



SPOTLIGHTING THE FUTURE

It's not enough to be successful for the time being. Entrepreneurs who wish to maintain their edge on the market need to be well ahead of their time and shine a light on the future. This is no easy task. Eight farsighted thinkers—including a tractor manufacturer, a menswear maker, and a muesli mixer—give Porsche Consulting magazine a glimpse of how they develop their promising ideas for the future.

nimbus group

“YOU DON'T HAVE TO BE A GENIUS TO PRODUCE CREATIVE SOLUTIONS”

DIETRICH BRENNENSTUHL, NIMBUS

For Dietrich Brennenstuhl, a designer and manufacturer of elegant LED lights, innovations are the product of systematic work—also and especially in the creative sector. “Design is not a pure process of creation. It's more a matter of adapting form to technical possibilities and guidelines.” His Nimbus company, headquartered in Stuttgart, specializes in serving customers who require individual lighting solutions above and beyond the extensive range of standard products.

Because tiny LEDs can have ever greater light output these days, the design of the LED body has to be constantly adapted to the fittings in order to ensure good thermal management and eliminate glare. In 2006, for example, Brennenstuhl faced the task of illuminating the Classicist-

style trading floor in Hamburg's Chamber of Commerce as subtly as possible with 160,000 LEDs. The solutions are as individual as the clients' needs. They range from absolutely inconspicuous to extravagantly artistic sources of light.

“You don't have to be a genius to produce creative solutions,” says Brennenstuhl, an architect who switched early on from making buildings to designing and producing lights. “It's not the case that we start with a great idea and then work out how to do it. The good ideas often only come after my team and I have examined a problem intensively.” A thorough exchange of specialized knowledge with customers, architects, staff, and sales partners is an extremely important part of this process. “Innovations aren't worked out in solitude, but rather through dialogue,” says Brennenstuhl.



OFFICE 2034: WHEN THE ELEVATOR TALKS TO THE A/C

BENOÎT BROSSOIT, UTC

As the employee enters the building, the access card reader communicates with the elevator, sending it to the employee's exact location. The elevator takes the employee to the 14th floor, where, at 9 a.m., the temperature is automatically adjusted to make the space more comfortable, and therefore, productive. That's what the office of the future could look like—and not just in 20 years.

Engineering advances today are creating the intelligent building of tomorrow, as Benoît Brossoit sees it. Brossoit is Vice President of Operations at United Technologies, a multinational conglomerate headquartered in Hartford, Connecticut. "The building of the future understands the needs of its occupants, and adjusts its systems accordingly to ensure comfort, mobility, safety, and security," explains Brossoit. UTC manufactures a wide range of high-technology products for the aerospace and commercial building industries worldwide.

The trend in commercial buildings is mirrored by the aircraft side of UTC's operations, says Brossoit. "In the future, engine, landing gear and electronic systems will be fully integrated." Another big change in the industry will be the Fly-by-Wire (FBW) system that replaces the conventional manual flight controls of an aircraft with an electronic interface. According to Brossoit, FBW will provide "a huge opportunity for weight savings, boosting fuel savings, and overall efficiency of an aircraft."

At UTC, inspirations for innovation come from outside as well as inside the company, says Brossoit. UTC closely follows where its customers—from aircraft OEMs to building contractors—are going, but also studies socioeconomic megatrends, like aircraft passenger load and the global population movement from the countryside to larger cities as the middle class grows. Internally, UTC pushes its employees to constantly look for benchmarking ideas to learn from the best of the best. The UTC ACE (Achieving Competitive Excellence) operating system continuously improves the work environment. "And that can lead to product innovation," says Brossoit.



WHEN THE FARM TURNS INTO A COMMAND CENTER

MARTIN RICHENHAGEN, AGCO

Martin Richenhagen has a clear vision of what farming will be like in the future: "It's going to be intelligent, integrated, and completely computer-controlled," he says. Since 2004 Richenhagen, who first taught religion at a secondary school in Cologne, Germany, has been CEO of the AGCO Corporation. AGCO, which is headquartered in Duluth, Georgia, is the third-largest manufacturer of agricultural machinery in the world, with renowned brands such as Fendt, Massey Ferguson, Challenger, and Valtra. The company had revenue of 10.8 billion dollars in 2013.

"The tractor of the future will be lightweight, high-powered, with little load pressure on the ground, and low fuel consumption," he explains. "It will be networked with the combine and forage harvesters. It won't have a driver, and you'll control it from the farmhouse." Innovation means staying a step ahead of the market. His company could be building the unmanned tractor right now, says the company chairman. "But it will probably take a few years until the market is ready for it."

