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FINANCE AND TECHNOLOGY UNPACKED

AC IMMUNE
The Swiss
pharma aiming
to treat
Alzheimer's

K-POP
A Korean
wave worth
billions

CULTURE
The success
of audiobooks



DOSSIER

LOW-COST FLIGHTS

FURTHER, FASTER, CHEAPER

ISSN 2296-3278

54



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Keep your seatbelts fastened



By Marc Bürki,
CEO of Swissquote

We've spent so much time talking about the (very real) changes in the auto industry that we have almost forgotten about air travel, which is currently experiencing its own revolution. In less than five years, the number of new **low-cost** transatlantic routes from Europe has multiplied six-fold, reaching nearly 100.

p. 30

Norwegian, whose business model has been copied by a myriad of companies, has paved the way for low-cost long-distance flights, making a city like New York accessible from Paris for 500 Swiss francs round trip. This new business model isn't risk-free: it requires these young airlines to purchase the most modern aeroplanes, which are more expensive but also more fuel-efficient. The intense daily use of these planes for multiple round trips – typical for low-cost airlines – is also harder to implement for long-haul flights.

As a result, some low-cost airlines have decided to avoid this approach. **EasyJet**, the iconic example, has chosen to continue its expansion by optimising its traditional business model of low-cost short flights. The group's European head, Thomas Haagensen, sat down with us for an interview, in which he discusses

p. 40

the many Brexit-related challenges that affect the orange airline.

The low-cost craze is part of a larger trend of incredible growth for air travel. The outlook seems almost unbelievable, and even sometimes concerning: according to the International Air Transport Association (IATA), the number of air passengers worldwide will double over the next 20 years, exceeding eight billion travellers per year. Many companies will benefit from this, but according to the IATA, the existing infrastructure won't be able to keep up. Zurich-Kloten and Geneva-Cointrin **airports**, to name just two, will reach saturation as early as 2030. As aeroplanes are currently one of the most polluting methods of transport, there needs to be a decisive technological advance to finally reverse this trend.

p. 38

This end-of-year issue covers a variety of topics in addition to the featured theme. Investors seeking promising future gems will be very interested to read the interview with Andrea Pfeifer, CEO of **AC Immune**. This Lausanne-based pharma company – virtually the only one in its segment – is developing a treatment for Alzheimer's. If the drug is successful, it will make headlines in a few years.

p. 20

An excellent holiday season to all!

MILLE MIGLIA CLASSIC CHRONOGRAPH

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THE ARTISAN OF EMOTIONS – SINCE 1860



AC IMMUNE



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LOW-COST
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K-POP



ENVIRONMENT



TRAVEL

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SCANS



“Our own information, from the everyday to the deeply personal, is being weaponized against us with military efficiency”

Tim Cook, CEO of Apple, during a conference on data privacy.

credit

THRILLING TIMES FOR VISA AND MASTERCARD

Visa and Mastercard have announced record-breaking results for the last quarter. Visa’s earnings reached \$5.4 billion, up 12% compared to last year. Its net income was even up 33%. This is the ninth consecutive quarter of growth for the credit card giant. But its competitor Mastercard is not that far behind: revenue increased 15% over the quarter, reaching \$3.9 billion. The two US companies are benefiting from the boom in online sales. Their cards are also increasingly linked to mobile payment systems such as ApplePay.

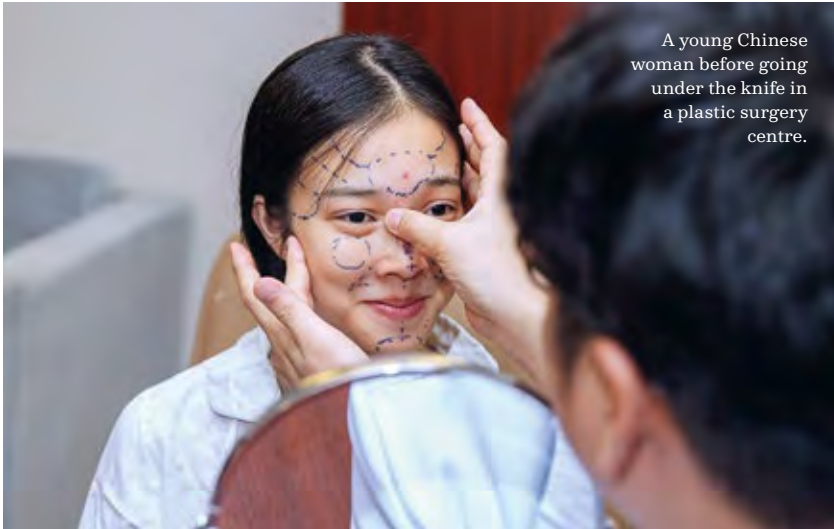
— V — MA



ISTOCK

beauty

BOTOX INVENTOR SHINES IN CHINA



A young Chinese woman before going under the knife in a plastic surgery centre.

GU DAO / AFP

More and more people are going under the knife in emerging countries. To take advantage of this market, Allergan will open a new centre in early 2019 in Chengdu, in western China. The centre will focus on innovation in cosmetic surgery and will train 3,000 surgeons per year in this type of procedure. The centre

will also be open to the public to show-case products and treatments developed by the Irish group that invented Botox, among other drugs. In 2018, the Chinese cosmetic surgery market is anticipated to be worth \$13.6 billion. It is expected to grow by 22.7% per year on average between 2015 and 2020. — AGN

credit

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— V — MA

ISTOCK

\$33.4 BN

The amount that IBM spent to acquire open-source vendor Red Hat. It is the most expensive acquisition ever made in the IT industry. The US giant hopes to compete with Google, Amazon and Microsoft in cloud computing.

digital

LONDON TAXES TECH GIANTS

In Europe, contempt is growing for companies like Facebook and Google that use tax optimisation tactics to avoid paying taxes in countries where their revenue is generated. In late October, the UK announced that a 2% tax will be applied to company revenue if income is at least €500 million (656 million Swiss francs). This tax is expected to bring in €400 million per year. The European Union is considering a 3% tax on sales of online services exceeding €750 million per year.

gaming

E-SPORTS ARE GREAT FOR LOGITECH



DENIS DERY/SEVIC

The Swiss firm sponsors many teams and competitions.

Video game competitions are attracting more and more fans. They generate millions of views on the internet, as do videos of players gaming on platforms such as Twitch and YouTube. This boom has boosted sales for computer peripherals. Vaud-based Logitech knows just

500,000

The number of electric vehicles Tesla will produce each year in the mega factory it plans to build near Shanghai for \$5 billion. It will be the group’s first production site outside the United States. The new site is strategically located to avoid the tariff war between Washington and Beijing.

how to benefit from the craze, tailoring its product line marketed to this clientele. Products include special keyboards and mice as well as a wide range of game controllers. The sales from video games rose from \$314 million to \$492 million between 2017 and 2018, up 57%. — LOGN

RANKING

TOP 5 MOST ACTIVE COMPANIES AGAINST GLOBAL WARMING

(according to a survey of 700 environmental experts)

1. TESLA
The group requires its suppliers to adopt environmentally-friendly and energy efficient practices.
2. IKEA
The group has invested €1.7 billion in renewable energies. By 2020, it will use only green energy.
3. NESTLÉ
The company has committed to exclusively using palm oil produced under responsible conditions by 2020.
4. PATAGONIA
The brand donates 1% of sales to protecting the environment. Its clothing is made with organic cotton and recycled materials.
5. UNILEVER
All ingredients used to make its products will come from ethical sources by 2020.

Source: GlobeScan/Sustainability

TOP 5 COUNTRIES WITH THE MOST EDUCATED POPULATIONS

(as a % of the population aged 25-64 who have studied at university level)

1. CANADA
56.3%
2. JAPAN
50.5%
3. ISRAEL
49.9%
4. SOUTH KOREA
46.9%
5. UNITED KINGDOM
46%

Source: OECD

TOP 5 OLDEST COMPANIES ON THE CAC 40

(based on date founded)

- 1665 SAINT GOBAIN (construction materials)
- 1805 PERNOD (alcoholic beverages)
- 1810 PEUGEOT (automotive)
- 1817 AXA (insurance)
- 1836 SCHNEIDER (electricity)

Source: BFM Bourse

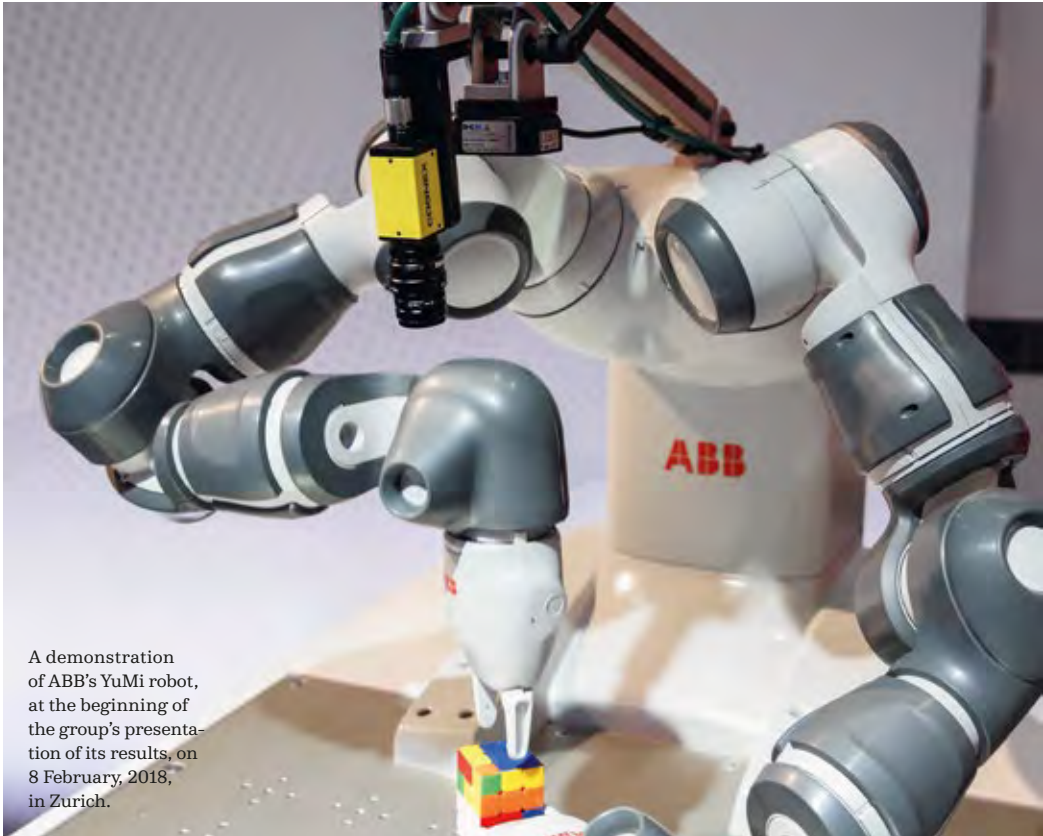
SCANS



0.5%

This is the maximum amount of sulphur that will be allowed in fuel used by shipping vessels by 1 March 2020. It is currently limited to 3.5%. Only ships equipped with a system that can filter their emissions are exempt from the anti-pollution regulation.

MORITZ HÄGER / REUTERS



A demonstration of ABB's YuMi robot, at the beginning of the group's presentation of its results, on 8 February, 2018, in Zurich.

production
ABB ROBOTS CONQUER CHINESE FACTORIES

ABB is building a \$150 million factory near Shanghai. Opening in 2020, it will produce 100,000 robots per year, or one-quarter of the Swiss group's global production. ABB is the primary supplier of industrial robots in China, which are increasingly used to replace factory workers due to wage increases. This new production site will also use ABB's YuMi robots for some assembly tasks. In 2017, China was home to 138,000 robots, which is one-third of all robots sold around the world. — ABBN



"I think Bitcoin is a store of value. I think it's the greatest store of value ever created. It should surpass gold over time. It won't happen overnight"

Lou Kerner, a partner in the CryptoOracle investment fund, interviewed by CNBC on November 21, 2018.

KICKSTARTER



NEBULA

NEBULA

The travelling cinema

This little black capsule about the size and shape of a can of Coca-Cola is able to project a 250 cm image (diagonal) in high-definition (720 p) on any light-coloured surface. It also has an integrated speaker which is reportedly quite powerful and bass-heavy. It can be used to watch TV series and films or play video games in the right conditions, even while travelling. Some of the device's strong points are that it fully recharges in two and a half hours and has three hours of battery power; it adapts the brightness of the image to the ambient light; and, it automatically analyses the angle of the surface the image is projected onto in order to avoid distortion. Designed for plug-and-play use with many devices (smartphones, game consoles, laptops, etc.), the projector is also equipped with Android TV and Google's personal assistant.

FUNDS RAISED
CHF 1.4 MIO

AVAILABLE
MAY 2019

automobile

VOLKSWAGEN TESTING THE RWANDAN MARKET

The auto market is booming in Africa. But many residents do not have the means to afford their own car. To solve this, Volkswagen has opened a factory in Rwanda to produce vehicles designed for a car-sharing platform. The service is currently used mainly by small business

owners in Kigali, the country's capital. By the end of the year, there will also be an on-demand taxi network. The German group hopes to expand this model to neighbouring countries. Peugeot, Nissan and Toyota have also all recently opened factories in Africa. — VOW



The new Volkswagen factory was inaugurated in Kigali in June this year.

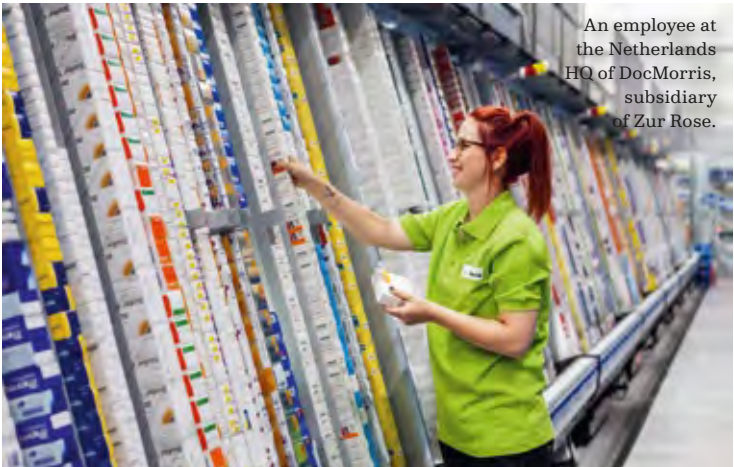


16,000,000 km

This is the distance that autonomous vehicles from Waymo, a subsidiary of Alphabet, have travelled on US roads. In May, the group began to test a driverless robo-taxi system in Phoenix, Arizona. A few hundred select users can access the cars.

health

ZUR ROSE, SWITZERLAND'S ONLINE PHARMA LEADER



An employee at the Netherlands HQ of DocMorris, subsidiary of Zur Rose.

The online pharmacy market is worth €100 billion in Europe and Zur Rose is the clear leader. It reinforced its power in October with the acquisition of Medpex, the third biggest player in the German market, just two months after acquiring Spanish group PromoFarma. Present in

20 countries, PromoFarma is an intermediary between independent pharmacies and small shops looking to sell health products online. In 2017, the company made €19 million in revenue. Zur Rose made 983 million Swiss francs that same year. — ROSE

SCANS



“People often say that the digital natives would be radically different from the humanity that came before them, and we would have to decipher their strange habits like an occult code. Frankly I’m not so sure of it”

Antoine Arnault, CEO of luxury brand Berluti.

food

UNILEVER TRIES ITS HAND AT FRESH PRODUCTS

Processed foods are falling out of favour, especially among millennials. To respond to this changing demand, Nestlé has entered into a partnership with start-up Here, which makes juices and dips from local fruit and vegetables. Meanwhile, Unilever will sell kits containing fresh ingredients, a sauce or condiment, and a recipe. Consumers will then have all they need to make cauliflower curry or pepper and courgette burritos. But the Dutch giant is up against supermarkets selling similar products and home delivery services like Hello Fresh. — ULR

détente

IS THE NORTH KOREAN MARKET A BLESSING FOR ITS NEIGHBOUR?



