in 2022, while L'Oréal believes the revenue for that year was €250 billion. Why are these estimates so different? The answer is simple: it all depends on what companies research firms consider to be part of the beauty industry. In this issue, we chose to take an inclusive approach. Here are the seven sectors we included.



1 Make-up

A Future Market Insights report estimates that the global make-up market will reach $54.77 billion by 2024 and could reach $87.92 billion by 2034, coming to an annual growth rate of 4.8%. This growth will largely be due to the growing middle classes in emerging countries, but there's another factor at play as well: a growing segment for masculine make-up driven by Gen X and social media. On TikTok, for example, the hashtag #meninmakeup had 250 million views in late 2021, but soared to nearly 425 million views by late March. "Men are still a niche market, but they are spending more and more on beauty," said Marine Dubrac of Thematics Asset Management. "It's a growing segment." According to Future Market Insights, the market for men's make-up is expected to grow 9.4% per year between 2023 and 2033, going from $17.57 billion to $43 billion. The main players in the segment are beauty experts (L'Oréal, Shiseido) and luxury groups (LVMH).



2 Skincare

According to L'Oréal, the skincare sector, which includes all creams and other cleansing products that are applied to the skin, generated approximately €110 billion in 2023. Usually, this market is divided into three segments: mass market, dermocosmetics (products sold in a pharmacy) and luxury goods. "Dermocosmetics is the fastest growing segment," said Marine Dubrac of Thematics Asset Management. "Consumers are seeking products that are safe and high-quality. In this context, we see increasing demand for products recommended by dermatologists."

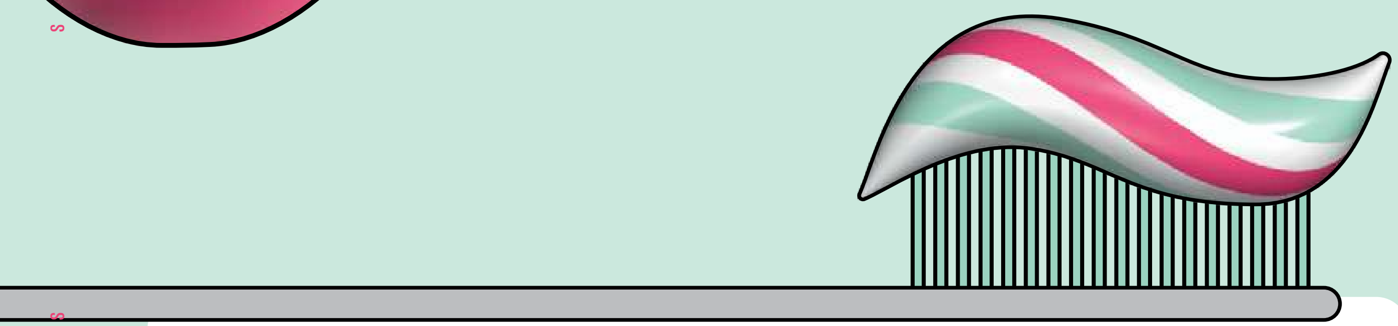
The luxury segment is also experiencing strong growth, particularly in Asia. "Cosmetics are a sign of social status in emerging countries, where the middle class is much more likely to buy luxury products than in other geographic regions," continues Marine Dubrac. However, "mass market is very significant in terms of volume," said Delphine Le Louët of Société Générale. "This product segment also meets consumer demand." Most of the giants, such as L'Oréal, Beiersdorf and Estée Lauder, are present in all three segments. Of note: Swiss dermatology specialist Galderma, which just went public, is particularly well positioned to benefit from the boom in dermocosmetics (see interview on p. 44).

3 Hair care

The global hair care market (shampoo, hair dye, conditioner, oils, etc.) generated more than $56 billion in 2023, according to figures from L'Oréal. Fortune Business Insight estimates it as much higher. According to estimates from the consulting firm, the global hair care market was worth $99.52 billion in 2023 and is expected to reach $213.47 billion by 2032, which is an annual growth of 10.4% over the period. This market is usually divided up into three sub-segments: mass market products, luxury goods and professional care that is found in hair salons. Among the companies that are well positioned in the hair care segment are beauty giants such as L'Oréal, Coty and Procter & Gamble.

4 Perfume

According to the firm Grand View Research, the global perfume market generated $50.85 billion in 2022, and is expected to grow 5.9% per year between 2023 and 2030. "In Europe, we're used to wearing perfume regularly." This routine is starting to become common in the United States, as well as in Asia, driving sales upwards, according to Marine Dubrac of Thematics Asset Management. "Social media and e-commerce have accelerated the demand in countries where wearing perfume isn't a cultural phenomenon." Perfume brands, such as Swiss groups Givaudan and Firmenich, are also benefiting from a growing demand for natural products rather than chemicals, which allows them to increase their margins.



5 Dental care

"The dental care sector is booming," says Delphine Le Louët of Société Générale. According to Fortune Business Insights, the global dental care market, which was valued at $36.08 billion in 2022, is expected to reach $65.23 billion in 2030, for an annual growth rate of 7.9% over the period. While the desire to have a perfect smile isn't new, the rise of "tooth tech" in recent years has helped boost sales. Now in bathrooms, alongside the traditional toothbrush and toothpaste are many other products and objects: hydroflosser, interdental brushes, enamel repair gel, hyaluronic acid toothpaste... The list is long.

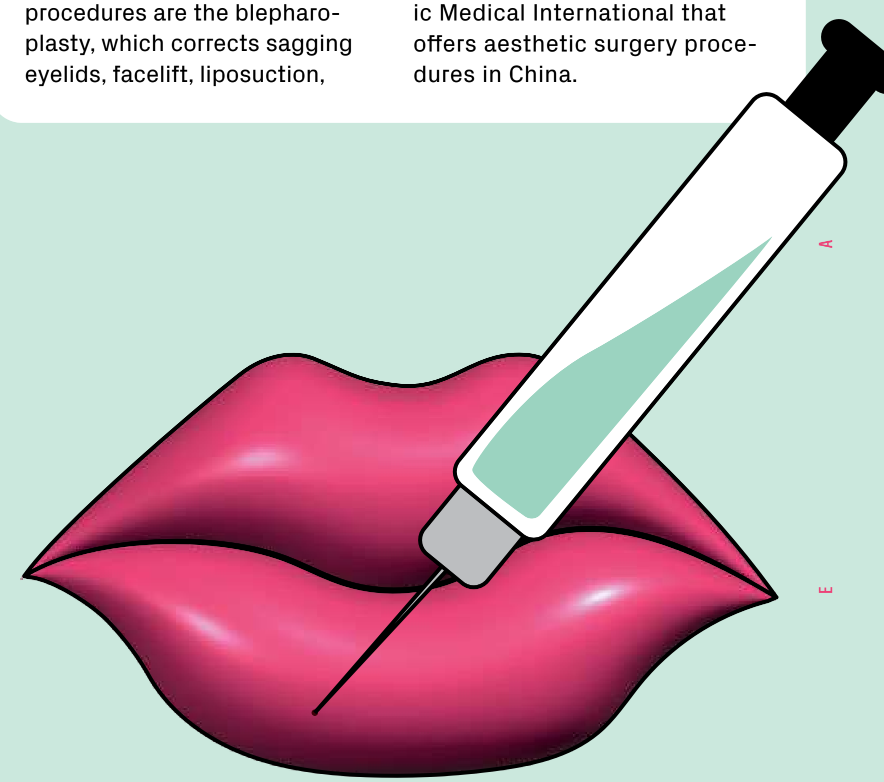
But orthodontics seems to have the most significant revolution, with a myriad of startups offering teeth aligners, particularly invisible ones, which are much cheaper than the traditional silver braces. Among the companies that are benefiting from this boom in dental care are giants such as Colgate-Palmolive, newcomers such as orthodontics specialist Align Technology, and Swiss companies such as Straumann (see company profiles on p. 38 to 51).

6 Hygiene

According to L'Oréal, which publishes a yearly report on the beauty industry, the global hygiene market (shower gel, soap, hair removal creams, etc.) generated €27 billion in revenue in 2023. In this specific branch of the beauty sector, much like the skincare sector, everyone's talking about one thing: the skin microbiome, or the micro-organisms that live on the surface of our skin. "Just a few years ago, all products were designed to kill as many bacteria as possible," said Tancrède Amacker ruefully, CEO of Cellap Laboratoire. "But with the discovery of the importance of the intestinal microbiome, and then the skin microbiome, our perspective has radically changed. It is important to preserve the bacteria that live on our skin, because they play a fundamental role."

7 Cosmetic surgery and procedures

"The cosmetic surgery and aesthetic procedures' sector is showing very strong double-digit growth figures. People don't want to wait to get these procedures done," said Delphine Le Louët of Société Générale. Dr Nicolas Chami, an expert in plastic, reconstructive and aesthetic surgery, agrees: "People are starting to undergo plastic or aesthetic surgery earlier and earlier," said the doctor. For surgeries, the most requested procedures are the blepharoplasty, which corrects sagging eyelids, facelift, liposuction, and breast augmentation and reduction. For aesthetic procedures, hyaluronic acid and botox injections remain very popular, but new treatments to rejuvenate the skin are now on the market, such as stem cell and exosome injections – though the latter are currently banned in Switzerland (see also p. 31). Several companies benefit from the rise in cosmetic surgery and procedures, such as the manufacturer of Botox Allergan (owned by AbbVie) and Aesthetic Medical International that offers aesthetic surgery procedures in China.



Asia: Eldorado for beauty brands

The entire beauty industry has its eyes set on Asia. The continent is both a source of inspiration, with South Korea, and a rapidly expanding market, especially in China and India. BY BERTRAND BEAUTÉ

Make-up remover, cleanser, exfoliator, toner, essence, serum, mask, eye cream, face cream and finally sun care. That is, in order, the 10-step facial care ritual that Koreans meticulously adhere to. The routine is gradually taking over the world, powered by social media and the current wild popularity of Korean culture. We have everything "K", with K-pop (Korean pop music – remember *Gangnam Style*? – and the boy band BTS), K-dramas (series such as *Squid Game* and *Winter Sonata*) and even K-food. Now K-beauty is the big export. The Chinese have dubbed this massive spread of Korean culture around the world *Hallyu*, which translates as "Korean wave", a term now adopted worldwide.

"South Korea is currently the most mature country in the world in terms of beauty," reports Delphine Le Louët, an analyst at Société Générale. "The industry's inspiration comes from there." The #kbeauty hashtag garnered 15.7 billion views on TikTok as of 8 April, a significant increase from less than 10 billion a year earlier. A Global Data study predicts that the South Korean skin care market, worth $8.5 billion in 2021, will grow by 5% per year until 2026. That growth will mainly benefit three companies: the Korean conglomerate LG, with its subsidiary LG Beauty, the local pure player Amorepacific, and the world's No. 1 beauty giant L'Oréal.

> "In Korea, the monthly per capita spend on skincare and cosmetics exceeds $100"
> **Thomas Patchett** of Baillie Gifford

Whereas Westerners have long relied on make-up to conceal the skin's imperfections, K-beauty focuses on maintaining healthy skin. That means taking care of one's epidermis with skin care products that give priority to cleansing and moisturising. "Skin care is less exposed to economic cycles because it is perceived as a necessity, while make-up is considered more as 'non-essential', i.e., an expense that consumers can cut back on in the event of an economic downturn," says Thomas Patchett of Baillie Gifford. Following the example of K-pop stars, the prime ambassadors of K-beauty, Koreans of all genders spare no expense to achieve perfect skin. And they start out at an early age.

Meanwhile, the global cosmetics industry is lured not so much by the local Korean market – already seemingly saturated with more than 2,000 brands – as by the spread of K-beauty around the world, particularly in Asia. "In Korea, the monthly per capita spend on skincare and cosmetics exceeds $100," Thomas Patchett adds, "compared with just $36 in China. So there's huge potential for levelling up." That is what is happening in India, Indonesia and elsewhere in Asia.

L'Oréal estimates that the beauty industry will attract more than 600 million new consumers of beauty products by 2030, and the vast majority of them (460 million) will come from North and South Asia, the Pacific, the Middle East and North Africa (see infographic on p. 28). "The Asian cosmetics market is the fastest-growing in the world," Thomas Patchett says. However, experts believe that this growth will not necessarily pass through to local brands. "Despite the many local players in Asia, consumers in these countries are fervently keen on big international brands, which convey a prestigious image," says Marine Dubrac, co-manager of the Wellness strategy at Thematics Asset Management.

