MORE FROM WOOD.



www.egger.com

EGGER Group customer magazine



Secret of success timing

Sometimes it all comes down to seizing the right moment.

What does this mean for companies?

INTERNATIONALISATION

The world is coming closer together, markets are being restructured. What it means when companies expand

CLIMATE CHANGE

Sustainability is the order of the day.

What contribution the economy can make

CONTENTS

03 Editorial

10 E_INSPIRATION

- 11 Ideas for tomorrow
- 12 The right moment:
 What good management
 has to do with timing
- 20 Infographic:
 Timing strategies for companies
- 22 Interview:
 Everything in flux Timing
 in the furniture market

26 E_SOLUTIONS

- 27 We Are EGGER
- 28 Always following the markets: Opportunities and risks of expansion
- 32 The new consumers:
 economist Tamer Cavusgil on
 globalisation
- 36 Think global, act local: EGGER in Argentina and the USA

40 E_NATURE

- 41 Sustainable living
- 42 What is regenerating for the future: Sustainability and innovation
- 46 From dust to electricity: Energy management in Rambervillers
- 48 Environmental performance at a glance: Flagship projects at EGGER
- 51 Imprint



THE WORLD IS CHANGING.

AND EGGER IS CHANGING WITH IT.



1885 is considered to be the year of the birth of the automobile, when the "Benz-Patent-Motorwagen Nummer 1" (patent motorcar number 1) by Carl Benz rattled through Mannheim for the first time. In actual fact, it had been invented earlier, but Benz perfected this invention to such an extent that it brought him the success we all know.

This pattern is often found in the history of inventions: James Watt perfected the steam engine invented by Thomas Newcomen, while the invention of the calculator tends to be attributed to Blaise Pascal rather than Wilhelm Schickard and Johannes Gutenberg is considered to be the inventor of the printing press. He came up with the principle of interchangeable metal letters, yet the Chinese printed as early as the 11th century, albeit with crude technology.

However, this principle for success seemed to change. Speed proved to be a decisive success factor in carving out a career. Better to be early than mature – the philosophy of "banana software", which matures once it has reached the customer, became known along with Silicon Valley. Back in **1998**, already academic Klaus Backhaus warned of "**acceleration traps**". Ever faster market entries of self-driving cars risk the life and limb of the customer as well as the manufacturer's reputation. So is timing overrated after all? A highly-topical question that we have made the topic of our cover story.

The world is changing. And EGGER is changing with it. The company is strengthening its presence with new production sites overseas. Read about our motives in this edition. In addition, EGGER has published the new Sustainability Report 2018 – a good opportunity to address the interplay between environmental responsibility and economic activity.

We wish you an exciting read.

EGGER Group Management

Walter Schiegl

(Production/Technology)

Thomas Leissing

(Finance/Administration/Logistics)

Ulrich Bühler (Marketing/Sales)

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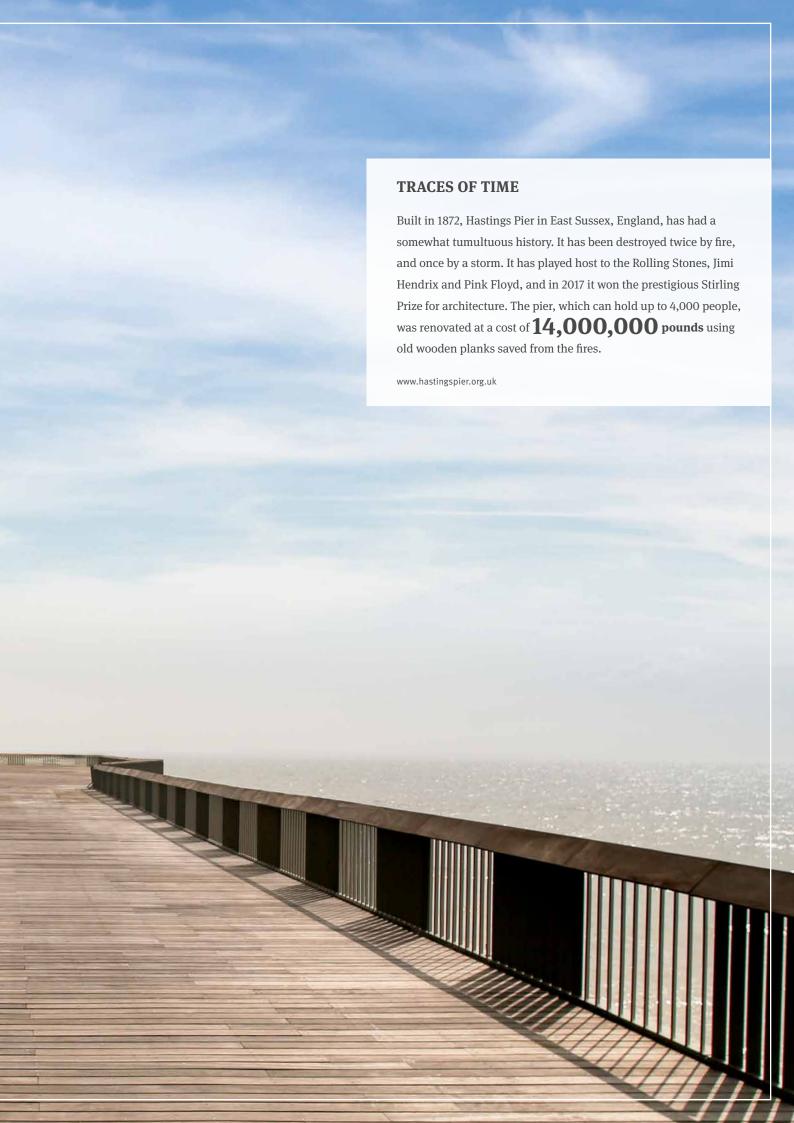












E_INSPIRATION

"The guys from YouTube didn't even have a business model when they started out. But the timing was simply beautiful."

Bill Gross, Idealab
The right moment (pages 12 to 19)



Ideas for tomorrow



IN MOTION

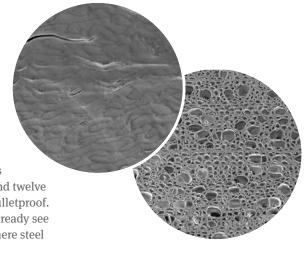
www.jreast.co.jp/shiki-shima/en

The Train Suite Shiki-shima proves that rail travel can offer pure relaxation and a stunning experience of nature. Instead of narrow seats and dust-coated windows, here you sit in wood-panelled suites in a balance between classical Japanese aesthetics and futurism, and enjoy the view through the curved panoramic windows. Award-winning cuisine is served in the "Komorebi" lounge. Its branched design complements the landscape which rushes by outside. "Komorebi" means "rays of sunshine which penetrate through the trees in a forest".

HARD AS STEEL

www.umdrightnow.umd.edu

Engineers from the University of Maryland have discovered a method of making wood as hard as steel. In the magazine "Nature", Liangbing Hu and his colleagues describe how they place pieces of wood in a sodium hydroxide-sodium sulphite solution, decoct lignin and cellulose and then press the wood at 100 degrees centigrade. The result is three times as dense as natural wood (magnified on the right), ten times as resilient and twelve times harder. In the test the "super wood" also proved to be bulletproof. The procedure still only works in the laboratory, but experts already see innumerable possible applications: in particular anywhere where steel has previously been used.



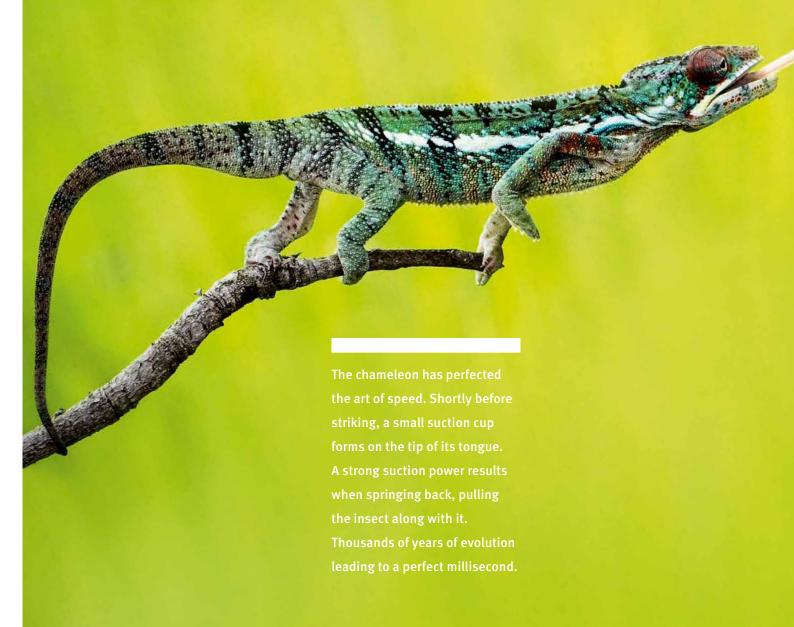


WOOD CARVING ART

www.pontuswillfors.com

California is the first US federal state to allow fully autonomous self-driving cars. The things that made the hearts of tech fanatics in Silicon Valley beat faster would conversely be met with incomprehension by Californian wood artist Pontus Willfors. Digital mobility is not his thing – he sticks by his 40-year-old Ford Falcon. The artist has immortalised the car by sawing, planing and filing a life-sized and detailed imitation from a block of hardwood. California does not consist solely of Silicon Valley, but has a substantial counterculture too.

The right moment





There is a right time for everything in life, also for good ideas. Companies are thus trying to optimise their timing. But how does that work?

AUTHOR Ariane Breyer

Whether a company is successful or not comes down to one key factor: timing. This is the belief of Bill Gross, at least. Bill Gross is an entrepreneur from California who founded Idealab, a business incubator, more than 20 years ago. Idealab helps companies to develop their business concept. Bill Gross has supported over 100 start-ups in this way, and has founded just as many companies himself. At the "TED Talks" series of events, Gross gave one of the most highly regarded talks. It was about "the single biggest reason why startups succeed". He had analysed which factors had been crucial for the success or failure of companies originating from Idealab. His experience can be summed up as follows: The igniting business idea overestimated. An effective team –

hardly decisive. The business model – a secondary factor. Funding – nice to have. What it really comes down to, stresses Gross, is waiting for the right moment for the market launch of a company or product.