North Korean leader Kim Jong-un and South Korean President Moon Jae-in embrace each other during their meeting in the Demilitarised Zone (DMZ) on 26 May.

HANDOUT / DONG-A ILBO / AFP

The recent détente between North Korea and foreign powers is boosting companies in South Korea that can take advantage of the shared culture and language. Lotte and Hyundai have created a task force to study how to invest in this market. Several banks have de-

veloped products specifically tailored to this clientele, such as a trust fund that can access an inheritance left by a loved one living in South Korea. Construction giants such as Daewoo are envisioning immense infrastructure needs in North Korea, estimated at \$45 billion.

IPO

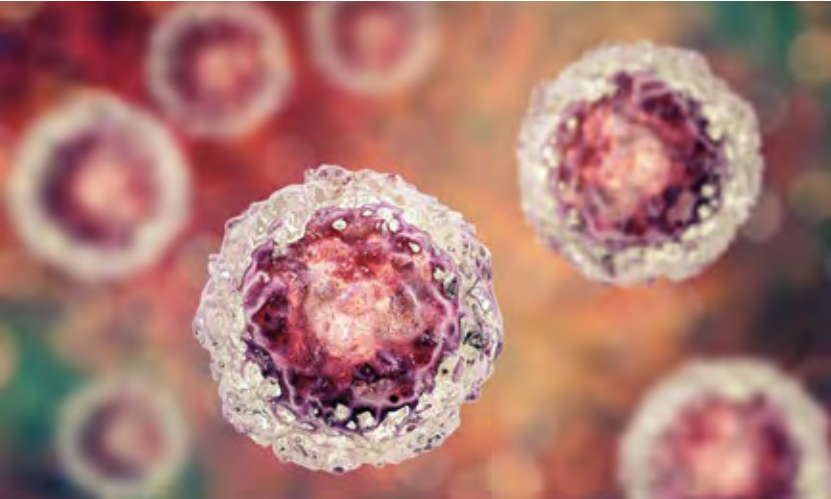
JAMES BOND’S CAR IS ON THE MARKET

Aston Martin went public on the London stock exchange in early October. The brand, founded 105 years ago, is now worth £4.3 billion (5.6 billion Swiss francs). After several years of highs and lows, the British group has found its equilibrium again. It sold 5,098 vehicles last year, its best performance in nine years. Its earnings reached £876 million (1.1 billion Swiss francs), up nearly 50%

compared to the previous year. But many analysts doubt the company’s ability to rival more well-known brands like Ferrari. The new import taxes imposed by the United States and the effects of Brexit are also concerning. The United Kingdom is Aston Martin’s primary market (30%), followed by the rest of Europe (25%), Asia-Pacific (24%) and the United States (20%). — AML

pharma

A CELL-MAKING MACHINE



ISTOCK

Swiss company Lonza has acquired a majority stake in Canadian group Octane Biotech. Since 2015, this company has been developing a system called Cocoon which can produce autologous cells automatically and on a large scale. Demand for these cells is increasing,

thanks to the emergence of a series of personalised treatments such as CAR-T, which treats certain cancers using the patient’s immune cells. One of Cocoon’s advantages is that it minimises yield variations during cell production. It also produces higher-quality cells. — LONN



“This legislation threatens hundreds of thousands of jobs, European creators, businesses, artists, and everyone they employ”

Susan Wojcicki, CEO of YouTube, on the new European regulation that makes it illegal for online platforms to publish content subject to copyright.

insurance

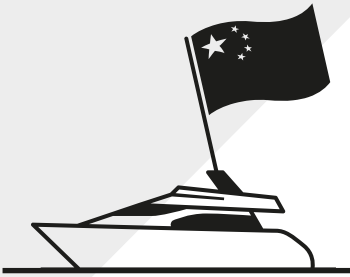
SWISS RE DEFENDS AGAINST SMOG



ISTOCK

Every year during the dry season, Singapore’s sky becomes grey and the streets are blanketed by a thick fog. This phenomenon is caused by fires lit by palm oil plantations on the neighbouring island of Sumatra. Hundreds of restaurants, shops and tourist attractions are forced to close, sometimes for several

days. In 2015, a single event caused losses worth \$900 million. To rectify this, Swiss Re has created an insurance product that allows companies to protect themselves against this risk. Dubbed “HazeShield”, it guarantees financial compensation when air pollution levels reach a certain threshold. — SREN



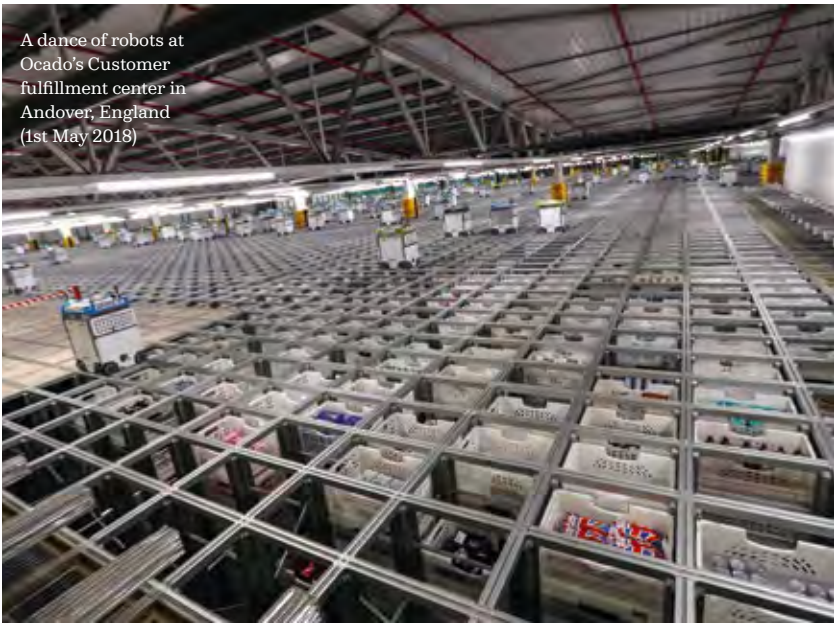
373

The number of billionaires now in China, according to a study by UBS and PricewaterhouseCoopers. There are two new billionaires every week. On average, they are 55 years old, which is a decade younger than their Western counterparts. Comparatively, the United States is home to 585.

SCANS

logistics
OCADO'S AUTOMATED WAREHOUSES

A dance of robots at Ocado's Customer fulfillment center in Andover, England (1st May 2018)



The US grocery giant Kroger has teamed up with British online supermarket chain Ocado to develop futuristic, fully automated warehouses. Here, robots fitted with high precision arms are capable of lifting fragile objects, such as fruit, without damaging them. The robots can

also communicate with each other and pack items for home delivery. The system's features include software to automate order processing. Ocado has also signed deals to work with the French retailer Casino, Canada's Sobeys and the Swedish chain ICA. — KR — OCDO

THE FLOP

A virtual assistant with limited talents

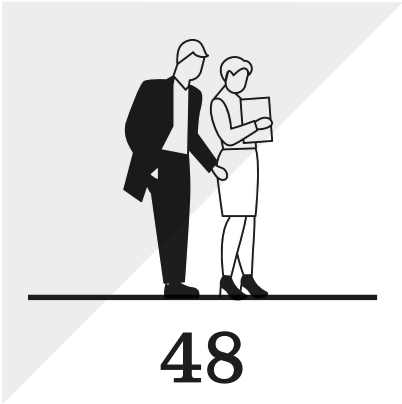
Available for sale in February this year, the HomePod, Apple's virtual assistant, is struggling to make a name for itself. Only three weeks after its launch, sales had already begun to slump. It now makes up only 6% of smart speaker sales in the United States, with three million units sold in the first six months of the year. These numbers cannot compete with its main competitors, Amazon Echo and Google

Home, which monopolised 73% and 14% of the market respectively, during the first 10 weeks of HomePod's sale. The main cause of this unpopularity is the price: at \$349, it is almost \$200 more than the other leading models. Its features are also limited: the HomePod can play music, connect to some household appliances and send messages...but it cannot place online orders, like Amazon's Echo. — AAPL



“There is still overcapacity worldwide. Reducing that needs to continue”

Guido Kerkhoff,
CEO of ThyssenKrupp AG,
regarding the steel surplus.



The number of employees Google has had to fire over the past two years over sexual harassment allegations. The movement has gathered momentum in the last year with the #MeToo movement. Like many Silicon Valley companies, the tech giant is known for its sexist work environment.

The Breitling Cinema Squad
Brad Pitt
Adam Driver
Charlize Theron

AIR
LAND
PREMIER
SEA

BREITLING
1884
#SQUADONAMMISSION

BREITLING BOUTIQUE
GENEVA • LAUSANNE • ZERMATT
ZURICH

TRENDS



the figure

ALBERT BOURLA

An expert to guide Pfizer

Position
CEO of Pfizer
(as of 2019)

Age
56

Nationality
Greek

2017 salary
\$6,068,632

In January 2018, Albert Bourla was named COO of Pfizer, before quickly being promoted to managing director in February. As of 2019, he will be the group's new CEO. This meteoric rise is not by chance. An establishment figure, he has been with the US group for 25 years. Bourla has been head of various divisions focused on animal health, vaccines, oncology, consumer goods and innovative products. The 56-year-old also has considerable scientific knowledge, as he trained as a veterinarian and wrote a thesis on animal reproductive health. As CEO of Pfizer, he will be tasked with managing the controversy over the New York group's recent decision to increase the price of 40 of its drugs. Pfizer also faces a drop in income due to expired patents on some of its blockbusters, such as Viagra and Lipitor. However, the success of a handful of products recently put on the market – such as cancer drug Ibrance and pneumococcal vaccine Prevnar 13 – have helped sales take off again.



the country

PAKISTAN

On a downward slide

Pakistan isn't doing well. External debt has reached \$95 billion, exports are down, its currency is in free fall and inflation is booming. The country is suffering from its inability to collect taxes: out of a population of 200 million, only one million residents actually paid. Tax evasion is rampant. It's also in debt to China, which has given the country ap-

proximately \$60 billion in loans and investments in a series of infrastructure projects for its Belt and Road plan. Furthermore, Pakistan's economy is suffering from decades of underinvestment. Its only exports are low value-added goods such as rice and textiles. The situation is such that the new prime minister Imran Khan was forced to ask for \$6 billion from Saudi Arabia. It also reached out to China and the International Monetary Fund.

Population
207.7 million

GDP per capita in 2017
\$5,527

Growth in 2017
5.4%

Main economic sectors
Agriculture, textiles, cement, remittances



the innovation

FACIAL RECOGNITION SYSTEM

Company
Ping An

Launch
2017

Cost
The conglomerate has invested 50 billion yuan (7.2 billion Swiss francs) in R&D over the past 10 years

Lie-detecting software

Chinese financial group Ping An invests 1% of its revenue per year in research and development. The results of this investment include a facial recognition system based on artificial intelligence that can recognise 54 involuntary gestures. The goal is to determine expressions that are symptomatic of telling a lie, such as rapid blinking or a brief forced smile. The group began to use this tool to observe and analyse the faces of customers seeking a loan via its online interface. Customers must

film their request on their smartphones. If the software believes the client is making a questionable request and lying about the planned use of the funds, the company will investigate the case in more detail.

According to the group – founded in 1988 in Shenzhen – this system has reduced the company's losses from borrowers who default on their loans by 60%. It has also helped the company to assess requests for credit more quickly. The goal is to process

50,000 requests per day, only spending a few minutes on each. Ping An also uses this facial recognition system to verify the truthfulness of payout claims made to its insurance department. The group has 166 million customers, making it the global leader. In 2017, the Chinese group's revenue stood at 975 billion yuan (142 billion Swiss francs), with profits of 100 billion yuan (14.5 billion francs).

ANALYSIS

THE VIEWPOINT OF SPECIALISTS

INTERVIEW

Mergers and acquisitions are slowing down

2018 has been a great year for mergers and acquisitions. Jean-François Lagassé from Deloitte explains what motivated these transactions and why this momentum may not last.

BY ANGÉLIQUE MOUNIER-KUHN

For the past several years, the economic environment has been perfect for mergers and acquisitions. But companies are growing wary due to the context and geopolitical tensions. Jean-François Lagassé, partner in Deloitte's Financial Advisory practice and Romandy market leader, is an expert in these types of deals. He analyses the dynamics at play for us...

We saw a rise in M&A transactions in 2018. What does this increase mean in practice?

The global volume of transactions reached \$2,700 billion in the first three quarters of the year, an increase of 22% compared to the same period last year. And 2017 was itself a good year, with a volume of approximately \$3,000 billion, similar to 2016. A record of nearly \$4,000 billion was set in 2015.

In terms of the number of transactions, the increase is slightly more modest: 13,000 transactions were announced in late September, compared to 11,000 the year before. This

enthusiasm is characterised by an increase in transactions for more than \$10 billion. In the first nine months of the year, 32 "mega deals" were announced around the world. UK company Shire was acquired by Takeda, the Japanese pharmaceutical company headquartered in Opfikon (Zurich), for \$80 billion (including debt). In the United States, the ongoing telecoms consolidation led to T-Mobile acquiring Sprint, a transaction valued at \$61 billion.

What economic factors explain such a frenzy of acquisitions?

The trend can be analysed in two ways. In the first part of the year, activity continued to be buoyed by the good macroeconomic outlook and the matching pace of growth in Asia, Europe and the United States. Companies reached peak valuations. And since interest rates remained relatively low, companies were able to finance their acquisitions at a low cost. In the United States, Donald Trump's tax reforms have also freed up significant liquidity, as companies

that return their foreign profits to the US are expected to have reduced taxes. Furthermore, the US market sets the tone, since the United States is responsible for almost half of the volume, compared to 29% in Europe and 20% in Asia.

What about the second half of the year?

The third quarter was down compared to the two previous quarters, with a significant reduction in the number of global transactions. This spring, the United States began a trade war with China and the rest of the world, which led to financial market instability and in turn weighed on M&A transactions. As a result, companies retreated to their domestic markets, whereas they were previously focused on international transactions. Simultaneously, with the steady interest-rate hikes by the US Federal Reserve and the strengthening of the dollar, companies saw their financing costs go up, given that the majority of international transactions are financed by dollar borrowing.

This spring, the United States began a trade war with China and the rest of the world, which led to financial market instability and in turn weighed on M&A transactions

Furthermore, increased prices for petrol and raw materials affect production costs and, as a result, companies are seeing their profit margins shrink. Finally, the uncertainty in emerging markets that contributed to the global boom – like China, where growth has slumped, and Turkey, whose currency has depreciated considerably – also weighed on the trend. In short, after years of nothing but green lights, things are now starting to slow down.

What is the outlook for 2019?

Company fundamentals are still generally good, which could help to support M&A activity. But the way the US-China trade war will play out will be a key factor. A calmer geopolitical climate would be favourable to M&As, while increased tensions would penalise companies' visibility. The continued monetary tightening

in the United States and fluctuation in the oil price will also play a role, even though the growth slump in the European Union is over.

Does this fluctuation also affect industry strategies?

Of course. In this context of accelerated innovation, tech companies are ideal targets. Acquiring a company is also a way to acquire the technology necessary to ensure that distribution channels are diversified, for example. The merger between Richemont and China's Alibaba is a perfect illustration of this. It follows the luxury brand's acquisition of internet platform Yoox Net-à-Porter's entire share capital, an operation valued at 2 billion Swiss francs. The co-company that will be created between Yoox and Alibaba will allow Richemont to develop online sales of luxury products in China, in addition to traditional sales channels

What other industries should investors interested in M&As keep an eye on?

The energy industry has seen very significant growth in transactions. In late September, M&As were up 37% over one year, representing close to 20% of global volumes. With increased oil prices and backtracking by some governments regarding the limitation on fossil fuels, companies in this industry are becoming appealing again. In the power generation industry, China Three Gorges Corporation acquired 77% of Energias de Portugal for \$27 billion. The transaction demonstrates China's desire to control European assets needing recapitalisation.