Moreover, Western beauty giants do not hesitate to acquire local companies as they start to make it big – such as L'Oréal, which bought the Korean company Stylenanda in 2018 – or to invest in local stars. In 2019, LVMH-owned Dior chose Jimin from the Korean group BTS to front the brand, while MAC Cosmetics (Estée Lauder group) made Lisa, the Thai-born member of the K-pop group Blackpink, its muse. And in January 2022, the Japanese group Shiseido unveiled a new brand ambassador, Korean singer and actor Kim Woo Seok.

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→ Created in 2006 and listed on the stock exchange since 2015, the young Korean cosmetics brand TonyMoly is very popular in the *kawaii* ("cute" in Japanese) universe. Distributed by Sephora, it is taking world by storm.

Ten dazzling beauties

Many beauty companies are listed on the stock market. Here is our selection. But beware: it is as subjective as beauty itself. BY BERTRAND BEAUTÉ

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↑ Estée Lauder's skincare collection, pictured in October 2022 in Bangkok.

Estée Lauder
Sleeping beauty

Not all big names in the beauty business enjoy the same radiance. While L'Oréal is on a record-breaking streak, US rival Estée Lauder reported in February that sales were down 7% in the second quarter of its 2024 financial year, which ended on 31 December. And this poor performance follows on directly from previous results. For its 2023 financial year that ended 30 June, Estée Lauder recorded a 10% drop in revenue to $15.91 billion compared with $17.74 billion a year earlier.

How did that happen? Sluggish sales in China, where economic recovery is proving slower than expected; the prolonged closure of the island province of Hainan, a duty-free haven and therefore Eldorado for cosmetics brands; and "headwind due to business disruptions in Israel and other parts of the Middle East," as the company put it. If Estée Lauder is going through tough times, it remains a solid group with outstanding brands.

> **The group also bolstered its positioning when it bought the Tom Ford brand in November 2022 for $2.3 billion**

The US company's portfolio includes some powerhouse names in cosmetics, such as Estée Lauder, Aveda, Clinique, MAC and Jo Malone. The group also bolstered its positioning when it bought the Tom Ford brand in November 2022 for $2.3 billion. The acquisition not only gives the company a foothold in fashion, but also provides full access to the fast-growing brand Tom Ford Beauty.

Given these conditions, this lull for Estée Lauder could turn out to be an opportunity for investors. Year on year (5 April 2023 to 5 April 2024), the share price lost 40% of its value and could rebound on the back of a recovery in China. Of the 30 or so analysts who follow the stock, about 10 recommend buying Estée Lauder shares, while all the others recommend holding them.

FOUNDED: 1946 **HEADQUARTERS:** NEW YORK (US)
EMPLOYEES: 60,000 **2023 REVENUE:** $15.91 BN → EL

↑ Part boutique, part beauty salon, the "Nivea Haus" opened its doors in Hamburg in 2006. This 800-square-metre space represents a first for a mass-market cosmetics brand in Europe.

Beiersdorf
The frog-turned-prince

Beiersdorf. You have to admit, the name of the German giant does not ring a bell for most consumers. But many use its beauty products, especially its iconic Nivea creams or Labello tubes of lip balm, with their distinctive blue packaging that lines countless supermarket shelves. However, with the advent of social media and the proliferation of beauty brands, these historic players – Nivea and Labello are over 100 years old – in recent years have come across as slightly outdated. But that was then. Since 2022, Beiersdorf Group has made a spectacular turnaround, launching a multitude of innovative products. For example, while the Nivea story began in 1911 with a single product – Eucerit skin cream sold in small round blue tins – the German brand now sells more than 500, including the successful Nivea Q10 (anti-wrinkle) and Cellular Filler ranges enriched with hyaluronic acid. And it's working! Nivea brand sales soared 16.2% in 2023. For the group as a whole, after years of sluggish growth (revenue only rose by an average of just under 4% a year between 2012 and 2019), revenue shot up by a record 10.8% to €9.447 billion in 2023, up from €8.799 billion a year earlier.

Beiersdorf is also benefiting from the boom in dermocosmetics with its Eucerin brand

Alongside the resurgence of its hugely mass-market brand Nivea, Beiersdorf Group is also benefiting from the boom in dermocosmetics, i.e., skincare recommended by dermatologists. Its Eucerin brand posted annual growth in sales of 22.1% between 2020 and 2023. The only minus is Zurich-based brand La Prairie, which is experiencing a rough patch, with revenue down 15.4% in 2023. "Beiersdorf has accomplished a lot in recent years, focusing on innovation and skincare," says Paul Rouvière, an analyst at the investment bank Bryan, Garnier & Co. "And all that work is now paying off." Since 1 January 2022, Beiersdorf's share price has risen by almost 45%. Most analysts recommend buying the share, convinced that it will continue to climb.

FOUNDED: 1882 **HEADQUARTERS:** HAMBURG (DE) **EMPLOYEES:** 22,000 **2023 REVENUE:** € 9.447 BN → BEI

Align
The ultra-bright smile

Joseph M. Hogan. The name is not unfamiliar to Swiss investors. In 2008, the American businessman made headlines by becoming the first non-European to become CEO of ABB. During his five-year tenure at the helm of the Zurich-based group, the company's revenues grew 25%. Since 2015, Joseph M. Hogan has taken into his own hands the destiny of the American smile expert, Align Technology. Founded in 1997 by two Stanford students, the orthodontics specialist started out developing clear plastic aligners and retainers to replace metal braces for patients with malocclusion (misaligned teeth).

Between 2020 and 2021, the company's annual revenue sky-rocketed 59.9%

On the market since 1999 under the name Invisalign, these devices have the advantages of being cheaper than braces, virtually invisible, and removable for meals and sports training. But the pandemic is what gave Align Technology's sales a real boost. As video conferencing became an everyday reality, a perfect smile became a must. Between 2020 and 2021, the company's annual revenue sky-rocketed 59.9%. Meanwhile, from January 2020 to January 2022, the share price soared by 135%. In the 26 years since the US Food and Drug Administration approved its Invisalign custom-made systems, Align Technology has fitted nearly 17 million patients.

However, Invisalign was the only product of its kind on the market when it was launched. Since the expiry of its key patents, which began in 2017, Align has had to contend with growing competition. Well-established players such as Danaher Corporation and Sirona Dental Systems, as well as startups such as Candid and SmileDirectClub, are beginning to gn way at its market share.

Every year, 22 million people start orthodontic treatment worldwide, including 15 million teenagers, according to Align. After conquering the adult market, the Invisalign aligner is becoming increasingly popular with young people. ↓

But that is no cause for concern among analysts, and most recommend buying Align Technology shares. That is because the US firm has diversified into other areas. It has launched intraoral scanners (iTero), used for restorative and orthodontic solutions (digital imaging for crowns, veneers and implants), as well as orthodontic software. In 2023, teeth aligners accounted for just 80% of the company's revenue.

FOUNDED: 1997 **HEADQUARTERS:** TEMPE, ARIZONA (US) **EMPLOYEES:** 22,000 **2023 REVENUE:** $3.9 BN → ALGN

↑ Visitors walk past the L'Oréal booth at the VivaTech trade show, held in June 2023 in Paris.

© ALAIN JOCARD, AFP

L'Oréal
The elegant Parisian

The years seem to have had no effect on L'Oréal. What's more, the 100-year-old group looks better and better as time goes by. In 2023, the world's No. 1 beauty company had another record year. Another record year? Yes, because 2022 and 2021 were already record years. In a cosmetics market that grew by 8.5% in 2023, the French giant posted an 11% increase in revenue, to €41.18 billion. The group also "set a new operating margin record," CEO Nicolas Hieronimus gushed at the presentation of its annual results in February. The figure rose from 19.5% in 2022 to 19.8% in 2023.

And what is most surprising is that all of the group's divisions are showing growth. Despite inflation, the consumer brands (L'Oréal Paris, Garnier, Maybelline, NYX Professional Makeup and many others) grew by 12.6%. The dermatology division (CeraVe, La Roche-Posay, Vichy Laboratoires, SkinCeuticals etc.) posted spectacular growth of 28.4% in 2023. The luxury division (Lancôme, Prada, Kiehl's, etc.) only grew by 4.5%, but the professional products division (Kérastase, Redken, Pureology, etc.) was up 7.6%.

"L'Oréal is the only pure player in the beauty sector to be present in every segment of the beauty market," says Paul Rouvière, an analyst at the investment bank Bryan, Garnier & Co. "Compared with its competitors, the group has the advantage of size, with a very wide range of top-notch brands [ed. note: including 36 international brands]. It has exposure across all market segments (mass market, premium, luxury, professional) and is present in every major country." And when a small company begins to shine, the French giant does not think twice about snatching it up. In August 2023, L'Oréal bought the Australian luxury brand Aesop. Half the analysts who cover the French company recommend buying the stock, the other half advise holding it. "I've followed L'Oréal for 30 years and I've always been a buyer," says an analyst who will be leaving finance in a few months' time. "I've never been disappointed." Over the last five years, the company's share price has risen by more than 70%.

When a small company begins to shine, the French giant does not think twice about snatching it up

FOUNDED: 1909 **HEADQUARTERS:** PARIS (FR)
EMPLOYEES: 90,000 **2023 REVENUE:** € 41.18 BN → OR

Perfect Corp
AI-enhanced image

With over 100 million downloads on Android, YouCam Makeup, developed by Taiwanese firm Perfect Corp, is now the world's No. 1 virtual makeover app. Founded in 2015, Perfect Corp has the potential to attract beauty industry giants. Back in 2017, a partnership with French firm L'Oréal made it possible for YouCam Makeup users to virtually test lipsticks and various foundations on the app. But Perfect Corp has set its sights higher. Self-described as the go-to AI beauty app, the young company sells a number of Software as a Service (SaaS) tools. Its solutions let users virtually try hairstyles or analyse skin condition, with advice on skincare products.

Perfect Corp says that it works with more than 640 cosmetics brands

In addition to its consumer apps, Perfect Corp says that it works with more than 640 cosmetics brands. Despite all that, the future of the company – a pioneer in its field – seems uncertain. The pandemic enabled all the major beauty industry groups to understand the importance of virtual try-on capabilities for their products and online advice. "L'Oréal is focused on inventing the future of beauty and becoming a Beauty Tech powerhouse," the French giant writes on its website, while Shiseido has long been developing its own applications. All this sheds doubt on Perfect Corp's future. All the analysts who follow the company recommend holding the stock, which has lost more than 70% of its value since the IPO in November 2022.

FOUNDED: 2015 **HEADQUARTERS:** TAIWAN (TW)
EMPLOYEES: 300 **2023 REVENUE:** $53.5 M → PERF

↑ With a degree from the University of Copenhagen, Danish doctor Flemming Ørnskov has led Galderma since October 2019. Previously, he was CEO of UK-based pharmaceutical company Shire from 2013 to 2019. Earlier in his career, he held various roles in the pharmaceutical industry, notably at Bayer, Novartis and Merck.

"We're growing faster than the market"

Just before Easter, the Swiss pure-play dermatology company Galderma made a triumphant debut on the Swiss stock exchange. Its CEO, Dr Flemming Ørnskov, spoke with *Swissquote Magazine*.

BY BERTRAND BEAUTÉ

The IPO was a stunning success. Last month, on 22 March, the dermatological skincare company Galderma, based in Zug in German-speaking Switzerland, took its first steps on the SIX Swiss Exchange. Although the IPO price had initially been set at CHF 53 per share, the stock closed its first day of trading at CHF 64. That extra 20% increased the company's market capitalisation to CHF 15.4 billion. Galderma consequently raised more than CHF 2 billion, making it Switzerland's largest IPO since smart meter manufacturer Landis+Gyr went public in 2017. On 15 April, Galderma shares were still trading at around CHF 63. And its Danish CEO, Flemming Ørnskov, couldn't be happier. We spoke to him to hear more…

Galderma's IPO went very well. Did you expect it to be such a success?
Yes, I think our IPO can be described as a success. Before going public, we managed to garner a great deal of interest among Swiss, European and US investors. And our shares ended up being oversubscribed in the book building process, meaning that demand exceeded supply. I'm also pleased to see that we managed to attract long-term investors, which is particularly important for a company like ours that is focused on innovation.