Gross seemed to have convincing evidence. For example, the success of lettings platform Airbnb, whose founders initially found no investors. This was because financial backers found the idea that people would rent out their own homes to strangers to be simply absurd. "But then came the financial crisis and the recession," explains Gross, "and people urgently needed money." Circumstances helped, and so Airbnb was a success story right from the beginning.

Gross' theory has circulated in economics blogs like a magic formula. It is certainly a nice thought: That every idea is dependent on the right moment, without which it cannot unfold. That there is the right time for everything, even in business. But does good timing mean something different to everyone? And how do companies thus find their individual timing strategy? Can you practice the right way to approach timing, is there a formula?

Rule 1: It usually comes at a different time to when you think.

Niels Fertig had just started his PhD thesis when he came to the conclusion that his topic was much too regrettable.

→ The physicist had developed a biochip at the Center for Nano-Science of the Ludwig Maximilian University of Munich which allowed the search for new drug substances to be greatly accelerated. The process of measuring the current flow through a cell had previously required painstaking manual labour. A proficient scientist could analyse around ten samples per day – Fertig's biochip managed 20,000.

When Niels Fertig founded the Nanion Technologies GmbH in 2002, he was still in the middle of his dissertation. But he didn't want to wait. "Every idea has its time, and if you hesitate for too long it's gone," he says. Together with a couple of colleagues from university he tinkered with a robot which was meant to be able to examine more than a dozen cell samples simultaneously. Investors were immediately won over by his idea, and start-up financing wasn't a problem. But then the biotech bubble burst – and at the next round of financing all of the investors were put off.

Nanion had arrived too late. "For the better," says Niels Fertig today. "We made the best of it and entered the market with a much smaller device." The mini robot which emerged out of necessity was a complete success. After just two years Nanion's figures were in the black, a rarity in the researchintensive biotech sector. With the slimmed-down, much cheaper version Nanion was able to get to know its customers, get a feel for the market and further improve the product. If everything had gone according to plan perhaps it would have gone wrong, but who knows? In any case, Fertig can say in hindsight: The timing was perfect.

Rule 2: There are always precedents.

Economists have put some effort into clarifying the timing problem. Which strategy is the right one for each company? This question came to the fore particularly from the late 1970s



Training, training and more training - only through constant practice can figure skaters attune their body and movements so well to the rhythm of the music that the impression of effortless ease results. Timing errors have painful consequences.

"Every idea has its time, and if you hesitate for too longit's gone."

Niels Fertig, founder of Nanion Technologies

as globalisation intensified, global competition increased and more and more companies tapped into new markets. At first, researchers tended to consider that pioneers had an advantage. They are free to develop without disruption from competitors - but in return assume a particularly high risk. Therefore, advocates of the follower strategy soon found themselves watching and learning from the initial steps taken by the competition. Economic science makes a distinction between followers and imitators. The latter – as the name suggests – simply copy a successful business model. The risk is minimal. Although the profits that can be expected are also minimal.

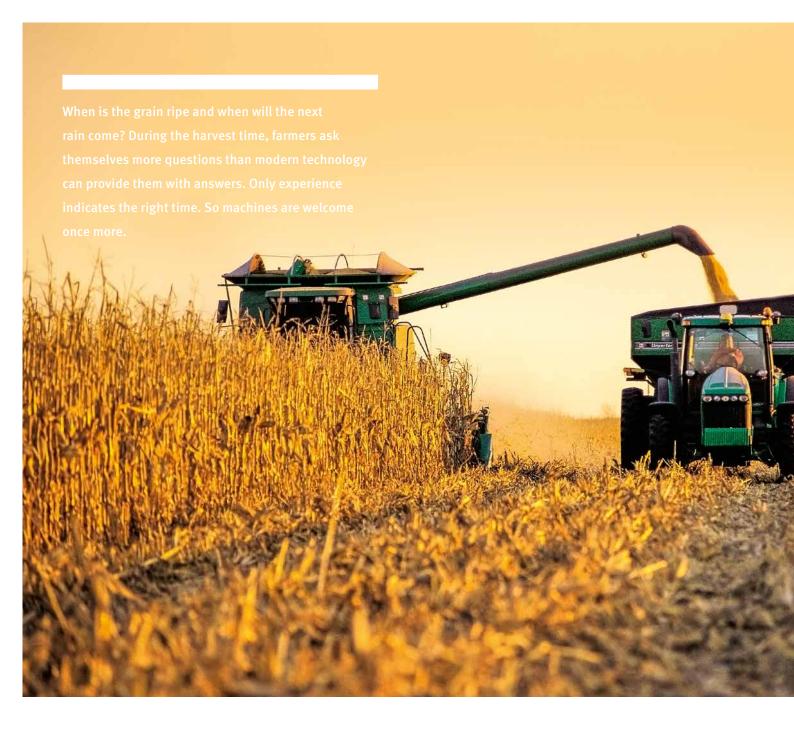
Successful examples can be found for each of the strategies. Coca-Cola continues to market its product today with the story of the pharmacist who invented the legendary lemonade formula more than 130 years ago, in search of a syrup against fatigue. So far, no competitor has surpassed the company. And Amazon began selling electronic books at a time when most observers in the industry found it particularly eccentric. Today it doesn't look like entering the market early was a bad decision. On the other hand: Google was certainly no pioneer, but has clearly dominated the search engine market to this day. Or IBM: The company entered the PC market in the early 1980s and quickly outpaced the pioneer Apple. The fact that it is even possible to compete as an imitator on the world market is demonstrated by Israeli pharmaceutical manufacturer Teva, which transacts more than 20 billion

US dollars annually, for the most part with generics. In Germany, the online mail-order company Zalando has shaken up the fashion industry with a business model taken from the USA.

There is no empirical evidence for the fundamental superiority of one of these three models. For the single reason that companies can act as both pioneers and followers. Compared to Samsung, Apple acts more like a follower with its smartphones, yet with the iPhone has brought the first product of its kind on the market.

Rule 3: Hurry up – but don't be too quick.

The late Paul A. Geroski, a professor at the London Business School and one of the UK's leading economists, combined the advantages and disadvantages of the timing strategies into one model. Ultimately, the company that usually dictates the market is the one which comes onto the scene at the exact moment in which the essential characteristics of the product emerge. He named this product core "dominant design". The operating system Windows is an example of such dominant design. As a follower, Microsoft shaped the understanding of what an operating system is with Windows. Windows turned Microsoft into one of the leading software manufacturers. Geroski terms this strategy "fast second": wait, be ready, set standards. This must succeed if a company wants to achieve a leading market position, writes Geroski. A balance needs to be struck between smart innovation and speed.



→ Rule 4: Quality is everything. Almost.

Unfortunately, Geroski's recommendation not to be the first but rather to be the second to cross the finish line at the right moment does not make things a whole lot easier. Since the question of the right moment remains. Perhaps the Halifax Oak can help here. This is the name of EGGER's most successful decor of the past decade. It is characterised by a striking texture with pronounced cracks and knots. The reason it looks so authentic is down to the synchronised pores whose structure accurately reproduces the optical grain of the furniture decor. The faced board looks like real wood and also feels like it. The Halifax Oak's resounding success

is owed to the fact that the decor with this surface came at precisely the right time, says Klaus-Dieter Monhoff, Head of Design and Decor Management. "Good design does not only assert itself through its quality. It is also dependent on good timing." So let's take a look at what went together

so well in the case of this popular decor. The Halifax Oak entered the market in 2015. "Two years earlier such a vivid and striking decor would not have been so widely accepted," says Head of Design Monhoff. At the time of the market launch, however, there had already been a rustic wave in the flooring sector, natural designs were in demand. Customers wanted authentic floors with natural features which



"Believing in technological perfection is at the heart of the EGGER philosophy."

Klaus-Dieter Monhoff, Head of Design and Decor Management

as a fast follower," says Klaus-Dieter Monhoff, "and implemented it in a decor that came out on time for the emergence of a new trend."

So what can Halifax Oak tell us now? Even companies, in whose self-image quality prevails over speed, cannot avoid the question of timing: The implementation should ideally match the zeitgeist. Quality is the essential prerequisite for a product's success. "Believing in technological perfection is at the heart of the EGGER philosophy," says Monhoff. "Only in this way can we always deliver the highest quality, which our end customers enjoy in the long term."

Rule 5: Trust takes time. But not everyone needs trust.

Both must come together: consistently high quality and a feel for trends. Perhaps this is an initial, universally valid realisation in the search for the right moment?

Let's call Roland Sillmann. Sillmann is somewhat akin to a German version of Bill Gross. Like Gross, he once had a start-up in the field of solar energy, and like Gross he now runs a huge start-up incubator: the Science and Technology Park Berlin Adlershof (WISTA for short), a city of science with over 1,000 companies, university institutes and a large innovation centre from which new enterprises constantly emerge. Yes, says Sillmann, quality is certainly important – but only for some of the companies. "B2B is always about trust. That is the most important ingredient for success.

And building up this trust takes a long time." Without a good product you can't get very far.

So far so predictable: After all, everyone expects quality. If you buy a kettle that breaks after two weeks, the next time you will go for another brand. But here the WISTA boss makes a contradiction. Working diligently is not the best strategy for every company. "Brand awareness is more important in the B2C sector. Here you have to be quick to be the first to create an end-customer market." Network effects play a major role, especially in Internet start-ups. Those who quickly attract many users thereby increase the visibility and usefulness of their product and attract even more users. This still applied even if they consider themselves to be incredibly quality conscious. The Facebook example demonstrates: Despite serious privacy issues, the sheer number of users makes the company one of the most successful in the world.

Rule 6: Beware of green bananas.