In the pharmaceutical industry, Takeda's acquisition is part of a basic trend that is expected to continue. Returns on investment in pharma research and development are decreasing steadily. In order to strengthen their specialisations, industry players are looking for leaders in certain niches. Conversely, companies are selling assets that are no longer considered strategic. There is a lot of talk at the moment of a potential sale or flotation by Novartis of its ophthalmology division, Alcon, whose spin-off is in progress. ▲



JEAN-FRANÇOIS LAGASSÉ
FINANCIAL ADVISORY
DELOITTE

FOCUS

Agrochemicals: a tectonic shift

The market concentration of seed and pesticide producers has led to an oligopoly dominated by Bayer and Monsanto – for better or for worse. We take a closer look.

BY JULIE ZAUGG

An incredible market concentration has taken place over the last three years in the agrochemical industry. It all started in 2015, when Monsanto's takeover bid for Switzerland's Syngenta was rejected. The first transaction took place in late 2015, when US companies Dow and DuPont kicked off a merger worth \$130 billion. In February 2016, ChemChina announced it was acquiring Syngenta for \$43 billion. Then in September of the same year, German firm Bayer and US giant Monsanto agreed to a takeover of Monsanto for \$66 billion.

These moves led to the emergence of an oligopoly. Bayer and

Monsanto are the clear leaders, followed by DowDuPont and ChemChina-Syngenta and then Germany's BASF far behind. These four companies single-handedly make up 51% of the global seed and pesticide market, compared to 12% in 1996, according to Sylvie Bonny, researcher at France's national agricultural research institute. The rest of the market is composed of mid-size players such as Limagrain (France), KWS (Germany), FMC (US), UPL (India) and Nufarm (Australia) as well as 7,500 SMEs selling seeds.

The causes of this concentration are the result of companies needing to achieve economies

of scale and synergies. "In 2015 and 2016, seed and agrochemical companies were experiencing financial difficulties," said Bonny. "Global pesticide sales fell 9% between 2014 and 2015, and then another 2.7% in 2016. Seed sales were also affected, but to a lesser degree."

This poor performance is linked to reduced revenue from farms. "In the United States and Europe, margins for farmers are less than 10% on average," said Sebastian Bray, analyst at Berenberg. "They're suffering from the effects of overproduction of certain products, as well as increased wages and higher costs for agricultural machinery."

They've also recently been affected by the trade war with China initiated by Donald Trump, which is penalising soy exporters in particular. In Brazil, the devaluation of the real has led to a collapse in farmers' profits. "All of this has reduced the industry's appetite for sophisticated seeds and pesticides sold by big agricultural groups," said Bray.

The groups are also affected by the increasingly strict rules introduced in several regions around the world – particularly in the European Union – after discovering that some pesticides have toxic effects on human health. For example, glyphosate, one of Monsanto's flagship products, can cause cancer. "These regulations are leading to increased launch costs for new products," said Bonny.

But the current alliances in the agrochemical industry are also motivated by new opportunities:

"These companies will be able to create all-in-one packages that include seeds and pesticides specific to that type of seed," said Bray. For example, they could sell genetically modified soy that is resistant to a particular herbicide.

Bayer and Monsanto are in the best position to benefit from this. The German company specialises in pesticides and the US group focuses on seeds. These two fields of expertise are now both under the same roof, which should allow the new entity to achieve \$1.2 billion in synergies. They will account for one-third of the global seeds market and one-quarter of the global pesticides market.

These companies will be able to create all-in-one packages that include seeds and pesticides specific to that type of seed

With the acquisition of Monsanto, Bayer now has a formidable machine for producing GMO seeds, as well as a firm with ground-breaking precision agriculture technology. In March, the US group invested \$125 million in start-up Pairwise, which aims to apply the CRISPR process – an extremely precise genetic engineering tool that has until now primarily been used in medicine – to agriculture.

DowDuPont is a similar company, but with a less global footprint. "It's mainly focused on the American market," said Bray. Conversely, BASF and ChemChina-Syngenta, which draw on their origins in the chemicals industry, do not yet have a sufficient presence in the seeds market.

But Syngenta will benefit from access to the gigantic Chinese market thanks to its acquisition by ChemChina. The Chinese company hopes to benefit from the Swiss group's expertise in order to increase China's agricultural self-sufficiency and win market share in Africa, a region that will have significant food challenges in the coming decades.

But not everyone is pleased with the creation of this oligopoly. Many farmers fear that it will lead to higher seed prices and lower investments in research and development because of the lack of competition. In certain segments, the concentration will be quite extreme: Monsanto and Bayer are practically the only companies that sell certain cotton seeds.

Aware of this danger, the European Union forced DuPont to sell a part of its pesticides portfolio and its R&D activities. In 2019, DowDuPont must also sell off three entities focused on materials science, agriculture and specialised products, respectively. ChemChina also had to abandon certain pesticides and Bayer had to sell its South African entity, as well as its LibertyLink products, after pressure from anti-trust authorities. ▲

INTERVIEW

“We will find a cure for Alzheimer’s”

AC Immune could become the first biopharma company to see a treatment for Alzheimer’s disease entering the market. We meet CEO Andrea Pfeifer at the company’s headquarters in Lausanne.

BY BERTRAND BEAUTÉ / PHOTOS: NICOLAS RIGHETTI

Will a small Vaud-based company succeed where pharma giants have failed for years? In June 2018, following a series of inconclusive clinical trials, British laboratory AstraZeneca announced that it was abandoning its most advanced Alzheimer’s treatment. Prior to this, American giants Merck and Eli Lilly experienced similar disap-

pointment. Since then, AC Immune has found itself in an excellent position to become the first biopharma company – together with its partner Roche/Genentech – to see a treatment for this disease, that diminishes cognitive function, entering the market. “I have every faith,” affirms Professor Andrea Pfeifer, founder and director of the company, which is based on the École Polytechnique Fédérale de Lausanne (EPFL) campus. Find out more in this interview. ▶

Developed in AC Immune’s laboratory, the Crenezumab antibody seeks to cure patients with Alzheimer’s disease by activating their immune system.

AC IMMUNE IN NUMBERS

10

The number of molecules being developed in the AC Immune laboratory.

90

The number of employees working for the company.

148,000

The number of people with dementia in Switzerland, of whom a majority (70%) have Alzheimer’s.

7

In billion of Swiss francs, the social costs generated each year by dementia in Switzerland.

There is currently no cure for Alzheimer's disease. When will the first one appear?

The number of people affected by this terrible disease is colossal. According to the World Health Organization (WHO), 50 million people suffer from Alzheimer's around the world and this figure is set to rise to 152 million by 2050 due to ageing populations. It is therefore vital that a cure be found. Current treatments only lessen symptoms – they don't stop the disease progressing. But I'm convinced we'll get there soon.

For example, the American laboratory Biogen has developed a promising molecule called Aducanumab. Meanwhile, Roche is conducting two phase III clinical trials of our

monoclonal antibody, Crenezumab. Results are expected in 2020. This is the final stage before applying for a marketing authorisation. If the trial results are positive, which I hope they will be, the product should be on the market soon thereafter. We could then become the first company with our partner Roche offering a cure for Alzheimer's disease.

Why would AC Immune succeed where pharmaceutical giants have failed?

We have made the right decisions, and probably had our fair share of luck too. For example, many years ago, some pharmaceutical companies placed a lot of hope in drug candidates called BACE, targeting the beta-amyloid protein found in

Alzheimer's patients. We decided not to partake in these programmes as we weren't sure it was the right approach. It could have been a mistake, but we turned out to be right: these molecules cause too many undesirable side effects to be placed on the market, and so they were abandoned. This decision made by scientists a few years ago explains why we are still in the running today while other pharma companies had to give up on these programmes.

What approach have you decided to take?

We decided to go down the immunotherapy route with our most advanced product, Crenezumab. Alzheimer's disease is characterised by a build-up of amyloid



Known for its drug candidates, AC Immune also works on developing diagnostic tools for Alzheimer's and Parkinson's diseases.



plaques in the brain, and the so called oligomers or oligos, which are very toxic. They damage and kill brain cells, leading to well-known symptoms such as gradual memory loss. Crenezumab is a monoclonal antibody which binds specifically to these oligos, thus allowing the immune system to destroy them. A study conducted on 98 people with Alzheimer's disease, the results of which were revealed in July 2018, showed significant oligo reduction in the brains of patients treated with Crenezumab. This is a world first – no drug has ever had such a result. So, it's very promising. Especially given that our antibody causes very few side effects thanks to its highly specific nature. In particular, it doesn't trigger any inflammation, despite the immune response it generates.

“A vaccine is the is the ultimate goal”

We are now hoping that the two clinical trials currently being conducted with 1,500 patients will demonstrate maximum clinical effectiveness – i.e. an improvement in patient condition.

But you are still exploring other ways to fight the disease. Why?

It's a matter of strategy: it's less risky and more beneficial for us to work on several projects at once. As such, we are developing small molecules, called Morphomer Tau, which enter neurons and act on diseased proteins. We are not as far along in this area compared to our immunotherapy treatment – the results of our phase II clinical trial should be revealed in 2019. However, should our leading treatment not succeed, we also have this project and a wealth of other clinical and pre-clinical programmes.

Investors should therefore realise that our value is not dependent on Crenezumab's phase III results alone.

THE WOMAN WHO IS WAGING WAR ON CHRONIC DISEASES

Andrea Pfeifer has been fighting illness since a very young age. She was just 11 when she learned her mother had a chronic disease. Greatly affected by the news, this young girl, born in Munich in 1957, decided she would study medicine. She eventually decided on pharmacy. After obtaining a PhD in toxicology from Julius-Maximilians-Universität (JMU) in Germany, she worked at the National Cancer Institute in Bethesda, in the US. But disease caught up with her. “I came back to Europe to support my dying father,” she says. Pfeifer then joined Nestlé, where she rose to the position of research director, with 600 people under her command. She left the Swiss giant in 2002 to found AC Immune. “I have always been driven by a desire to find solutions to chronic illnesses,” she says. In fact, Pfeifer was already doing this in the US, where she worked on cancer treatments, and at Nestlé, where she helped develop health products, such as the LC1 yoghurt that enhances the immune system.

We have many drug candidates in the pipeline whose value is substantial.

Currently, when patients are diagnosed, they already have some memory loss and the disease is at an advanced stage. Is this not a problem?

Indeed, it has now been established that the disease starts to silently attack the brain 10 or so years before the onset of symptoms. This means that by the time a patient is diagnosed, their brain has already suffered damage over a long period.

“We have become a model of success for many Swiss start-ups”

Furthermore, once the disease reaches a certain stage of severity, when 70% of brain cells have been permanently destroyed for example, treatment becomes futile. It is therefore vital that an early diagnosis be made. Current cerebral imaging techniques make this possible, but they are expensive. Other techniques are therefore being developed. For example, Roche has been granted approval for an early testing technique based on assaying biomarkers in the cerebrospinal fluid (CSF). It’s a tremendous breakthrough. It’s my belief that, one day, when you go to your doctor at age 50 or 60 to get your cholesterol or blood sugar levels tested, you’ll also be able to screen for Alzheimer’s disease and other dementia with a simple blood test. This would make it possible to begin treating patients right from the onset of symptoms, or even before that, as a preventative measure for people particularly at risk.

And that’s the objective of the work you are conducting in Colombia...

Yes. As everyone knows, in our part of the world there is a link between Alzheimer’s and ageing. At 60, people have a 10% chance of developing this neurological disease. At 80, this increases dramatically to 30%. However, in a region in north-west Colombia, people as young as 30–50 years old are developing the disease due to a certain genetic mutation. Members of this community have a 50% chance of developing the disease at birth.

it would be excellent news not just for this population but for others too. It would pave the way for a preventative treatment for all risk profiles.

You are also developing vaccines against Alzheimer’s. How do these complement your treatments?

A vaccine is the ultimate goal. Alzheimer’s is a chronic disease, meaning once a drug becomes available, patients have to take it for the rest of their lives. However, given the high number of sufferers around the world, this would be very costly for health systems. A vaccine would solve this problem by protecting people before the disease develops. So, we have begun phase II clinical trials for two vaccine candidates.

You are also developing treatments for Parkinson’s disease, glaucoma and Down’s syndrome. Is this not a bit too ambitious for a company with only ninety or so employees?

No. All the diseases we focus on are related to the same biological processes. We might seem to have a lot of projects in the pipeline, but they are based on the same principles, allowing us to use the same technological platforms, which are based on antigen detection.

ANALYST ADVICE

ALL OR NOTHING

If an effective treatment against Alzheimer’s were to come on the market, it would be a sure-fire hit and generate more than a billion dollars per year. In other words, Lausanne company AC Immune is potentially sitting on a gold mine, provided the clinical trials it is currently conducting prove successful. Many analysts recommend buying AC Immune for its diverse

pipeline of potential treatments against Alzheimer’s, one of the most expensive diseases in the world, for which there is currently no cure. Nevertheless, it is still a risky investment. Should the phase III clinical trials of its most advanced molecule, Crenezumab, fail, the value of AC Immune could plummet. But for now, the interim results are positive.



The AC Immune laboratory, located at the Innovation Park on the École Polytechnique Fédérale de Lausanne campus.

In 2016, you listed AC Immune on the Nasdaq. Why did you not list the company in Switzerland?

Being a Swiss company, it was a difficult decision, but the number of investors, the volume of transactions and the capital available are all much greater in the US than in Europe. Being based in Switzerland puts us at a bit of a disadvantage in terms of capital. We have to do more to get the same recognition as an American company. With that said, we don’t intend to move. People might not realise it, but we have an exceptional environment here in Switzerland. Research in the field of neuroscience is particularly

good here and we have an excellent talent pool to choose from.

AC Immune issued new shares in July this year. What will the funds be used for?

We issued three new share subscription offerings, at the usual price of \$11.75 per share, which has allowed us to raise a total of \$117.5 million. These funds will allow us to continue our clinical trials. To be more specific, we have enough capital to continue until the third quarter of 2021. In other words, we are on a strong footing financially. Ultimately, our goal is to become a business that will live off the sale of its products. But

for now, we are in the research stage. Our cash comes from investors and partnerships with pharmaceutical companies, such as Roche/Genentech and Biogen with whom we are developing Crenezumab and working on diagnostics for Parkinson’s disease.

You founded AC Immune in 2003. What is your view of the journey so far?

I am very proud to have led our company to where it is today. AC Immune has become a model of success for many Swiss start-ups. The fact that my work helps a cause that is dear to me, and could be useful to society, makes me even happier.

INTERVIEW

SIX'S DIGITAL REVOLUTION

In recent months, the Swiss exchange's managing company has made a host of announcements on topics such as artificial intelligence, cloud computing and robotics. Intrigued, *Swissquote Magazine* interviewed the company's heads of innovation.

BY LUDOVIC CHAPPEX

On 6 July, SIX Group announced a revolution: the development of SIX Digital Exchange (SDX), a dedicated infrastructure for issuing and trading digital assets, with a planned launch date in mid-2019. In other words, the Swiss exchange's managing company, the backbone of the Swiss financial market, will soon provide a secure environment in which to trade tokens. This is the first of its kind in the world. The Zurich-based company, currently owned by a collective of more than 130 banks, seems more than ever to be on the lookout for the latest market trends. A decisive shift was made at the beginning of the year, when SIX decided to create a committee entirely focused on innovation. The team now includes more than 45 employees with a wide range of experience. Head of innovation and digital, Daniel Dahinden was kind enough to sit down with us for an interview, along with Gregor Kalberer, head of innovation design & technology.

ENNIO LEANZA / KEYSTONE

SIX announced that in 2019, it will launch a platform dedicated to digital assets called the SIX Digital Exchange (SDX). What will this platform do?

DANIEL DAHINDEN — The idea is to create a digital ecosystem that enables the creation of new business models. It is the first duly regulated and secure infrastructure in the world that offers a complete platform to trade and hold digital assets. This platform will be able to handle the tokenisation of existing securities as well as non-bankable assets,

such as classic cars and valuable art. The goal is to transform a physical asset into a liquid asset that can be easily traded. This would cut out a lot of intermediaries. The service is based on Blockchain technology and Distributed Ledger Technology (DLT).

