

STAR COOPERATION®

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Your Partners in Excellence

TREADING NEW



PATHS

TOGETHER

*Only those  
who tread new*  
**PATHS**  
*will stay ahead.*

WE TREAD NEW PATHS WITH YOU.

YOUR PARTNERS IN EXCELLENCE

TREADING NEW PATHS TOGETHER

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# STAR COOPERATION®

Your Partners in Excellence



## Dear readers,

**The paths we choose in life define both our professional and private lives. Some of them are familiar and some lead to uncharted territory. Some paths are long and winding, while others end abruptly. Some paths go in a straight line, others offer shortcuts. Whichever path you are on in life, your journey will go more smoothly with the right partner at your side.**

Here at STAR, we are fortunate that we have always found the right partner for everything we have encountered on our path. Many have accompanied us on our journey over the past twelve months. This annual report retraces the steps we have taken in the past year. Some of our partners have been at our side for many years now and they recount their experiences working with STAR on successful projects.

Some of STAR's most dedicated fellow travellers are our employees. As in previous years, they are the reason we were able to forge ahead on the STAR path with great success in 2016. As such, we would like to take this opportunity to thank them. We also wish to extend our gratitude to customers and partners, both old and new. We are looking forward to the exciting new journeys that we will take together in 2017.

We hope you enjoy reading our 2016 annual report.

Kind regards,  
Prof. Dr. Alfred Neher and Sofia Neher



## SOLUTIONS

### Media & Logistics



- Media Conception & Creation
- Sales Apps
- Marketing Consulting
- Explanatory Video
- Logistics Consulting
- Media Logistics
- Production Delivery JIS

### Consulting & Digitization



- Connected Mobility
- E-Commerce & Logistics
- Virtual Engineering
- Digital Business Models
- Healthcare & Life Sciences
- Digital Marketing & Sales

### Industry & Technology



- Spare Part Technology
- Remanufacturing
- Repair Technology
- Damaged Part Analysis
- Virtual Engineering
- Diagnostic Systems
- Technology Support

## PORTFOLIO

[star-cooperation.com/en](http://star-cooperation.com/en)


### Sales




- Market Insight
- Customer Journey
- Online Marketing & E-Commerce
- Pricing
- Marketing Business Consulting
- Innovative Media
- Marketing Automation
- Logistics & Marketing Process Outsourcing
- Business Intelligence & Big Data

### After Sales



- Service Marketing
- Sales & Point of Sale
- Spare Part Management
- Strategic Development
- Business Models
- Digitization & Customer Relationships
- Integrated Services

### Automotive Electronics



- Cable Assembly
- Vehicle Modification
- Testing Systems
- Contract Development
- Electronic Manufacturing Services
- Engineering Services
- Hardware and Software for:
- Measurement, Simulation and Control Technology
- Energy Supply & Management





## New paths, OLD FACES

IT IS ALREADY WELL PAST MIDNIGHT. IN THE COURTYARD OF THE STEINMANN HEADQUARTERS, THE BOUNCY CASTLE HAS LONG SINCE BEEN ABANDONED, THE BAND HAS PACKED AWAY ITS INSTRUMENTS AND THE CATERING TEAM IS GATHERING THE REMAINING PLATES AND GLASSES.

JUST A FEW TABLES ARE STILL OCCUPIED. AMID CANDLELIGHT AND RED WINE, FRANK STEINMANN SITS WITH THE LAST OF THE GUESTS AT HIS COMPANY PARTY. MARKUS RICHTER FROM STAR COOPERATION IS ALSO STILL THERE, THOUGH HE MADE THE SWITCH TO WATER SOME TIME AGO. HE STILL HAS TO DRIVE HOME.

"Frank, this has been a really great party," says the man sitting opposite with an approving nod. Martin Staudinger has been close friends with Frank Steinmann since his childhood. Just like Frank, he took over the family business a few years ago. The Staudinger button factory, however, faces challenges of a rather different nature to Frank Steinmann's technology company. "Companies in Asia are really putting the screws to us; we can't keep pace with their production costs here. But that means lower quality in turn," says Martin Staudinger earnestly. "Not to mention the retailers. They squeeze the prices to the point where it just doesn't work." "Can't you simply avoid the retailers? Nowadays, you can sell pretty much anything online," suggests Frank Steinmann. "You can," replies his friend, "but it is not that easy to put into practice."

At another table, an animated talk about electromobility is underway. "Of course," says Carsten Baumann, whose car dealership is adjacent to the grounds of the Steinmann company, "electric vehicles are on their way up, not least when you think that they are now being subsidized." "For us as a city, it would be a major boon to our image if we

could completely convert the city's fleet," counters Mayor Christian Schneider. "The question is whether it would be economical." "That is something that would have to be examined. The cars themselves are of the least concern; the options will multiply in the years to come. The problem is the infrastructure. You have to have charging stations at the city nursery, city hall, the depot and so on. And the batteries should be quick to charge." Christian Schneider furrows his brow: "That concerns me, too. And by the time one of our officers has really sunk his teeth into the subject, months or even years will have passed."

Meanwhile, Frank Steinmann has turned to the man next to him. Boris Brunner runs a construction company and is talking about his latest project. "Six floors, all office and commercial space that can be outfitted completely as required, whether it is for an IT company or for tradespeople. We'll do whatever it takes to make sure it works out." "Sounds exciting," replies Frank Steinmann. "Do you already have the plans?" "Of course, but it is difficult to get a good idea of it on paper or in 2D on a computer. Privately, I dream of being able to experience it all in virtual reality with 3D glasses long before ground is even broken on the project." "And what keeps you from doing just that?" "In our industry, it is still a pipe dream – and really just a game. Later on though, when the building is up, it would certainly be useful to be able to view the piping and wiring networks in 3D. It would keep the craftspeople from having to drill too many holes. They would know right away where things are."

**ALL THE WHILE, MARKUS RICHTER JUST SAT AND LISTENED – AND MADE A LOT OF MENTAL NOTES.**



CREATING NEW

## perspectives

TOGETHER

MARTIN STAUDINGER IS STANDING IN THE MIDDLE OF HIS BUTTON FACTORY. HE STUDIES A LIST AND THEN PEERS INTO THE BASKET IN HIS HAND.

“Ah, the mother-of-pearl buttons,” he says before heading off toward the other end of the production room, where an employee sits polishing a lilac-coloured button to a high sheen. “Ms. Yüksel, you were planning to work on the blue stars today as well. Where are they?” he asks the polisher. “I’ve already taken them to the warehouse, Mr. Staudinger,” she replies.

Martin Staudinger wanted to personally take care of the very first order to arrive via his brand-new online shop. Thirty minutes beforehand, he had been sitting excitedly in his office, watching the Staudinger button factory go online together with his project manager Sofie Bloch from STAR COOPERATION. They had announced the launch in advance via Facebook, their website and various needlework magazines. The measures paid off: the first order was surprisingly quick to arrive.

Martin Staudinger had developed his online shop concept over the past few months with assistance from STAR. Incidentally, the initial contact with STAR had come about by chance. At his friend Frank Steinmann’s party a few months back, he had met Markus Richter. While looking into the options available for online shops a little while later, he again encountered the name STAR. He dug out the business card he had pocketed at the party and made the call.

After that, everything went rather quickly. At their first meeting, Markus Richter brought along Sofie Bloch, who works as an expert in online marketing for STAR. Two weeks later he attended a day-long workshop at STAR’s headquarters in Böblingen. That was the first time he properly understood just how much goes into setting up an online shop. He learned, for example,

that a simple text description is not enough if he wants to sell his buttons to end customers. High-quality photos are required so that sewing enthusiasts can see exactly how the buttons look. This is why a professional photographer took pictures of all the buttons. Every single one. In every shape. In every material. In every colour.