Some companies deliberately sell defective goods, says Piet Hausberg, who works as a junior professor at the Department of Technology and Innovation Management at the University of Osnabrück. This strategy is particularly prevalent in the IT sector: It is referred to as the "banana principle". Bananas are often sold still relatively green in colour and then ripen once bought by the consumer. Software also matures, as it were, if the developers upgrade the product based

they could then combine with plain furniture. Since EGGER manufactures products for both the flooring and the furniture market, it was anticipated that the natural wave would most likely soon cover the furnishing sector. And as it happens, demand for rustic designs soon increased rapidly among furniture manufacturers. The successful product launch was therefore the result of attentively observing the trends. However, there was one additional factor: Shortly before, technology had made a leap in quality. EGGER suppliers were now able to implement the surfaces not only in even greater perfection, but also on both sides - which made work much easier for the carpenters. "We made use of this mature technology

on user feedback. In this way, they involve the customer in the completion of the product he/she has bought. This becomes problematic at the latest when it comes to data security. "The mounting privacy scandals of IT companies are also a consequence of this extreme timing strategy," says Hausberg. "Consumer protection is not following fast enough with its regulations." And when it does, then the damage to the image of those start-ups that do not have an established brand may be of no importance to them. "They then simply start the next company." So will quality no longer play a role in

years before YouTube conquered the world from San Mateo, California. "The guys didn't even have a business model when they started out," says Gross in amazement at TED. "But the timing was simply beautiful."

Would it have worked out a little later with z.com? With Nanion? With Coca-Cola, or Windows? Nobody knows. This is precisely why the idea of timing being key is a little too straightforward. It reduces entrepreneurial engagement to a superfluous task requiring great diligence, because supposedly everything ultimately depends on luck. In a strong wind even turkeys can fly, goes the saying in the investor scene. If the wind only blew strong enough, even turkeys could fly. However, you don't have to be an investor to guess what happens to the turkey when the storm subsides.

In the end, Niels Fertig did build the large robot that he had wanted to develop before the investors bailed, from the company's own revenue. If you ask him today whether it was fortunate timing that Nanion had been so successful, he hesitates. "I would say: The decisions that we made in the situation at the time were exactly the right ones." Perhaps you could sum it up like this: The timing has to be right. And the rest too.

"The privacy scandals of IT companies are also a consequence of this extreme timing strategy."

Prof. Dr. J. Piet Hausberg, Professor of Technology and Innovation Management

the future? At least here Piet Hausberg can provide reassurance: The more traditional the industry, the more valuable the brand, the more carefully companies need to handle it. There is no reason to fear that the banana principle will spread from the digital to the analogue world given that you cannot send updates to shoes and refrigerators.

Rule 7: Turkeys don't fly.

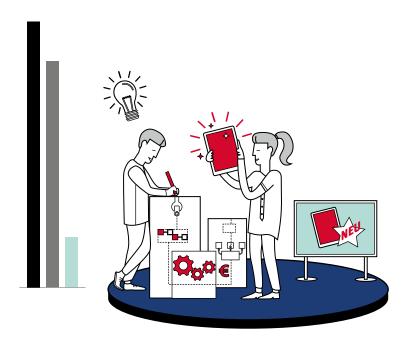
Back to Bill Gross. In his TED talk, Gross also talked about z.com, one of his own companies. The online film portal was launched in 1999. At the time broadband penetration was too low and there was no standard among video players. z.com went bankrupt in 2003 – two

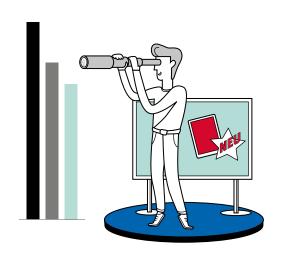


Timing is everything

The early bird catches the worm. Or perhaps not? An overview of the strengths and weaknesses of different timing strategies.

Development costs Risk Advertising costs





PIONEERS

A company that is the first to produce and sell a new product creates a new market and is thus a pioneer.

ADVANTAGES

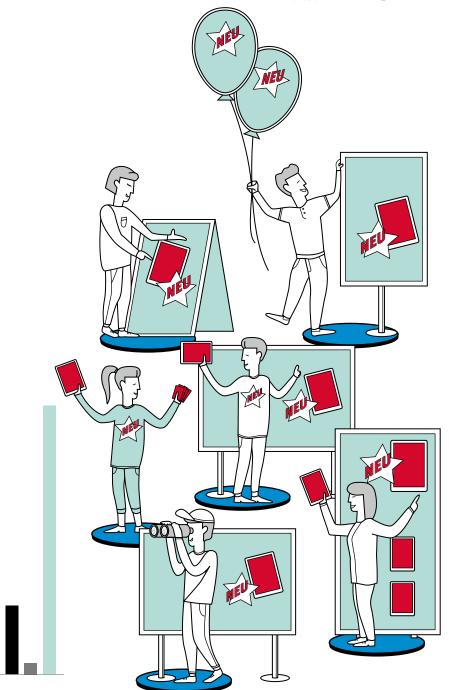
- Pioneers can build barriers against competitors by filling distribution channels and securing resources.
- They shape customers' preferences.
- Without competition their advertising is very efficient.

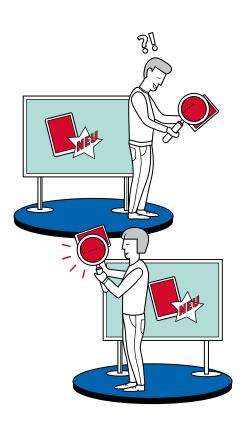
DISADVANTAGES

- In a new, unknown market the first one makes mistakes while the imitators are spared.
- ♠ Moreover, the former has high costs above all for development and market exploitation.
- A sudden change in technology can outpace pioneers.

FOLLOWERS

"Followers" are international companies that don't enter the market first, but rather enter a pre-existing market. The literature distinguishes between early and late followers.





ADVANTAGES

- Followers can learn from the rookie mistakes of pioneers and better serve customer needs.
- They have lower development costs.
- At the beginning, customers' willingness to pay is low. It rises with a growing market.

DISADVANTAGES

- It may be the case that the pioneer already has patents pending, thus meaning that followers then have to pay to use them.
- By definition, followers always have competitors and must fight for market share.

IMITATORS

Imitators only enter the market late and distribute already established products without their own innovative services. Only the product or manufacturer name changes.

ADVANTAGES

- If the product is already available there are virtually no development costs.
- ◆ Latecomers can take advantage of investments made by predecessors (free rider effect).
- The market is widely known, thus the business risk is very manageable.

DISADVANTAGES

- The more competition there is, the more expensive advertising and marketing becomes.
- The market is saturated − extremely high profits can no longer be expected.
- In general, imitators have a less positive image than innovators.

Everything in flux

The furnishing industry is growing, but faces epochal challenges. The design and trend expert Volker Streckel gives his views on digitisation, manufacturing technologies and timing in furniture making.

AUTHOR Clemens Niedenthal

Mr Streckel, you recently attended the Milan Furniture Fair. What's new?

Many fashion brands are now also positioning themselves strongly in the furnishing sector. This can be seen in the case of luxury labels such as Hermès, Louis Vuitton and Bulgari. But also in the mass market segment furniture offshoots are sprouting up, for instance Zara Home and H&M Home. Manufacturers are following principles typical to fashion rather than those of furniture. The collections are designed for a short half-life and the colours follow short-term trends.

How do these items of furniture produced by fashion manufacturers look?

Strikingly colourful, playful designs

with a mix of materials were on show. This doesn't surprise me because even the furniture market cannot escape the general trends of design and consumer culture.

What kind of tendencies are these?

For a long time in the furnishing sector we have been observing a resurgence of bygone eras. The big mid-century hype, which was mainly influenced by designs from the 50s, has now become part of the mainstream. The next logical step in retro-inspiration is the rediscovery of post-modernity. Currently, the style-defining designs of the 1980s and 1990s are experiencing a revival.

Does that mean that the furniture industry is ultimately stagnating?

No, because you can of course always take inspiration from observing the past for the creation of something new. Such processes can also be seen in the fashion industry. If old designs are not simply copied or bluntly referenced, but rather interpreted under the influence of current trends, it can result in something very exciting.

Does successful timing in the furniture market mean being the first to commercialise such new design trends?

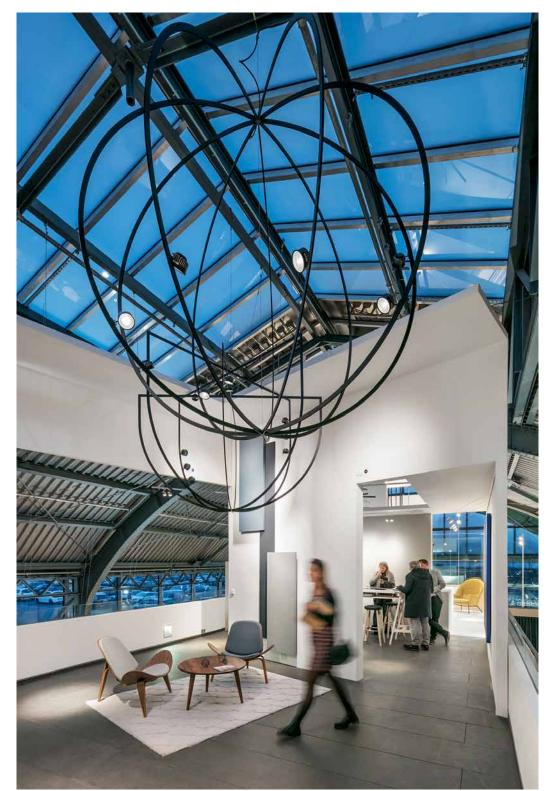
This may work in the very fast-moving fashion market. Furniture design and architecture are generally slower here. You have to reckon with longer half-life periods. It is said that fashion trends always arrive in the furniture sector with some delay. That's why it's not so important to be first when it comes to new trends.

Furniture tends to be bought with the long-term in mind.

Exactly. Being bold with colour selection is more easily accepted for a t-shirt than a sofa landscape. For the latter, the desire for enduring security is considerable. So it's better for us to go for the mouse-grey!