Looking into the future means "looking outside the box of your own company, your own industry, and your own culture," says Richenhagen. "In the technology sector, for example, we are keeping a very close eye on developments in the automotive and commercial vehicle industries." The greatest challenge of the next few years? "I don't see any unsolvable problems," he says. But the agricultural machinery industry will have to get used to two opposing trends: "On the one hand we have regions where farming is becoming ever more professional, namely, North America, South America, and Europe. At the same time, however, we have to offer solutions to developing countries—in Africa, for example, where farming still uses traditional practices."



“OUR CUSTOMERS GENERATE INNOVATIONS THEMSELVES”

MAX WITTRÖCK, MYMUESLI

Oats are a rather dry affair. But together with two fellow students, Max Wittrock made a beeline for breakfast cereals, berries, and similar items in order to market them in an innovative way. “We got the idea one day while driving to a lake for a swim. We heard a commercial on the radio for muesli, which made us think we could do that better.” So they promptly founded Mymuesli in 2007, which allows online customers to put together their own personal variant of muesli—choosing from different base mixes, flakes, seeds, dried fruits, etc. With a range of more than 80 ingredients, around 566 quadrillion combinations are possible.

Success was not long in coming. In 2013 Mymuesli won a Deutscher Gründerpreis (German Founders’ Award), which first and foremost honors young entrepreneurs with especially clever business ideas. Today the Passau-based muesli company has more than three hundred employees, who not only run the online business but also supply the company’s own local stores as well as other retail outlets with pre-mixed muesli products. The mixes on offer can change in accordance with customer preferences. As Wittrock explains, “We give complete liberty to our customers, and they themselves are constantly creating new products.”

Maximum customer participation has transformed what used to be a boring breakfast item into an individualized lifestyle product. “We are very close to our customers and can respond directly to their wishes,” says Wittrock. Using feedback from the online portal, Mymuesli’s product range is constantly being adapted and expanded, for example with new ingredients. These young entrepreneurs will not be running out of ideas any time soon.

OLYMP

SHIRTS: MARK BEZNER SENDS SCOUTS AROUND THE WORLD

MARK BEZNER, OLYMP

For Mark Bezner, the owner and managing director of the Olymp menswear company, design innovations are part of everyday business. “Every year we not only develop and produce four completely new collections with several hundred articles each, but also make ten deliveries to retail outlets and our own shops. That’s in addition to the assortments immediately available from our stock range.”

The designers at this company in the southern German town of Bietigheim-Bissingen are more than a year ahead of time—or of fashion, to be precise. In the summer of 2014 they are already producing designs for the autumn of 2015. But how do you meet customer tastes that far in advance? “We work together with trend offices and specialized informa-



tion services that have scouts throughout the world, and we keep in close contact with our suppliers for threads, materials, and fittings.”

Designers and product managers rely on this information to discern the trends of the near future. It's not a matter of which ideas are the most innovative. As Bezner explains, “Instead the question is how far we can go, or what innovations will be well received by our customers. You can only answer that type of thing

if you have a lot of experience and know the needs of your target group.”

According to Bezner, every bit as much innovative capacity is required in sales and logistics. “For decades, clothing manufacturers simply sold their collections via retail stores. Now, however, you need multi-channel strategies that include your own shops and online sales. Demands here change as quickly as they do in fashion itself. As a leading maker on the

market, we have to detect these trends and quickly adjust our business model accordingly. Our sales structures are designed to enable different distribution channels to mutually benefit each other.”

That is clearly working very well for Olymp. Over the past seven years the company has more than doubled its sales—to more than 200 million euros, and that in a declining market.

BOMBARDIER

A TRAIN DOOR THAT CHECKS FOR TICKETS AND SECURITY

RAYMOND BACHANT, BOMBARDIER TRANSPORTATION

Speed—that's what defines the future of the passenger railway industry. And Raymond Bachant is not just talking about the horsepower of locomotives, monorails, commuter, and high-speed trains. The President of the Americas Division at Bombardier Transportation is also thinking about connectivity, and the flow of information. “Ideas will be moving in almost real time—very, very rapidly, that is,” he says.

Montreal, Quebec-based Bombardier has an aerospace and a transportation division. Bombardier Transportation develops and manufactures railroad engines and various types of passenger trains. “The passenger train of tomorrow is very energy efficient,” says Bachant. “We will be able to increase reuse power generated from the brakes. Also, the types of materials that we use to build trains will be even more lightweight and recyclable 20 years from now, just as they will be in the airline industry.”

As mobility continues to increase around the world, Bombardier Transportation always pushes to be ahead of the curve. Besides monitoring developments in the field of aerospace, Bachant says the company is looking at how the automotive industry gears up for the near- and medium-term future. “We evaluate elements of safety, as well as elements of communication”—like car-to-car communication that will help avoid crashes and adjust speed and direction. Or augmented reality dashboards that display information about external objects.