At this point, the basic structure of the Staudinger online shop was already in place. Together, they had chosen the right system and determined which features the shop should offer. The STAR developers worked on the project at full steam to ensure a timely launch. The photos were integrated and suitable descriptive texts were written for each product and added to the site. STAR held a training course to enable the Staudinger team to operate the system and manage the content themselves. Finally, the entire shop and all of its features were put through their paces and optimized for the key search engines.

Meanwhile in the warehouse, Martin Staudinger has found the blue mother-of-pearl stars and added ten to his basket. On the packing table, all of the ordered buttons are placed into a prepared shipping parcel – carefully sorted into a plastic pipe for each type of button. On top of the environmentally-friendly packing material, he places a small flyer with the quality promise of the Staudinger Button Factory, and then closes the top. His wife Ina, who handles accounting for the family company, joins him at his side:

**“THIS IS THE RIGHT STEP, MARTIN. NOW WE WILL FINALLY HAVE DIRECT CONTACT WITH THE MARKET AND DON’T JUST DEPEND ON OTHERS.”**





## EVERYTHING A TRUCKER'S HEART DESIRES

THE PRACTICES OF THE WORLD'S CAR MANUFACTURERS HAVE FILTERED DOWN TO THE WORLD OF COMMERCIAL VEHICLES AS WELL: HIGH-QUALITY PRODUCTS AND GOOD SERVICE TURNS BUYERS INTO LOYAL CUSTOMERS, AND MERCHANDISE AND CLUBS TURN CUSTOMERS INTO FANS.

This is why our customer, a manufacturer in the commercial vehicle sector, has been operating an online shop for its branded articles for years. From clothes to scale models, toys and accessories, truck and bus fans can find all the gear to get their engines running. The year 2016 was a new start for the shop. The company was looking for a new partner for the project. Ultimately, STAR won the job through a combination of e-commerce experience, logistics expertise and compelling and innovative solutions. The project team, which consisted of just under ten people, worked feverishly until the end of the year to build the **new online shop** and the underlying system landscape, train staff in the new processes and

move and reorganize the consignment warehouse required for the project. The new online shop was relaunched in late 2016. We will continue to manage and develop it in the future. In a parallel move, our customer also entrusted our STAR logistics experts with the smooth handling of orders, including **warehouse and inventory management**, shipping and customs handling, returns and complaint processing. Finally, we provide services to online shop customers via a multilingual service hotline – so that they become and stay fans.



## Designer pieces SHOWN IN THE RIGHT LIGHT

IN FURNITURE SHOWROOMS, EVERYTHING ALWAYS LOOKS SO BEAUTIFUL, SO PERFECTLY COORDINATED. THE FURNITURE AND ACCESSORY ARRANGEMENTS LOOK AUSTERE/CLEAN OR RUSTIC/COSY, DEPENDING ON THE DESIRED TASTE. **BUT WHO ACTUALLY MAKES SURE THAT EVERYTHING IS IN THE RIGHT PLACE?**

For example: STAR. With our new client from Switzerland, we took our first steps this year into a product group that is rather unusual for the STAR portfolio: designer furniture and home accessories. Furniture aficionados can admire the client's tables, chairs and sofas in numerous furniture stores throughout the world as well as in its own showrooms. To ensure that its high-quality lamps, stools, wardrobes and kitchen utensils of the Autumn/Winter Collection would be presented in style everywhere from

Australia to Iceland, the customer opted for STAR to supply the respective promotion kits. In a three-months pilot project, five STAR experts handled the production of the kits (consisting of differently coloured panels, foils and graphic prints), shipping to the various country branches and associated accounting issues. In the process, we impressed the customer not only with our dedication to quality and experience in **media production and logistics projects**, but also with our ability to adapt quickly and flexibly to new products, industries and processes. As we have received nothing but positive feedback from the customer to date, we are looking forward to the new collection in spring.



## THE LONG PATH TO EFFICIENT MARKETING COMMUNICATIONS

AT SOME POINT IN THEIR EFFORTS TO EXPAND, COMPANIES PUT THEIR MARKETING ACTIVITIES UNDER THE MICROSCOPE. HOW CAN COMPANIES MAKE THEIR **MARKETING COMMUNICATIONS** FASTER, MORE TARGETED AND INTERNATIONAL USING SOFTWARE?

The answer to this question is highly individual and depends on a variety of different factors – and the publishing experts from STAR are well-versed in finding the right solution for any given constellation. One example is our customer from the ventilation and air-conditioning systems industry. In early summer, we began jointly acquainting ourselves with the issue and assessing the current state of the company's marketing communications. The visions of where the journey should be heading in the long term – which in some cases are highly divergent – were then discussed and boiled down to a common denominator. In the past, the marketing, IT and executive management departments had not always been on the same page. With a clear objective in place, the STARS developed a **concept** that defined the tools and measures with which the objective would be pursued. The advantage for our customer: for starters, the company now has a precise plan about which organizational and infrastructure needs have to be addressed internally within the next five years in order to fulfil its desire to become more international in its marketing communications. The customer now also knows which software tools it can use to achieve its efficiency objectives two to three years ahead of schedule.



## FINANCIAL MARKETING MADE EASY

THE SERVICE PROVIDER LANDSCAPE IN MARKETING COMMUNICATIONS IS BROAD, AND COMPETITION FOR CUSTOMER BUDGETS AND JOBS IS FIERCE. HOWEVER, IF YOU CONSISTENTLY DELIVER GOOD WORK, CUSTOMERS REMEMBER YOUR NAME.

Last year, the financial arm of a automotive manufacturer was looking to make some changes. In concrete terms, it wanted to find a more efficient process for creating the print media and point-of-sale materials for the marketing of its financial products. As such, the client was looking for a new partner with an understanding of **media production** and the ability to take a structured approach to achieve the objective. It also asked its parent company for recommendations. Because the parent company had already had a number of good experiences with the publishing experts from STAR, we were able to present our vision of how the process would look in the future to the decision-makers – as well as how STAR could contribute to the goal. In tough competition against some much larger industry heavyweights, we were able to come out on top. Starting last summer and to be continued over the coming years, four STARS will handle not only the **printing process** for flyers, brochures, posters and calendars, but also the project management, technical media consulting and **creation** aspects. And we will do so under our own steam. To date, the customer has been highly satisfied with the process optimization, our standardized approach and the savings of 20 percent – not to mention the high-quality print media with which its financial services are now being marketed with optimal effectiveness.







## HAPPY NEW YEAR ...

TO YOUR HEALTH AND HAPPINESS! A TYPICAL SAYING THAT ONLY TAKES ON GREATER SIGNIFICANCE WHEN ONE IS AFFECTED BY HEALTH PROBLEMS.

Our customer, a leading company in the field of medical technology, has set itself the task of advancing research and development in the fields of heart valves and cardiovascular monitoring. In collaboration with various doctors, the company (originally founded in the USA and now based in Munich) continuously works on developing technical solutions that save the lives of many patients and improve their long-term quality of life. Technical expertise, passion and an innovative product – the ideal conditions for being able to help many more patients in the future. There is just one thing missing: a **complete concept for the product launch**. This is why our customer contacted STAR on short notice with the aim of completing the project in good time in 2016.

In close consultation with the customer, eight STARS from different units developed a comprehensive concept covering all aspects of a **digital marketing campaign** aimed at reaching end customers: the development of an app, a newsletter with market access and micro-sites – from design and copywriting to programming. The result was a customized, comprehensive marketing solution that fostered customer loyalty and provided the desired media impact for the product launch. We are delighted by the positive feedback from our customer on the successful integration of the concept into its corporate communications – not to mention by the chance to take part in this literally life-saving project.