Digitisation is changing manufacturing and distribution. Does it also have an impact on the way furniture is made?





- Design Post Cologne was founded by Dutch furniture producers Paul van den Berg and Willem van Ast.
- 2 The materials of the product range "Really" consist exclusively of old textiles.
- 3 Rotterdam-based designer Diederik Schneemann makes lamps and vases out of flip-flops washed up on Kenyan beaches.





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24

"We need a renaissance of knowledge about quality and product knowledge. Who knows the difference between cotton and wool?"

Volker Streckel, Manager of Design Post Cologne

→ Absolutely. Because form does not only follow function, but also feasibility

– or market demand. Currently, it is noticeable that many designs in particular meet the demand of packing down compactly. Since you can only sell things online that are suitable for shipping. And online trade in furniture is growing in the double-digit percentage range. In the future, no furniture retailer will be able to avoid e-commerce any more.

Which plays a greater role in such developments: technology or the zeitgeist?

Both are mutually dependent. Sometimes I wonder whether phenomena like 3D printers excite designers and consumers for the sole reason that they are supposedly forwardlooking technologies.

Is digitisation also changing the concrete work of the furniture makers?

In general, cabinets and shelves are still modularly assembled from different planks. And I also can't see certain manual procedures disappearing – at least not in the premium price segment. Quite the opposite. But it is of course theoretically conceivable that at some point we will no longer have furniture delivered, let alone go to pick it up ourselves, but rather print out a design at home on the 3D printer. Furniture design would then become altogether a thing of data.

Are customers at all ready for the unlimited freedom of choice that this would allow?

For most customers, a preselection made by an expert would certainly prove very helpful. There are certain restaurants where guests pick a selection of different ingredients from a buffet and then have them cooked in a wok by a chef. With someone who has a sound knowledge of flavours and who knows what ingredients go well together, the result will usually be something tasty. But for others I would recommend eating in a

traditional restaurant, thus leaving the composition of the ingredients to the chef.

So you would prefer not to allow customers to choose themselves?

What I mean is: The more diverse the possibilities, the more you depend on experience. For the furniture sector this means that there must be a renaissance of knowledge about quality and product knowledge. Who knows, for example, the difference between cotton and wool? Or how do you recognise whether the upholstery is of good or bad quality? Much has been lost here.

And where will the customer approach take place in future? Increasingly online?

The Internet is certainly an excellent way of informing yourself. Yet time and again I am discovering that there is a distinct desire to be able to try out the product in person before purchase – particularly with furniture.

Unlike furniture retailers, furniture brands are of little importance. Would you advise a furniture manufacturer to invest in their own brand identity?

That is a possibility. But: Anyone who wants to go down this road must conduct their furniture distribution, digital and analogue marketing and social media with the same professionalism as design and production. Not every company can afford that.

Do you expect more concentration or growth in the industry in the coming years?

Generally speaking I see more of a concentration process. At least in Europe, we are moving in a rather saturated market with furniture. This means that all items of furniture that enter the market are always already present in a similar form in many homes.

Is resource conservation becoming a major topic in furniture design?

It is my belief that we won't be able to circumvent this issue. Also from an ethical and moral standpoint, we must ask ourselves whether we can keep on consuming in such a way that we would require the resources of our planet three times over. The furniture sector in particular has great potential for sustainability, given that as a rule its products – provided that the quality is sufficient – are long-lasting.

Can you currently see any signs of such a change of consciousness?

Yes, and they are gradually increasing. At the Milan Furniture Fair the Danish fabric producer Kvadrat was in attendance exhibiting the new material "Really", which is manufactured entirely from recycled textiles. However, the use of resources is also a big topic among young designers. Diederik Schneemann, who developed a collection of furniture and accessories from discarded flipflops, is one such example. I really hope that the era of fast furniture is reaching its end and that the sector develops more strongly in the direction of sustainability. That would be a genuine revolution.

E_SOLUTIONS

"Cultural differences make international business really interesting!"

S. Tamer Cavusgil, professor of International Business, Georgia State University (USA) The new consumers (pages 32 to 35)

We Are EGGER

NADJA FEJES

Communications and Social Media Expert, St. Johann (AT)

Nadja Fejes grew up in the Lower Bavarian Spa Triangle. She studied cultural industry with an emphasis on Southeast Asia and subsequently worked in Frankfurt as a PR consultant in the tourism sector until she moved back south – there she applied to work for EGGER. Since spring 2016 she has been a part of the communication team and is responsible for the social media strategy there. In practice this means: Chairing editorial meetings, managing agencies, organising training. And the highlight is getting to meet colleagues at the sites abroad to agree on communication strategies. She immediately felt at home in St. Johann. "The woody scent in our headquarters brings back memories of my grandfather's workshop." There she often stood next to the piles of sawdust as a child and watched as he made furniture.





WOICIECH ZALEWSKI

Transport Management Specialist, Biskupiec (PL)

When Wojciech Zalewski started his new role, he first had to build his workstation himself. Machinery and construction materials have been delivered to the first Polish EGGER plant in Biskupiec since mid-2017. Zalewski is responsible for ensuring that transport runs smoothly. Previously, as a logistics expert for a Dutch company, he transported fish from Norway all across the continent. Now he coordinates suppliers from all over Europe and engineers on site. "There is always something new: sometimes ten lorries carrying building materials, sometimes a five-metrewide machine is delivered under police escort which must be unloaded with a crane. The variety is what makes it fun." Wojciech Zalewski likes to spend his weekends in the outdoors. Preferably in the woods around Biskupiec with his family and his little dog Ozi.

GABRIEL E. PAVÓN

Payroll team leader, Concordia (AR)

Gabriel E. Pavón has been working for 15 years in the plant in Concordia which was acquired by EGGER in 2017. His position remained unchanged as a result of the takeover. "My challenge now is to support our 500 employees through this transition process," says Pavón. Because the South American company is developing into a global player and that means new technologies, new processes and new colleagues in Europe. They, however, require the smallest adjustment. "The teams from other countries received us with such enthusiasm," tells Pavón, who has a lot of contact with the international colleagues. "That is so motivating."





Always following the markets

Globalisation facilitates expansion abroad. However, entering a new market has its risks. How to avoid danger and seize opportunities.

AUTHOR Jan Ahrenberg

It runs and runs and runs – the VW Käfer is one of history's greatest export successes. It proved such a success that the Volkswagen Group also began producing it abroad from 1957. First in Brazil and in Mexico too from 1964 – which later became one of its strongest sales markets. Only in 2003 did the last model of the cuddly compact car come off the production line there. At that time, Käfer production had already come to a close in Germany 18 years previously.

At first glance, Emden in East Frisia and Puebla in Mexico, which are both Käfer production locations, have hardly any similarities at all. Emden lies just one metre above sea level, while Puebla is perched at an altitude of 2,135 metres. Emden has scarcely 50,000 inhabitants and the average temperature even in August only reaches a cool 16.3 degrees. On the contrary, the catchment area of Puebla is home to some 2.8 million people who usually enjoy pleasant air temperatures of 25.2 degrees in August. Listing such contrasts could go on forever. Similarities are only to be found in the successful Käfer production. And inevitably the question arises: How did the VW managers of the 1960s recognise the potential of the Mexican market for the Group?

"To understand how the successful internationalisation of a company works, you have to go back a step," says Michael Holz, a scientist at the Institut für Mittelstandsforschung (IfM) Bonn. Because from the beginning, as can be expected, it is usually not the case that companies commit to one specific market. Rather, astute managers observe the pulling effect of market forces that are on the move.

A world full of opportunities – for those that recognise them

The story of Mexico and the Käfer is a good example of this principle: In the 1960s, the country experienced a boom akin to the economic miracle in post-war Germany. Industries took root and provided modest wealth to the population, increasing the need for mobility. VW recognised this opportunity – and seized on it. The Käfer, with its tried-and-tested technology and cheap production costs while ensuring high quality, was the ideal product to meet the demand.

"The internationalisation of a company usually happens in a number of stages," describes Michael Holz. "In the process, entry into the export business for medium-sized enterprises often begins with rising demand from abroad." This is usually a reaction to the market, less often active marketing. The more the export business's share of sales expands, the more meaningful its own sales structure abroad will be. "This then serves the companies in two ways: First, they optimise their value chain and thus increase their profit. Secondly, they gain initial experience with the legal, tax and cultural specificities of a market." This know-how is an indispensable prerequisite for creating realistic conditions for the company's own production site in the target country. Of course, there are companies that skip the first two steps. According to Holz, however, such companies would face almost incalculable risks and require high reserves to compensate for possible financial setbacks during the establishment phase.

But to what end would such a high risk be a good thing? EGGER has decades of experience in the opening up of new markets and thinks little about internationalisation for its own sake. "At the EGGER Group, we have a clear focus on meaningfulness for the company and our customers," says Ulrich Bühler, CSO of Marketing & Sales for the group. "It is an interplay of positive indications, experience and recognisable benefits



→ that leads us into new markets." One of the group's key aspirations is to activate untapped potential. A market will be of interest to the EGGER Group in places where the economy is booming and the most important raw material – wood – is available in sufficient quality and quantity.

Particularly since the downside of globalisation offers additional incentives to produce locally in the target markets. "Sanctions and protectionism create additional uncertainty for companies today," observes Michael Holz from the IfM Bonn. "They can only counteract this with intensive risk assessment as well as solid information and decision bases." Those closer to the customers, the intermediate processing and the consumers themselves have a clear

advantage. Protectionist measures do not have any effect if you produce in your own country. But also in this regard EGGER judiciously weighs up: "We have good sales markets where we refrain from investing directly - even if we could increase our market share through local production," says Ulrich Bühler from the Group Management, explaining the strategy. If, for example, you have to restrict entrepreneurial independence in order to gain a foothold in a market, that is an exclusion criterion. Ultimately, it is always about a corporate and commercial culture, passion for quality and trust in personal contact that are "suited to us", summarises Bühler. "We are a family business that attaches great importance to reliability and a down-toearth attitude. We expect that from our partners as well."