GREGOR KALBERER — With this platform, it will be possible to hold and trade a fraction of certain assets with limited capital. That's a significant innovation. I believe it will also be relevant for small and mid-size companies.

You're rapidly increasing investments in fintech. Is that the solution to stay on top of new technologies?

DD — We've established – and provide financial support to – the F10 incubator, based in Zurich, which focuses on financial technologies and is a hub for promising international start-ups. Lots of ideas come to us and we discuss them internally. This structure means that we're able to stay very close to market innovations. We've also just invested in two start-ups (Vestr and Shift-

“In the longer term, physical money seems doomed to lose its meaning”

Daniel Dahinden, head of innovation & digital at SIX Group

Cryptosecurity) via our CHF 50 million venture capital fund SIX FinTech Ventures. Additionally, we have a close relationship with banks, which are our clients, in order to best meet their needs in a changing market.

What are you currently working on?

DD — First of all, I want to clarify that we're planning on continuing and developing our traditional activities, including payments, trading, market management, etc. As for new approaches, we are focused ▶

on three aspects: firstly, reshaping the financial industry, with unprecedented services such as the SDX platform. Secondly, automating tasks, which primarily means using artificial intelligence (AI) and robotics in order to increase productivity and reduce costs. Thirdly, finding new cybersecurity solutions.

What type of solutions?

DD — Information security is an integral part of SIX. But for smaller banks it can be difficult to manage this problem alone. To address this, we've launched a 24/7 monitoring service called Managed Security Services. Two banks are already using it. We're also developing a cloud computing service. The goal is to avoid having client data stored on servers from US companies.



"AI is a very promising tool"

Gregor Kalberer, head of innovation design & technology at SIX Group

We are working to establish a secure Swiss Cloud, which will not be linked to any foreign firm. This is our response to the famous CLOUD Act, a law that requires US internet companies and IT service providers to provide US authorities with access to data, even if it is not stored in the US. We're currently in talks with several potential partners and we hope to offer such a service in 2019.

You mentioned task automation. Which fields are you thinking of in particular?

DD — We're working with banks in particular to find more efficient compliance solutions (ed. note: compliance denotes the procedures through which banks comply with various regulations). The goal is to accelerate and facilitate these processes. For example, we're working

on projects of this type in the new technologies sector – where new regulations are constantly being implemented – with the help of, among other things, artificial intelligence.

GK — AI is a very promising tool. We program the AI to mimic the human behaviour of experts so that the machine can reproduce their decisions and their actions, resulting in significant time savings. In the near future, AI will certainly be able to read texts, understand them and decide on the right course of action. We're also experimenting with robotics tools to make administrative tasks more efficient. Many tasks that currently need human intervention can in fact be automated. Additionally, Big Data – collecting and analysing an immense quantity of data – can also help us improve our services.

In terms of innovation, where would you rank SIX compared to other financial platforms?

DD — I believe we're at the cutting edge of innovation. There isn't really an equivalent to SIX in terms of product diversity and services offered. We also benefit from our close relationship with banks and fintech. Each day, we collect an impressive amount of financial information. That makes us a unique company. We also collaborate regularly and very effectively with political and regulatory authorities at the highest level. These exchanges mean we're able to create a framework that is very favourable to innovation.

GK — I would add that the presence of many technological firms in the Zurich region, such as Google or Disney, as well as the proxim-

ity of the Crypto Valley, creates a positive impetus. Switzerland attracts a lot of talent.

What financial hubs or countries are a source of inspiration for you?

DD — In terms of payment technology, China is at the forefront. The digital society there is very advanced.

Regarding the developments taking place in payment systems, what do you think of the emergence of cryptocurrencies such as XRP (Ripple)? Do you think that such solutions will take hold?

DD — The determining factor in the financial world is trust. And that is built over the long term. From that perspective, cryptocurrencies can't yet be considered to be a "trade value" or "store of value". Public confidence in this type of asset is lacking. At the moment, they're a risky, alternative investment. We don't believe that tokens will dominate the financial world in the next four or five years. That change, if it happens, will probably be over decades.

Will you offer cryptocurrency trading?

DD — Probably, even if it's not an immediate priority. Some offers already exist on the market.

When will there be an e-franc?

DD — Again, that won't happen in the very short term, but we're obviously closely following all discussions on the subject. And we're monitoring projects from various national banks. In the longer term, physical money seems doomed to lose its meaning. Personally, I haven't taken cash out in over a year.

GK — Same for me... I only use coins in parking meters. It's clear that citizens' needs are moving towards digital. The Swedish central bank is currently testing a digital currency called E-Krona. But it's risky. It's still a very new subject. ▀



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Dossier prepared by
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DOSSIER

LOW-COST
FLIGHTS

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THE BATTLE FOR THE SKIES HAS BEGUN

After revolutionising the short- and mid-haul market, low-cost airlines are challenging traditional giants when it comes to long-distance flights.

BY BERTRAND BEAUTÉ

Looking for a tropical escape this winter? How about Tahiti? A one-way flight from Paris to Papeete will set you back 600 Swiss francs, a Barcelona-San Francisco flight goes for 160 francs and London-Montreal costs just 175 francs. Travellers rejoice! Over the past few months, attractive offers abound for flights from Europe to all over the world. And while the promotional prices shown are often much lower than the fares that are actually available, it is possible to buy a round-trip Paris-New York flight for less than 500 Swiss francs, airport taxes included. "Low-cost airlines, which used to focus solely on trips under five hours, are now

starting long-haul flights," says Xavier Tytelman, an aeronautics expert and consultant for CGI Business Consulting. "It's a fundamental trend that is shaking up the air travel industry."

The number of low-cost long-haul routes leaving from Europe has spiked from 14 in 2013 to 87 in 2017, according to figures from Airports Council International (ACI), which includes 500 European airports (see infographic on p. 37). The increase is so significant that while low-cost long-distance airlines are still marginal, with less than 2% of global capacity, some experts are predicting a very bright future. "It will work," said John Leahy, former commercial director of Airbus, as

recent as 2017. "Low-cost airlines could take up to 50% or even more of the long-haul market." Willie Walsh, CEO of IAG (the parent company behind Iberia and British Airways) is predicting 40%.

EXPERIMENTAL STAGE

In only four years, European pioneer Norwegian became the first non-US low-cost airline to make transatlantic flights. And while its rapid growth, financed by loans, is slow to result in stunning profits, its commercial success has signalled the start of the race towards low-cost long-haul flights. Companies such as France's French Bee and XL Airways, Denmark's Primera Air and Iceland's Wow Air have ▶

AIR TRAFFIC DRIVEN BY ASIA

The numbers are impressive. According to the latest forecasts from the International Air Transport Association (IATA), published in October 2018, the number of air passengers is expected to double over the next 20 years, reaching 8.2 billion travellers per year in 2037 (see infographic on p. 37). With an annual growth rate of 4.8%, the Asia-Pacific region will be the main driver of traffic growth. Starting in the mid-2020s, China will become the largest aviation market in the world, ahead of

the United States, while India will round out the top three. In Europe, annual growth will stand at 2%, meaning 611 million more passengers in airports. The problem: "Aviation is experiencing an infrastructure crisis," warns the IATA. "Regardless of which scenario is considered, airports and the air traffic control system won't be able to keep up with demand." This is a well-known problem in Switzerland, where the two main airports, Zurich and Geneva, will reach saturation by 2030.

all thrown their hats into the ring. In Canada, WestJet has asked authorities for flying rights to China and, in the United States, JetBlue and Southwest are open about their desire to begin transatlantic routes.

"LOW-COST AIRLINES COULD TAKE UP TO 50% OR EVEN MORE OF THE LONG-HAUL MARKET"

John Leahy, former commercial director of Airbus

"Three years ago, there was only Norwegian and AirAsia X," says Tytelman. "Now new airlines are

coming into the market every day." Despite the boom, experts remain cautious as to the economic viability of this model. Is it really possible to significantly reduce costs compared to traditional players? "That's the question everyone is asking," says Jean-Louis Dropsy, an aeronautics expert at Cylad Consulting. "For the time being, the low-cost long-haul model is at an experimental stage. We don't have enough distance yet to say if this model can be profitable or not." This is because the magic recipe for "traditional" low-cost flights, which has been so successful for Ryanair and easyJet, is hard to reproduce for flights longer than six hours. "To lower prices, these airlines optimised efficiency," says Jean-Baptiste Nau, an aeronautics expert for consulting firm Wavestone. "That means ultra-modern fleets – Norwegian, for example,

uses brand new Boeing 787s, which use 15–20% less fuel than planes from the previous generation – and it also means using each plane as much as possible." Essentially, where traditional airlines would fly two round-trips per day, for example, low-cost airlines add an additional flight to limit the amount of time the plane is on the ground to the greatest possible extent.

At Ryanair, for example, turnaround time (i.e. the amount of time a plane spends parked between two flights) averages 25 minutes. The problem: "After a ten-hour flight, it's hard to reduce the length of a stopover," says Nau. "You have to clean the entire cabin – which you don't have to do with short flights – get a brand new flight crew, fill up with kerosene, etc. And since there are only 24 hours in a day and most airports

are closed at night, low-cost airlines can't differentiate themselves from traditional airlines in this regard."

The second distinct advantage that Ryanair and easyJet have is selling a host of options to raise income, such as food and drink, internet access and checked luggage. Some of these additional amenities, such as priority boarding lanes or paying for a specific seat, sometimes don't even cost the airline anything. But the subsequent profits are definitely not negligible. In the 2018 financial year, these fees brought in over €2 billion for Ryanair, or 28% of its turnover of €7.15 billion.

"A la carte services work very well on short-haul flights, because passengers think they can fly two hours without a snack, but then end up buying a sandwich anyway," says Nau. "But when you're on a ten-hour flight, passengers need to eat, drink and check in their luggage. That means that low-cost airlines are then forced to include these services in the base price, which ends up coming close to the prices of traditional airlines." According to experts, in order for a low-cost firm to make it amongst industry players, prices need to be 20% to 30% less than traditional airlines.

Norwegian's current financial difficulties, with its debt reaching €2 billion, and the recent bankruptcy of Primera Air, which suddenly went bust in October 2018, reinforce the idea that the low-cost long-haul model is a difficult one. But there was the same scepticism when Ryanair and easyJet got started... "At the time no one believed it!" says Nicolas Paulissen, delegate general of UAF, the French airport union.

Nau adds: "Despite the difficulties, some airlines seem to have achieved convincing operating and financial results. Norwegian's debt is a result of its frenetic growth policy and its purchase of several aircraft, and >



ULTRA-LONG HAUL FLIGHTS TAKE OFF ONCE AGAIN

Almost halfway around the world without a stopover! The latest from Airbus, the A350-900 ULR (ultra long range), can fly non-stop for 20 hours, covering almost 18,000 km. Delivered to Singapore Airlines in September 2018, the first model was used in October to fly the Singapore-New York route, an aerial marathon of 18 hours and 45 minutes. "Ultra-long haul is a niche market and the complete opposite of the low-cost industry. It's designed for people who are willing to pay extra to save four hours during a layover," says Xavier Tytelman from consulting firm CGI Business Consulting. "The inside of the cabin looks more like a flying office than a passenger aeroplane." Inside the Singapore Airlines aircraft are 67 seats in business class, 94 in economy premium and no economy class.

It's not the first time the Asian airline has offered this route. It operated Singapore-New York for nine years with an A340-500, a fuel-hungry four-engine aircraft, but stopped the route in 2013. "The problem with ultra-long flights is that you have to bring an enormous quantity of kerosene on board (editor's note: up to 165,000 litres for the A350 ULR), and a significant portion of it is burned to transport the fuel itself," says Tytelman. As more fuel-efficient aeroplanes come on the market, like the B787 and the A350, these flights finally become profitable. And this means that the race for the longest flight has only just begun. Qantas has announced that it will begin direct flights from the east coast of Australia to London starting in 2022. That flight is expected to take 20 hours and 20 minutes. When the Australian group created the Kangaroo route in 1947, it took four days and nine stopovers, in the best of conditions, to travel between London and Australia.

SWISS SKIES : THE SWISS PROJECT

Will a low-cost long-haul carrier soon be founded in Switzerland? In September, a former Ryanair pilot and three associates announced that they wanted to create a new airline. They hope to raise \$100 million. Based at Basel-Mulhouse airport, this future low-cost airline hopes to offer cheap flights between Switzerland and North America starting in 2019. To do so, it plans to exclusively use Airbus A321neo LRs, a single-aisle model capable of crossing the Atlantic (see p. 44).

not a result of its business model," says the author of the report entitled "Can the low-cost model be adapted to long-haul carriers?". "I think we're headed towards an 'à la carte' offer, where passengers will only pay for what they consume. In-flight films, wifi, meals – everything will be optional. The success of the new players will depend on the reaction from traditional airlines, which are also increasingly leaning towards this type of model."

INCREASED CONCENTRATION IS COMING

Thirty-five years ago, when Ryanair first took to European skies, the big airlines mocked the newcomer's take-off, convinced it would crash and burn at the end of the runway. They did nothing and were outpaced by the low-cost

competitor. Not this time! When Norwegian made its first transatlantic flight in 2014, Lufthansa reacted immediately, launching its subsidiary Eurowings in 2015. IAG Group, the result of a merger between Iberia and British Airways, also decided to take the leap and created Level in 2017. Singapore Airlines began Scoot and Australian airline Qantas founded Jetstar, which are both low-cost airlines. And subsidiaries seem to keep popping up all over the place: Japan Airlines announced in May that its low-cost long-distance carrier will serve Asia, Europe and North America starting in summer 2020, and Air France-KLM is currently considering the issue.

"With the increased level of competition, airlines will fold and a con-

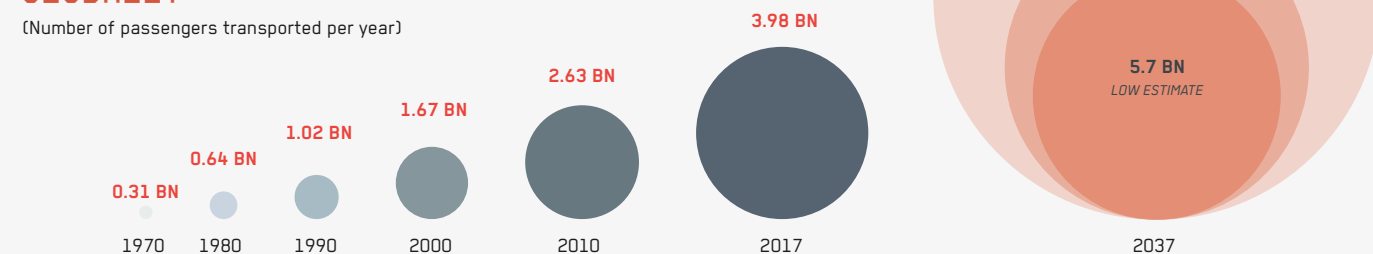
centration of the industry seems inevitable," says Jean-Louis Dropsy from Cylad Consulting. In fact, it has already begun: in November, Icelandic low-cost airline Wow Air was acquired by traditional carrier Icelandair, whose share price on the Reykjavik exchange shot up 42% after the news was announced.