## BACK TO THE ROOTS

*Inconsistent image quality and a rather pragmatic appearance: these are the usual calling cards of a PIM system. What use would bells and whistles be anyway? All you ultimately need is clear information – you are not trying to design a catalog from it.*

Or are you? That was precisely the challenge posed to us by a medium-sized business based in Nördlingen, Germany. The print product was slated for printing in early September, so time was of essence. The task was rather complex in view of what little information we had available to us. This is why we put five STARS on the job right from the start in May. Their task was to get the ambitious project off the ground. From the first layout draft to the creation

of templates and policies, along with exporting data creating the catalog in InDesign, our experts gave it their all to make the all-but-impossible a reality over the course of four months: a high-quality, nearly 1,000-page **print catalog** that was ready for printing on schedule after the final artwork, finishing and generation of print data. The result was highly pleasing to our customer and its end customers – but not only them. We were also extremely satisfied when we received our first copy from the printer. We were particularly pleased with the effusive praise from the customer at our ability to keep our promises in spite of the tricky circumstances.

## Apps ARE CONQUERING THE WORLD – AND THE ANIMAL KINGDOM, TOO



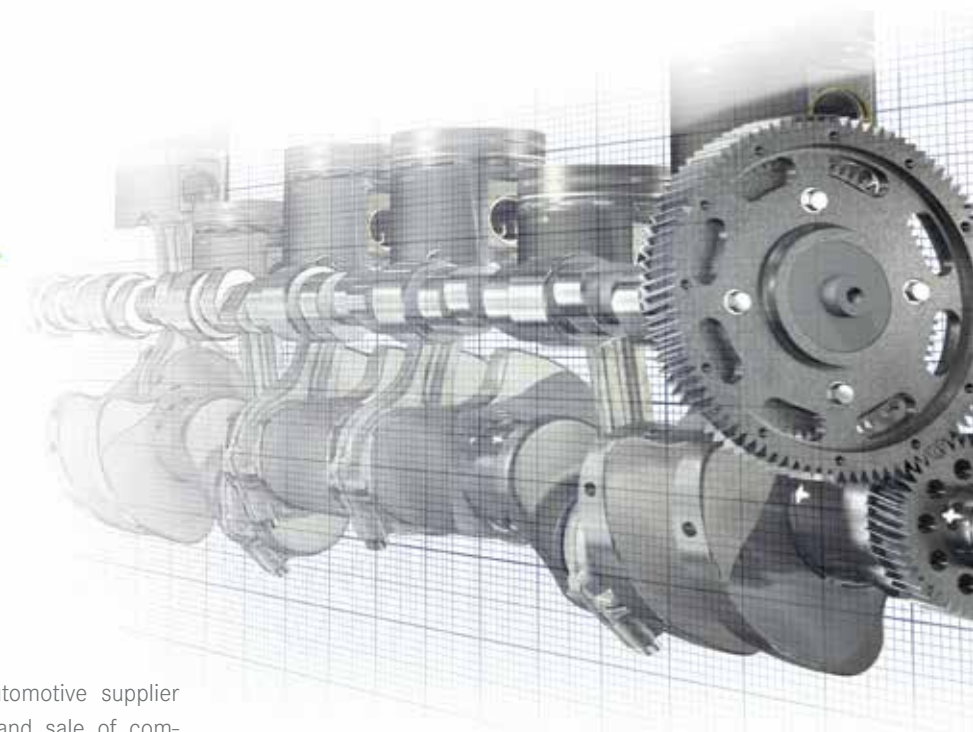
We are not talking primarily about entertainment apps for the family dog or the kids' pet hamsters. Rather, we mean apps that assist people who work with animals professionally. **Such as in agriculture.**

Our internationally active customer produces products such as vaccines and medication that are indispensable for preserving the health of large animal stocks, e.g. pigs. With several thousand piglets, sows and fattening pigs in a stall, it can be difficult for the farmer to maintain a proper overview. Which group has to receive which vaccinations at which age? Which box has already been vaccinated? Which medications need to be administered at which dosages? The multitude of legal regulations makes the task even more complex. Our customer was looking to provide assistance with these issues and wanted to offer farmers an app that would also fulfil the extensive documentation requirements. After an initial attempt failed to deliver the desired results, the app experts from sense&image were brought in. They analyzed and enhanced the existing source code and presented a new **operating and design concept**. Beta testing in Germany was successful and proved so effective in reducing farmers' workloads that we are now working on country-specific adaptations for the whole of Europe. Our customer is highly pleased with the positive results of the project and the potential for further development.

## FULL SPEED AHEAD

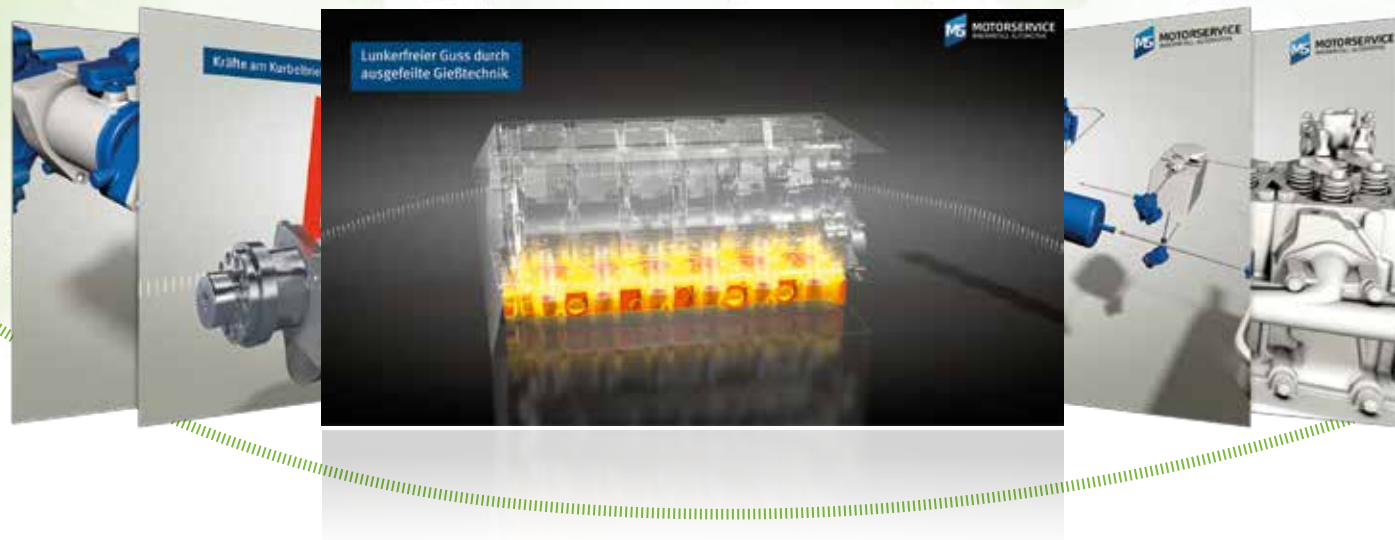
SINCE ITS INVENTION DURING THE INDUSTRIAL REVOLUTION, THE ENGINE HAS BEEN THE HEART OF EVERY VEHICLE. BUT WHAT SEEMS SO APTLY SUMMED UP BY THE TERM IS IN FACT MUCH MORE COMPLEX THAN WE COMMONLY ASSUME.