Galderma is not very well known in Switzerland. Why did you choose to list on the SIX?
It's our company's heritage. Galderma was created in 1981 as a joint venture between Nestlé and L'Oréal. Therefore, we started out as Swiss and French. But in 2014 Nestlé bought out L'Oréal's 50% stake before selling the company to a consortium of funds in 2019. So we're from Switzerland, and I think the SIX was the right choice for us. This IPO will bring us greater visibility, and we are very attractive.

In the autumn of 2021, Galderma's plans to go public were discussed then put on hold. Why did you decide to go ahead with the IPO now?
The financial environment in 2021 was hardly a good time for an IPO. Now was the ideal time. We have met our financial targets over the past two years, which gave us credibility in the eyes of the markets. The time had also come for some of our historic investors to sell their stakes in Galderma.

Galderma raised CHF 2 billion in this IPO, not including the over-allotment. What do you intend to do with the funds?
We're going to use most of it to scale down our debt. By the end of the year, the net debt-to-EBITDA ratio should fall to between 2.25 and 2.5. In the medium term, we expect it to rapidly come under 2, on the back of strong forecast growth in our EBITDA.

On 15 April, Galderma shares were trading at around CHF 63. Do you think that's a fair valuation? How do you see the company's share price developing over the next few months?
That's not for me to say. Investors will decide how much the company is worth. My job is to make sure that we continue to reach our targets. And I'm very confident that we'll get there. That will also enhance the appeal of our company.

> "In 2023, we generated revenue of $4.082 billion, an increase of 8.5%"

In recent years, Galderma has grown faster than the dermatology market as a whole. How do you explain that success?
In 2023, we generated revenue of $4.082 billion dollars, an increase of 8.5%. That means we're growing faster than the dermatology market as a whole, which is showing growth of around 7%, and the beauty market (up 5%). We hope to continue on this path over the next few years and project annual sales growth of 7% between 2023 and 2027.

One reason for this performance is that we are a pure-play dermatology category leader. Our employees wake up thinking about skin care and go to bed thinking about skin care. Our competitors are giants that sell lots of different products, such as L'Oréal. These companies do their job very well, but they are not as in tune as we are to the dermatology needs of their users because they're diversified. We, on the other hand, are entirely focused on skin care. Our goal is to become the world leader in the dermatology market.

What are your main activities?
We're active in three areas. First, injectable aesthetics [ed. note: hyaluronic acid, neuromodulators, etc.] accounted for 52% of our sales in 2023 and are a fast-growing sector. Second, dermatological skincare (30% of sales in 2023) is also showing strong growth, especially for our premium brands. And third, therapeutic dermatology [ed. note: prescription-based] is a more mature market, with 18% growth. Dermatological skincare posted the strongest growth in 2023 (up 12.1%), ahead of therapeutic dermatology (up 8.7%) and injectable aesthetics (up 6.5%).

The general public knows about Galderma mainly through its Cetaphil skin care brand (cleansers, anti-ageing creams, etc.), which generates over $1 billion sales a year, or 25% of the company's revenue. Isn't it risky to be so dependent on one brand?
No, it's an advantage. There aren't many dermatology products that make more than a billion dollars in sales. This is the case with the Cetaphil range, which is recom- →

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↑ Galderma's development and manufacturing centre in Uppsala, Sweden.

© GALDERMA

mended by many dermatologists. The line features products with several areas of application and is available from a large number of sales outlets. Online sales are also very strong. On top of that, we have two other blockbusters in our pipeline, i.e., products that could eventually generate more than $1 billion a year in revenue.

One of these is the antibody nemolizumab, used to treat atopic dermatitis (a chronic condition that causes itchy skin). What is its potential and when will it be launched to market?

Nemolizumab is a medical product with two potential treatment applications: atopic dermatitis, which affects more than 230 million people worldwide, and nodular prurigo – a chronic inflammatory skin disorder. With these two applications, we estimate that nemolizumab could eventually generate revenue of €2 billion a year. It's currently undergoing the approval process by the US and European authorities. If approved, it could be sold as early as next year for use with both conditions.

What is the other blockbuster in development?

It's QM-1114, a highly active, ready-to-use neuromodulator. It is designed as a liquid formulation, meaning it doesn't have to be prepared from powder before injection, which eliminates variability.

How important is research and development for you?

It's essential. Since 2019, we have conducted more than 700 clinical trials. We currently spend around CHF 300 million a year on R&D, coming out to around 7.5% of our revenue. And this figure is set to rise over the next few years as our sales increase. ◢

Galderma
Switzerland's dermatology expert

Founded in 1981 by Nestlé and L'Oréal, Galderma is a pure player in the dermatology world and has just embarked on a new adventure.

Galderma generates nearly 45% of its sales in the United States, its primary market

After starting out as a joint venture owned by two giants, then becoming a subsidiary of Nestlé (2014-2019) and then owned by a consortium of investment funds (2019-2023), the Swiss firm is now publicly listed on the Zurich stock exchange. Now's the time for the company to make a name for itself – Galderma is based in Zug, but generates nearly 45% of its sales in the United States, its primary market. The general public knows Galderma best for its cosmetics line Cetaphil (cleaners, anti-ageing creams, sun creams, etc.) whose first product was launched 75 years ago. In this segment, Galderma is a direct competitor of brands such as La Roche-Posay (L'Oréal) and Eucerin (Beiersdorf).

But Galderma's most significant business line isn't dermocosmetics. It is aesthetic injectables, particularly Botulinum toxins (also called neuromodulators) with brands such as Alluzience, Dysport and Azzalure, as well as hyaluronic acid (Restylane and Sculptra). In this segment, Galderma competes with US giant AbbVie.

Finally, Galderma is also present in the pharmaceutical industry, with prescription-only dermatology products (for rosacea, atopic dermatitis and prurigo nodularis). The pharmaceutical sector seems the most promising for the company, with the potential launch of nemolizumab – a drug used to treat certain skin ailments – in late 2024 or early 2025 if the US and European authorities approve. This treatment could generate two billion in sales per year, increasing Galderma's revenue by 50%.

FOUNDED: 1981 **HEADQUARTERS:** ZUG (CH)
EMPLOYEES: 6,500 **2023 REVENUE:** $4.082 BN
→ GALD

Production of injectables – Galderma's flagship activity – at the Uppsala plant in Sweden. ↓

AbbVie
The Botoxed ogre

The botox craze shows no signs of abating. Sales of botulinum toxin generated $5.673 billion in revenue for AbbVie in 2023.

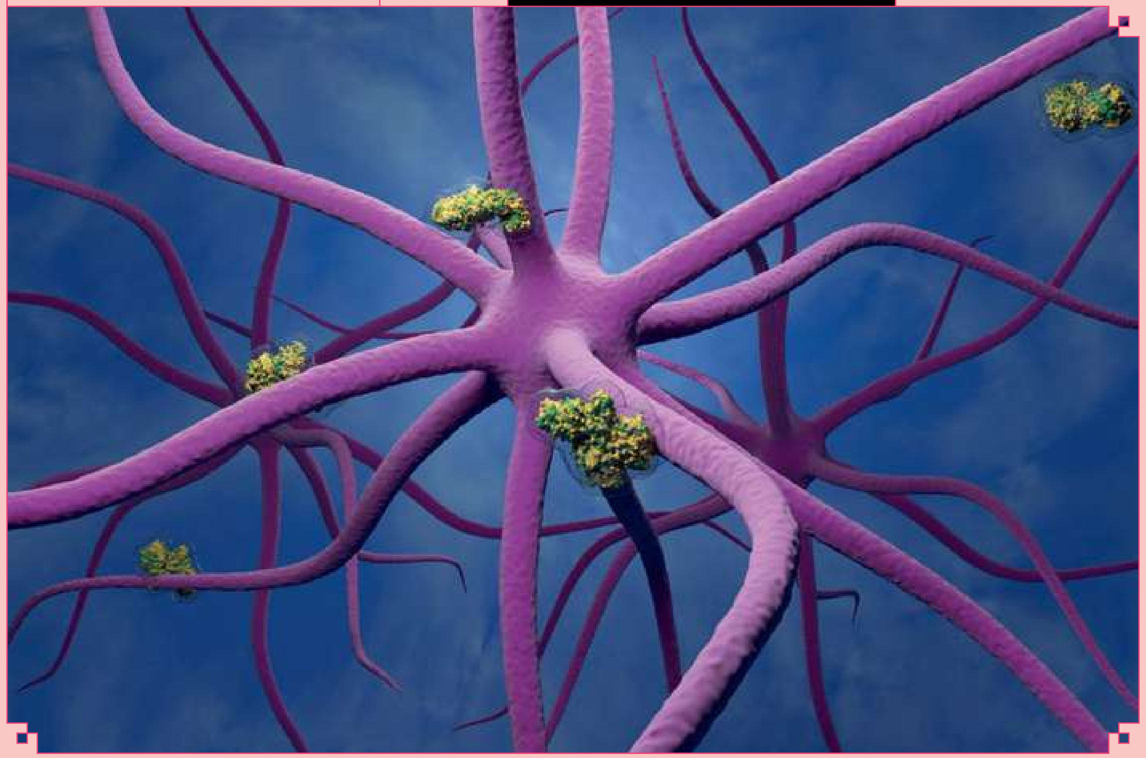
In June 2019, AbbVie acquired Allergan, the maker of Botox, for $63 billion

While therapeutic use of its product accounts for the largest share of sales ($2.991 billion), aesthetic use showed very strong growth in 2022 (up 17.2%) before stagnating last year (up 2.6%). This segment brought in $2.682 billion in 2023. While sales of Humira – a drug used in a number of treatments, including rheumatoid arthritis, which until 2022 was the drug generating the highest revenue worldwide – are collapsing (down 32.2% in 2023), AbbVie has found a serious growth driver in the aesthetics market.

In June 2019, AbbVie acquired Allergan, the maker of Botox, for $63 billion. No regrets there. Despite the emergence of competitors such as Galderma from Switzerland and Ipsen from France, the Botox brand continues to dominate by far the botulinum toxin market. AbbVie also markets injectable hyaluronic acid through its brand Juvéderm, world leader in the market segment generating revenue of $1.378 billion in 2023, and breast implants sold under the name Natrelle. In total, the aesthetics segment generated $5.294 billion for AbbVie in 2023, or around 10% of the company's revenue. Most analysts recommend buying AbbVie stock, which has shot up more than 100% in the past five years.

FOUNDED: 2013 **HEADQUARTERS:** NORTH CHICAGO (US)
EMPLOYEES: 50,000 **2023 REVENUE:** $54.318 BN → ABBV

Illustration of the nerve-blocking activity by botulinum toxin. This neurotoxin (in green and yellow), produced by the bacterium *Clostridium botulinum*, prevents the release of neurotransmitters.
↓



↑
On 17 March, 2024, representatives of e.l.f rang the opening bell of the New York Stock Exchange (NYSE).

e.l.f. Beauty
Radiant in its youth

Founded just 20 years ago in 2004, the US firm e.l.f. Beauty (an acronym for eyes, lips and face) is no longer quite the pimply-faced teenager, despite being in the middle of a growth spurt. Set to report its 2024 financial year results in May, the company is expected to post revenue of between $980 million and $990 million, up 69% to 71% from its 2023 financial year. The e.l.f. share is following the same dizzying rise: between 1 January 2022 and 5 April 2024, its price soared by almost 390%. How did it do that? Virtually unknown in Europe and Asia, e.l.f. generates 88% of its revenue in the United States. But in the space of a few years, it has become the favourite cosmetics brand of American teens, according to a study conducted by the company itself.

e.l.f. donates to non-profits and produces 75% of its products in Fair Trade Certified facilities

To achieve that status, the brand has focused on strong ethics, which appeals to Gen Z consumers. Its products have never been tested on animals and only contain chemicals reputed to be safe, having banned over 1,600 ingredients. E.l.f. also defends the planet (recycling, reduced packaging, etc.), campaigns for diversity, donates to non-profits, and produces 75% of its products in Fair Trade Certified facilities. But in this day and age, it takes more than these good practices to guarantee success. And in the case of e.l.f., that "more" is TikTok, the go-to social network of all of today's youths.

In 2019, the company worked with advertising agency Movers+Shakers to launch the e.l.f. Cosmetics challenge. The game rules involved asking people to post a video on TikTok, created specifically for the challenge, of themselves putting on make-up and dancing to music. The event resulted in more than 5 million user-generated videos, including from stars such as Lizzo, Ellen and Reese Witherspoon – who joined in, unpaid – and 7 billion views, making it the most viral campaign ever launched by a cosmetics brand in the United States. Since then, e.l.f. has achieved success on TikTok with multiple original campaigns.