Visit from overseas: For many companies, export is the first – and relatively low-risk – step towards internationalising the business.

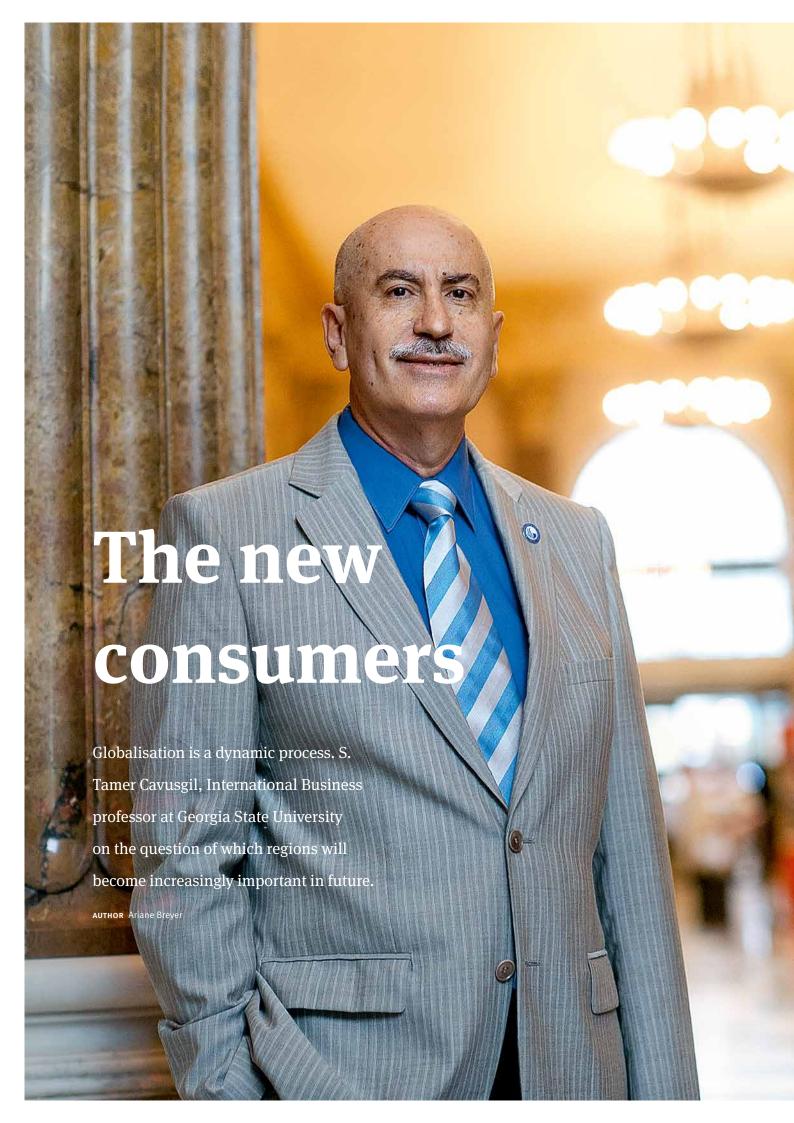
Even within Europe, companies therefore need to take a close look at where their product, understanding of service, sales and quality awareness best corresponds with their own philosophy. "The home market is always an important benchmark, and you shouldn't lose sight of it," recommends Michael Holz from the IfM. Here, the product has come to know its cultural imprint, here it is anchored. Crises and fluctuations in demand in foreign markets are easier to cope with if the home markets are developing solidly. It's a bit like a tree: Only if the roots and trunk are healthy can the shoots continue to grow towards the light and gather additional energy for the whole organism. Ulrich Bühler adds: "Our most important markets are naturally in Europe. And they are developing in

a highly stable manner. In addition, we also recognise countries overseas with good growth prospects that suit us very well." Argentina, for example, where the group has acquired a plant. Although the Argentine economy is very volatile at present, meaning every investment carries a certain amount of risk, in terms of trade relations and the understanding of good design, we are on an equal footing with the Argentines, since the step from importer to producer was simply logical. And the developments on the US market, where EGGER is currently building a new plant, also play into the hands of the group (see page 36).

Clever use of synergy effects within the group

Furthermore, the interplay with other

production locations offers further opportunities. For example, the Käfers manufactured in Puebla, Mexico, were shipped via Emden to the German market at a time when the East Frisian plant had long been involved in the manufacture of the Golf. Very similar effects are hoped for at EGGER: "We will benefit from the distribution of risks across several regions of the world as well as from the growing sales opportunities for the plants in Europe," says Ulrich Bühler. With one foot on another continent, for example, edgings or laminates from European plants could be better sold overseas if the brand already had a positively established presence there. Particularly in new markets, high brand loyalty quickly develops, allowing anyone who can convince with quality to benefit. For EGGER it is not just about opening up new sales markets, offsetting risks and exploiting synergies in distribution channels. It is also about the process of learning: "We transfer knowledge and experience to the new markets and in turn gather new impressions and concepts there," Ulrich Bühler describes EGGER's approach. "That makes us altogether more stable and diverse as a group."



ABOUT

S. TAMER CAVUSGIL

serves as Fuller E. Callaway Professorial Chair in the International Business faculty at Georgia State University, Atlanta, USA. In addition, he heads the Center for International Business Education and Research (CIBER) at the university. One of his areas of focus is the internationalisation of companies. Cavusgil has authored several standard works on business administration and is a member of the Academy of International Business.



Professor Cavusgil, the turn of the millennium was marked by globalisation. Yet since the financial crisis of 2008, more and more countries are closing themselves off. Is borderless world trade already reaching its limits?

No, not in any way. The financial crisis was indeed a blow. In countries with highly developed economies, we are still not seeing strong growth rates. They are not exceeding two to three percent. But: We are recovering, albeit slowly.

Have companies become more cautious about expanding into other markets?

On the contrary! While the economy may be stagnating in the west, elsewhere vast markets are emerging. China and India, for example, will play a significant role in the future. They already constitute important sales markets due to their huge populations. Even more interesting, however, is the fact that a large middle class is currently developing there very quickly. Thus, with regard to income, the number of people that fall into the bracket between rich and poor is growing.

What is so interesting about them?

Their income satisfies their basic needs and a portion of it is left over for luxury expenditure: better housing, better education, better health care. And those households that have only recently become middle class are especially interesting. They display particularly strong loyalty to premium brands. Previously, they tended to consume unbranded products – now they attach importance to high quality.

How do the middle classes in Asia differ from those in western

countries?

Certain similarities prevail: They are concentrated in cities, are as a rule digital users and in terms of consumption are oriented towards known western brands.

Why western brands?

Sometimes I wonder about this too! Here in Atlanta, guest researchers regularly pay visits from China. They usually take home bags or shoes from big Italian or French brands as a souvenir, despite knowing that they come from China. They are cheaper in the USA than in China. When I suggest they could buy a much cheaper but equally good counterfeit in China, they are appalled. They want the original brand as a symbol of a glamorous, sophisticated lifestyle – even if it means that they laboriously reimport goods produced in China.

What can be learnt from such consumer behaviour?

When we analyse markets, we collect different indicators. We are more interested in how fast the middle class is growing than their specific consumer desires. Which countries are growing quickly? And which slowly? This tells us a lot about the long-term development of an economy.

And where is the middle class growing particularly quickly?

Above all in South Korea, Taiwan and the city states of Hong Kong and Singapore, but also in Israel. Some time ago, these countries started to adapt their economies and make them extremely efficient. Companies have been privatised and have had their infrastructures modernised. A process of



Rising purchasing power: Passers-by on a busy shopping street in Myeongdong, a district of the South Korean capital Seoul.

→ urbanisation and industrialisation took place which began 30 years ago.

Does the political environment not play such a big role here?

The Asian countries that I mentioned have opened up politically. Where political progress fails, however, setbacks arise. We are seeing this in the example of South Africa, which has promised a lot, but is currently developing in a disappointing manner owing to the difficult political situation.

Many countries are considering closing off their economies. How do companies get around this? Could it be the case that they will focus more on their own domestic market?

Companies think in the long-term.
Take Coca-Cola, the big player here in Atlanta. Coca-Cola generates 80 percent of its turnover outside the US. Thus the company will hardly become less interested in doing business internationally. And apart from potential tendencies towards isolation, it must be said that today it is easier and cheaper than ever to do business on an

international level. Think of the megaships, for example, that have emerged in recent years and are once again reducing freight costs significantly. These make it easy for companies to organise their supply chains internationally.

However, the model of offshoring only works provided that the salary gap between countries is large enough.

Yes, that's why it's a dynamic process. When the economy grows, salaries rise at some point. China initially became a large manufacturing base, yet meanwhile the Chinese are having their shoes manufactured in Vietnam, where labour is cheaper. Ironically, at the same time incomes in the USA have stagnated or fallen. For instance in the automotive industry: Following the bankruptcy of General Motors, the management negotiated new contracts with unions. Hourly pay dropped considerably – from 50 to 28 euros.

So will production return at some point?

Attempts at reshoring have been made. Sporting goods manufacturer Adidas, for



"If you are closer to the customer you can react better and faster to their wishes."

S. Tamer Cavusgil, International Business professor at the Georgia State University in Atlanta (USA)

example, has until now manufactured primarily in China, Indonesia and Vietnam. In recent times, however, Adidas has built factories in Ansbach, Bavaria, and here in Atlanta, where much of the production is automated. On the one hand this is a reaction to rising costs in Asia, while on the other hand it is an attempt to shorten the supply chain. If you are closer to the customer you can react better and faster to their wishes.

Are companies that are relying on dwindling resources more likely to move abroad? In Central Europe, wood and sand are currently scarce.

In such situations, a change in corporate culture can be observed. They are more concerned with resource efficiency and recycling – not just for image reasons, but also due to economic considerations. Google operates huge server farms that produce an enormous amount of heat. This heat is converted into energy, which in turn is used to cool the server farm. This is a very sophisticated process. The company is reducing its carbon emissions while at the same time increasing its profitability. Design innovations play a significant role in this.