This is why our customer, a globally active automotive supplier with expertise in the development, production and sale of components and systems for the automotive industry, decided to present its products in a series of different **animations** at a trade fair that it was planning to attend. This posed no problem to the STAR team, which came through impressively with everything from development to implementation. In parallel, the team was charged with developing an **app** that would show a 3D engine. Our media experts were given only a short time window in which to complete the tasks. The idea was to create concepts for the animations as quickly as possible, prepare the CATIA data for an engine and place the customer products on it to enable 3D modelling for the app.



The aim was to make visible at a glance where the customer's products are installed in the engine and where they are ultimately located in a truck. In short: it was not just our customer's engines that were running at full speed. In spite of the many different parties involved and the complex technical expertise required to develop the animations, we were able to create an end product that was well received both by our customer and the trade fair visitors.





## The *engine* of the industry



That would be an apt description of our customer, a leading wholesaler of products and services for engines. Our customer ensures a constant supply of engine components for the spare parts markets in Germany, Austria and Switzerland and provides sales, service and logistics from a single source. Its motivation: customer satisfaction.

It achieves this through product quality, well-known brand partners, profound technical knowledge and comprehensive services. To provide its customers additional value, our customer decided to embark on a new path with STAR COOPERATION. It wanted to make its products more easily understandable by means of **3D objects** – demonstrating the function and benefits of its products with appealing visuals.

To be ready for the leading global automotive industry trade fair, Automechanika in Frankfurt, the team of STAR experts began working on the visualizations in March. This included the combination cooler module and piston assembly, crankcase, crankshaft and air mass sensor.

The position of the respective component was shown using an engine block or circuit and the

WE SUCCEEDED  
IN PRESENTING USUALLY  
DIFFICULT-TO-DEPCT  
ADVANTAGES IN A WAY THAT  
WAS EASY TO UNDERSTAND.

various functions were elaborated upon in a last step. This made it possible to demonstrate what are normally difficult-to-depict benefits such as the control of exhaust gas recovery in the air mass sensor in a traceable way. Over the course of the project, a relaunch of the corporate design was also underway, which added an extra time factor, but also proved to be a huge benefit: all data, images and videos were, effective immediately, adorned with the correct logo – after all, one trade fair is always followed by the next.

Many of the visual files found another, longer-term use as well: they continue to be used for catalogs, training materials and print ads. In this manner, we were able to achieve something that in many cases can only be accomplished with elaborate marketing measures or extravagant promotional gifts: making the customer's trade fair booth at Automechanika a crowd favourite.

It was a complete success, and one that we are especially proud of. To this day, we are still delighted when we see an ad we created in various magazines.

IN A MARKET FULL OF ALTERNATIVES:

*How do I reach  
my customers today?*

WE TREAD NEW PATHS WITH YOU.



HEALTHCARE &  
LIFE SCIENCES

DIGITAL  
MARKETING &  
SALES

## EXPERTS IN *Digitization*

THERE IS NO ESCAPING IT NOW. DIGITIZATION IS EVERYWHERE. IN PRIVATE HOMES, PUBLIC SPACES AND THE WORKPLACE. IN BUSINESS, POLITICS AND LEISURE ACTIVITIES. **STAR, TOO, IS FORGING AHEAD WITH ITS DIGITAL TRANSFORMATION.**

If you look closely, many of our joint projects with our customers touch on the topic of digitization – at least tangentially or, more likely, as the primary focus of the project. Many examples of this can be found right here in this annual report, whether in conjunction with logistics, IT, engineering or digital marketing projects.

In the future, we will focus even more on digitization projects and design new solutions to pave the way for our customers as they embrace the digital future. In Marketing & Sales. Virtual Engineering. E-Commerce & Logistics. Healthcare & Life Sciences. Connected Mobility. And in the development of future-ready digital business models. **We are looking forward to this exciting journey – are you too?**

IN THE AGE OF DIGITIZATION:

*How can I make my business  
ready for the future?*

WE TREAD NEW PATHS WITH YOU.

E-COMMERCE &  
LOGISTICS

VIRTUAL  
ENGINEERING

CONNECTED  
MOBILITY

DIGITAL  
BUSINESS MODELS



CREATING NEW

## experiences

TOGETHER

"THIS IS REALLY AMAZING," SAYS BORIS BRUNNER, LOOKING AROUND IN ASTONISHMENT AS HE FEELS HIS WAY FORWARD. HE IS STANDING IN THE UNFINISHED SHELL OF HIS BUILDING – THEY WERE UNABLE TO FIND ANY OTHER LOCATION THAT OFFERED SO MUCH SPACE ON SHORT NOTICE.

He is surrounded by two tripods, each with a small infra-red camera on top. They are connected to a computer sitting on a box which is off to the side. And Boris Brunner is standing right in the middle with a pair of oversized ski goggles on his head that look like a prop from a Star Trek film. His hands are covered by a pair of equally futuristic gloves, which are also outfitted with a good deal of technology.

Nick Stiefel from STAR chuckles. He often sees this reaction from customers who are trying out virtual reality glasses for the first time. He sits down in front of the computer and changes a few settings. "You can now move about the room freely, Mr Brunner. Just don't go beyond the boundaries of the tripods, because that's where the projection ends. You'll notice that for sure." "It's a good thing we're here on the ground floor and not up in the penthouse," replies Boris Brunner with a laugh as he continues to feel his way forward. "So this is how the room will look when it's finished. And what about the walls?" "Simply tap once in mid-air with your right index finger," says Nick Stiefel, "and then you'll see variant A with smaller office units."

Boris Brunner turns and takes a big step forward. "I always wanted to be able to walk through walls," he says. "So those are the restrooms. Have you designed the kitchen yet?" Nick Stiefel answers in the affirmative and adds the element. "Great. Can I actually move the walls somehow?" "No, we're not quite that far yet," says Nick Stiefel. "That would take us into the realm of holographic representation. But I have brought the equipment for that, too." Boris Brunner moves around the virtual

offices for quite some time, looks out of virtual windows at virtual neighbouring buildings and inspects virtual work stations. At last, he takes the gloves and glasses off. "It does take a bit of getting used to, standing in a room that doesn't exist yet and not being able to see your own body," says Boris Brunner as he adjusts his own glasses. "Yes, that's true. But you get used to it," says Nick Stiefel as he takes the apparatus back.

"I have the hololens here as well. You can leave your glasses on for this." He helps his customer put the apparatus on, positions the device and adjusts the size with a button on the back. "Is that comfortable?" "Yes, absolutely. Now what?" "Now, I'm going to show you a hand motion that will let you move objects around the room as you please. Like a wall, for example." Boris Brunner is delighted. Nick Stiefel is too: "I have one more surprise for you. You should now be able to see where the downpipes are located in the walls." Boris Brunner stares at a wall and then closely examines a construction drawing. "They're exactly where they're supposed to be." "That's right," replies Nick Stiefel, "and we can now do this with all of the different lines. Electrical, water, heating, telecommunications – whatever you like. And you can use that capability to find the right line at the right location long after the building has been completed – for service work, for example." Boris Brunner is visibly impressed.

**"IT IS TRULY INCREDIBLE WHAT TECHNOLOGY CAN ACHIEVE NOWADAYS."**





## SPARE PART TECHNOLOGY: OUTSIDE THE BOX

WANT TO CONQUER THE EUROPEAN MARKET?  
THIS IS NO LONGER A CHALLENGE FOR  
OUR CUSTOMER, A LEADING GERMAN  
PREMIUM CAR MANUFACTURER.