Norwegian's share price has experienced ups and downs on the Oslo exchange as rumours abound of the airline being bought out. "Right now in Europe, everyone is talking with everyone else. We're right in the middle of a wave of consolidations," Lufthansa CEO Carsten Spohr told German daily *Süddeutsche Zeitung* in June. "That means we're in touch with Norwegian as well..." ▲

AIR TRAFFIC BY THE NUMBERS

INCREDIBLE GROWTH GLOBALLY

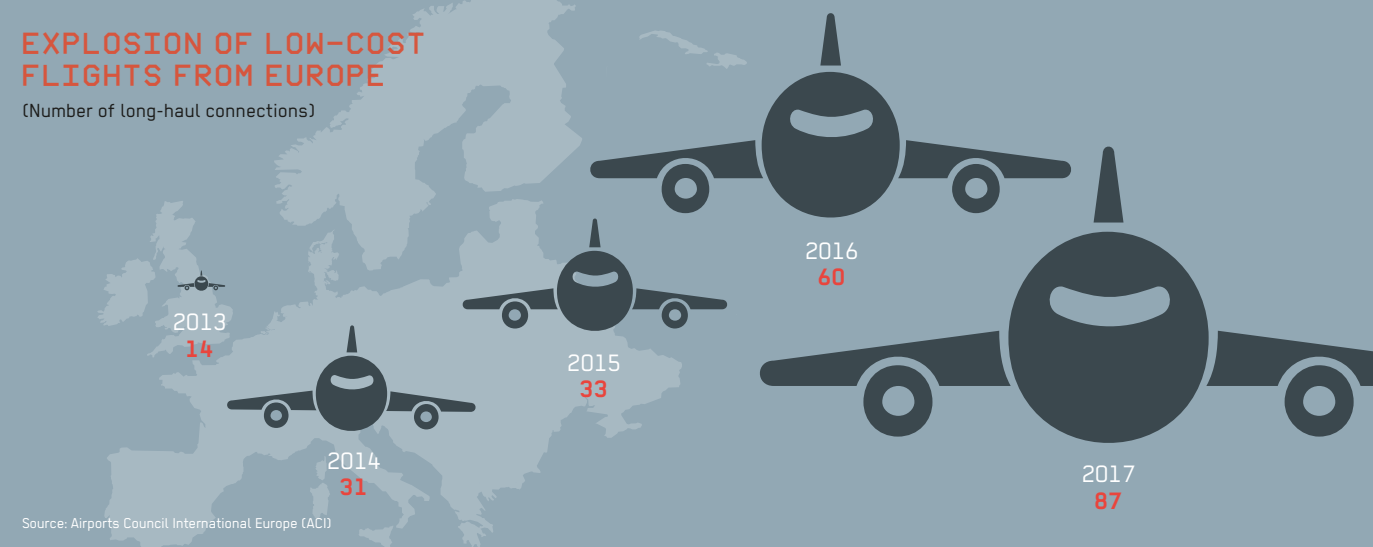
(Number of passengers transported per year)



Source: International Air Transport Association (IATA), World Bank

EXPLOSION OF LOW-COST FLIGHTS FROM EUROPE

(Number of long-haul connections)



Source: Airports Council International Europe (ACI)

AEROPLANES – A NOT-SO- ECO-FRIENDLY SOLUTION

(CO₂/km emissions of various types of transport)



*New cars sold in Switzerland in 2017

**Data calculated based on the average number of people on board

Source: Office fédéral de l'environnement (OFEN), easyJet, SNCF, Ouibus



COMPETITION HEATS UP BETWEEN AIRPORTS

European airport companies are fighting an increasingly heated battle to attract airlines.

BY BERTRAND BEAUTÉ

Route exhibitions – mass gatherings of aeronautics industry stakeholders – are looking more and more like speed-dating sessions where airports try to seduce airlines.” In one sentence, Nicolas Paulissen, delegate general of the French airport union UAF, sums up the situation: over the past 15 years, competition has been ramping up between European airport groups, including some public companies like Aéroports de Paris (ADP), Flughafen Zürich and Fraport (see p. 48).

The cause of this battle for influence can be found in the growing success of the low-cost model. While traditional airlines are often former national companies and are structurally closely linked to their respective countries, low-cost airlines are flexible pan-European companies that can leave an airport if the expected profitability isn’t up to par. In October 2018, for example, Ryanair decided to close its bases in Eindhoven (the Netherlands) and Bremen (Germany) and reduce capacity in Niederrhein (Germany). These announcements are nothing

out of the ordinary: of the 18,000 routes that link European airports, an average of 3,000 are opened and 2,500 are closed, each year. “It shows the extreme volatility of this market, where an airline can move overnight,” says Olivier Jankovec, director general of Airports Council International Europe. “For hubs, it’s not necessarily a problem, but for smaller airports, an airline closing could have serious consequences.”

To understand the full scope of the phenomenon, it is helpful to look to the past. “Thirty years ago, no one took a weekend trip to Barcelona, because the train took too long and flights were too expensive,” says Jean-Baptiste Nau, an aeronautics expert at Wavestone. “Low-cost airlines caused an explosion in mass tourism.” That’s one way of saying that for travellers, price has become the main factor when choosing a destination: “If Rome is more expensive, you choose Lisbon,” says Paulissen of French airport union, UAF. This type of decision means that a city like Cluj-Napoca in Romania could compete with

Cork in Ireland to attract new airlines and keep existing ones.

**"LOW-COST
AIRLINES
NOW HOLD
CONSIDERABLE
POWER"**

Olivier Jankovec, director general
of Airports Council International Europe

Airports must financially encourage companies to choose their airport, and make sure that ticket prices are as inexpensive as possible. “This could mean reductions in airport fees,” says Paulissen. “Some airports are even offering airlines communications and marketing campaigns.” Regional authorities, which benefit from hordes of tourists, are often stakeholders in these types of negotiations.

“Low-cost airlines now hold considerable power,” says Jankovec. The numbers confirm this: low-cost

airlines contributed up to 76% of air traffic growth between 2010 and 2016, according to a study by Airports Council International published last year. And the arrival of low-cost long-haul carriers will further increase traffic growth. “Mid-size and even small regional airports will break into the long-haul market. Cork, for example, now has regular services to Boston and Manchester and flights to Puerto Vallarta, Mexico,” says Paulissen. “But there can’t be an infinite number of these kinds of routes: there won’t be both Toulouse-New York and Bordeaux-New York. It will be either one or the other.”

While major European hubs are largely spared this phenomenon, they need to be wary of competitors from the Gulf states and Turkey. Indeed, airports in Dubai, Abu Dhabi, Doha and Istanbul are becoming more and more competitive in terms of transfer passengers. This type of passenger makes up 30% of passenger traffic at London Heathrow and 32% at Paris-CDG, with the figure rising to 61% at Frankfurt. ▲

INTERVIEW

"WE WON'T FLY LONG-HAUL FLIGHTS"

The heavyweight of European skies, easyJet seeks to continue its growth in Europe without relying on long-distance flights. Thomas Haagensen, executive director of EasyJet Europe, explains.

BY BERTRAND BEAUTÉ

Faced with the threat of Brexit weighing on its business model, easyJet, historically based at London Luton Airport in the United Kingdom, had to take action. In July 2017, the British airline created easyJet Europe, a subsidiary based in Vienna. In time, it will manage nearly 150 aeroplanes, or half the fleet of the orange airline. The executive director of this entity, Thomas Haagensen, spoke with *Swissquote Magazine*. Find out more in this interview.

FROM PACKAGING TO COMMERCIAL AVIATION

Born to a family with Danish and German origins, Thomas Haagensen grew up in Switzerland. After studying Business Administration at HEC Lausanne, he began his career in 1996 at Tetra Pak. From 2004 to 2008, he lived in Beirut where he was Tetra Pak's head of sales for Lebanon and Syria. In 2008, he joined easyJet as a country director for Switzerland and Germany. In July 2017, he was named executive director of easyJet Europe. He spends most of his time in orange planes between London, Berlin and Geneva.

On 29 March 2019, the United Kingdom will leave the European Union. How has easyJet, a UK-based airline, prepared for this deadline?

As of right now, no one knows what the actual consequences of Brexit will be for air traffic. But we couldn't wait until negotiations were complete to take action, because in the event of a "hard Brexit", UK airlines could lose the right to fly freely in European airspace. Obviously, flights to and from the UK will continue. But we're still unsure about inter-European flights. Will a British airline like easyJet still be able to operate flights from Berlin to Paris after 29 March? There's no guarantee. So we decided to create a new airline based in Vienna, easyJet Europe, which received its Austrian Air Operator Certificate (AOC) in July 2017. We're now in the process of re-registering some of our British planes under this new company. Our pilots are also getting their European licences. Before the UK leaves the European Union on 29 March 2019, easyJet Europe will have between 130 and 140 planes, which will allow us to continue operations regardless of the outcome of the negotiations between Brussels and London.

What are the other issues associated with Brexit?

The location of our headquarters isn't the only challenge. Brexit brings up many regulatory questions that we're in the process of figuring out. It's a huge amount of work. For example, the United Kingdom could leave the

European Aviation Safety Agency (EASA). If no agreement is reached, it could be the end of reciprocal recognition of certification for aircraft and safety procedures. So for example, if we repair one of our aeroplanes in a UK airport, it would no longer be able to fly in the European Union because the spare parts that were made in the United Kingdom will no longer be automatically recognised in Europe. Passengers and aeroplanes coming from the United Kingdom will also have to go through additional security checks. However, we remain confident about signing an agreement that will address these issues.

"MARKET CONSOLIDATION WILL CONTINUE IN EUROPE"

In 2018, easyJet transported 14.5 million passengers to or from Switzerland, which is a record number. Is there still room to grow?

Yes, there's still room. Our growth strategy is twofold. First, we must consolidate our existing strengths. In Switzerland, that's Basel and Geneva, where our market share is at 60% and 45% respectively in terms of passenger numbers. To maintain this position, two new planes were added to our Basel fleet this sum- ▶



A321NEO LR: THE PLANE THAT CHANGES EVERYTHING

The long-haul model from Airbus, which has just become available for commercial service, is set to shake up the transatlantic flight market.

BY BERTRAND BEAUTÉ

If you regularly fly with easyJet, then you've definitely flown on an Airbus A321. The single-aisle aircraft has, until now, been reserved for short-haul flights, such as Geneva-Barcelona or Zurich-London. But that was then. The latest version of this aeroplane, the A321neo LR (long range), with its more efficient engines, can cover 7,400 km – a distance that was once only possible for much larger two-aisle planes. This latest model is capable of flights such as Zurich-New York, Lisbon-Recife, Dubai-Beijing, Kuala Lumpur-Tokyo and Singapore-Sydney. This is revolutionary. "The A321neo LR will be a game-changer for the long-haul

market because it will open up new routes," predicts Xavier Tytelman, an aeronautics expert for CGI Business Consulting. "This will lead to a complete reorganisation of the skies."

The enormous quantity of fuel needed for long-distance flights meant that it was necessary – until now – to fly large aircraft that could hold 300 to 400 passengers. To make flying these huge planes profitable, airlines had no choice but to have them take off from hubs – giant airports in big cities that could draw enough passengers. As a result, the air network started looking like a spider's web: single-aisle planes went from regional airports to gigantic hubs, where passengers could disembark to board long-distance flights. It's a system that the A321neo LR, which has between 200 and 240 seats depending on the cabin configuration, is promising to shake up. "This aeroplane will allow local airports to offer long-haul destinations that wouldn't

be profitable commercially with large aircraft," explains Jean-Baptiste Nau, an aeronautics expert for consulting firm Wavestone. "Everyone knows about the Paris-New York route, but next we'll have Toulouse-New York."

"EVERYONE KNOWS ABOUT THE PARIS-NEW YORK ROUTE, BUT NEXT WE'LL HAVE TOULOUSE-NEW YORK"

Jean-Baptiste Nau, expert for consulting firm Wavestone

These point-to-point flights are the preserve of low-cost airlines, which believe the A321neo LR will be the tool that allows them to break into the long-haul market. Essentially, rather than compete with traditional giants for big routes like London-New York, they could open new routes such as Boston-Bristol. That's what Norwegian, the biggest low-cost long-haul airline in Europe, is trying to do. It ordered

thirty A321neo LRs in 2016 to open routes between Bordeaux and the United States. Israeli low-cost airline Arkia, which received the first A321neo LR model in November 2018, is starting routes from Israel to Europe and Asia.

The threat is real enough that Air France even mentions it as part of its strategic direction: "Due to the growth of single-aisle long-haul aeroplanes [...]," wrote the French airline, "we must seriously study this new form of competition in order to best address it." Boeing is also expected to make moves. For now, the US aircraft manufacturer doesn't have a plane that can compete with the A321neo LR. Its B737 Max 8 – one of which was owned by airline Lion Air crashed in late October – holds fewer passengers than the Airbus model and has a smaller range. Norwegian uses it on shorter transatlantic flights, particularly between Dublin and Newburgh in New York State. ▲

THE A321NEO LR, SWISS ARMY KNIFE OF AIR TRANSPORT

While only certified for a 7,400 km flight, the A321neo LR can fly much further. In March 2018, Airbus completed a test flight under service conditions between the Seychelles and Toulouse, flying 8,300 km without a stopover in 10 hours and 50 minutes.



Source : Airbus

7

companies to watch

The airline industry is booming despite some turbulence. Here's a look at the most interesting companies.

BY BERTRAND BEAUTÉ



FOUNDED: 1993
HEADQUARTERS: FORNEBU (NO)
EMPLOYEES: 10,000
2017 REVENUE: €3.1 BN
CAPITALISATION: €9.3 BN
 NASO

NORWEGIAN

NORWEGIAN THE LONG-HAUL PIONEER

Until now, Norwegian Air Shuttle has rejected any potential acquisition proposals. But that might not last. Founded in 1993, the Scandinavian company is the first of its kind in the low-cost long-haul industry. It has seen incredible growth since 2013 – nearly 15% per year – which made it the eighth largest European airline with 30 million passengers transported in 2017. But this too-fast progression was financed by loans that are now weighing down the company's budget. With a debt of €2 billion, Norwegian must rein in its wings. To bail itself out, the group announced in September that it would sell up to 140 aircraft on order. As Lufthansa and IAG have announced their interest in acquiring Norwegian, the company's share price fluctuates according to rumours.



FOUNDED: 1984
HEADQUARTERS: DUBLIN (IE)
EMPLOYEES: 13,000
2017 REVENUE: €7.15 BN
CAPITALISATION: €13 BN
 RYA

RYANAIR

RYANAIR THE INDUSTRY TROUBLEMAKER

Fees for obese people, flights where passengers travel standing up and even fees to use the toilets. Since its beginnings in 1984, Ryanair has rocked the airline industry with its sensational announcements from Michael O'Leary, its iconic CEO. Behind the (currently short-lived) headlines is a flourishing business. Over the financial year from 1 April 2017 to 31 March 2018, Ryanair made a record profit: €1.4 billion, up 10% year-on-year. But experts are prudent regarding 2019. The Irish company, which is facing endemic social discontent, had to grant salary increases to staff following a series of strikes. Increased petrol prices and Brexit will also weigh on the company's margins. For these reasons, most analysts advise to keep shares and wait for a calmer time.



FOUNDED: 1995
HEADQUARTERS: LONDON-LUTON (UK)
EMPLOYEES: 12,000
2018 REVENUE: €5.9 BN
CAPITALISATION: €4.4 BN
 EZJ

EASYJET

EASYJET THE RAVENOUSLY AMBITIOUS AIRLINE

After acquiring a part of Air Berlin in December 2017, easyJet announced in early November that it would continue talks with the Italian government in order to acquire the short-haul business of debt-ridden Alitalia. With this acquisition policy, the orange brand is making a name for itself in a European sky that is becoming more consolidated by the day. After transporting 88.5 million passengers in 2018, EasyJet wants to increase its capacity by 10% in 2019. Rising fuel costs, which make up one-third of the company's costs, as well as the potential consequences of Brexit, encourage analysts to be careful. Most advise to keep shares.



FOUNDED: 1971
HEADQUARTERS: DALLAS (US)
EMPLOYEES: 57,700
2017 REVENUE: \$21.17 BN
CAPITALISATION: \$29.54 BN
 — LUV

SOUTHWEST



FOUNDED: 1924
HEADQUARTERS: FRANKFURT (DE)
EMPLOYEES: 20,673
2017 REVENUE: €2.9 BN
CAPITALISATION: €5.9 BN
 — FRA

FRAPORT



FOUNDED: 2000
HEADQUARTERS: KLOTEN (CH)
EMPLOYEES: 1,773
2017 REVENUE: CHF 1.04 BN
CAPITALISATION: CHF 5 BN
 — FHZN

FLUGHAFEN ZÜRICH



FOUNDED: 1945
HEADQUARTERS: TREMBLAY-EN-FRANCE (FR)
EMPLOYEES: 17,422
2017 REVENUE: €3.6 BN
CAPITALISATION: €17.4 BN
 — ADP

LIDON - BONVALENTIN / ADP

SOUTHWEST THE AMERICAN MODEL

In 1966, Rollin King, a Texas entrepreneur and his lawyer, Herb Kelleher, were having drinks at a bar. According to the legend, they had an epiphany that would revolutionise air travel: a company whose planes are always full could sell tickets for half the price. In 1971, when Southwest Airlines took off, it already had all the characteristics that would later be mimicked by Ryanair and easyJet in Europe: low prices, maximum use of aeroplanes and many additional options for a fee. While Southwest has seen some ups and downs in its history, it has always remained in the green. In 2017, the company celebrated its 45th consecutive year of profit, coming in at \$3.5 billion. It is a sure bet that most analysts recommend purchasing.