And times have changed. These days, young people don't just borrow their mum's mascara before going out. Contemporary youths are self-taught experts, trained on TikTok. And they buy their own products. To gain a place in the hearts of this audience, while going easy on their cash flow, as they tend to have less disposable income than their parents, the US firm has another edge. Unlike big groups that bank on "premiumisation", e.l.f. goes for affordability. Most analysts believe these ingredients combine into a winning formula and recommend buying the stock.

FOUNDED: 2004 **HEADQUARTERS:** OAKLAND (US)
EMPLOYEES: 340 **2023 REVENUE:** $579 M → ELF

Amorepacific
The Korean beauty giant

This is one of the great paradoxes of the modern-day beauty industry. While K-beauty, the South Korean skin care ritual, is gaining in popularity around the world, the largest beauty group in the "Land of the Morning Calm" is not reaping any of the benefits. Amorepacific, which sells cosmetics, fragrances and hair care products, posted sales of 4,021 billion Korean won in 2023, down 10.5% from 4,495 billion won in 2022. So what happened? The company's domestic sales, which still account for almost 50% of its revenue, fell by 14%, due to faltering travel retail and fierce competition from major Western groups, led by L'Oréal. China's still awaited economic recovery has also strained the company's earnings in Asia (20% of revenue), which were down 16%.

The company's domestic sales fell by 14%, due to faltering travel retail and fierce competition from major Western groups

On the other side of the spectrum, Amorepacific sales soared in the Americas (up 58%) and in the Europe, Middle East and Africa (EMEA) region (up 62%), confirming K-beauty's worldwide appeal. Unfortunately, the Americas and EMEA generate less than 10% of the group's total revenue. Growth outside Asia has therefore not offset the decline in sales in South Korea and China. Despite this, most analysts recommend buying the stock, based on the belief that China will eventually bounce back to lift Amorepacific's sales.

FOUNDED: 1945 **HEADQUARTERS:** SEOUL (KR)
EMPLOYEES: 10,000 **2023 REVENUE:** KRW 4.021 BN → 002790

Shiseido
The Japanese brand at a standstill

Shiseido is suffering from long COVID. The Japanese cosmetics group has yet to regain its lustre since the pandemic. After a record performance in 2019, with revenue of 1,131 billion yen, the firm's earnings have stagnated at around 1,000 billion yen per year. In 2023, sales totalled 973 billion yen, down from 1,067 billion yen in 2022 and 1,010 billion yen in 2021. Since the coronavirus outbreak, Shiseido's great strength has become its main weakness.

The company, which claims to be the leading cosmetics company in Asia and in Japan, generates almost 25% of its revenue in China and, more generally, almost 60% of its sales in Asia (Japan, China and Asia Pacific). As a result, China's prolonged lockdown has been devastating for Shiseido. And the country's slower-than-expected economic recovery continues to affect the group. Making matters worse, the Japanese company moves many of its products through airports, with travel retail bringing in over 15% of the company's income in 2022.

Workers at the inauguration of a new production plant for cosmetics group Shiseido in Otawara, Tochigi Prefecture, Japan (27 November, 2019) ↓

© CHARLY TRIBALLEAU / AFP

Shiseido's share price has taken a hard blow on the markets, losing 50% of its value in the last five years

Given this performance, Shiseido's share price has taken a hard blow on the markets, losing 50% of its value in the last five years. However, for analysts who follow the company, this fall in the share price is welcomed as an immense opportunity. Most recommend purchasing shares. "Japanese cosmetics manufacturers are struggling a bit at the moment, but these companies offer exciting long-term prospects," says Thomas Patchett, a Japanese equities specialist at Baillie Gifford. "The Chinese attribute a lot of credibility and prestige to Japanese brands, and sales will take off when the Chinese economy rebounds, and discretionary spending/travel retail recovers."

FOUNDED: 1872 **HEADQUARTERS:** TOKYO (JP)
EMPLOYEES: 39,000 **2022 REVENUE:** $ 8.1 BN
→ TYO: 4911

Heading north for the vineyards

Due to climate change, wine production has been expanding to areas that were once believed to be too cold, such as the United Kingdom. Meanwhile, southern regions are grappling with heat, drought and wildfire. BY JULIE ZAUGG

© CHRIS RATCLIFFE/BLOOMBERG/GETTY IMAGES

← Listed on the London Stock Exchange, the Chapel Down group is England's largest wine producer. Here, some of the company's vines photographed in 2022, at Maidstone in Kent.

Vines stretch as far as the eye can see on a sunny hillside, a gentle sea breeze sweeping through the green hills. Flourishing in the calcareous soil, the recently pruned vines are now mere twisted stumps, topped by two thin branches that will soon be tied in an arc before the first buds appear. In the distance, you can see the silver 50,000-litre vats that will be used to ferment the wine and a few alpacas grazing on the grass in a nearby field.

> **"Several major champagne producers have also started buying up land in the south of England, including Taittinger and Pommery"**
>
> **Andrew Wood,** a PhD student at Oxford University who is studying the impact of climate change on wine

No, we are not in Bordeaux, but the south of England. This winery belongs to Chapel Down, a wine producer with 367 hectares of vineyards spread across Kent, Sussex and Essex. Located not far from the medieval village of Tenterden, the winery was created in 1977 by Stephen Skelton, a pioneer in British winemaking after he spent two years studying viticulture in Germany.

It was bought in 1995 by a group of Sussex winemakers, which have since accumulated 10 vineyards under the Chapel Down name. They grow Chardonnay, Pinot Noir and Pinot Meunier, the three main grapes used to make champagne, and Bacchus, a German variety that the British have enthusiastically embraced. The 2023 harvest was exceptional, resulting from a frost-free spring, a wet summer and a particularly warm September. Chapel Down took in 3,811 tonnes of grapes, compared with 2,050 tonnes in 2022.

The group now dominates wine production in the UK, with 3.4 million bottles produced in 2023 (see also the company fact sheet on p. 54). By way of comparison, for a fine French white wine, such as Chablis Grand Cru (Burgundy), around 700,000 bottles are produced per year. Its sparkling wines have also started to win awards. Its fresh and elegant Chapel Down Grand Reserve, aged in bottle for three and a half years, features notes of red fruit, apple and brioche. The 2018 vintage took home a gold medal last year at the International Wine Challenge.

Chapel Down owes this success to climate change, which has turned the UK into a wine region in its own right. "Just a decade ago, it was almost impossible to produce a good crop of ripe grapes in this country," says Linda Johnson-Bell, a British wine expert. "Now it happens almost every year."

Wine climatologist Alistair Nesbitt confirms this: "On average, it's 1°C to 1.5°C warmer in the south of England during the growing season, from April to October, than it was in the 1980s." Winters have also become milder, and the climate →

A University of Palermo study projects that by 2100, European agricultural land suitable for wine production will increase by 45%

is now similar to the climes of the Champagne region 40 years ago. "This has led to an explosion of land in production, which has expanded by between 400% and 500% over the last 10 years to 4,300 hectares," the expert says (an area that is still modest compared to the land covered by Bordeaux vineyards, i.e., around 118,000 hectares).

A Chapel Down wine shop, near the picturesque town of Tenterden in Kent, the "Garden of England". ↓

Vineyards can now be found in places as surprising as Wales, Cornwall, Norfolk and even Scotland. The UK now has 943 vineyards, three times as many as 20 years ago. Wines of Great Britain, the national association for the UK wine industry estimates that by 2032, the UK will have 7,600 hectares of land under vine.

Large estates of over 100 hectares have begun to appear, led by a new generation of winegrowers such as Chapel Down, Nyetimber and Gusbourne. "Several major champagne producers have also started buying up land in the south of England, including Taittinger and Pommery," says Andrew Wood, a PhD student at Oxford University who is studying the impact of climate change on wine.

For the time being, the British wine industry is dominated by sparkling and white wines. But that could be about to change. "In 2020, a year with a very hot and sunny summer, grapes ripened enough to produce red wine for the first time," Andrew Wood says. He believes that the country would lend itself particularly well to red varieties such as Pinot Noir.

The United Kingdom is no exception. "Vineyards have sprung up in several northern European countries, including Belgium, the Netherlands, Canada, Sweden and Denmark," Alistair Nesbitt says. In Germany and Austria, vineyards are heading northwards. A University of Palermo study projects that by 2100, European agricultural land suitable for wine production will increase by 45%.

But while vines are growing strong and healthy in colder climates, they have begun to shrink in the hottest areas, such as southern Spain, Sicily and Greece, where temperatures regularly rise to 45°C in summer. Elsewhere, vines are struggling to survive.

"Blooming, ripening and harvesting are happening faster, sometimes several weeks earlier, than in the 1980s," says Kees van Leeuwen, professor of viticulture at Bordeaux Sciences Agro. "That means that the grapes contain a higher amount of sugar, hence a higher alcohol content in the wine, and lower acidity." Furthermore, their phenolic compounds and aroma precursors, which are predominantly present in the skin of the berry and give the wine its notes and complexity, do not have time to develop. Another issue is that milder winters encourage the proliferation of parasites, such as moths and mildew. Rising temperatures also cause drought, which reduces crop yields. "If it gets very hot in the summer, the grapes risk getting sunburnt and wilting," Kees van Leeuwen says.

↑ Workers picking grapes from the vineyards at Chapel Down, Maidstone, during the October 2022 harvest.

Some regions outside Europe have started using irrigation, but the practice is still banned in many winegrowing areas in southern parts of the continent. "But in the case of drought, water resources are limited," the expert says.

On top of that are hail and frost, which have become more unpredictable. "As the buds come out earlier, a bout of frost in the spring can have devastating effects," says Benjamin Cook, a →

COMPANIES TO WATCH

CHAPEL DOWN
The British winery on the rise

Listed on the stock exchange at the end of 2023, this British wine producer has seen fast growth in recent years. In 2023, its sales rose by 14%, and sales of sparkling wine increased by as much as 25%. It did that by upping its prices and expanding its sales channels, predominantly in the restaurant sector and duty-free shops in British airports. However, the group is still grappling with an image problem, especially abroad, where its wines are relatively unknown. It has an ambitious plan to double its production by 2026, positioning itself as a competitor to established brands such as Moët & Chandon. The only analyst covering the company recommends buying shares.

FOUNDED: 2001
HEADQUARTERS: TENTERDEN (UK)
EMPLOYEES: 65
2023 REVENUE: £17.9 M
→ CDGP

TREASURY WINE ESTATES
The Australian giant

Created by grouping together vineyards founded in the 19th century, this Australian group now owns several leading brands, including Penfolds, Beringer (US), Wolf Blass and Rosemount. It manages 10,100 hectares of vineyards, mainly in Australia, New Zealand and California. In response to climate change, Treasury Wine Estates has introduced drip irrigation in its vineyards using an underground piping system, and started buying land in Tasmania. Most analysts have issued a buy or outperform recommendation.

FOUNDED: 2011
HEADQUARTERS: MELBOURNE (AU)
EMPLOYEES: 2,500
2023 REVENUE: AUD 2.49 BN (1.4 BN SWISS FRANCS)
→ TWE

climate specialist at Columbia University. He recalls how in April 2021 almost 80% of the harvest was damaged in France following a sudden cold snap.

California and Australia have also suffered severe forest fires in recent years. "This has an impact on the vines, either by destroying them or contaminating the grapes with compounds from the smoke, giving the wine a pungent taste," Benjamin Cook explains.

Winegrowers have adopted new strategies to try and limit these effects of climate change. In California, 70% of new vines planted grow on a suspended trellis, a method developed by University of California viticulture specialist Sahap Kaan Kurtural. "With this system, the bunches are better protected from the sun by the leaves," he explains.

He has also experimented with using different kinds of canvas covers – some of which block up to 30% of the infrared light that causes heat – and planting the vines further apart. "When the vines are not so close together, the roots can spread out further and capture more water," he says.

In France, winegrowers have started to plant other species among the vines (white mustard, rapeseed), because they improve water retention and nutrients in the soil. Some have

↑ Chapel Down CEO Andrew Carter, pictured here in October 2022 at one of the company's vineyards in Tenterden.

© CHAPEL DOWN / TREASURY WINE ESTATES

revived a technique known as "goblet pruning", which used to be practised in the southern Mediterranean region because it delays ripening. Others have started spraying their grapes with a clay and water mixture to protect them from the sun.