If you look at markets in the south-west of the globe, even experienced companies can encounter difficulties when it comes to analyzing the local market properly. After all, who can say with any certainty what their stocks of spare parts might look like in

Panama, Costa Rica, Guatemala, Chile, Peru, Colombia, Paraguay, Uruguay or the Caribbean? Our customer faced the challenge of analyzing its markets in Latin America more precisely. Together with two after sales experts from STAR, the aim was to clarify whether the **spare parts supply and stocking** worked, whether there was a uniform IT support system for the ordering process for each of the markets and whether inventory analyses had been performed. Customized software was the solution. Success was not long in coming: thanks to the integration of the after sales systems, stock turnover was increased and sales and goods transports were improved. We also achieved transport cost savings of over 20 percent for our customer as well as a significant rise in customer satisfaction among end customers. Just as importantly, we showed that STAR was a competent after sales expert in nine Latin American countries. **We are ready and are looking forward to new markets!**

## ONE SIZE FITS ALL? - NOT ALWAYS

What distinguishes trucks from passenger vehicles? They often operate as fleets – most truck customers own more than just one truck. Sometimes hundreds. Even thousands. Concentrated regionally, spread nationally or all around the globe.



Many truck OEMs such as our customer systematically provide services to the larger national fleets and major international fleets after the sale through established key account managers. Until now, after sales efforts have tended to neglect truck workshop customers with fleets of fewer than 100 vehicles on the retail end. For our customer, that was reason enough to join forces with the specialists at STAR to establish a new type of key account management: the world's first **retail truck key account manager** will focus on actively and systematically expanding and improving services for small and medium-sized customer fleets such as workshop services

and spare part provisioning. The STAR-developed master concept is the basis for our consultants in 26 countries. These consultants train the service operations staff on-site and help foster the establishment of this new retail-based role. For our customer, this means more than just an increase in revenues associated with truck after sales. The positive feedback from the smaller fleet customers regarding this type of management – which is tailored to their segment – also shows that investing in customer-specific after sales pays dividends for all involved.

## FROM CONCEPT TO METHOD

When it comes to checking damaged vehicle components, particular attention needs to be paid to finding cracks in both the welding seams and cast components. Like every major automotive manufacturer, our customer has a **repair concept list** that describes the exact procedure for each component.

These lists were painstakingly put together over many years and greatly simplify processing thanks to their standardization. From coatings and die-cast components to longitudinal members and anchorage kits, the ideal procedure is described for every damage scenario. To make processing even more efficient, the idea was to transfer the Excel-based repair concept list to a **modern, digital work step table**. Or, in technical jargon, a transfer of the Delta repair concept list to the customer's product data management system. To enable a direct relationship between the repair concepts and 3D data, a team of six STAR experts evaluated various options for a digital structure. Of particular interest in the process was the co-development of the digital work step table concept, which envisioned the transfer of very large volumes of data. Utilizing the latest methods for working with 3D data in the context of product data management, our STARS boldly advanced into previously uncharted territory. And the excursion paid off: from concept to method, we succeeded in establishing an end-to-end data basis for the entire development process of a vehicle.



## Everything from a single source -

### ONLINE APPOINTMENT BOOKING MADE EASY

IT IS NOT AS EASY AS IT MAY SEEM. THE MORE COMPLEX THE PROCESSES ARE, THE MORE OFTEN COMPANIES HAVE TO BRING IN DIFFERENT SERVICE PROVIDERS.

To preclude the need for complicated coordination measures with indirect chains of communications, an international car manufacturer was looking for a company that could offer wide-ranging technical expertise. This is where STAR came into play. The goal of the year-long process was to provide existing services to end customers in an appropriate digital form within the context of the overarching digitization strategy. More precisely: the manufacturer wanted to offer end customers an efficient and innovative solution for binding **online appointment booking**. Yet, for all the simplicity of the desired system from the end customer's perspective, the preparatory work was anything but easy. The coordination efforts required to put the operational roll-out preparations in place were substantial. From requirements management and release planning with the project management, departments and IT implementation partners to surveying the systems and interfaces in the various markets, a considerable amount of work was required before even beginning to design an online survey to measure end customer satisfaction. After that, the challenges began all over again. For a long time, our efforts were exclusively focussed on identifying, analyzing and correcting errors. Then, all of a sudden, the work was complete: an intuitive product whose long and complex development process remains hidden from the end customer. Exactly how it should be.





## STARS CONQUER THE INDIAN SUBCONTINENT

*Reliability, discipline and diligence – around the world, the German work ethic is regarded as especially virtuous. It therefore comes as no surprise that consultants, engineers and developers are often dispatched to other countries to train local employees.*

For this same reason, STAR COOPERATION experts spent half a year in an area to the south of the Himalayas. The reason for the deployment was a request by the research & development department of a large automotive manufacturer whose objective was to enable its employees in India to independently operate the **spare parts system** for the company's model ranges after the successful completion of their training. The first step in the process was to create documents that would enable the training to be conducted in English. Afterwards, the STAR team assisted

the Indian employees around the clock – even after the training and on-site-presence phase, when assistance was provided remotely from Germany. Communications was a particularly exciting aspect of the project for our experts in spite of language challenges and the level of previous knowledge of the Indian R&D department with respect to the customer systems. It was an extraordinary project and we can say without reservation that we learned a lot and brought many insights back home with us.



## AFTER SALES FOR THE RIGHT PERSPECTIVE

IN RECENT DECADES, HIGH-TECH DEVELOPMENTS HAVE BENEFITED SOCIETY IMMENSELY, NOT LEAST IN THE FIELD OF MEDICINE. AND WHEN HIGH-PRECISION TOOLS ARE IN THE SIX-FIGURE RANGE, SERVICE PLAYS AN EVEN MORE IMPORTANT ROLE – ESPECIALLY WHEN HUMAN HEALTH IS AT STAKE.

Our customer, a manufacturer in the medical technology sector that develops lasers and other devices used in eye care applications, is well aware of that responsibility. This is why the customer set up an after sales partner program that offers ophthalmologists and clinics a comprehensive service package, from support to training and courses and even participation in clinical trials. The customer also attends ophthalmological conferences and regularly invites its most important end customers to events to present the latest developments from its R&D department. One example was the event this year at Copenhagen's Koncerthuset, where our medical technology experts from sense&image were also involved. The customer wanted a new **image video** for the event that would acquaint guests with the added value offered by its partner program in a visually appealing way in just over a minute. As well as providing the idea, concept, storyboard and text, we took care of the animation, motion graphics and editing services. The finished film was very well received at the premiere and our customer was delighted with the quality of the service provided by us. Further projects are already in production.



## Great aspirations CALL FOR GREAT EFFORT

*It has long been clear that after sales is the key to growth in such a fiercely competitive market as the automotive industry. Only those who offer outstanding service can attract and retain customers.*

Our customer from the premium segment set itself ambitious targets for its sales figures through 2020 in Germany. The first step, namely the establishment of an all-new, high-quality vehicle portfolio, has so far been well received by the market. Now the associated dealer organization was to undergo the transformation that would be required to provide a high level of after sales performance. The key issue for the company: how can our after sales make a contribution to the satisfaction and loyalty of our customers and therefore increase the likelihood that they will buy from us again? To answer this question, the retail consultants from STAR were taken on –

experts who are well-versed in after sales, the identification of customer requirements and the performance-driving components in retail organizations. The project started in the summer of 2016 with a study of the connections between customer satisfaction and various services. On this basis, the four STAR consultants developed a consulting concept which they have been using since and will continue to use in the months to come. This concept is intended to coach and instruct dealers, workshops and service centers throughout Germany in the organizational and quality measures that they can apply to exploit the full potential of after sales.