So what does sustainable design look like?

When a new table is being designed at Ikea, designers most certainly wonder how to save the scarce resource – thus in this case wood. The image of an environmentally and socially aware company pays off in the long term. It strengthens the brand.

You teach international business and have authored standard textbooks. How do you teach a student good entrepreneurship?

Well, you can certainly argue about

whether it is possible to teach entrepreneurship. You can learn how to write a business plan, acquire funding and identify market opportunities. The great German sociologist and economist Max Weber spoke of "acquisitiveness", a psychological disposition. Either you have it, or you don't. Whereby I have noticed a change in recent years: Previous generations wanted to graduate then work for a large corporation. Over the past couple of years my students have for the most part told me that they intend to start their own business and under no circumstances want to work for someone else.

What does that come down to?

On the one hand, today we know more thanks to digitisation. Entrepreneurs can identify market opportunities more easily, they are simply better informed. On the other hand, there is more risk capital. 30 or 40 years ago those who wanted to launch a start-up enterprise had to ask their family or fall back on personal savings. Today capital providers are actively seeking out investment opportunities by approaching start-ups themselves.

Nowadays, there are entrepreneurs who have pop star status.

The phenomenon is particularly widespread in China. People like Jack Ma, boss of Alibaba, an online company comparable to Amazon, and Wang Jianlin, founder of the world's largest real estate developer Wanda, are great role models for young Chinese people.

Does globalisation level cultural differences?

Partially, at most. People are proud of their origins and do not give up their culture, lifestyle and consumption habits so easily. Thankfully that is the case – because it is differences that make international business so interesting!

What kind of differences are we talking about here?

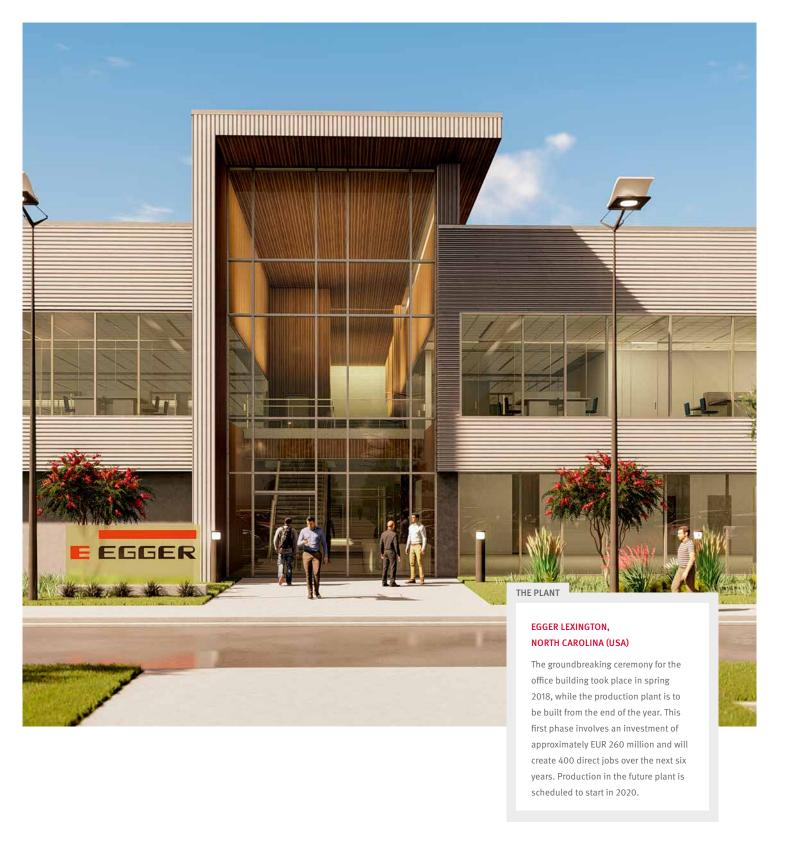
I was recently sitting in a minibus fitted with 18 cup holders. 18! Unlike in Europe, in the USA it is completely normal to eat and drink in vehicles. Vehicle designers have to pay attention to such idiosyncrasies. Otherwise the product flops.

Which country is likely to interest you most in the future as a researcher?

Brazil. There is an abundance of resources there: plenty of clean land, sun, water, minerals. Of course, the country is not currently realising its economic potential due to political unrest. But the country will undoubtedly be a big player that will not go unnoticed.

How exactly do you work that out?

There is a very simple, albeit rather unscientific method: Think about where China is investing in the long term. The Chinese are very good long-term planners, and they have been investing in Brazil as well as Australia and Africa for over 20 years. If you want to know what the world will look like in a few decades' time, simply have a look at what the Chinese are doing.



Think global, act local

In North and South America, innovative wood-based materials are in greater demand than ever before.

For EGGER, this represents an opportunity to expand its local presence with its own plants

AUTHOR Axel Novak

When Luciano Tiburzi first travelled to the Austrian town of St. Johann, he was amazed. Not so much about the stylish EGGER headquarters with the wooden façade or the sheer size of the plant. "What impressed me was that the owners of the company still live only a few hundred metres away from the plant," explains Tiburzi. "Although their company has long been a major player on the world market, you can feel their presence in every decision the company makes."

Luciano Tiburzi worked for Masisa for 22 years, one of the major players in the South American market for wood-based materials. He has pursued his career in Argentina, Chile and Venezuela and most recently has headed the affairs of Masisa in Argentina. The company has belonged to EGGER since July 2017. Concordia is now EGGER's first plant outside of Europe, with plants for the production and laminating of chipboard and MDF boards.

But it is not the only production facility located overseas. Almost at the same time as the acquisition on the South American market, the EGGER Group Management decided to build another plant outside of Europe, some 8,000 kilometres northeast of Concordia: in Lexington in the US state of North Carolina. Construction is scheduled to

begin at the end of 2018.
EGGER has been supplying decorative wood-based materials to North America for more than five years. The products have also been available in South America since 2011. In both regions, the group initially gained extensive experience on site before deciding on a suitable production location. In this respect, the stories of both plants

resemble one another.

And yet they differ from one another. In Argentina, the objective is to integrate an existing plant in a spirit of partnership into a family business with a strong identity – in short: growing together. In the USA, the challenge is to consistently impress with the EGGER core values in a fast-paced, profit-oriented market in which a necessary modernisation drive is imminent.

Argentina: An opportunity and a challenge

With the plant in Concordia, EGGER can become one of the leading market players in South America. Luciano Tiburzi now heads the marketing and sales department of the America division. His task now is to manage the transition to a globally operating group of companies for the 500 employees. "Suddenly becoming part of a global enterprise is a unique opportunity," says Tiburzi. "And a great challenge."

If you ask Tiburzi what has changed, he points first to the similarities: In many ways, the new corporate philosophy seamlessly ties in with the former. At Masisa, too, emphasis was placed on employees, innovation and resource-efficient production. "What changes with EGGER is the higher demand for quality and customer service. We have things to learn there. Fortunately we get a lot of support."

The first integration phase has already been completed. A 20-member EGGER



The groundbreaking ceremony in the New World: The office building for some 80 administrative employees in Lexington is scheduled for completion by spring 2019.

team spent a week on site several times to introduce the new processes. "This external support was extremely helpful to us," says Tiburzi. "This is how we were able to determine where changes were needed." Currently, for example, quality controls are being stepped up. And this is not only in production, but also in packaging, labelling and shipping. Because building a strong brand requires the customer to immediately recognise the product as an EGGER product. In general, customer loyalty is a big topic. That's why a customer relationship management tool was installed in parallel with the SAP implementation.

At the same time, the job descriptions of all 500 employees are being systematically updated. On this basis, each individual will receive different training: Depending on the position, this may include technical training, workshops on EGGER core values or coaching on management style. Here, supervisors are urged to always address problems openly, among other things. Tiburzi likes the fact that they should be role models within the company and bear responsibility for ensuring a positive corporate culture. This means, for instance, that the boss should exemplify a healthy work-life balance, especially in stressful situations. This humanity – one of the core values of the company – can be seen throughout the entire integration process. "The changes are not imposed," says Tiburzi. On the contrary, he witnesses supportive accompaniment. His impression so

THE PLANT

EGGER CONCORDIA (AR)

The plant in Concordia has facilities for the production and lamination of chipboard and MDF boards. Production ³ of chipboard, 280,000 m³ of MDF boards and 274,000 m³ of lamination. 500 employees are currently employed at the plant.



far? "Only positive. It is noticeable that the employees have experience with internationalisation processes, not only in Central Europe."

USA: Shifting trends in the furniture market

EGGER is building the plant in the USA from scratch. Not least because of its size, the market offers excellent prospects. EGGER has long been supplying it without on-site production - this, however, results in a disadvantage. Since European plants are not geared towards the usually smaller board size in the USA, In Europe a larger format has become established: Larger boards mean less waste. However, only a handful of US customers can process them. With one plant on site that also produces in small format, EGGER is to become a potential supplier to all American furniture manufacturers.

Nevertheless, EGGER is already a strong brand in the North American woodbased materials market today. This is due to shifting trends in American culture. "North American furniture and interior design is currently undergoing development," says Mario Bobsin, Plant Manager Sales at Lexington. In recent decades, heavy real woods, veneers and lacquered MDF have dominated the furniture and interior design market in the USA and Canada. But massive ranch furniture in cosy country style has had its day. American ideas of good design are converging with the European principles of clarity, lightness and functionality. The result: The homes of people in Chicago, Denver and Seattle are becoming ever more similar to those in Stockholm, Paris and Berlin.

At the same time, new products are offering an alternative to traditional, and often expensive, materials. As a result of the new trend, the faced chipboard gained in importance. Here, EGGER impressed with its innovative designs and products. For example with its Feelwood collection, in which the structures that run in sync with the decor image reproduce the visual, tactile and aesthetic qualities of wood in an outstanding way. And this with exactly those simple and casual designs



Visit from Argentina: María Haymes (Head of Trade Marketing), Matias Correa (Deputy Manager Innovation & Product), Francisco Estruga (Marketing Manager) in front of the EGGER headquarters in St. Johann.

that are currently in demand in North America. Feelwood is thus a genuine, cost-effective alternative to real wood and veneer. "Our innovation strategy has opened the door to the North American market," sums up Mario Bobsin.