Laboratories have taken charge by developing cross-breeds that are more resistant to heat and drought. Some Saint-Émilion winemakers have started growing Merlot, because the grapes produce less sugar when exposed to the sun. New strains of yeast have also been created that produce less alcohol during fermentation.

"Most of the innovations, however, are in rootstocks (ed. note: the underground part of the vine onto which vines are grafted), because we want to avoid affecting the grape varieties," Kees van Leeuwen says. Wines made from hybrid varieties, such as Chambourcin, which is highly resistant to mildew, or Novavine, which can survive drought, are not well appreciated by critics.

Some winemakers have taken more drastic measures and moved their vines to north-facing slopes, to the seaside or to a higher elevation. Australian wine producers, such as Treasury Wine Estate (see the profile on p. 55), have even started buying up land on the island of Tasmania, where the climate is cooler. "But this raises the issue of heritage land. Appellations such as Bordeaux or Barolo, which are linked to a specific region, can't do that," Alistair Nesbitt says.

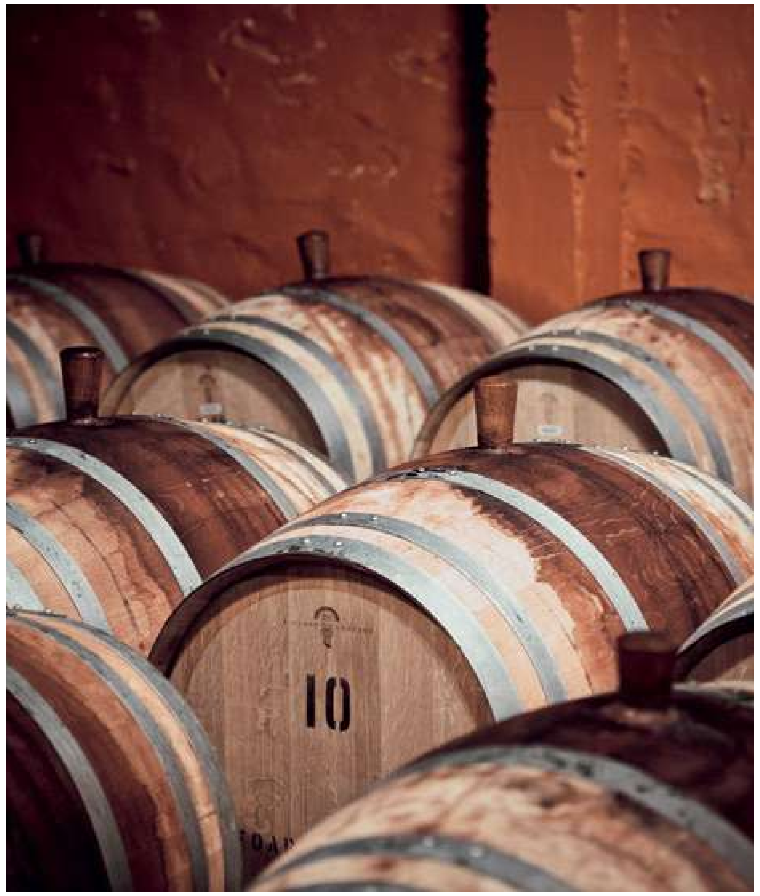
But attitudes are changing, even in the most traditional winegrowing areas. In 2021, authorities in Bordeaux allowed growers to introduce six new varieties that are more suited to hot climates, including Portuguese Touriga Nacional and Arinarnoa, which are rich in acids and tannins. However, their content must not exceed 10% of the final blend.

"Most of the innovations are in rootstocks, because we want to avoid affecting the grape varieties"
Kees van Leeuwen, professor of viticulture at Bordeaux Sciences Agro

Outside of Europe, winegrowers are forgoing French varieties for Spanish, Greek and Italian grapes, such as Nero d'Avola, Vermentino, Fiano and Xinomavro, which are more used to hot weather. Less well known to mainstream consumers, they may still have trouble finding a market.

Furthermore, it is not easy to transform a vineyard quickly. "It takes an average of 10 years for a new vine to produce a usable crop," Benjamin Cook says. Winegrowers still have a way to go in the fight to protect their age-old craft. ◢

Barrels of wine from the Australian company Treasury Wine. The company bought land in Tasmania to guard against global warming. ↓



COMPANIES TO WATCH

THE DUCKHORN PORTFOLIO
The West Coast Baron

From Napa Valley's St. Helena vineyards, the group comprises around 10 estates in California and Washington State, which produce high-end wines. It was listed on the stock exchange in 2021. The Duckhorn Portfolio recently embarked on a wave of vineyard acquisitions and has so far been largely spared by the forest fires and drought in California. Only 6% of its vineyards are in areas where water is very scarce. Most analysts recommend buying shares.

FOUNDED : 1976
HEADQUARTERS : ST. HELENA (US)
EMPLOYEES : 500
2023 REVENUE : $403 M
→ NAPA

VINTAGE WINE ESTATES
The US winery trying to get back on track

With revenue down 3.3% and an adjusted loss of $11.4 million for 2022-2023, the US firm has seen brighter days. With vineyards in California, Washington and Oregon, it has embarked on a restructuring plan. The programme involves shedding its consumer brands to focus on its premium range, simplifying its sales channels by withdrawing from certain direct-to-consumer sales platforms, and reducing its workforce by 15%. The two analysts covering the company believe its shares are undervalued and recommend buying.

FOUNDED : 2000
HEADQUARTERS : SANTA ROSA (US)
EMPLOYEES : 568
2022-2023 REVENUE : $283 M
→ VWE

WORK

Will the four-day work week become the norm?

The initiative, which would give employees more free time, has started to make waves among publicly listed companies. The results of the experiments are encouraging, but the complexity and initial costs that come with the change remain barriers to entry for most companies. BY BLANDINE GUIGNIER

© ALEX NABAUM

Laurent de la Clergerie never expected to announce a four-day work week to his company like he did. "The news was very quickly leaked to the media and we had only just started discussing it internally. Investment firms called me up to ask what I was thinking. 'We didn't know you were a left-leaning CEO,' they said. But we didn't see any negative effects on our share price in the days that followed. Overall, the reactions were more surprised than scared." The four-day initiative was still relatively unknown in Europe in 2020, when the French online retail group LDLC decided to take the leap. Since then, pilot projects have popped up in many countries, including dozens of companies in the United Kingdom, Portugal, and even right now, in Germany. We've also seen new laws that allow employee requests for a shorter week, such as in Belgium in October 2022.

This concept has spread around the world, thanks to the efforts from the "4 Day Week Global" foundation, created in New Zealand in 2019. The group encourages thousands of companies around the world to launch a six-month pilot project, which reduces working time to 80% while maintaining the same salaries and productivity goals. The multinational Unilever piloted this programme in Oceania. After an 18-month pilot from December 2020 to June 2022 in its New Zealand branch with 80 employees, Unilever extended the pilot to include 500 additional employees in Australia. "Our pilot project in New Zealand led to promising results, exceeding the key performance indicators, including revenue growth," said a company spokesperson. "Absenteeism was reduced by 34%, work stress was down 33% and conflicts between work and home life were cut by a whopping 67%. Meetings were reduced to 3.5 hours per week and we maintained stakeholder satisfaction throughout the entire pilot."

Appealing employers

In the United Kingdom, the results of the 4 Day Week Global pilot program, compiled by the University of Cambridge and Boston College, were also very positive. Among the 61 participating companies (representing approx. 2,900 employees in total), 92% decided to continue the programme beyond six months. The number of employees who quit during the pilot dropped by 57%. Immediately afterwards, retail shops publicly traded on the LSE, such as Dunelm, Sainsbury's, Marks & Spencer and Superdry, began offering shorter work weeks. This benefit is appealing in a context of employee shortages and high turnover, which is common in retail. These "in-person" jobs, much like industry and healthcare, can't take advantage of remote working – another type of flexible work that employees increasingly request.

Employee loyalty is the primary advantage of these types of programmes for the company, according to Professor Rafael Lalive from the University of Lausanne. "In recent history, the COVID pandemic highlighted the need to have better work-life balance. When competing to attract talent in fields such as tech, for example, companies realised that they had to offer not only →

←
Laurent de la Clergerie, CEO of the French group LDLC, has introduced the 4-day week at his company. In his book *Osez la semaine de 4 jours!* [Try the 4-day week!], he explains the benefits for his group.

“Employee loyalty is the primary advantage of these types of programmes for the company”

Rafael Lalive, professor at the University of Lausanne

a competitive salary, but also more free time. The four-day work week is a competitive advantage, a way to stand out from other companies. It increases employee loyalty and retention, saving money that would otherwise be spent on engagement and training new employees.” For the economist, who specialises in the labour market, global forces are at play here. “According to a recent study conducted by SECO, between 1950 and 2022, the actual annual hours worked per working person in Switzerland dropped from 2,400 to 1,500 hours. The hypothesis is that thanks to automation and digital technologies, we are now much more productive. And the corresponding productivity gains result in more free time for employees.”

EPFZ professor of work and organisational psychology Gudela Grote hopes that companies, and more widely, national laws will continue to work towards reducing the work week because of productivity gains, “as that will help manage the major transformations that we will see in the labour market.” But the professor does admit: “Corporate interest in the four-day work week is also a result of a lack of qualified personnel in many sectors and industries. That could change if the situation flips and the supply of workers exceeds demand.”

In France, almost all companies that are interested in a reduced work week are having difficulty recruiting,” said de la Clergerie. In his book *Osez la semaine de 4 jours!* [Try the 4-day week!], the LDLC CEO focused on the positive effect the pilot had on human resources. Going from 35 hours in 5 days to 32 hours in 4 days, LDLC saw the rate of absenteeism drop between 2019 and 2021, even after accounting for sick leave during the pandemic. The initiative has gained even more traction after pilots showed that supplemental hiring needs were lower than initially expected. But the entrepreneur does offer some advice. “You need to make this opportunity available to all employees, not just the ones who cannot work remotely, for example, or for the roles that are particularly hard to fill. It’s a matter of equity and above all, I am convinced that the more employees that participate in the programme, the more profitable it will be for the company.” According to the CEO, even if the reason that companies begin a pilot is to combat an employee shortage, they often continue the programme after seeing other advantages.

“Companies can also highlight improved carbon emissions, thanks to no longer having employees commute”

Laurent de la Clergerie, CEO of the LDLC group

Rethinking corporate structure

At LDLC, the most surprising outcome was increased efficiency in the workplace and steady revenue. “I calculated that if the company moved from 35 to 32 hours, we risked losing approximately 5% of the workforce, which could result in a 2% to 3% loss of EBITDA. And despite the concerns that it would negatively affect our share price, I decided to go for it after everything I read about it in other countries, particularly for Microsoft Japan. In the end, revenue went from approximately 500 million in 2019 to 700 million in 2021. The workforce increased by less than 4%, going from 1,020 to 1,060 employees, with working hours reduced by 8.6%. In 2022, revenue dipped slightly, because it was very high following the explosion of online shopping during the pandemic, but the shareholders and analysts never blamed it on the move to the four-day work week.”

Both the French group’s CEO and the EPFZ professor believe that the effort involved in reorganising processes and schedules to figure out how to complete the work in a reduced time frame can improve a company’s overall structure. “Working longer doesn’t necessarily mean working more efficiently,” said Grote. “If companies use these initiatives to examine and improve their processes in order to reduce working time, the positive effects can be compounded.”

For some multinationals such as Panasonic Japan, the move to the four day work week was part of a larger review of work-life balance that was →

included in their ESG report. For the Japanese group, which has 233,000 employees around the world, it was the CEO himself, Yuki Kusumi, who announced the initiative during a presentation to investors on sustainable development. "We didn't do a specific calculation at our company, but it is indeed an interesting metric for corporate social responsibility (CSR)," said de la Clergerie. "With this type of commitment in favour of more social progress and employee wellbeing, companies will be valued higher on the stock markets and among certain specific investment funds." Companies can also highlight improved carbon emissions, thanks to no longer having employees commute, for example.

Switzerland doesn't seem like the easiest place to implement a four-day work week

Caution and limits

For the Swiss universities that we interviewed, the four-day work week is difficult to apply across the board for all companies in a uniform way. "Companies piloting this approach have often said that not all types of work can be reduced to four days," said Grote. "For example, shift work and 24/7 service are particularly complicated." Companies that already have a solid financial basis seem to be much more willing to reorganise the structure to accommodate a four-day work week, according to Rafael Lalive. "The company needs to be able to absorb increased costs for the first few months."