## WHEN modern bikes HAVE TO GO TO THE SHOP ...

... IT IS ENTIRELY POSSIBLE THAT **SPARE PARTS** WILL BE REQUIRED. HANDLEBARS, SADDLES AND COGS. LIGHTS, BATTERIES AND DRIVE COMPONENTS. WHERE CAN THESE PARTS BE ACQUIRED, ESPECIALLY FOR MODELS THAT ARE NO LONGER NEW?

For our customer, a manufacturer of e-bikes, it was becoming increasingly difficult to find a satisfactory answer to this question. Supplying the market with regularly ordered spare parts as well as handling warranty and replacement claims constituted an enormous challenge. An alternative solution concept was proposed by the STAR logistics specialists, who have been successfully serving the dealer organisation of the parent company with a wide variety of products through a proven online sales channel for many years. Without further deliberation, we added the **'e-bike spare parts'** article category to the existing platform, created the functions required

for this special type of product and trained the staff in the new processes. And because STAR regularly and gladly works across internal organizational boundaries, our engineering experts were also brought on board to handle the processes surrounding spare part sourcing. Since then, we have handled all matters relating to order processing, storage and logistics as well as customer service on the customer's behalf. The feedback from the market provides ample proof that the implementation of the project in early 2016 has paid dividends: the ordering parties are highly satisfied with the current service and rapid delivery of urgently needed spare parts.





STAR ITQS



STAR ITQS

## Industry 4.0

PROCESSING DAMAGE CASES GENERALLY CAUSES SIGNIFICANT ADMINISTRATIVE COSTS AND TIES UP PERSONNEL RESOURCES. THEN, THERE ARE WELL-KNOWN COMMUNICATIONS PROBLEMS AND ISSUES WITH THE PROVISION OF INFORMATION. EVEN A PREMIUM AUTOMOTIVE MANUFACTURER LIKE OUR CUSTOMER KEPT ENCOUNTERING THE SAME PROBLEMS AND THEY ALL HAD ONE THING IN COMMON: ENORMOUS ADDITIONAL OUTLAY IN TERMS OF TIME AND COSTS.

The answer to this challenge can be found in the form of digitization and Industry 4.0. They enable problems such as systemic redundancies, wasted time and sluggish information flows to be counteracted effectively.

Such a system for the efficient processing of damage cases is subject to a range of different requirements. Some of them are purely functional in nature, enabling the proper mapping of business processes, while others are non-functional. Non-functional requirements include the operation and availability of the system and provide indications as to which software type would be most suitable for the particular use case. To meet these requirements adequately, we adapted our existing software solution to the needs of our customer, which is why we developed an **app for recording vehicle damage cases worldwide**. We also established a web platform for previously entered

transport damages. This was followed by a global roll-out and operation of the software, including the integration of 50,000 users.

The combination of Industry 4.0 with a long-term logistics and quality concept yielded a significant reduction in administrative costs, an increase in the settlement rate and greater transparency in the supply chain. It is now also possible to measure quality of the service providers. In everyday situations, digital solutions of this kind save time and money. With significantly greater benefits and shorter processing times, the monthly costs for the operation of the portal represent just a fraction of the costs for the correspondence that would otherwise be in place. And this STAR solution is so flexible and customizable that we are already looking into using it in other use scenarios. We are excited to see what the future holds.

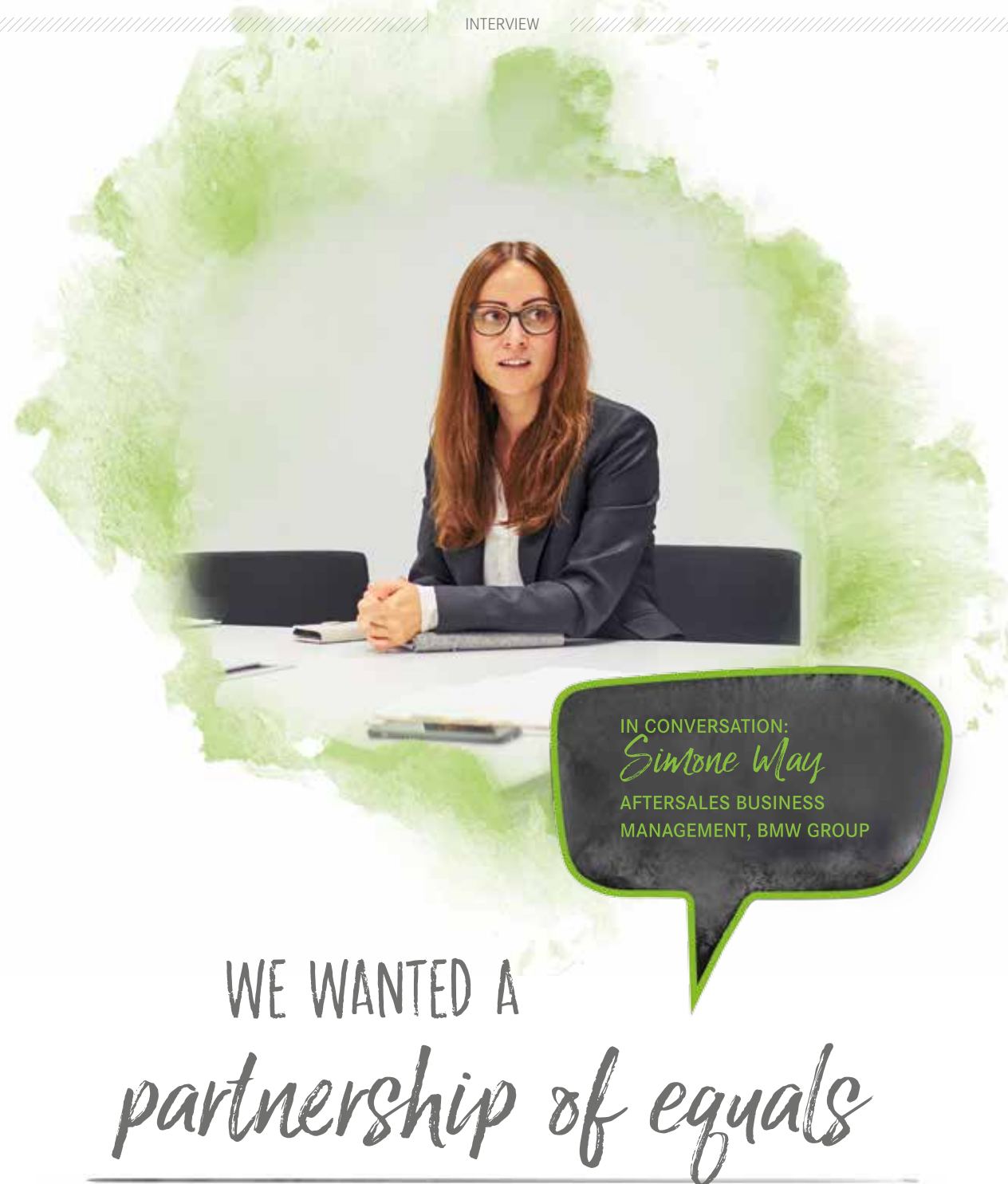
POST-PURCHASE IS PRE-PURCHASE:

*How can I ensure customer loyalty?*



WE TREAD NEW PATHS WITH YOU.