Different cultures

However: The market entry was no walk in the park, says Bobsin, who has already accompanied the market development in several countries. Since the US furniture market is primarily focused on quick profits – the durability of products is of secondary importance. At first glance, the corporate philosophy of the Austrian company, for whom sustainability and quality are the key to long-term competitiveness, appeared not to fit at all. "This is where cultures clash," says Bobsin.

Currently, Asian companies are pushing into the US market with low-cost products, which is steadily losing

competitiveness. EGGER wants to start here with the new plant. "Our goal is to provide on-site solutions for qualityfocussed, efficient production that enable sustainable collaboration with our customers." The plant is scheduled for completion in 2020. The first apprenticeship scheme already began in Lexington in autumn 2018. Future employees are expected to be present right from the start, even during the construction of the machines. "We want our employees to identify with EGGER," explains Bobsin. Apprentices should grow into the company and build up profound technical knowledge. "Only in this way can we meet our demands for quality and efficiency in the long term."

E_NATURE

"Sustainability in business is more than sponsoring social or sporting activities."

Günther Bachmann, Secretary General of the German Council for Sustainable Development What is regenerating for the future (pages 42-45)

Sustainable living



LIVING IN COMPOST

https://kebony.com/de/projects/das-biologische-haus/

For this 145-square-metre house, the Danish architectural firm Een Til Een has been looking for residual materials from agriculture that could be used for construction. And they found some: Grass, tomato stems, straw, seaweed and waste wood. This waste is usually burnt. Instead, the architects have designed a modular upcycling construction out of it. Since it is on a pile foundation it can be easily unscrewed and taken away for the purposes of relocation. Electricity is produced by means of solar panels on the roof. It hardly gets any more sustainable than this.

FRESH FROM SIBERIA

www.anastasiyakoshcheeva.com/

Birches grow faster than most other trees. Their bark is water-repellent and also forms essential oils that can have an antibacterial effect. Three reasons that prompted Russian-born designer Anastasiya Koshcheeva to produce storage containers made of untreated birch bark. The lid and bottom are made of Siberian cedar wood. A selection of eco-friendly and decorative containers will be offered as prizes to our puzzle on page 52.





What is regenerating for the future

Climate protection and social commitment – all just PR?

Not true. Sustainably managed companies are more innovative and successful. At the same time, they are already looking after the world of tomorrow today.

AUTHOR Axel Novak

Today, sustainability is more topical than ever. But what does this mean for companies? Does sustainable economic activity mean lowering the temperature on the factory floor in order to save on heating costs? Sending out interns to detect energy waste? Is it enough to create a good working atmosphere to ensure the sense of wellbeing of employees? "Sustainability in business is more than sponsoring social or sporting activities," says Günther Bachmann, Secretary General

of the German Council for Sustainable Development. The Sustainability Council advises the German Federal Government on sustainability issues and supports projects for social change. Bachmann says: "Companies need to have an idea of how their business will evolve in the future, and how they take responsibility for their products and supply chain. This includes appropriate awareness among managers and the documentation of all activities." For Bachmann, sustainability is not an end in itself, but a necessity,





→ because resources are regenerating more slowly than we are consuming them. Climate change is driving species to extinction and ultimately threatens us all. Experts from the Intergovernmental Panel on Climate Change (IPCC) estimate that if we do not curb greenhouse gas emissions, we could experience towards green investments, which the London-based NGO "Carbon Disclosure Project" (CDP) assesses. The CDP collects data from companies on $\rm CO_2$ emissions. "Investors are keen to reduce risk by shifting their investments to a less $\rm CO_2$ -intensive infrastructure," says CDP chief Paul Simpson.



"Companies that want to survive need to develop their business model."

Günther Bachmann, Secretary General of the German Council for Sustainable Development.

an average temperature increase of more than four degrees Celsius. The consequences of such warming would be immense: Sea levels would rise by one metre, island states and low-lying coastal regions would be flooded, millions of people would have to flee from increasingly extreme weather. The consequences can already be seen: Last spring, an international research team reported in the specialist journal "Nature" that the Gulf Stream had slowed by 15 percent in the last 100 years. Climate change is already disturbing ocean currents and is further destabilising the entire ecosystem.

In order to avert the worst consequences, industry and economics would have to move away from oil and coal and switch to renewable energy sources. A daunting challenge for companies that need to reconcile sustainability and economic success. But more and more companies are taking on this task. "We are seeing more and more companies competing for the German Sustainability Award," says Bachmann, who presides over the jury. Every year, the prize rewards solutions to environmental and social challenges and is considered to be an indicator of the industry's commitment. "We currently reach more than 2,000 companies and the number of companies that are getting involved and want to learn continues to grow." Another indication of the heightened awareness is the trend

Sustainability also makes economic sense

Yet environmental awareness is just one aspect of sustainability; others include dealing with social issues and workers' rights. They are among the "non-financial issues" that EU companies have had to report about since 2017. Obliging them to do this is the EU Directive on Corporate Social Responsibility (CSR), which aims to increase the transparency of environmental and social aspects of EU companies. Companies must therefore be accountable for environmental, social and labour issues, respect for human rights and the fight against corruption and bribery. The regulation affects large stock corporations and publicinterest companies or those with more than 500 employees. Across the EU, some 6,000 companies have to submit a corresponding CSR report. Experts believe that as a consequence, more and more medium-sized companies will publish sustainability reports since research by reportable companies to describe their supply chains forces their suppliers to collect sustainability data, even if these companies are actually below reporting thresholds, like a type of chain reaction.

For example, back in the year 2000, the furnishing group IKEA introduced a code of conduct for suppliers. With it the company wants to ensure that not only the almost 150,000 people employed directly by IKEA are treated fairly, but also the approximately 600,000 employees of the partner companies. They must be able to eliminate child labour and forced labour and pay minimum wages. In addition, they must guarantee freedom from discrimination and association. If companies do not meet these requirements, their contracts expire.

Dealing with sustainability issues also brings economic benefits. For example the principle of cascade use, according to which EGGER organises its production processes, shows to what extent environmental and business goals can intertwine. From the production of solid wood in the sawmill to the production of wood-based materials, the raw material wood is fully utilised here. Only when material use is no longer possible will the residual wood and biogenic substances be used to generate electricity and heat through combustion. Up to this point, carbon is retained within the products – 825 kilograms of CO₂ in one cubic metre of spruce wood. Cascade use protects both the climate and the environment and makes economic sense since the raw material wood is used as efficiently as possible.

Motivation and innovation through long-term strategies

"Companies should act with sustainability in mind today if they still want to be in the market in ten years," says Bachmann. "Those who want to survive must develop their business model." As a whole, current efforts would not be enough to achieve the climate policy goals. "Sustainability means that we all pull together as one: Companies, politicians and civil society." This includes clear legal and political framework conditions, but also commitment and, on the part of companies, a strategy that goes beyond the scope of annual financial statements, says Bachmann. "Companies that operate sustainably have a huge impact: internally by increasing the motivation of employees, and outwardly by means of a true innovation boost."

SUSTAINABILITY REPORT 2017/18



OBJECTIVE AND COMPARABLE

The environmental and social issues of particular relevance to EGGER were compiled for the first time in a sustainability report in summer 2018. On the one hand, in order to identify the main content, the interests of stakeholders were determined and, on the other hand, the effects of the EGGER core business on the environment and society were analysed.

ECOLOGY

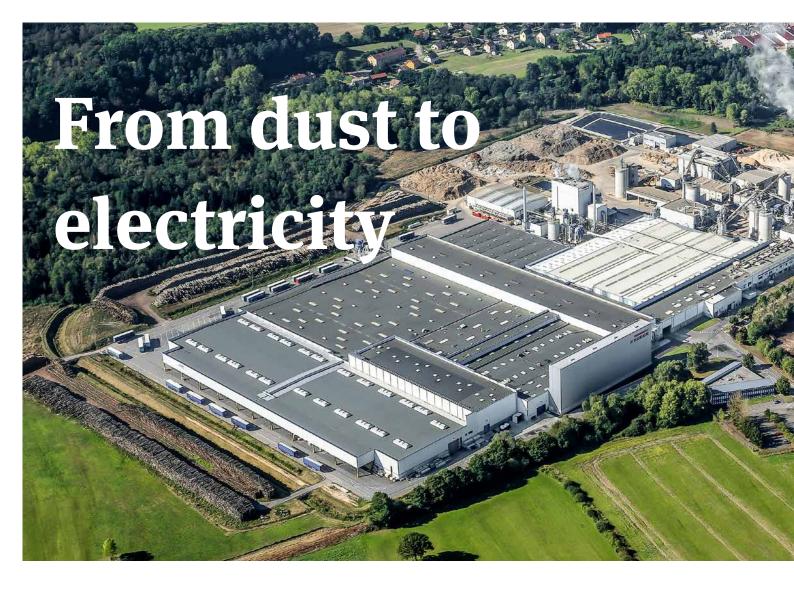
In the field of ecology, the longevity and recyclability of products is a priority. Other important issues include energy efficiency, renewable energies in production and the use of wood from sustainable sources. The efforts of the EGGER Group in this regard are already well documented. In terms of chipboard, EGGER demonstrates a very good certification share of more than 70 percent according to the sustainability report. The goal is now to achieve the same high level in the case of MDF boards.

SOCIAL ISSUES

Key social issues include:
Occupational safety, health
protection at work, advanced
training, equal opportunities
and diversity as well as working
conditions in the supply chain.
Furthermore, focus is placed on
employee satisfaction. As shown
in a representative survey, this is
comparatively high at EGGER at
over 80 percent.