Convenience and safety are key components of the future railway experience. “The passenger screen doors, for example, will be equipped to check a ticket, but also to perform a thorough security



scan.” All trains will have high-speed Internet connectivity—anytime and anywhere in the rail network. In addition, Bombardier has a close eye on the IT industry, Bachant says. “Because signaling is of utmost importance to the rail industry, and it will be even more complex and connected in the years ahead.”

Bombardier Transportation considers the global trend toward living in major urban areas as a true opportunity, especially in emerging countries. In Latin America, for example, more and more people are moving into, or close to the cities. “In places like Mexico City or São Paulo, people simply can't afford to spend two hours or more to get to work,” says Bachant.

“Therefore, the trend calls for fast, efficient, and reliable means of public transportation.” The benefits are obvious: less time spent in traffic jams, more time to work and connect while on the train, and the prospect of arriving rested and ready for the day.



ENHANCING QUALITY OF LIFE WITH A CLICK OF THE MOUSE

DR. HAMID SHAFIE, **AMERICAN INSTITUTE OF IMPLANT DENTISTRY (AIID)**

Some in the medical arena may consider this bad news: the days when the doctor—and the doctor alone—called the shots are coming to an end. Dr. Hamid Shafie thinks that's a good thing, though. "The status quo will go away; old hierarchies will be replaced by an integrated platform approach."

Originally from Iran, Shafie is a prosthodontist and President of the American Institute of Implant Dentistry in Washington, D.C., a bestselling author of two textbooks, an international keynote speaker, and an entrepreneur.

The dental practice of the future "will be much more automated, connected, and digital technology-driven," says Shafie. Creating an implant-supported prosthesis could be as easy as this: an intraoral or tabletop scanner enables the clinician to create a virtual model of the patient's mouth, as well as the implant itself. Using a design software, a virtual prosthesis will be developed on the computer screen. "With a click of the mouse, the design will be sent to a desktop milling machine, and two hours later, the clinician can deliver the prosthesis." An implant treatment, which in the past used to take six months, will take no more than a day.

Shafie strives to be on the cutting edge of innovation. Besides partnering with Porsche Consulting to bring lean methodology to implant dentistry, he's working with the Ritz Carlton Leadership Center, a subsidiary of the five-star hotel management company, in order to bring their successful hospitality methodology to implant practices, which work with high-end customers. "I'm trying to teach clinicians and their staff the same approach, so that when they present a \$30,000 or \$50,000 treatment plan to their patients, they don't get rejected," he says.

Shafie is convinced that innovation also has to come from within—a team, a company, or an organization. "My personal philosophy is that I always try to hire people who are smarter than me, who push the limits, and therefore push for new ideas." The last thing he says he wants is to be surrounded by yes-sayers. "They don't have the guts to challenge me and the team."





AT 40,000 FEET, THE BOARDING PASS WILL SERVE AS A WISH LIST

GIL WEST, **DELTA**

Half of his mind flies in the skies of the future; the other half stands firmly on the tarmac of today. That's how Gil West, Executive Vice President and Chief Operating Officer at Delta Air Lines, handles the balancing act of his industry. Atlanta, Georgia-based Delta is the world's second-largest passenger airline, serving 333 destinations in 64 countries on six continents.

West expects technology to be the biggest game changer in the next 20 years. "If you look at the aircraft of the future, it will have better performance, better efficiency, better economics—and all will be led by engine technologies as well as avionics," he says. While the aircraft market is currently dominated by a duopoly of manufacturers—Boeing and Airbus—"it will be interesting to see if there's not at least a third manufacturer coming out of China."

West, who has worked in the airline industry for three decades, expects another major development in the area of customer interface, especially for the frequent-flyer, high-end customer. "Today, an airline employee doesn't really know a lot about the customer," he says. Similar to Google Glasses, the boarding pass of the future could have an RFID chip embedded, with electronically stored information about the customer, his flight history, his meal and seat preferences, and how important the customer is to the airline. "Then we can customize the experience accordingly."

Delta looks at other industries for trends and ideas, including automotive companies, software development, and tech companies. "Apple Stores are a great example," says West. With their mix of showroom displays, individualized technical support, and overall aesthetic and practical appeal, "those types of experiences tend to be on the leading edge of customer care."

Delta considers open and creative debates key to its corporate culture. Each department holds meetings on a regular basis in order to brainstorm and discuss new ideas. Employees are encouraged to submit suggestions to the executive team. "However, we're also very pragmatic about innovations, because at the end of the day, they need to have an impact on our business," says West.