Simone May has worn a variety of hats at her employer's. She comes from purchasing and has managed a number of major IT projects. Today, she is the 'dealership operator model' project manager, which is the role through which she first encountered STAR COOPERATION four years ago. "With the project, we wanted to help BMW dealers professionalize their parts management and improve the service provided by the dealerships," she says, describing the early phase of the tender process. "It took us almost a year to find the right partner." The feeling of partnership is extremely important to her, not only between BMW and STAR, but also in the relationship with the actual customer of the project: the BMW dealers in Germany and four

other markets. In the BMW dealer model, STAR COOPERATION acts on behalf of the car giant as a general contractor and supports the dealerships on location with a range of different services. This is because BMW dealers are independent businesses and generally handle the complex procurement of original spare parts and their inventories independently. As not all of the operations have the requisite resources and expertise on hand, they have the option of calling in the support of the STAR material managers. They are experts in logistics and spare part management and know from experience exactly which key performance indicators and reports car dealerships need to achieve the greatest possible efficiency in this field.



SIMONE MAY EXPLAINS HOW THE SERVICE  
MODEL WORKS

"In my view, having a close relationship with the parts sales managers in the individual operations is the most important task in this project. We simply cannot manage that from headquarters," concedes Simone May. This is why it is all the more important to her that STAR offers a partnership of equals that lays the basis for a close relationship. "We wanted a reliable partner who is flexible, responsive to customer wishes and able to be managed by us." In the beginning, it was difficult to let go. "It is a very important area for us and it is crucial for everyone to first come together as a team and develop trust on all sides. This should not be underestimated." Four years later, a proper team has taken shape that works well even with the distance between Munich and Böblingen. Things have continued to develop over the years. "The best aspect for me is that you really notice how much the STARS enjoy the work and how motivated they are. Although they do not actually work for BMW themselves, you can see how much they identify with the brand and our project," says Simone May.

TODAY, 20 STAR MATERIAL MANAGERS HANDLE OVER 250 DEALERSHIPS IN GERMANY ALONE – ALL FROM THE SITE IN BÖBLINGEN. "We are proud of that as well," says the project manager. "As well as supporting the German economy, we are able to guarantee that the service quality is right." This is confirmed by the dealers themselves, most of which are glad to receive the support in a complex field that would otherwise tie up important resources which they can now use in other ways.

AFTER FOUR YEARS OF WORKING TOGETHER, HOW WOULD YOU ASSESS THE OPTION OF OUTSOURCING A KEY AREA OF BUSINESS TO A COMPANY LIKE STAR? "In my view, it depends very much on the size of the project. You have to bear in mind that such a setup with a general contractor initially means a great deal of managerial work and training until everything has fallen into place. It is important that both sides recognize from the outset that there will be many uncertainties and challenges while working together. It is crucial to remain patient and to be able to respond flexibly. Many things happen much later than planned. Other things have to be implemented from one day to the next. STAR has proven to be a very reliable and capable partner in these respects." Looking ahead, Simone May is initially focussing on some additional markets that the team aims to conquer next year with the BMW dealership model. Beyond France and Switzerland, China in particular will provide a whole new set of linguistic and cultural challenges. But she is not losing sight of trends in after sales either.



"FOR ME, DIGITIZATION WILL BE ONE OF THE MAJOR THEMES OF THE COMING YEARS, INCLUDING IN OUR SEGMENT." This not only applies to the vehicle itself; it will be essential in all of the associated services as well. "From a service perspective, we are currently in a transition phase. There are many customers who still prefer to come to the workshop and who do not want to give up that experience. But we are also encountering more and more customers for whom the brand is not the main factor. It is about mobility in itself – and the service that this enables." Bridging the gap between the old and new worlds of after sales is currently one of the greatest challenges facing the field. In terms of the future, new services tailored to the digital world need to be developed. "It is a very exciting time."



CREATING NEW

*Connections*

TOGETHER

A HUMMING SOUND PUNCTURES THE SILENCE IN CHRISTIAN SCHNEIDER'S OFFICE. "MR BAUMANN IS HERE," CHIMES THE VOICE OF HIS ASSISTANT.

"Okay. Send him in, please," he replies via the intercom before taking his jacket from the armrest of the chair. He is still putting it on when Carsten Baumann appears in the doorway with a beaming smile. "Ready for the big day?" he asks the Mayor. "I still haven't got used to these occasions," admits Christian Schneider. "This time it's for a truly good cause though."

Together, they walk through the foyer and make their way outside to where a small group of people is waiting: members of the city council, the local press, the director of the municipal depot, a few employees and a host of interested citizens. Franz Wolfram, mobility consultant at STAR, has also made time in his schedule to be there. The event: the handover of an electric-powered light truck for the city's fleet of vehicles. "Before we're open for questions and photos, I'd like to say a few words," says Christian Schneider by way of introduction. "Today, we are taking the first step toward a more mobile, environmentally friendly and cost-effective future for our city. Through its study, STAR COOPERATION has demonstrated that the conversion of our municipal vehicle fleet is the right decision not only from an environmental standpoint, but also financially speaking."

Christian Schneider reiterates the key elements of the project. How he contacted STAR COOPERATION about his idea. How they first discussed mobility in general and electro mobility in particular. How he had to gain ground bit by bit as he generated public support for his proposal. How the STAR experts and partners quickly grasped the current situation

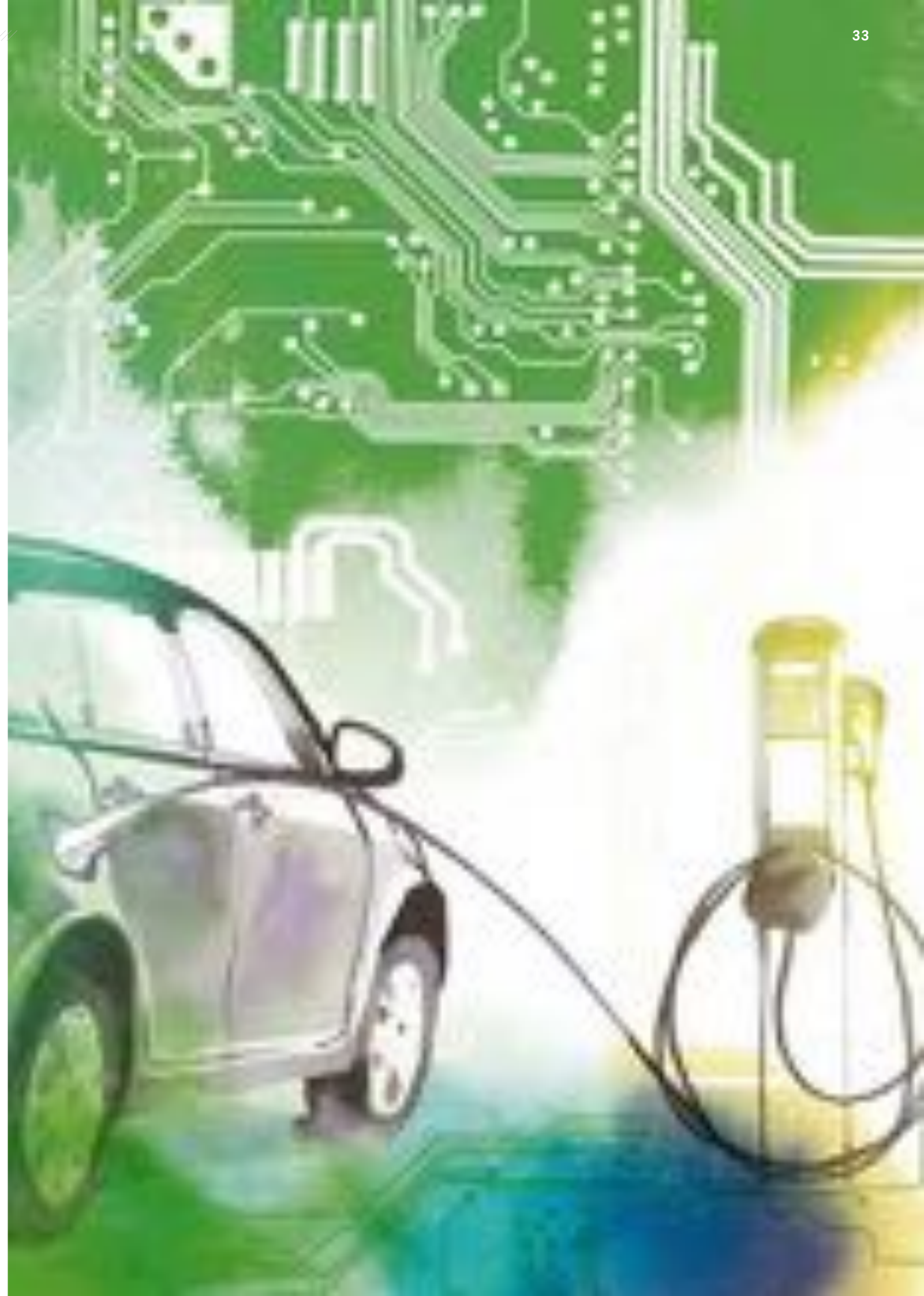
and presented various alternative concepts for a forward-looking municipal mobility strategy. How the city council spent many hours debating whether the city should go ahead with the idea or not. What went through Schneider's head when he sat in an e-transporter for the first time – the one that STAR provided to the city for a practical test under real conditions. How little he understood when the STAR electronics experts showed him the finer technical points of rapid charging stations and battery technology. And how he ultimately managed to persuade the city council that the substantial investment in the forward-looking technology of electro mobility is a genuine opportunity to protect the city's environment, lower the burden on the city's coffers over the medium- to long-term and burnish the city's image well beyond the borders of the region.