SUSTAINABILITY IN THE MISSION STATEMENT

"The sustainable use of raw materials is anchored in the EGGER mission statement." says Moritz Bühner, Product Sustainability Manager. Previous achievements show that EGGER takes this challenge seriously. "The report also points to new areas into which our service can be expanded," says Bühner. "The result is a clear mandate to increase the intersection between economic efficiency and sustainability over the next few years, to identify and systematically overcome conflicting goals."



Sustainability has a long tradition at the EGGER plant in Rambervillers.

Now the new biomass boiler has been expanded with the addition of a steam turbine – and the plant has become a model for exemplary energy management.

AUTHOR Jan Ahrenberg

1st January 1993: The European single market enters into force. A couple of days later Bill Clinton enters office as the 42nd President of the United States, and in the little French commune of Rambervillers in the Vosges a smallscale revolution is underway: The local chipboard plant sets in motion a cycle that utilises even the smallest wood residues and thus handles the raw materials at maximum efficiency. A biomass boiler has been installed for this purpose that uses waste from production to generate energy for the operation of the presses and the raw particleboard dryers. This was in actual fact a mini revolution back then,

because the idea of sustainability, which is so familiar to us today, led a shadowy existence in the 90s. The approach only became fashionable in the early 2000s: Since then, universities have been researching sustainable production methods and banks have been developing sustainable funds. Back in 1993, the foundations for sustainable energy management were laid in Rambervillers with which the plant continues to play a pioneering role within the EGGER Group.

As a result, energy management was steadily expanded. "In the mid-2010s, the idea emerged to expand the

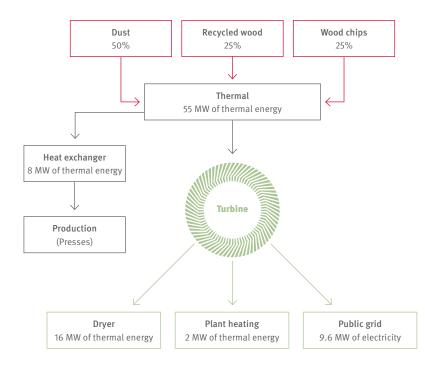
cycle by means of a steam turbine to generate electricity," explains Pascal Labourdique, Head of Energy and Environmental Management at the site. "We saw the opportunity to thermally reuse larger parts of the waste products – and thus to produce a surplus of energy."

Sometimes a new investment is the more economical solution

The capacity of the original biomass boiler was no longer sufficient to recover all of the wood residues left over from the production process. After all, the plant had grown steadily since its



Energy cycle in the Rambervillers plant



The plant in Rambervillers has one of the eight biomass power plants of the EGGER Group (see page 48 following).

takeover by the EGGER Group in 2000. At its opening in 1974 it covered just over 14 hectares in total area, now this figure has risen to 87 hectares. Investment amounting to 100 million euros was made during this time. The old boiler was reaching its limits.

As the idea of a steam turbine began to take shape, it quickly became clear that replacing the whole boiler would be worthwhile. Although the old boiler could have been retrofitted to use a modern steam turbine, this would have amounted to around 80 percent of the cost of purchasing a new boiler. The new boiler also provides additional benefits. Instead of a maximum pressure of 45 bar, 80 bar and 55 megawatts of thermal energy have now been achieved. "The EGGER Group quickly decided to go the whole hog," recalls Anne Hoeft, environmental technician at Rambervillers.

Every speck of dust is recovered – and at the end energy is left over

The 55 megawatts of thermal energy supplied by the new biomass boiler is to a large extent converted into electricity by the turbine. However, eight megawatts of thermal energy flow directly into a heat exchanger for the four short-cycle presses and the plant's ContiRoll press. The thermal energy left over from the power generation is also used: 16 megawatts go to the raw particleboard dryers, while a further two megawatts of thermal energy operate the plant's heating systems. In this way, the original idea of using the residues arising during production for key production steps is preserved. In addition to this, now no dust particles whatsoever remain unused. "In total, we are generating around 9.6 megawatts of electricity for the public grid," says Anne Hoeft. The fact that the plant does not

use the electricity itself but feeds it into the grid is the result of French guidelines for the production of green electricity. These guidelines also stipulate a feedin of biomass boilers from different sources. Dust makes up around 50 percent. Wood chips and recycled wood supply a further 25 percent each.

The retrofitting procedure has made it possible, in the production of chipboard on an industrial scale, to even have energy left over for the general public. "With the investment of 34 million euros on the boiler and turbine we have added the finishing touches to our energy management at the site," says Project Manager Pascal Labourdique. And with this, the plant is once again ahead of the times.

Environmental performance at a glance

EGGER constantly focuses on the environmental impact of its production processes. The map shows a number of flagship projects in environmental and energy management.



In 1991 EGGER integrated the first biomass power plant in Brilon. The site was subsequently equipped with a second heating network, which makes the waste heat of individual processes usable elsewhere. Particularly efficient drainage in the MDF plant saves energy when drying the fibres.



Hexham (UK)

The reed purification pond cleans up to 2,100 m³ of waste water per day, in addition to providing a habitat for plants and animals. The biomass power plant replaces fossil with biogenic fuels.





The biomass power plant with a capacity of 50 megawatts converts 60,000 tons of production residues into energy annually. This reduces the plant's natural gas requirement by 75 percent.



The new biomass boiler utilises even the smallest production residues. These provide energy for production and the public power grid.

Wismar (Germany)



The integrated IT control of the biomass boiler optimises the combustion process and helps to reduce emissions.

Gagarin (Russia)



With the new MDF plant, a biomass boiler was also installed to supply the production with heat and process steam. It has been in operation since 2016. Consequently, bark and wood dusts arising in the process can be appropriately used for the energy supply.

14 15



17

Rădăuti (Romania)



The modular administration building consists exclusively of our own wood-based materials and received the DGNB certificate (German Sustainable Building Council) in gold and platinum. Rădăuti also has its own biomass power plant, which uses wood residues thermally.

St. Johann (Austria)



Biogenic fuels that cannot be used in products are transformed into heat and environmentally-friendly electricity in the biomass power plant. The waste heat from the wood dryer enters a district heating network that supplies 1,500 households with climate-friendly heating energy.

Unterradlberg (Austria)



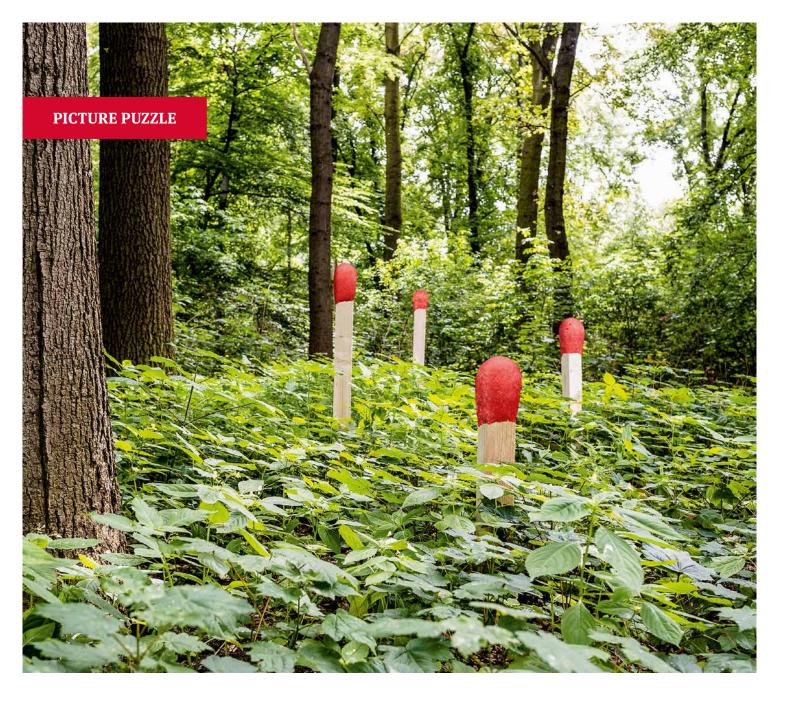
In 2014, the gas-powered forklifts were replaced by electric forklifts, whose number is steadily increasing. The electricity they require is covered by our own biomass power plant – one of the largest in Austria.

All production sites

- 1 St. Johann in Tirol (AT)
- 2 Wörgl (AT)
- 3 Unterradiberg (AT)
- 4 Brilon (DE)
- 5 Bevern (DE)
- 6 Gifhorn (DE)
- 7 Bünde (DE)
- 8 Marienmünster (DE)
- 9 Wismar (DE)
- 10 Hexham (UK)
- 11 Barony (UK)
- 12 Rambervillers (FR) 13 Rion-des-Landes (FR)
- 14 Shuya (RU)
- 15 Gagarin (RU)
- 16 Rădăuți (RO)
- 17 Gebze (TR)
- 3 Concordia (AR)

In planning/under construction

- 19 Biskupiec (PL)
- 20 Lexington, NC (US)



Who is hiding in the forest?

When our treehugger stepped out of the door of his pharmacy in Stockton-on-Tees, it did not go unnoticed since nobody walked around in knee breeches, a tailcoat, beaver hat and white tie even in the north-east of England in the early 19th century. The local people referred to the odd fellow as "Stockton's encyclopedia", because his knowledge seemed inexhaustible. This was especially true for the fields of botany, mineralogy and chemistry. He devoted his spare time to experiments. How exactly he discovered that an antimony (III) sulphidepotassium chlorate mixture combined with starch and rubber ignites when rubbed on a rough surface is not known. The name he gave his invention was: "Congreves". He never attempted to apply for a patent. He ultimately took these things to be pointless gimmicks.

What is the name of the eccentric inventor?

Write to MORE@egger.com with the name of the inventor. One lucky winner who submits the correct answer will receive a set of environmentally-friendly food containers from the "Tuesa" product range (page 41). The deadline is 31 January 2019. The decision of the judges is final.

In the MORE 10 picture puzzle the armour represented Odysseus, the great hero of Greek mythology. Thank you for your answers. Sigi Scholz from Olching (DE) won the portable Bluetooth audio system "Get Together Mini" made of wood.

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