The number of Swiss public companies with a four-day week remains very limited, though there are a few pilots, such as at Romande Energie (see inset on p. 62). For the HEC Lausanne professor, this is due to the fact that Swiss people strongly identify with their work. "Reducing the work week by one day could cause confusion for many Swiss people, who in the past, for example, refused an initiative to increase the number of vacation days." The EPFZ expert Gudela Grote also considers a cultural reason: the Swiss economy is less inclined to try new concepts like this. "Companies in Switzerland are doing well overall, and the concept of the 'great resignation' in the United States didn't really have much of an effect here, and perhaps the idea of experimentation isn't as strong here as elsewhere."

Furthermore, Switzerland doesn't seem like the easiest place to implement a four-day work week. The maximum number of hours worked per week is relatively high: 42 hours, compared to 35 in France and 38 in the Netherlands, for example. The geographical differences could make implementing a uniform solution quite complicated, for example when taking into account the cantonal specifics in terms of the right to work or longer school days for children. "Workers do not need to do 10-hour days," said Lalive. Even if it was legal, productivity could be very low by the end of the day. Furthermore, it would no longer seem to be an advantage for employees and the idea could lose its appeal." The economist also foresees another potential negative. "Much like other modes of flexible working, companies need to ensure that social relationships are maintained. Informal discussions between colleagues create trust, and nurture creativity and possible collaborations. To counteract this, management needs to encourage social events, which will no longer necessarily happen during working hours." Relaxation spaces and game rooms seen in big companies such as Google Zurich could soon become obsolete.

Romande Energie: a Swiss pilot

© ROMANDE ENERGIE

Romande Energie, which is partially public to investors, has several pilots in progress for a four-day work week. The goal is to refine the concept in order to eventually expand the pilot to the entire company.

For Philippe Chollet, the idea to test a four-day work week came from an assessment. "The energy transition in Switzerland could be affected by a significant labour shortage of around 300,000 people," explained the head of strategy for Romande Energie Services. "We need to offer disruptive working conditions to attract new talent and keep employees from going to the competition." The Romande Energie group sells technical offerings in construction and building renovation. Technicians in the field make up the majority of the company's employees, alongside engineers and other office workers.

From March to June 2023, the first pilot was conducted in a team of seven people. "They went from 5 days to 4, with 10-hour days instead of 8. It was legal under the cantonal labour law, with a required 30-minute lunch break. Several employees came from neighbouring France and the idea of having one fewer day to commute was quite appealing." Of the risks identified by the company at the start of the pilot project, only a few actually materialised. "Contrary to our concerns, it was easy to organise the work. Coordinating with other groups at construction sites – which were all working 4.5 or 5 days – was not complicated. We also didn't have any negative repercussions about our reputation with clients. We didn't see any reduction in revenue, and the number of hours billed stayed the same." But there were other hardships. "Employees ended up increasing their commuting time home because they got stuck in rush hour traffic. Returning home later in the day impacted their family life. Physical fatigue also increased."

For the next round of pilot projects, which will begin 1 April, Romande Energie Services made some changes. "We are conducting pilots in Neuchâtel and Bulle, where commuting times are generally lower. We're reducing the number of hours while maintaining the same salary." At the Neuchâtel-based company, the entire subsidiary (approximately 25 people) will move to 37 hours from Monday to Thursday. "Only the after-sales service department will remain open Monday to Friday with a rotating system." The Bulle subsidiary has 40 employees, and the local team suggested a pilot with one team working a 4-day week (34 hours) and another team working 5 days (42.5 hours) that switch weekly.

"At the end of the pilot, we will analyse productivity, feedback from clients and other stakeholders, revenue changes, managers' feedback on the organisation, and absenteeism." All employees have been informed of the changes. "The goal is really to test the advantages and disadvantages of the approach, rather than forcing people to do something."

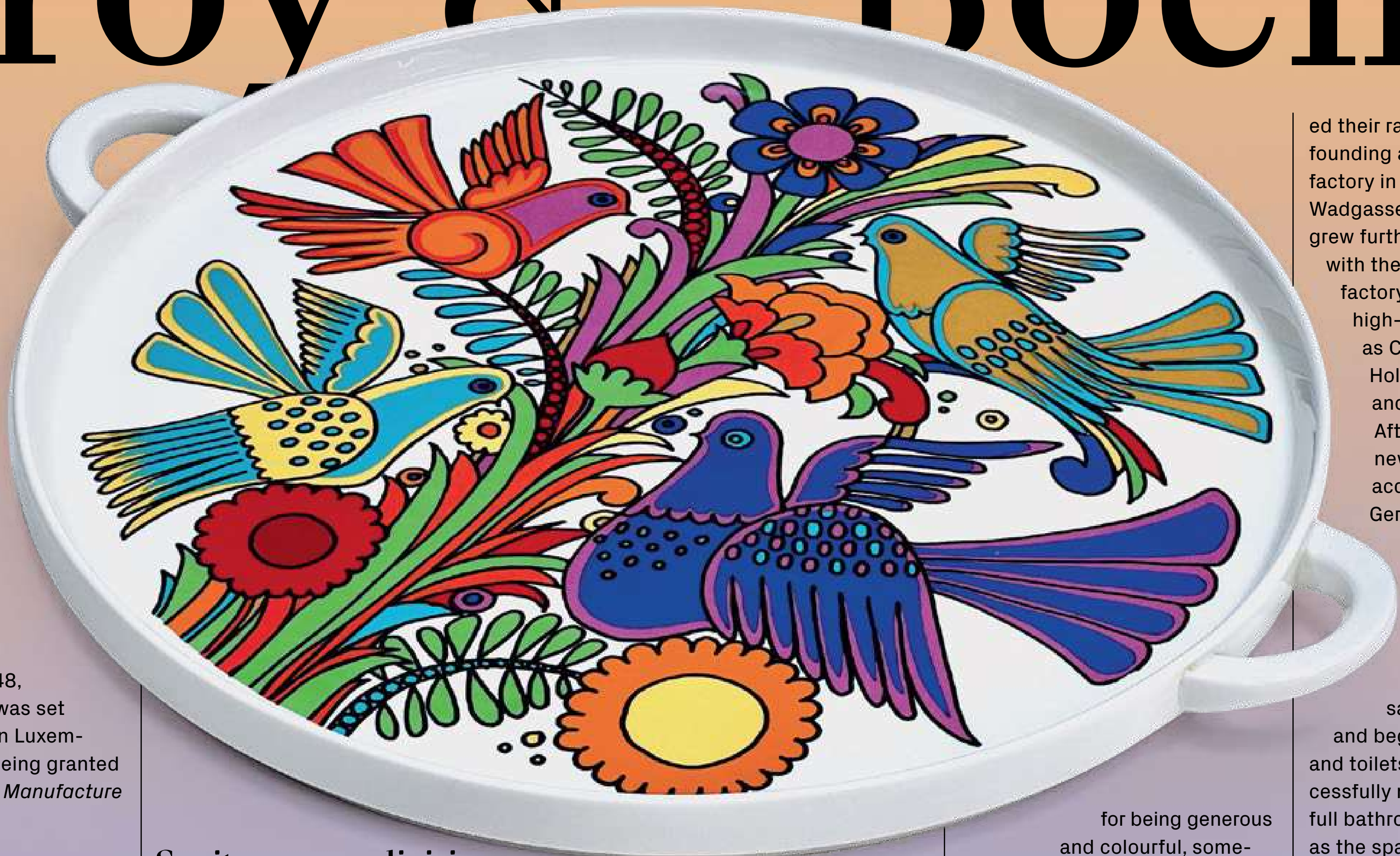
Chollet is, of course, supported by the group's management team. "They thought it was a good idea and gave us the freedom to test it. They just set a few conditions such as no losses in productivity and revenue goals." It seems premature to report on the experience at a global level, for example in the management report. "But I'm convinced that by improving work-life balance and employee motivation, the company as a whole will benefit. And it's important that we're seen as agile, because in 15 years, the four-day week will become the norm."

Villeroy & Boch

A BRAND A STORY

The ceramics chameleon

The former "Imperial and Royal Manufactory" has recently celebrated its 275th anniversary. In addition to producing its famous porcelain plates, the company continues to expand into the sanitary ware industry. BY BLANDINE GUIGNIER



↑ The Acapulco line, produced since 1967.

© VILLEROY & BOCH

Try it: go to a second-hand shop, restaurant or department store in Switzerland and turn over a teapot, plate or cup. Chances are you'll find the Villeroy & Boch stamp. Vintage lovers actually do that frequently. After falling into disuse, some of the brand's collections are back on trend. Such is the case with the Boule designed by Helen von Boch, a porcelain sphere made up of the basic dishes needed for a meal like a Japanese bento box, or the vibrantly coloured Acapulco line, with its Mexican-style motifs. However, the Boch family's reputation for tableware is anything but recent. Ceramic crockery production began in Lorraine, in eastern France, in 1748, and the first factory was set up in Septfontaines in Luxembourg in 1766, after being granted the right to call itself *Manufacture Impériale et Royale*.

Despite its traditional image strongly associated with tableware, the brand's logo can be found on a wide range of products. It appears in bathrooms, on a washbasin here, on a bathtub there. The range more closely resembles product lines from companies like Grohe or Laufen than from Meissen or Limoges porcelain. In fact, its sanitary ware division now generates more than two-thirds of the company's revenue. Why would it be contradictory for Villeroy & Boch to produce both plates and toilets? "There is continuity in the company's ceramics making techniques," says Estelle Daval, a journalist with *Espaces Contemporains*, a design and architecture magazine based in French-speaking Switzerland. "Over the decades, the company has developed different formulations for producing the material, depending on its purpose of use: crockery, tiles, bathroom fixtures and fittings. It has sought to innovate, as have its competitors, such as Laufen and Geberit in Switzerland, by adjusting the amounts of the ingredients and techniques used. In both areas, Villeroy & Boch is perceived as a prestigious brand, while offering affordable products for the upper middle class." Its design is known for being generous and colourful, somewhere between classic and modern, rather than sleek and minimalist, the home specialist says.

> **Sanitary ware division now generates more than two-thirds of the company's revenue**

Continuous mergers and acquisitions

Another point that sets Villeroy & Boch apart from traditional porcelain manufacturers is its early ambitions in horizontal integration. As early as 1809, 60 years after the first factory opened, Jean-François Boch bought an abbey in Mettlach on the River Saar, in present-day Germany, to set up his headquarters and a mechanised factory. He then joined forces with another local manufacturer, Nicolas Villeroy, in 1836 to compete with English industry, dominant in Europe at the time. Together, they expanded their range of crockery by founding a crystal glassmaking factory in another Saarland town, Wadgassen. The industrial empire grew further in the 19th century with the acquisition of a tile factory. Its tiles were used in high-profile projects such as Cologne Cathedral, the Holland Tunnel in New York and the ocean liner Titanic. After World War I, three new production sites were acquired in other parts of Germany – in Bonn, Torgau and Breslau.

As cleanliness gained importance at the end of the 19th century, the Villeroy & Boch families saw a new opportunity and began manufacturing baths and toilets. "Villeroy & Boch successfully made the shift towards full bathroom design very early on, as the space emerged as a room to be decorated in its own right, creating boudoir-style environments," Estelle Daval says. "Today, its comprehensive range also includes taps, furniture, bathroom linens and whirlpool systems."

Villeroy & Boch began pursuing an integration strategy in the 1990s onwards to build a more broad-based offering in its bathroom range. Freshly listed on the Frankfurt Stock Exchange, the group bought factories in Romania, Hungary, Austria, Sweden and the Netherlands. On top of its expansion in Europe, in 2008 it acquired the Thai company Nahm Sanitaryware. However, its biggest acquisition is a recent one. In September 2023, Villeroy & Boch bought Ideal Standard for €600 million.

"This merger means that we will now catch up with the largest players on the European market in the bathroom sector in terms of turnover," Frank Göring, chief executive officer of Villeroy & Boch, said of the deal. The deal doubles the revenue of the Bathroom & Wellness division, from 2022 levels, to almost €1.4 billion. Including the Dining & Lifestyle business, total sales come to around €1.7 billion. Moreover, the merger strengthens the Group's position in Europe (especially the UK and Italy), North Africa and the Middle East, as well as in the fittings business. Its B2B market share has also increased.