FRAPORT THE FRANKFURT AIRPORT

Global air traffic growth benefits the Fraport group, which manages the Frankfurt airport as well as other airports around the world, such as Ljubljana (Slovenia), Varna (Bulgaria), Saint Petersburg (Russia), Lima (Peru) and Xi'an (China). Over the first nine months of 2018, the German company's revenue was up 10.4% to €377.8 million. The 14 regional airports in Greece, which joined the Fraport group in April 2017, contribute to this solid performance. The upcoming expansion of the Frankfurt airport should further increase revenue, as the new Terminal 3 will open in 2023. With nearly 51% of shares held by the city of Frankfurt and the state of Hesse, the Fraport group is a listed company that remains under public control. Many analysts recommend purchasing or keeping shares.

FLUGHAFEN ZÜRICH THE SWISS LEADER

Increase in passengers, positive sales figures and exceptional profits abroad... Flughafen Zürich, Switzerland's only listed airport, had a solid 2017 with profits reaching 285.5 million Swiss francs, up 15.1% over one year. In coming years, the global boom in air traffic is expected to benefit the Zurich hub, where 29.4 million passengers travelled through in 2017, compared to 17.3 million at Geneva-Cointrin. But the revision of the airport tax structure as outlined by the Swiss Federal Office of Civil Aviation could hamper the results. The text states that taxes will increase from 30% to 50% on revenue from commercial activities. If this modification is approved by the Swiss Federal Council, Flughafen Zürich's revenue could drop by one-quarter starting in 2020, according to the airport's calculations. Worried by this outlook, investors took action. In November, its stock shed 15% on the day of the announcement. We recommend that you keep your shares.

ADP A GLOBAL GIANT

The decision from the Macron administration is likely to shake things up a bit in France. But the deal is done: on Thursday 4 October, French MPs agreed to privatise Groupe ADP – formerly Aéroports de Paris. That means that the French government, which holds a 50.63% stake in the company, will sell all or some of its shares. The announcement made ADP's share price spike. Indeed, the company is a cash machine. In 2017, ADP posted profits of €571 million, up 31% compared to 2016. Besides the Paris-Charles de Gaulle hub, the French group manages 26 airports around the world through which 228.2 million passengers travelled in 2017. And the outlook for the airport group is good, due to the high growth in air traffic that's expected. Most analysts recommend keeping shares.


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In developed markets, the air travel industry has seen its growth slow down slightly. Shrewd airlines have re-oriented their strategy towards regions with the highest growth rates, particularly China and India – a sure-fire approach for new revenue and an improved reputation.

The Asia-Pacific region will be the main driver for demand from 2019 to 2035, with more than half of new passenger traffic coming from this area.

Emerging markets that are still under-exploited promise solid yields for airlines ready to satisfy local demand.

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A young Korean girl at the SM Town Museum. Opened in May, the museum is owned by K-Pop leader SM Entertainment. Visitors and K-Pop fans can come and view artists' memorabilia.

K-pop: the Korean wave worth billions

In the last few years, this genre of music has seen its fan base increase exponentially all over the world, from Beijing to Paris and California. This is good news for the three labels that dominate this market, which boasts a total worth of almost \$5 billion.

BY JULIE ZAUGG, IN SEOUL

SM Town occupies several floors of a skyscraper in the centre of Gangnam, a chic neighbourhood in Seoul. In this K-Pop temple, a shop sells a huge variety of products depicting the idols of the moment: Lego figurines of members of the band TVXQ, hand cream with singers from EXO on the label, and Red Velvet-branded packets of nuts. The premises also feature a museum and an amphitheatre that plays holographic concerts.

When school lets out, this space is filled with young girls. They giggle as they look at posters signed by

their idols, eat cupcakes decorated with their favourite band's logo and take selfies with their favourite star in an augmented reality photo-booth. Many girls are accompanied by their mothers.

K-Pop is both an immense cultural tsunami and an economic phenomenon. The genre began in the early 1990s in the wake of the re-establishment of democracy in South Korea, when a handful of cultural entrepreneurs began to look beyond the country's borders. "One of them, Lee Soo-Man, went to the United States," says Patty Ahn, a K-Pop expert at ▶

the University of California San Diego. “Blown away by the success of MTV and the quality of music videos produced by artists like Michael Jackson, he set out to reproduce the same thing in South Korea.”

In 1995, Lee founded music label SM Entertainment and launched H.O.T., the first K-Pop group. His label now dominates the industry, which is worth \$4.7 billion, alongside two other labels: JYP Entertainment and YG Entertainment. These companies developed a completely integrated business model, inspired by the manufacturing industry.

Artists are chosen via extremely competitive auditions at the age

of 9 or 10. “They are forced to sign typically decade-long contracts that tie them to the label and ensure that the label receives all the revenue the stars will generate in the future,” explains Martin Roll, an expert in Asian branding. “They will then spend several years in intensive training before making their public debut,” adds Won-Yong Oh, professor of economic strategy at the University of Nevada. “This makes them ready-to-use stars.”

Some of the profits generated by SM, JYP and YG come from music sales in the form of CDs, mp3s and streaming services. Last year, EXO sold 1.6 million copies of its album *The War*. In comparison, American

singer Taylor Swift sold 1.9 million copies of her latest album in the United States in 2017. “K-Pop groups depend heavily on online platforms such as YouTube,” says Oh. “They generate revenue through advertising on the site.”

Touring is also a considerable source of profits. Cult band BTS sold 40,000 tickets in just a few hours for two Paris shows in late October. Some tickets were being re-sold online for €4,500.

K-Pop idols have perfected the art of merchandising. Their faces are on t-shirts, stickers, mugs, pillows and masks. When Line Friends, a shop in Times Square in New York

City, began to sell a series of BTS figurines, it was swarmed by 35,000 K-Pop fans.

Artists are chosen via extremely competitive auditions at the age of 9 or 10

Fans of this genre are fiercely loyal. They’ve even created their own tribes. BTS enthusiasts are nicknamed ARMY, while Shinee fans are shawols and BigBang devotees are blackjacks. “Some fans will buy an album five times, just to increase sales,” says Ahn. To monetise this passion, labels regularly set up events where fans can pay to meet their favourite stars and get their autographs.

Recently, some labels have also begun to diversify. “SM Entertainment purchased a travel agency not long ago,” says Oh. The label also has a marketing agency and produces several television series.

In addition, the major labels have expanded their fan base. “K-Pop began to spread beyond South Korea at the beginning of the new millennium,” says Michelle Cho, a researcher at McGill University in Canada. “It first conquered the rest of Asia, particularly Japan, China, Hong Kong and Taiwan.” Beginning in 2008, the United States and Europe began to discover K-Pop thanks to YouTube. In 2012, the song *Gangnam Style* by Psy went viral, reinforcing the popularity of Korean bands.

K-Pop is now a huge hit in the West, thanks in particular to the popularity of groups such as BTS. Labels were able to exploit this craze with ease. Several groups, such as Wonder Girls and Seventeen, have translated songs and even entire albums into



JULIE ZAUGG

COMPANIES TO WATCH

SM ENTERTAINMENT THE CONFIDENCE OF THE BIGGEST PLAYER

SM Entertainment is the leader of K-Pop. In the second quarter of 2018, revenue increased 84% and profits were up 626% compared to 2017. Some of its artists include mainstays such as Girls’ Generation, Super Junior and EXO, as well as groups experimenting with new sounds such as Red Velvet, which is inspired by R&B. In the future, the company “will benefit from its expansion into new industries, such as marketing, producing televised content and creating groups for the Chinese market, like NCT,” says Park Jeong-yeop, an analyst at Mirae Asset, who recommends purchasing shares. Live concerts are also expected to bring in more revenue: in 2018, approximately 2.3 million fans will attend a show by one of SM Entertainment’s artists.

HEADQUARTERS: SEOUL
EMPLOYEES: 373
REVENUE (2017): \$321 MILLION
041510

YG ENTERTAINMENT BIGBANG’S BIG IMPACT

YG Entertainment is losing a little steam. Profits were down 68% in the second quarter of 2018, at 1.4 billion won (1.2 million Swiss francs). The label is bearing the brunt of the end of BigBang, one of its more profitable bands – its leader, T.O.P., has to complete his two years of mandatory military service. He also recently tested positive for marijuana, a serious offence in the clean-cut K-Pop universe. What’s more, 2NE1, another of YG’s bands, decided to separate in 2016. But the label could make a comeback in the third quarter, thanks to the success of its new female foursome Black Pink.

HEADQUARTERS: SEOUL
EMPLOYEES: 262
REVENUE (2017): \$308 MILLION
122870



The SM Entertainment group EXO during the K-POP World Festival in Changwon, South Korea. The annual event is organised by the South Korean Ministry of Foreign Affairs.

Japanese, Chinese and English. For several years, EXO even separated into two entities, one in South Korea and the other in China, where they sing in Korean and Mandarin, respectively.

And the effects of this Korean wave – dubbed “hallyu” – extend even further. “Twenty years ago, South Korea didn’t have a good public image,” says Roll. “It was associated with the Korean War, tensions with Pyongyang and the 1998 Asian financial crisis.” But the emergence of K-Pop has greatly improved the country’s reputation. Today, Korean brands represent quality, precision and sequins. “The improved image benefits the tourism industry, and even helps

increase sales of products such as Samsung telephones and Hyundai cars,” says Roll. A 2013 survey of travellers to South Korea showed that 60% of them had chosen the country as a travel destination because of their love of hallyu.

“Some fans will buy an album five times, just to increase sales”

Each time Korean cultural exports increase by 1%, sales of Korean consumer goods also increase

by 0.03%, according to the Hyundai Research Institute.

It’s not surprising, then, that cosmetics, food products, video games and Korean films are all benefiting from the K-Pop wave. These items have become extremely popular in the last few years, primarily in the rest of Asia. The South Korean government has even created a department within the Ministry of Culture to promote and financially support K-Pop – the first of its kind in the world. It has a yearly budget of \$500,000.

But as popular as it is, K-Pop isn’t invincible. “The 2017 crisis between Seoul and Beijing over the deploy-

ment of US anti-missile system THAAD was a huge blow to Korean exports to China,” says Professor Won-Yong Oh from the University of Nevada. Album sales and K-Pop products, which had become highly dependent on the gigantic Chinese market, plunged.

And what’s more, labels are at the mercy of their stars’ behaviour. In 2012, the band Block B caused much controversy by carelessly joking about serious flooding in Thailand during an interview. Their popularity instantly dropped. And when T.O.P., the lead singer of BigBang, tested positive for marijuana in 2011, his label YG Entertainment had to reduce its anticipated fundraising by 10% as the company went public. ▴

JYP ENTERTAINMENT

WOMEN TO THE FOREFRONT

In the last two years, JYP has seen incredible growth. In the second quarter of 2018, sales reached 31.6 billion won (28 million Swiss francs), an increase of 11% compared to 2017, and its profits were even up 31%. The Korean label owes its success primarily to its female group Twice, which has released hit after hit. The boy band GOT7 is also doing extremely well, particularly in the United States, where the group played a successful tour this summer. JYP also partnered with Chinese company Tencent to create Boy Story, a band designed for the very promising Chinese market. It officially debuted in September and is expected to boost the group’s yearly results.

HEADQUARTERS: SEOUL

EMPLOYEES: 170

REVENUE (2017): \$90 MILLION

035900



SM Town Coex Artium in Seoul, an entertainment and meeting space full of different experiences with the SM Entertainment stars (Seoul, South Korea, April, 2017).



GETTY IMAGES

WORKPLACE

SWISSQUOTE DECEMBER 2018

WORKPLACE

SWISSQUOTE DECEMBER 2018

Inclusion: a profitable decision

More and more public companies are establishing programmes to increase the role of women and minorities in their teams. It is an ethical approach, but also one that brings results.

BY MARIE MAURISSE

It's an achievement that Credit Suisse is particularly proud of: being the 2017 winner of the diversity at work rankings, an index published each year by the Institute of Financial Services Zug IFZ, Lucerne University of Applied Sciences and Arts and the Commission for Technology and Innovation (CTI). Last year, these experts determined that the bank had developed particularly effective methods to promote the role of women and ethnic and sexual minorities in its Swiss offices.

Currently, women make up 20% of its management and the bank hopes to make further progress. To achieve this, Credit Suisse has created a "Head of Diversity & Inclusion" role. This position,

which didn't exist a decade ago, has begun to appear at many public companies in recent years.

**Diverse companies
make better and
faster decisions**

The trend has picked up the pace even further with the #MeToo movement, as women are speaking up. In the United States, the website Glassdoor, which collects employees' opinions about their employer, has also put pressure on companies that do not provide a sufficiently welcoming environment for LGBTQ employees.

To avoid negative publicity and potential lawsuits for harassment or discrimination – which are more common in the United States – companies have taken action. A common first step is creating a behaviour charter – as well as consequences in the event the charter isn't followed. Companies also hold internal training to advance women's professional development. But this cultural shift requires a significant investment in human resources. For this reason, experts have sought to quickly determine both the qualitative and quantitative impact of these measures.

Does diversity and inclusion improve a company's bottom line? Most serious research is in unequivocal agreement. One of the most ▶

highly regarded studies is a yearly McKinsey survey of 1,000 companies in 12 countries. Based on data collected in 2017, the latest edition shows that companies with more women in their leadership teams are 21% more likely to earn higher-than-average profits than companies with less women. "In terms of ethnic and cultural diversity, the probability of EBIT margin outperformance is 33%," add the researchers. They conclude: "Companies that aren't inclusive enough do pay the price. They are 29% more likely to underperform than their competitors in the same industry." Other benchmark studies, such as research from the Peterson Institute for International Economics in Washington DC, have shown the same results.

The Thompson Reuters 2018 ranking awarded Novartis second place

Why are diversity and inclusion indicators of profitability? Because they attract the best talent, for one. In the highly competitive global human resources market, everyone in the company is important. An exceptional sales executive from India or one who is Muslim will choose a company that respects their culture. In return, they will probably give the company their best work.

Another advantage is that diverse companies make better and faster decisions, a correlation shown by Heidi Grant and David Rock in a November 2016 article published in the *Harvard Business Review*. Diverse teams are also more innovative when it comes to solving complex problems, in that they make use

of original resources. They are also better able to listen to customers' needs, particularly those of women and the LGBTQ community, which make up a growing market share for companies, as shown by a Williams Institute study published in 2013.

But that's not all. Establishing an inclusive policy improves employee satisfaction, which reduces internal conflicts and increases loyalty to the company – both important factors in achieving better financial performance. Finally, Vivian Hunt and her colleagues, the authors of the McKinsey study, highlight the fact that diversity is also a plus for the company's image, which can create a virtuous circle for the brand. Contrary to popular belief, it isn't just socially-focused companies that have proactive inclusive policies. According to the McKinsey authors, finance is doing particularly well on this front: women make up on average 18% of management teams, compared to 13% in the mass market and retail industry. Conversely, companies working in communications, media and new technologies have seen diversity decline since 2015.

In Switzerland, many companies listed on the SMI are very inclusive – Novartis is one such example. The Thomson Reuters 2018 ranking that measures corporate diversity and inclusion awarded Novartis second place and ranked Roche 12th. Curiously, Credit Suisse does not feature in the ranking. While study results do vary, there is still a very simple way to assess the extent to which women are integrated within a company: count the number of women in management. Large Swiss companies know this well. As members of the Advance association, several groups such as UBS, Adecco and Swisscom have committed to having women make up 20% of all levels of management by 2020. ▲



HOW LONG IS FOREVER?