The two newly merged companies – Villeroy & Boch with 6,400 employees at 13 production sites, and Ideal Standard with 9,000 employees at some 10 centres of expertise – are nevertheless faced with the present crisis in the European construction industry. In Germany, the number of building permits granted fell by almost 27% between January and November 2023. However, there is nothing about these current challenges that the historic company cannot handle, as it prepares to open a new tourist centre in Mettlach Abbey in the autumn to celebrate its 275th anniversary. ◢

→ VIB3

KEY DATES

1748
The first Boch factory was founded in Lorraine

1836
Merger with Villeroy

1990
IPO on the Frankfurt Stock Exchange

2023
Takeover of Ideal Standard for €600 million

Interprefy
The rise of instant voice translation

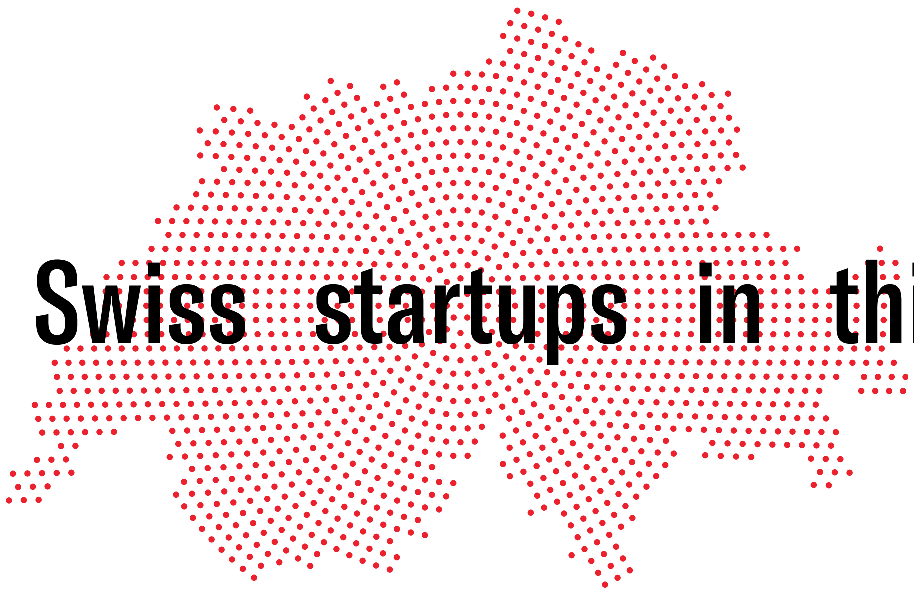
NUMBER OF EMPLOYEES
120

HEAD OFFICE
ZURICH

FOUNDED
2014

Imagine an international meeting where each person speaks in their own language. Meeting attendees are equipped with earbuds that play AI voices that instantly translate what is being spoken. Subtitles are automatically generated and are also available for those following along on screen. This technology is based on AI from Swiss startup Interprefy. The product, launched in 2023, now works in more than 80 languages, including Swiss German, Italian and French. The goal is to offer an alternative to English, which many think of as a lingua franca but only 17% of the global population speak it. But what about replacing human interpreters? CEO Oddmund Braaten says no. “There are approximately 10,000 professional interpreters in the world, who handle less than 10% of the demand for interpreting services. AI Speech is a tool that meets this high and untapped demand. For us, interpreters have their own role and provide important services to our clients by using our platform.”

Founded in 2014, the startup first developed a teleconferencing interpreting platform using human interpreters. It provided services for more than 100,000 events, bringing together up to 10,000 participants in 200 languages. Today, the company has approximately 1,000 direct clients (of which about 100 are Fortune 500 companies). In 2023, its revenue was $13 million. Operational profits, as well as fundraising from Swiss investors and a 3 million Swiss franc loan from the Swiss Technology Fund allowed the company to finance its product development.



Swiss startups in this edition

BY BLANDINE GUIGNIER AND GRÉGOIRE NICOLET

Zoundream
AI helping new parents

NUMBER OF EMPLOYEES
13

HEAD OFFICE
BASEL

FOUNDED
2019

This startup developed a software called CryAssist that can help identify different types of baby cries. Using artificial intelligence, essentially machine learning in this case, CryAssist can recognise even the smallest nuances in a voice or cry to determine if a baby is hungry, thirsty or tired. The Basel-based company, founded in 2019, has made significant progress in the last eight months. It was granted ISO (27001) certification, was the subject of a scientific journal article (*Frontiers in Neuroscience*) and, most importantly, in partnership with Canadian giant Dorel, launched the Maxi Cosi See Pro Baby Monitor (a camera and a screen) equipped with CryAssist software in Europe and North America.

After participating in CES 2024 in January, Zoundream will also be one of the 10 startups chosen to participate in Venturelab’s 2024 roadshow in Silicon Valley. CEO Roberto Iannone, who was appointed head of the Swiss team for the occasion, is quite thrilled: “Given our current presence on the American market and our growth plans, establishing a physical presence in Silicon Valley is a big step for us. We consider the Roadshow to be an incredible opportunity to consolidate our anchor in the region, expand our network and improve our visibility.” As for the software itself, the next step is using baby cries to identify early signs of disease or developmental delays, such as autism, or respiratory or heart problems.

R E A D

How Big Things Get Done

The Surprising Factors Behind Every Successful Project, from Home Renovations to Space Exploration

BY BENT FLYVBJERG AND DAN GARDNER
CROWN CURRENCY, 2023

This book examines why ambitious projects chronically run over schedule and over budget, and what can be done about it. The authors show how even smaller projects also typically fail, such as launching a small business, organising a conference or simply completing a task on time. Through examples of successful mega-projects such as the construction of the Empire State Building in 21 months, or the design and launch of Apple’s iPod in 11 months, they highlight the crucial importance of collaboration, thought leadership and long-term vision in bringing high-aiming undertakings to fruition. One of the authors, Bent Flyvbjerg, an Oxford University professor, has been dubbed “the world’s leading expert on mega-projects”.

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L I S T E N

Motley Fool Money

BY THE MOTLEY FOOL

Chris Hill and other Motley Fool analysts host this podcast twice a week to discuss the top business and stock investing news. They describe both good and bad impacts on investors and suggest stock picks that could be favourable. The advantage of this podcast is the team’s educational approach, aimed primarily at non-specialists. The programme introduces investors to potential new industries and investment opportunities.

WWW.FOOL.COM/PODCASTS/MOTLEY-FOOL-MONEY

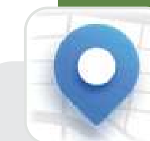
F O L L O W

Liz Ann Sonders

@LIZANNSONDERS
Chief Investment Strategist, Charles Schwab & Co., Inc.

X (TWITTER) **676** FOLLOWING **405.1K** FOLLOWERS

Chief Investment Strategist for Charles Schwab & Co., Liz Ann Sonders provides market and economic analysis for both Schwab clients and for all her followers on X (formerly Twitter). Throughout the day, she frequently tweets and retweets, with over 30,000 posts since 2015. Sonders is often invited by the US media to talk about global finance and is considered one of the best analysts in the market. Her feed is also packed with handy charts.



D O W N L O A D

FakeGPS Location

Skiing while at the office

This app allows users to change the GPS location of their mobile device, simulating its geographical position. This is an interesting option for getting around the geographical restrictions on apps and games that are only available from certain regions. However, FakeGPS Location should be used reasonably and within the bounds of the law.

GOOGLE PLAY, FREE

MOTORBIKE

Every day is an adventure

These days, whereas some big trail motorcycles go overboard in every way, Honda stays true to itself. The Adventure Sports version of the Africa Twin moves upmarket but remains an affordable motorbike. BY RAPHAËL LEUBA

HONDA CRF1100 AFRICA TWIN – ADVENTURE SPORTS ES DCT

A F R I C A T W I N

Now that Motofestival, held at Bernexpo in late February, is over, the 2024 motorcycle season can officially kick off. For a few days, we had the opportunity to get close and personal with the Adventure Sports model of Honda's big adventure touring bike. Without a doubt, this is one of the most versatile motorbikes on the market, sporting a crisp rally raid-inspired style, predominantly in grey or white. As a question of taste, the Honda CBR600RR appeared to be the more tempting option for testing a new bike. But careening through torrential downpours on the first leg from Satigny to the Seeland prairies was enough to convince us that we'd made the right choice and forget all about the sports bike. The Africa Twin's (manually) adjustable windscreen, heated handgrips, cruise control and cushy seat made the whole ordeal go down more easily. Not to mention the rich and smooth dual-clutch automatic gearbox and the ad-hoc settings to boost confidence on wet roads.

As we do not have the time or space to list all the possible settings here, we'll settle for just the semi-active suspension. While this does not alter the bike's setup, it does adjust the rebound and compression damping in the fork and rear spring/shock unit. Depending on the route and weather conditions, switching between six rider modes is possible. The two user modes can be personalised by adjusting settings such as power level, engine braking, gear shifting and chassis rigidity. All of this is effective, displayed in colour (touch screen capabilities when stationary) and, overall, works pretty well. But with all these buttons, you're better off keeping a clear mind while on the road, with gloves that aren't too thick!

Fortunately, the Africa Twin is very forgiving when it comes to suddenly correcting course. Thanks to its "small" 19-inch front wheel, this Adventure Sports version is relatively agile when cornering, while remaining very stable on the trajectory. The downside is that it doesn't handle off-roading with as much ease. In any case, at 250 kg fully loaded, this version of the Africa Twin is a bit heavy for that. While this mass – rather high off the road – is noticeable when manoeuvring from a standstill, it vanishes as soon as you start rolling. In the city, the bike is surprisingly easy to handle, aided by the progressive nature of its dual-clutch gearbox, which rarely hesitates, and the engine's smoothness. Even fuller at mid-range than in the past, the inline twin-cylinder, revved up to 270°, accompanies its vigorous acceleration with a deep, pleasant drumming sound. This big *djembe* is otherwise fairly discreet, and relatively pared down, with solo fuel consumption between 5.1 litres (motorway) and 6.5 litres per 100 km. In addition to its sexy, revamped exterior, the Honda has enough character to hold its own against the competition, such as the Suzuki V-Strom 1050SE and the new Moto Guzzi Stelvio among the reasonable big bikes packing only about 100 hp. The Africa Twin is also backed by a four-year factory warranty, which conveys the strong image of a tireless touring model, tried and tested since 1988. ◢

ENGINE
1,084 CC TWIN-CYLINDER INLINE ENGINE, 4 VALVES PER CYLINDER

HORSEPOWER
75 KW (102 HP) AT 7,500 RPM

TORQUE
72 NM AT 5,500 RPM

TRANSMISSION
CHAIN DRIVE, 6-SPEED DCT GEARBOX

PRICE
CHF 21,790

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T R A V E L

NIGHT TRAINS

LIVING THE OLD-FASHIONED DREAM

Instead of a low-cost airline flight, how about an overnight train? More and more carbon-conscious travellers are making that choice. And rightly so: some lines are practically travelling palaces.