HYT
#HYTWATCHES



ISTOCK

Towards a plastic-free industry?

By 2020, no plastic straws or plates will be sold in the European Union. Companies must find alternatives – starting now.

BY MARIE MAURISSE

Cotton buds, plates, cutlery, straws, balloon stems... Soon, none of these everyday objects will be made of plastic. That's the goal of the European Union, which has drafted a regulation that it plans to implement in early 2019.

According to the law, member states will have two years from the vote to ban these single-use items. Furthermore, bottles will only be allowed to be put on the market if they are made with at least 35% recycled plastic. "This is not a race against time," says Evguenia Dereviankine, an environmental law specialist and a partner at UGGC Avocats

in Paris. "Nevertheless, the goal is to ensure that the costs of this measure are not unreasonable."

Manufacturers are well aware that we need to reduce our plastic consumption, as 8 million tonnes of plastic are dumped in the ocean each year, and only 15% of plastic is recycled worldwide. However, they highlight the fact that the transition will be complicated and costly, in that alternative measures are not yet ready to be used. Cardboard products, for example, cannot be used to hold hot drinks if they are not coated in a plastic film. Bioplastics are two to six times more expensive, and

supply is still vastly inadequate. Rudy Koopmans, an expert on the subject and a researcher at the School of Engineering and Architecture of Fribourg, says: "In the world today, only 2 million products are packaged with biodegradable or compostable materials, or made with biocomponents. It is impossible to speed up the process overnight so that green plates replace all plastic ones."

McDonald's and Coca-Cola must immediately review their sourcing practices

So will the Brussels ban hurt the industry? There is very little data at this time. A study published in September by HSBC puts the impact of the future European regulation into perspective: "We believe that this measure will affect barely 2% of the global demand for plastic," wrote two analysts from the UK bank.

But for large retail and food groups, the costs will logically be higher. McDonald's and Coca-Cola, for example, must immediately review their sourcing practices. The hamburger giant is reportedly already testing paper straws. Ikea wants to completely adopt paper straws by 2020.


Starbucks, which uses 4 billion non-recyclable cups globally each year, will also need to change its entire system. The multinational has already announced that it will stop using plastic straws by 2020. But there is no existing technology that can replace the plastic film that prevents paper cups from leaking. For Rudy Koopmans, the "Cutin" project seems the most promising – this film covers the cup and is made from tomato peel. The research is currently being financed by the European Union.

Given the large number of fruits that end up in the bin, this bioplastic could be produced on a large scale, enough to meet demand.

In any event, even if the European regulation is not as strict as the initial text, the trend has begun: countries have decided to reduce their use of plastic. France has already implemented the Egalim law, which bans plastic straws and plates by 1 January 2020. India has promised to do so by 2022. But Indian manufacturers are not pleased: according to the Indian association of plastic processing professionals, the regulation will cost the sector \$220 million and result in the loss of 300,000 jobs. The HSBC researchers say that in India, "a certain number of large multinationals have already put pressure on the ban. Companies including Coca-Cola, Amazon and H&M have reportedly requested a breaking-in phase. Coca-Cola has asked to be completely exempt from the new regulations if it takes back its packaging and recycles it itself."

Oil operators, however, seem to believe that the European Union's decision to limit plastic is a done deal. In the *Financial Times*, John Abbot, a director from Shell, said the ban was "inevitable" – especially since China is now refusing to take in plastic waste from foreign countries, whereas it accepted as much as 56% in 2017. As a result, European countries must now deal with a significant amount of plastic that cannot be recycled due to lack of sufficient infrastructure. In a 2015 report, Deloitte estimated that it would cost at least \$1 billion yearly to build the proper facilities.

With environmental awareness now widespread, Switzerland is also affected. Even if there are currently no plans in Bern for a ban on plastic straws, researcher Rudy Koopmans believes that it is only a matter of time: "If Europe implements this regulation, Switzerland will have no choice but to follow suit." ▲



What if we could read with our ears?

Created for the visually impaired nearly a century ago, audiobooks are staging a comeback and winning over a growing number of fans thanks to their downloadable format. US “readers” are leading the way.

BY ANGÉLIQUE MOUNIER-KUHN

Aline discovered audiobooks when she was facing a long operation under local anaesthetic. “I was anxious. I needed to find something to take my mind off the operation,” says the young mum, who runs an information website. But the experience was short-lived for this contemporary literature fan. “There were not enough books that suited my taste. I downloaded and listened to the second *Bridget Jones* book, which helped me to relax, but I didn’t download anything else.”

In the US, this method of consuming literature is on its way to becoming commonplace

Aline might give audiobooks another chance in the future. “Readers” are demonstrating an increasing appetite for talking books – as they were known in the US when they first appeared on the scene in the 1930s – and the choice of titles is growing. These forefathers of audiobooks had 78 tracks and could be played >

on a gramophone. Audiobooks were originally conceived for charitable reasons as they enabled the visually impaired to have access to literature.

With smartphones, digital audio formats and, more recently, connected speakers becoming commonplace, audiobooks have been given a new lease of life. Reading whilst walking, running, cooking, taking public transportation or sitting on the beach... for audiobook enthusiasts, it is the perfect companion for an on-the-go lifestyle. In the publishing sector, audiobooks are now a sector in their own right. It is one of the rare, encouraging prospects in a market that is already saturated and disrupted by the change in reading habits.

As is often the case, the movement was led by the English-speaking world. In the US, this method of consuming literature is on its way to becoming commonplace. This spring the

Pew Research Center estimated that 18% of Americans have “read” an audiobook during the last 12 months. This figure has almost doubled since 2011. The research institute highlights that the number is even higher amongst readers who are educated, high-income city-dwellers.

Some prominent writers have decided to publish directly in audio format

To keep up with the times, the highly influential *Book Review*, published by the *New York Times*, launched an audio best sellers ranking in March. “We need to take into account the growing interest for audiobooks amongst our readers and listeners. The *Book Review* offers increasing coverage of

audiobooks,” said Pamela Paul, editor of the *Book Review*.

This appetite is also reflected in publishers’ catalogues. Whilst audiobooks are still only a niche market (just under 6% of total turnover for the sector in the US), earnings from these books are soaring. This is a boon, as investments in digital books have not lived up to their promise. The Association of American Publishers highlights that turnover for audio downloads increased by 38%, to \$295 million, between January and August 2018 in comparison to the same period in 2017. By contrast, audiobooks on CD have suffered a catastrophic decline (-25% over one year).

Another sign of the times is that some prominent writers have decided to publish directly in audio format. The audiobook is no longer a by-product of a written book – it’s a work in and of itself. Admired for his narrative style and his detailed investigations in the financial world, Michael Lewis – author of *The Big Short* – became a topic of discussion when he chose to publish his latest work, *The Coming Storm*, exclusively on Audible. Three other works will be published in this format in the next few years according to the contract signed by Michael Lewis, who also narrates these works.

Audible, bought by Amazon in 2008 for \$300 million, has hundreds of thousands of titles in its catalogue and increasingly supplements its range with home-grown works. This same strategy of developing original productions is used by video platforms. Audible, a pioneer in its field, still largely dominates the US market and is streets ahead of others such as Audiobooks, Apple’s iTunes or Scribd. The growth in sales is whetting appetites and new players are clamouring for a piece of the action. Japanese firm Rakuten Kobo recently partnered with distribution giant Walmart to launch its audio offering and Google opened an audio bookshop on Google Play this year. ▲



Donald Katz, founder and CEO of Audible. The US platform offers hundreds of thousands of audiobooks to download.

DANIEL HOFER / KEystone



A zen atmosphere at the recent Frankfurt Book Fair (13 October). A half-day conference was devoted to audiobooks.

MEHMET KAMAN / AFP

A DIFFERENCE OF OPINION BETWEEN FRENCH- AND GERMAN-SPEAKING READERS

On this side of the pond, despite becoming part of the norm for British, German and Swedish readers, audiobooks are proving less attractive to the public. But we hear about it more and more. The audiobook was also the star of the recent Frankfurt Book Fair in October, as illustrated by the half-day of press conferences that was devoted to it, as well as the popularity of those conferences in the media.

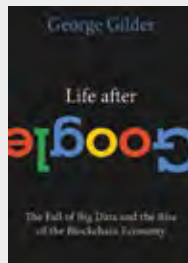
Is this just hype created by professionals to drive growth or genuine excitement? In France, only one in five people have listened to an audiobook. Sector leader Audiolib, owned by Hachette and Albin Michel since 2008, has, nevertheless, seen sales increase by 50% between 2014 and 2017. Its eclectic catalogue includes a number of works narrated by

actors. And this year, Audiolib has enhanced its catalogue with the addition of all three volumes of *The Lord of the Rings* by J.R.R. Tolkien, equating to more than 60 hours of “reading” for fans of this genre. At the end of 2017, the publishing house Actes Sud also started producing audiobooks. Rakuten Kobo and its partner, Fnac, have also added audiobooks to their catalogues. Edis, the second-largest publishing company in France, also launched its audio brand – Lizzie – in June.

In Switzerland there is also a tangible shift. “The demand for audiobooks is quite high,” says Alfredo Schilirò, spokesman for Orell Füssli, the Zurich-based bookshop chain. “Demand totalled almost 3% of book sales and purchases via our website doubled in one year.” On the

French-speaking side, Pascal Vandenberghe – CEO of the bookshop Payot – confides that he has been interested in audiobooks on CD since the mid-2000s. “We launched a great catalogue with two to three hundred titles. Sales have doubled, but in real terms they have increased from 0.5% to 1% of our total turnover. At best, we can talk about a modest success,” highlights the man known for his flowing, silvery locks. According to Vandenberghe, the audiobook is likely to become a niche product on the French-speaking market, even if it is taking off among German-speaking readers. “Some books narrated by famous actors are excellent,” he says, “but we have a special connection to reading and for true literature-lovers, swapping to audiobooks is by no means a given.”

TO READ, TO DOWNLOAD



From CHF 30.-

LIFE AFTER GOOGLE THE FALL OF BIG DATA AND THE RISE OF THE BLOCKCHAIN ECONOMY

By George Gilder
(Simon and Schuster, 2018)

“The age of Google” in which we currently live has reached its natural end. Founded on the domination of the internet by a few giants and the principle of free services in exchange for the monetisation of personal data, the era is coming to a close in an environment of permanent IT insecurity and general dissatisfaction with pervasive adverts and data breaches. In short, that’s the thesis of well-known American economist George Gilder’s latest book. He believes the rise of blockchain is the beginning of a welcome decentralisation of the internet and the end of the “aggregate and advertise” system that made Google a fortune.



From CHF 40.-

CAPITALISM WITHOUT CAPITAL

THE RISE OF THE INTANGIBLE
ECONOMY

By Jonathan Haskel and Stian Westlake
(Princeton University Press, 2018)

Amazon, Facebook, Google, Microsoft: these giants of modern capitalism all have one thing in common – none has produced a tangible product. With this in mind, the authors of *Capitalism without Capital* describe this new form of capitalism (goods that can be reproduced infinitely without any other cost apart from the initial investment) and ask strikingly topical questions: how can we record and tax intangible goods? What is the future of royalties? How can we survive de-industrialisation?



600 free minutes
Apple Store
Google Play

OTTER VOICE NOTES

AUTOMATIC NOTE-TAKING

This app will revolutionise note-taking: it records and transcribes conversations into text in real time and even distinguishes between different speakers. The result is rather impressive, even if the AI could be improved – and it will be. The only hiccup: the app is currently limited to English.



Free
Apple Store
Google Play

TAB

WHERE EVERYONE PAYS THEIR SHARE

Those who dread long negotiations with friends over the bill at the end of a good meal will be thrilled to install Tab. This easy-to-use app scans the bill and allows each person to click on what they ordered; the app then calculates how much each person owes.



Free
Google Play

TOR BROWSER

MOBILE INTERNET IN TOTAL PRIVACY

Tor Browser, the web browser used to access the well-known anonymous network, didn’t exist for mobile phones – until now. Developers have released this alpha version on Android and Tor has announced a stable, autonomous version, which will be ready in early 2019.



Free
Apple Store
Google Play

SKIPLAGGED

FLY UNDER AIRLINES’ RADAR

Airlines hate Skiplagged, an app that finds low-cost airplane tickets. Unlike its competitors, Skiplagged includes “hidden flights” in its searches. For example, instead of showing a Zurich–New York flight, the app will find a cheaper flight from Zurich to Miami with a stopover in New York, which will serve as the traveller’s final destination. But use the app sparingly – it’s only for travellers who don’t have any luggage and aren’t afraid of making airlines angry!

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TRAVEL

Venice in winter

Gondoliers, Piazza San Marco and the Bridge of Sighs are the stuff of dreams for tourists. But Venice has many other secrets hidden away.

BY SALOMÉ KINER

Imagine an imperial city draped in a shroud of fog. It is not quite daybreak; darkness still lingers in the streets. From a distance, the contours of the Dolomites' white summits take shape as the sun rises. Venice awakens. Terraces and bridges are empty. If you listen carefully, you might hear faint noises from the vaporetti docking in the lagoon. Or are those church bells?

Lauded by artists and writers and stormed by tourists from around the globe, the Serenissima has few

secrets left. But every winter, Venice seems to reinvent itself, as if the tourist lull allows the city to begin a new life, rejuvenate its charm and revive its legends. For those unaffected by fog, winter is the best time to discover a more authentic Venice, returned to its mysterious wonder.

But don't be fooled: even during the "acqua alta" flooding period, the Piazza San Marco is still brimming with tourist crowds in rain boots. Venice is never entirely empty, even in the off-season. To enjoy the city without being trampled on by tour-

ists, venture to neighbourhoods further away from the centre that won't be found in traditional guidebooks.

In the north-west corner of the city, Cannaregio is the most sprawling and most populated neighbourhood. Back in the day, famous figures such as Marco Polo, Titian and Tintoretto lived here. In the palaces, plaques still honour these illustrious residents. Well-known for sheltering Venice's Jewish ghetto, Cannaregio remains a neighbourhood of synagogues and is home to the Museo Ebraico, even though the Jewish population was >



The pristine charm of the Grand Canal.

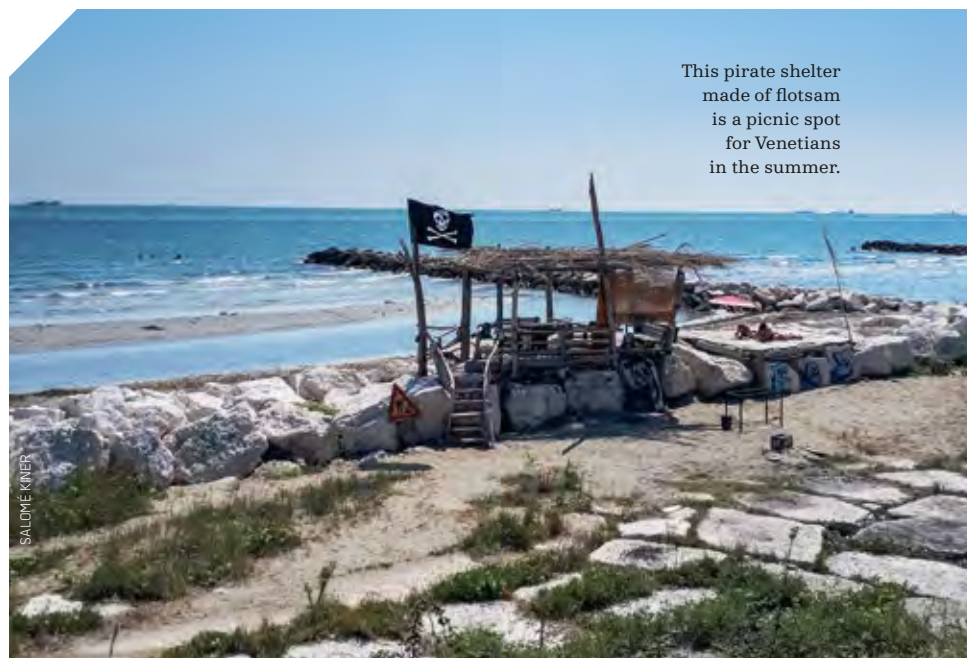


The orange facades of the Cannaregio neighbourhood, tucked away from tourist hotspots.

greatly reduced in World War II. The tiny streets hold places of worship and kosher restaurants. You don't even need a map – just wander past the red-orange façades, private gardens and interior courtyards. In Cannaregio, there are surprises around every corner. This area is known in particular for some of the last gondola repair shops.

You'll eventually reach the Fondamenta Misericordia. An evocative name for a stretch of cicchetti bars, serving Italian tapas such as croquettes and tartines. If you like music with your meal, Paradiso Perduto, easily recognisable via its outlandish blue exterior, is both a cicchetti bar and jazz club. Nearby, wine lovers congregate at Vino Vero, possibly the only bar in the city that is proud to not serve Spritz, as it has a robust and magnificent wine collection.

From the wine bar, you're not far from Ponte Chiodo, one of the rare bridges of Venice that remains in its original state without parapets. A long time ago, these bridges hosted the brawls and games between the various sestiere, the six famous



This pirate shelter made of flotsam is a picnic spot for Venetians in the summer.

neighbourhoods of Venice. Cross and you will arrive at a private residence that is home to a welcoming bed & breakfast. While less posh than a hotel, it offers a true Venetian experience.

Off-season, the seaside resort of Lido is reminiscent of a Patrick Modiano novel

The Vaporetto 5.1 water bus links the neighbourhoods of Cannaregio and Castello, in the far south-east of the city, in less than 30 minutes. You'll pass the hospital and the Arsenal, the city's former shipyard. You'll also see landscapes that are rougher and more industrial than the idyllic postcard of the Grand Canal. It's definitely worth the trip. To truly experience Castello, home to the Biennale de Venise, amble along the Via Giuseppe Garibaldi. Surprisingly large given the proportions of the city, the street is packed with shops, bakeries and



The unspoiled charm of the grand canal.

restaurants in which, for once, Italian can be heard much more often than other languages spoken by tourists. On Via Garibaldi, laundry is hung in windows. It's a sign of vibrant everyday life on the street. Another clue is the fruit and veg merchant, balanced on a barge moored at the entrance of the canal. Film lovers will bask in the perfect cinematography of this classic Italian scene.

If you have time, stop for an ice cream at Giardini della Biennale and enjoy your treat among students and dog walkers. For a change of scenery from Renaissance frescoes, visit the Serra dei Giardini, a thriving greenhouse in a kingdom of water. For dinner, head to Trattoria dai Tosi, easily spotted by the gondola embedded in the building's façade. In this family restaurant, the dishes are simple but delectable. The grandmother is queen of the kitchen, her son is behind the bar and her granddaughters are waitresses. You must go.

Venice is a walking city – you can only get a true feel for the place by wandering around and getting lost. But things are different in Lido. Just a few minutes away by boat, this sliver of an island is only 12 km long and a haven for Venetians escaping the brutal summer heat to swim in the Adriatic Sea. In the off-season, this seaside resort is reminiscent of a Patrick Modiano novel. The Liberty villas, fishing village and deserted beaches are steeped in old-fashioned charm, like the last vestiges of a bygone era.

A few minutes from the Vaporetto stop, Venice Bike Rental rents bicycles and tandems by the hour or for the day. It's the best way to get around the island, pedalling from the ancient Jewish cemetery to the Roman church in Malamocco. Take Via Giovanni Povidor to Pane, Libri e Cappuccino, a marvellous literary café, bakery and wine bar, then head to the public baths. Here you'll find magical pirate cabanas – rough huts built of driftwood where Venetians picnic in the summer. ▴

READ BEFORE YOU GO

Carnaval Noir
Metin Arditi (Grasset, 2018)

Fable de Venise
Hugo Pratt (Casterman, 1981)

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morihotel.com

Ponte Chiodo
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pontechiodo.it

To rent an apartment in the neighbourhood of your choice: venisejetaime.com



CARS

McLaren unveils the hypercar of the future

Three seats, 400 km/h: all at €1.75 million excluding tax. The Speedtail is on its way.

BY BLAISE DUVAL



Car fans over the age of 30 surely remember the McLaren F1. The supercar, which came out in 1993, boasted incredible performance at the time (627 hp, 1,140 kg and 391 km/h maximum). The UK firm presented its worthy heir, the Speedtail, in London this October. A defining feature: the driver's seat – or rather the cockpit – is placed in the centre of the cabin. Two passenger seats, placed slightly lower, complete the high-tech cocoon, as was the case in the F1.

Like its predecessor, the Speedtail will be produced in 106 models, which have all already been sold for the hefty sum of €1.75 million excluding tax. That doesn't include the infinite possible options that could bring the total up to close to half a million pounds. Each model is entirely customisable right down to the smallest details. The McLaren logo on the body can even be etched in white gold or another noble material.

But that's not what we're here for, is it? The lucky owners of this spaceship on wheels, who will receive their vehicles in early 2020, will be happy to know they will each have 1,036 hp available. That's enough for essentially anything. And to go from 0 to 100 km/h, McLaren states 2.6 seconds. But it doesn't stop there: the brand prefers to say 0 to 300 km/h in 12.8 seconds. But whether or not a racetrack subscription is offered to customers isn't specified. Comparatively, the gargantuan Bugatti Chiron (1,650 hp in its latest version!), 600 kg heavier than the Speedtail, can reach 300 km/h in 13.1 seconds.

What's surprising upon first glance is the original design. 5.13 m for a sport coupe with gullwing doors?

Under the bonnet, all we know for now is that a classic combustion motor is the main event, supported by one or several electric motors. There are no further details just yet. We'll bet that McLaren is using a custom 4.0 l V8 in a variant of approximately 750 hp – which seems to be the case given the noise in the first videos available – along with

an electric set of around 300 hp. That's the raw performance, but the McLaren gem doesn't stop there. What's surprising upon first glance is the original design. 5.13 m for a sport coupe with gullwing doors? Seriously? Is it excessive or ingenious? Your call. The rear overhang (similar to the 1992 Jaguar XJ220) hides the tail pipe and gives the Speedtail an undeniable grandeur. Designer Robert Melville was said to have been inspired by a comet when creating the vehicle.

Particular focus was given to the aerodynamics. Side mirrors are replaced with backup cameras; there are no aerodynamic devices but the body lowers to ground level at very high speeds. More originally, covers on the front tires optimise aerodynamics and airflow. Enough to reach maximum speeds of 400 km/h, on a track. Owners who are brave (or foolish) enough to take the Speedtail out on the road will enjoy luxurious audio, which could alleviate some of their frustrations about not being on a racetrack. Since the driver is sitting in the centre of the vehicle, McLaren took advantage of the placement to partner with UK group Bower & Wilkins, well-known for its very high-end audio equipment. Magic. ▲


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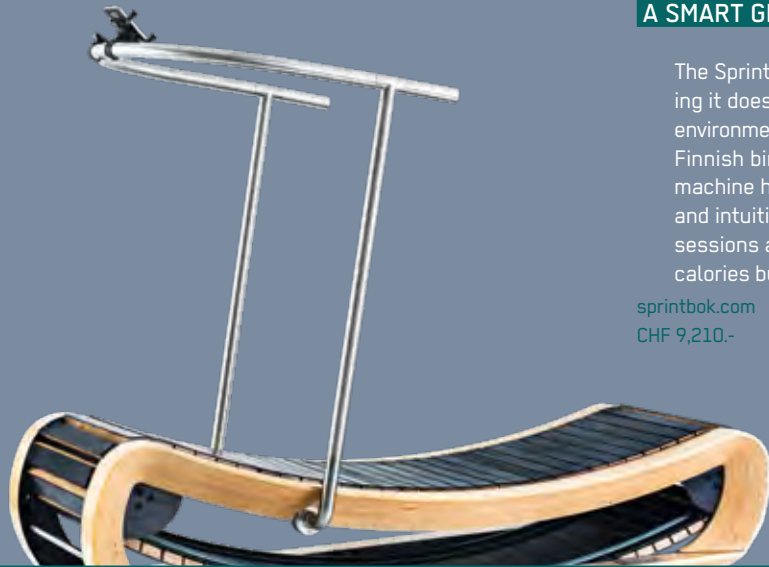
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CHF 9,210.-



PROTECTED BANK CARDS

Dutch company Secrid has created the Secrid Card-protector, a secure wallet made from truck tarpaulins. Providing protection against unauthorised reading by RFID and NFC chips, the aluminium case can hold up to six credit cards that can be removed one by one with just a press of a button. It also has a space for coins and two additional pouches.

secrid.com
From CHF 69.-



THE LEVITATING LAMP

Swedish company Flyte's latest creation is a levitating bulb that lights up with a simple tap on the wooden base. Designed after several years of research into magnetic suspension and induction, the lamp does not require batteries, as its LED technology guarantees 50,000 hours of light. Named in honour of famous engineer Nikola Tesla, the Nikola model includes a walnut base and a chrome bulb.

flyte.se
CHF 367.-



TRENDY ORANGE

Peak Performance has crafted a second collection with stylist Nigel Cabourn, inspired by the vintage archives of the British star designer. We particularly like the Mountain down parka. Cut in the style of parkas from the 1960s, the model with goose-down and Ventile – a breathable high-performance material originally designed for military clothing – is a totally trendy pumpkin orange.

peakperformance.com
CHF 1,700.-



THE ETHICAL BESPOKE WATCH

Richemont is shaking up the old world of watchmaking with Baume, its new brand designed for the mass market. Customers design their own watches on the internet and can choose from several options for each element (such as dial, hands, wristband and materials). This approach is designed to be environmentally responsible: there are no precious stones or animal leather – the watch is made from natural or 100% recyclable materials, such as cotton, linen and aluminium. There are quite a few excellent options available. Another advantage is that each watch is made to order, which eliminates any excess stock.

baumewatches.com
From €470.-



BANANA HEMP

Make less but do it better by investing in sustainability: that's the philosophy of Zurich brand Qwstion, which makes unisex handbags that are both ethical and chic. The company's revolutionary innovation is Bananatex, a 100% biodegradable fibre made from Abaca, a plant from the banana tree family, which Qwstion has used to produce an entirely new collection. Among the flagship models is the Roll Pack, which has customisable handles and a padded interior compartment that can fit a 15 inch laptop.

qwstion.com
CHF 340.-



A JUMPER FOR DIVERS

French brand Téorum makes jumpers made of merino wool with neoprene shoulder yokes that are reused directly from end-of-life dive suits or wetsuits, which cannot currently be recycled. The Graphite model is reminiscent of the rocky grey of the Brittany coast. The brand's discreet logo is inspired by the alpha red flag that divers use to indicate where they are in the ocean.

teorum.fr
CHF 170.-



BOUTIQUE

GEEK

HI-FI SOUND IN A TINY PACKAGE

Devialet has built quite a solid reputation in the high-fidelity audio world with products that are both innovative and compact. At only 20 centimetres long, the new smart speaker dubbed “Phantom Reactor” is a whole new level of tiny compared to the “classic” Phantom. With an integrated amplification system, the Reactor is available at two power levels (600 or 900 W) and is more accessible than the traditional model in terms of price.

devialet.com

From CHF 1,000.-



PHOTO UPGRADE FOR SMARTPHONES

Integrated smartphone sensors are getting better and better, but they are still limiting for those who love to take pictures. To resolve this conundrum, Swiss company Smart Evasion developed a series of lenses (wide angle, telephoto, macro, fish eye) that improve the original rendering and give users new possibilities. Each lens can be fitted in seconds to a special case for the user's smartphone model (only available for Apple and Samsung for the time being).

smartevasion.ch

From CHF 68.-

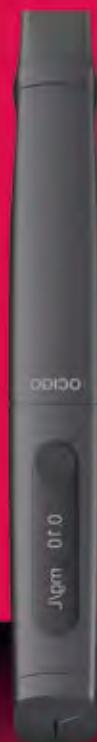


POCKET BREATHALYSER

Designed and created in Aix-en-Provence, France, smart breathalyser Ocigo from start-up Olythe uses infrared spectroscopy detection technology, similar to what is used in traditional breathalysers at police stations, but in a miniature version. A dedicated app displays the exact blood alcohol level of the driver and can calculate the amount of time needed for the driver to return to a normal state, or at least under the legal limit. This product is expected to be available in early 2019, and will first launch to companies.

olythe.io

CHF 285.-



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TRIED AND TESTED

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BY MARTIN LONGET

In a throwback to the early 1990s, *Swissquote Magazine* has been testing *Street Fighter II*, *Donkey Kong Country* and *Sonic the Hedgehog*.

“Hadouken!” Ryu relentlessly throws yet another ball of blue fire with a quarter turn of the joystick (down, down-forward, forward, punch, for those who may have forgotten). A magnificent “Shoryuken” finishes off Honda, who collapses on the tiles of the public bath house where he grew up, according to the legend. Everything is two-dimensional, naturally.

This fight scene isn’t taken from a dusty old VHS tape or an old console which has miraculously survived the passage of time: it is from a brand new device I just opened and connected with an HDMI cable to my flatscreen. It’s a carbon copy of the original Super Nintendo Entertainment System, but three times smaller. The Super NES Classic Edition, as it is officially known, is Nintendo’s latest offering to the retrogaming trend that is currently sweeping the video game world, with all due respect to young players of *Red Dead Redemption 2*. This wave of nostalgia was first started by a few geeks with more or less complete emulators, before the traditional first-generation game-makers took over, led by Nintendo and Sony (PlayStation Classic).

“Sales are booming,” said an enthusiastic salesperson at a

multimedia shop where we went to purchase our consoles. “Especially in the lead-up to Christmas,” he added. In front of him was a pile of boxes of various consoles, including the Atari 2600 and SEGA Mega Drive, which was actually produced by Chinese company AT Games. It’s a strange flashback to the past: retro packaging, flashy colours, pictures of Mario and Sonic. Great efforts have been made to remain as close as possible to the original consoles. They sell for between 80 and 200 Swiss francs depending on the console and accessories.

Each console holds a library of approximately 20 pre-installed games

Once we purchased the console, we could hardly wait to unwrap the precious relics. The first surprise is that the consoles are very small, almost as if the original version has been reproduced in miniature. But they look very similar to the originals, especially Nintendo’s, which has done a truly excellent job imitating the older version. But the connectors vary: the NES has

only one controller, whereas the SNES has two. Some consoles run on electric power (via a USB cable) but others don’t. There are no game cartridges either, and for good reason: each console holds a library of approximately 20 pre-installed games, mainly classics that made the consoles famous in their heyday: Nintendo has *Street Fighter II*, *The Legend of Zelda*, *Super Mario* and *Final Fantasy*...whereas *Sonic*, *Mortal Kombat* and *Golden Axe* are installed on the Mega Drive Mini, which has more than 80 games.

When we played, the consoles were not lacking in quality. The graphic and sound quality is the same as the original consoles, but there are a few upgrades, such as the ability to save progress at any point in the game. The Japanese company has pulled out all the stops.

After a weekend of bingeing and technological regression in 16-bit and 8-bit colour, while we love the throwback to a time that people under 20 will never know, we do take issue with the limited library of arbitrarily chosen games that not all fans will be satisfied with. The most tech-savvy gamers could try to install new games themselves, but their efforts certainly aren’t covered under the warranty... ▴

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UNYIELDING ENVIRONMENT; AND SINCE 1875 THE
HOME OF AUDEMARS PIGUET, IN THE VILLAGE OF
LE BRASSUS. THE EARLY WATCHMAKERS WERE
SHAPED HERE, IN AWE OF THE FORCE OF NATURE
YET DRIVEN TO MASTER ITS MYSTERIES THROUGH
THE COMPLEX MECHANICS OF THEIR CRAFT. STILL
TODAY THIS PIONEERING SPIRIT INSPIRES US TO
CONSTANTLY CHALLENGE THE CONVENTIONS OF
FINE WATCHMAKING.



ROYAL OAK
TOURBILLON
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