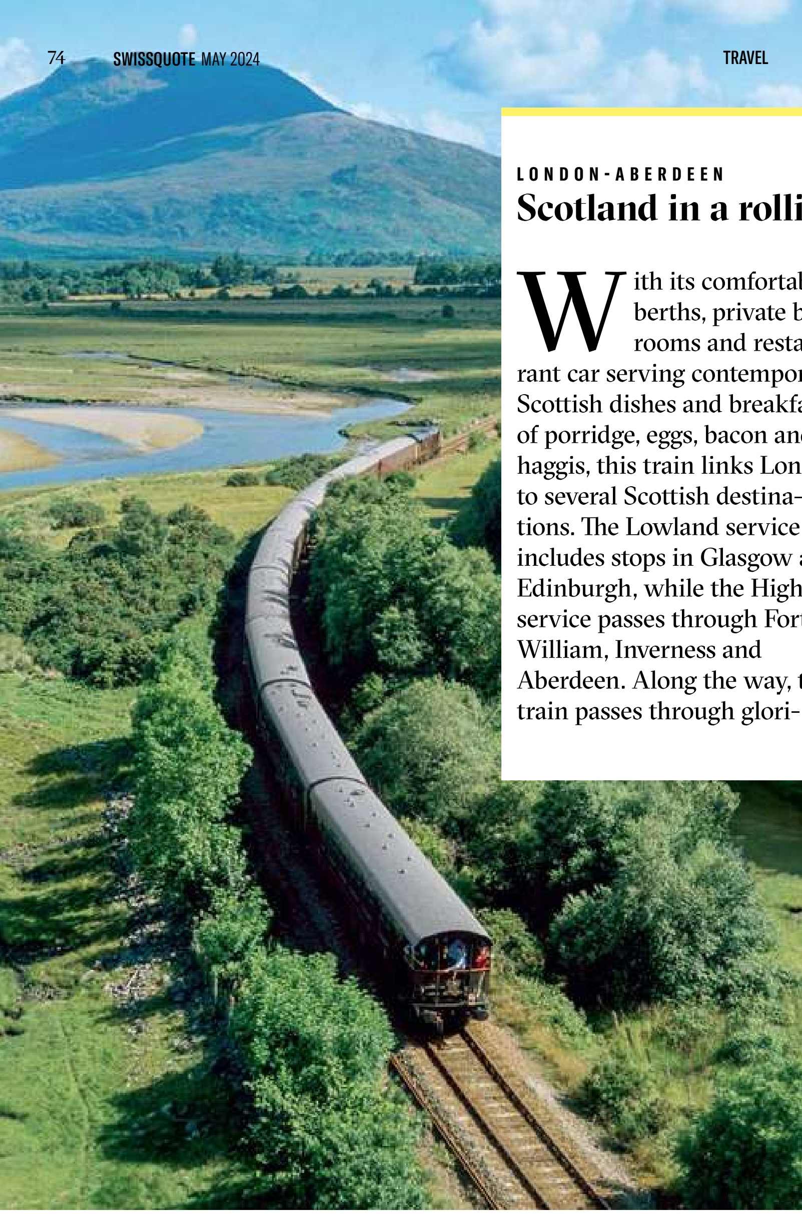
BY JULIE ZAUGG

The train starts off with a slight jolt. Nestled in their couchettes, passengers watch the night landscapes pass by as they nod off to sleep, lulled by the gentle back and forth rocking movement of the carriages. In the early hours of the morning, they see – still half asleep – the new country unfold before them through the train window, cup of coffee in hand. Travelling by night train holds the thrill of adventure while offering old-fashioned luxury. You forgo long lines at the airport and pre-dawn departure times for a journey just like in the olden days, where you take the time to explore the route along the way to your final destination. In today's age of climate change, train travel also has the advantage of being more eco-friendly. A train journey consumes almost 90% less CO_2 than its equivalent by plane. Over the past few years, night trains have started criss-crossing Europe once again. Here is a selection of the most enchanting experiences.

LONDON-VENICE

Art Deco luxury

This historic train line, which served as the inspiration for Agatha Christie's novel *Murder on the Orient Express*, connects London to Venice in 31 hours. Inspired by the 1920s Art Deco movement, the Venice Simplon-Orient-Express is operated by the British group Belmond. In the restaurant car, liveried servers carry exquisite dishes concocted by French Michelin-starred chef Jean Imbert, to the live piano music playing in the background. Several other city combinations are available, including Geneva-Innsbruck, Geneva-Verona, Geneva-Venice and the classic Paris-Istanbul. A new route was introduced last winter, from Paris to the ski slopes, with stops at Albertville, Bourg-Saint-Maurice and Moûtiers. Last summer, the group unveiled two new restored carriages featuring eight grand suites with private marble bathrooms and 24-hour butler service. → **belmond.com**



LONDON-ABERDEEN

Scotland in a rolling palace

With its comfortable berths, private bathrooms and restaurant car serving contemporary Scottish dishes and breakfasts of porridge, eggs, bacon and haggis, this train links London to several Scottish destinations. The Lowland service includes stops in Glasgow and Edinburgh, while the Highland service passes through Fort William, Inverness and Aberdeen. Along the way, the train passes through glorious Scottish countryside and ventures past several castles. Travellers seeking the ultimate luxury experience can board the Royal Scotsman, a hotel on wheels with a spa, spacious suites, a gourmet dining car and a bar stocked with over 50 types of whisky. The convoy provides a unique way of exploring Scotland's most beautiful sites aboard a Belmond train on a two- to seven-night loop from Edinburgh.
→ belmond.com → sleeper.scot

HELSINKI-ROVANIEMI

Midnight sun

Dubbed the Santa Claus Express, this double-decker train with double-berth compartments and a restaurant car links the Finnish capital to Rovaniemi, within the Arctic Circle, in less than 15 hours. Crossing snow-covered landscapes and tundra, the journey offers the chance to watch the midnight sun or northern lights, depending on the season. On arrival, passengers can visit Father Christmas in his Lapland village or take part in the many other activities on offer in this wild region.
→ vr.fi/en/santa-claus-express

TRONDHEIM-BODØ

The Norwegian experience

The Nordland, a bright red train with sleeping berths and a snack bar serving sandwiches and pastries, covers more than 700 kilometres of railway in the space of about 10 hours, linking Trondheim to Bodø, way up in northern Norway. It passes through a variety of landscapes, from pine forests to icy fjords and plains that are home to Arctic reindeer and foxes. In the summer, when the sun never sets, you can observe nature as it unfolds all night long. → sj.no

PARIS-ISTANBUL

Rebirth of the Orient Express

Starting in 2025, the French group Accor will bring the legendary Orient Express experience back, resuscitating 17 original carriages that travelled the Paris-Istanbul route in the 1920s and 1930s. Introduced into service in 1883 by Belgian entrepreneur Georges Nagelmackers, the Orient Express gradually lost its lustre after World War II. In the 1980s, shipping magnate James Sherwood revived the London-Venice line as the Venice Simplon-Orient-Express, bringing it under the UK group renamed Belmond in 2014. Swiss businessman Albert Glatt created the Nostalgie-Istanbul-Orient-Express, which went bankrupt in 2008, but the line's historic carriages will be used on the Accor group's new Orient Express. Restored by architect Maxime d'Angeac, the train will link Paris to Istanbul via Munich, Vienna, Bucharest and Budapest. In a 1920s-inspired setting with dark wood panels and Lalique lamps, passengers will have access to a restaurant car, a bar car and suites with double beds and en suite bathrooms.
→ orient-express.com

ROME-SIENA OR ROME-MATERA

The splendours of Italy

The Orient Express Dolce Vita, also operated by the French group Accor, will start operating in 2024. Six immersive itineraries will be available, including one or two nights aboard the train, to take in some of Italy's most splendid sights. The Rome-Venice-Siena journey features a private night-time visit to St Mark's Basilica. The Rome-Palena-Matera route offers a horseback ride in Abruzzo, before exploring the town of Matera known for its cave dwellings. Created by the Milan-based design firm Dimore Studio, the 11 carriages, with their geometric shapes and pastel colours, hark back to the golden age of Italian design in the 1960s. On the menu in the restaurant car are Italian specialities revolving around truffles or seafood, Sicilian pastries and a complimentary aperitivo.

→ orient-express.com

HAMBURG-VIENNA

Modern comfort

The Austrian rail group ÖBB has been a pioneer in reviving night train travel in Europe. Under the name Nightjet, it now offers dozens of routes from Austria, France, Germany, Italy, the Netherlands, the Czech Republic and Switzerland. From Basel or Zurich, you can travel to Amsterdam, Hamburg, Berlin, Linz or Vienna. At the end of 2023, the group unveiled a fleet of 33 new trains with a modern design, including compartments with two berths, a private bathroom, subtle lighting and a small bottle of wine. Soundproofed mini-cabins are also available, reminiscent of Japanese-style capsule hotels. In the morning, passengers can enjoy a continental breakfast of yoghurt, bread, cheese and cold cuts. First introduced on the Hamburg-Vienna line, the new trains will gradually be extended to Germany, the Netherlands, Italy and Switzerland by 2028.

→ nightjet.com

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b o u t i q u e

On your oars, get set…

Handcrafted with American cherry wood from certified forests, the Ergatta connected rowing machine features a gamified experience to motivate users. With an integrated 17.2-inch high-definition touch screen and a patented resistance system, this sleekly designed machine faithfully reproduces the feel of real-life rowing while offering interactive, game-based workout challenges that are calibrated to the user's fitness level.

nohrd.com
CHF 2,990.-

Protect your vintage

No bottle of Dom Pérignon should ever be transported in some common cooler. That is why German luggage manufacturer Rimowa designed a case exclusively to hold your most precious bottles. Made from anodised grooved aluminium, the case opens to reveal a padded black interior microfibre lining to keep the bottle in place and cool for hours. The exterior is embellished with a black leather handle and label, while a TSA (Transport Security Administration) approved lock keeps the contents secure.

rimowa.com
CHF 1,520.-

Roof tent

Aligning camping in the great outdoors with comfort? The latest roof tent from German startup Roof Space achieves just that. Unfolding in 60 seconds thanks to a gas pressure spring, the hard shell model has a spacious interior (250 x 150 cm), windows on all four sides, a skylight for stargazing and a small terrace. And the added bonus is the premium mattress with a breathable base.

roofspace.de
CHF 3,400.-

Compost bag

Urban gardeners, look no further! The Bacsac balcony compost bag can be used to collect dead leaves, wilted flowers and peelings and then transform them into natural fertiliser. Made from a fully recyclable breathable geotextile fabric that allows for good ventilation while retaining moisture, this sturdy bag – available in sizes of 20, 40 or 80 litres – has two openings, one for depositing organic waste and the other for collecting the compost.

bacsac.com
Starting at
CHF 60.50

Design to go

British designer George Sowden, a founding member of the Memphis group – a collective of architects and designers formed in Milan in 1980 – has developed a new line of lighting fixtures called Shades. Built with a touch-sensitive dimmer and a removable lampshade, these cordless lamps provide four to 10 hours of light depending on brightness. Their distinctive geometric lines can be customised thanks to the modular silicone components.

sowden.it
Starting at
CHF 75.90

3-in-1 turntable

The latest release from Austrian brand Pro-Ject, the new Juke Box E1 combines the functions of record player, Bluetooth receiver and power amplifier. The successor to 2017's Juke Box E, this upgraded model features a redesigned tonearm, a new anti-resonant ABS polymer platter, electronic speed change between 33 and 45 rpm, and a plug-and-play system for instant playback. Available on its own or with matching speakers, the turntable is available in black, white, red or walnut.

project-audio.com
CHF 999.- (with speakers)

A LOOK INSIDE THE LAB

Self-healing adhesive

A team from Mississippi State University has developed an adhesive material that can re-form and repair itself. This technology could extend the lifespan of certain structural components. BY JULIE ZAUGG

The discovery was made by accident. “We were trying to make a soluble polyamide,” says Colleen Scott, a professor with the Department of Chemistry at Mississippi State University, who supervised the research. “This form of polymer is a high-performance plastic that is very hard and resistant. But it’s not easy to transform due to its rigidity, which is why we wanted to develop a soluble version.”

One day, one of the students spilled the solution on his work bench. “Shortly afterwards, we noticed that his glass beaker and metal spatula had become stuck in the material,” the professor explains. So she decided to investigate the adhesive properties of the new solution. “We carried out all sorts of experiments, such as hanging a 14 kg weight for two days from a set of metal plates bonded together with our adhesive,” she says.

It turned out to be extraordinarily powerful. “When you use it to bond wood or glass,” she goes on, “the materials will break before the adhesive.” Even more interestingly, if it does break, it can be reactivated by applying a heat source to it. As Colleen Scott states, “It can heal itself.”

She is now trying to understand where these adhesive properties come from. “We have determined that they are derived from the materials that we added to the polyamide to make it soluble,” she says. However, the professor cannot say any more for the time being, as the patent for the new adhesive has not yet been filed. She hopes that will happen next year. “We still need to run several experiments to optimise the composition of the new substance and test how it works on different surfaces,” she explains.

Many applications are possible. “It’s extremely versatile. It can stick to glass, metal, wood and plastic,” she says. The added bonus is that, as the adhesive is made from bio-based materials derived from wood, producing it will not harm the environment. The new adhesive is also expected to be biodegradable.

“Its ability to self-heal using heat also makes it the ideal tool for applications where a new layer of adhesive cannot be added,” she points out. The lifespan of the structures to which it is applied would be extended, saving money and minimising waste.

While many other adhesive substances are out on the market, very few are made from bio-based materials, and even fewer can self-heal. “The demand is there,” Scott asserts. “I have received, and continue to receive, many calls from people interested in the properties of our new adhesive.”

The industries that could benefit from it include the construction industry, especially in building low-volume bridges designed for low traffic volumes, connecting dragline mats used during road construction, or developing blast resistant structures. Other potential applications include aerospace, dental care and construction materials, the scientist says.

← Nylon, the best-known polyamide, is often used as a textile fibre.