"One final thing: today, we are demonstrating that a small municipality like ours can lead the way. With this small step, we are doing something for the future of our planet and our society. I can't tell you how proud that makes me. And I hope you feel the same." The crowd applauds. Carsten Baumann approaches Christian Schneider holding a large cardboard key with a red bow around it. The press cameras click away as Christian Schneider takes the key and hands it to the director of the city depot:

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**"DRIVE SAFELY!"**

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## LEADERSHIP RETAINED

CONTINUOUS DEVELOPMENT OF NEW TECHNOLOGY CONCEPTS FOR THE AUTOMOTIVE INDUSTRY ARE THE CORE BUSINESS OF A PREMIUM MANUFACTURER OF VALVE SYSTEMS. TO RETAIN MARKET LEADERSHIP, INNOVATIONS ARE A DAY-TO-DAY ASPECT OF OUR CUSTOMER'S BUSINESS.



Our FlexGen-M PWM is a powerful multifunctional PWM generator.



The focus this time around: pulse-width modulation, or PWM for short. PWM is used to transmit information and often to control energy conversion in a technical system. The advantage of a PWM signal is that it can only take on two discrete values, but is continuously variable in its duty cycle. For the development and design of a PWM generator with a dither function, the aim was to actuate vehicle valves in the test environment via pulse-width-modulated power signals and reduce the static friction by means of tiny micro-movements. An expert team of four STARS was responsible for the concept design, hardware and software development and the commissioning, test phase and prototype approval. The result was a feature that makes it possible to conduct targeted testing on automotive valves and change their values. The project also provided a basis for the further development of our FlexGen-M device, which opens up new areas of opportunity for us and our customers. This has enabled us to retain our leading position – and perhaps we will soon be doing the same in other areas, too.



## MAKING AN EFFORT FOR THE environment

SMOG OVER THE ROOFTOPS OF BEIJING, RESPIRABLE DUST ALARM IN STUTTGART AND GLOBAL CLIMATE CHANGE – WHEREVER WE GO ON EARTH, THE TOPIC OF ENVIRONMENTAL DAMAGE IS EVER-PRESENT AND THE CONSEQUENCES ARE WELL KNOWN.



From separating waste to buying a less harmful car, most people are willing to do something to help the environment. Yet few people actually know which components actually contribute to lowering a vehicle's emission footprint. One component is the EGR valve, which reduces the combustion temperature in the exhaust gas recovery process and thus reduces the volume of harmful nitrogen oxides generated. However, there are differences here, too. To distinguish its own valves from inferior non-brand alternatives, our customer, an international automotive supplier, wanted to set up a validation and quality assurance procedure for its valves, throttle valves and other vehicle actuators. The plan was to define evaluation criteria through an electronic comparison with a golden sample. We were responsible for the **conception and development of comparison and analysis software, the setup of a complete test bench for EGR valves and the subsequent commissioning, test phase and prototype approval.** For the first time, this enabled the customer to compare multiple actuators with each other in terms of electrical parameters – and therefore carry out the required quality assessment for the benchmarking process. We are delighted that the environment will also benefit from this project.

## THE ENERGY IS RISING

*Named after the inventors of the battery – Alessandro Volta and French physicist André-Marie Ampère – volts and amps are common terms for us from school onwards.*

Still, when we step into our cars, we are unlikely to think about the central role they have played (and continue to play) in vehicle construction. The same cannot be said for the STAR experts who, over the course of a year, assisted a leading German sports car manufacturer in the conceptualization, hardware development, design, commissioning, testing and approval of an extremely interesting project: conducting **measurements in test vehicles and on test benches** of the high-voltage on-board network with a capacity of up to 1,000 volts and several hundred amps. The objective of the exercise was to integrate high-voltage measurement modules directly in the test vehicle through specific mechanical and electrical modifications and to render voltages of up to 1,000 volts measurable for future voltage levels. Despite the requirements of the customer, which were more complex than expected, and the difficult procurement of special plug connectors, our efforts were a complete success. Since then, every design has been mechanically and electrically adapted to accommodate this application, enabling stable and precise measurement results to be recorded. Our customer was also satisfied – the need for further devices has already been discussed. A truly 'energizing' project overall!





ELECTRICS/  
ELECTRONICS

WITH ALL YOUR

*Senses*

*A low center of gravity, aerodynamic design and above-average acceleration – these are the conventional characteristics of a sports car. Nevertheless, one thing comes to mind first when thinking about a sports car: the unmistakable sound.*



As such, it came as no surprise when visitors to the **EMBEDDED WORLD** fair in Nuremberg were drawn to our booth as if by magic. After all, our installation simulating real sports car sounds was a true highlight for car lovers. We had a great many interesting conversations with customers, partners and service providers about STAR's products and services in the field of EE. Visitors also had the chance to take a look at the latest member of the STAR product family, the **FlexConfig Analyzer**. The world's leading trade fair for embedded systems drew together nearly 1,000 exhibitors from 38 countries and more than 30,000 visitors. In addition to the many interesting conversations we had with fair visitors, the staff also reserved a great deal of time on Students' Day for students and other prospective employees who were eager to learn more about STAR as an employer and who peppered the STARS with their questions. The fair was a great success and another key building block in our new fair offensive.

CHECKING IN  
WITH THE EXPERTS

IN 2016, STAR COOPERATION ONCE AGAIN HELD ITS ANNUAL TRADITIONAL IN-HOUSE EXHIBITION WHICH OFFERED TECH-SAVVY VISITORS THE OPPORTUNITY TO EXPERIENCE THE ENTIRE RANGE OF KNOWLEDGE OF OUR AUTOMOTIVE ELECTRONICS EXPERTS IN A SINGLE LOCATION.

And when we say 'experience', we mean it. In four different free-of-charge training courses, visitors could try out our services under the watchful eye of our experienced experts. The 'Measurement technology in automotive high-voltage' and 'Creating gateways with FlexConfig RBS' courses were especially popular.

Our products also generated a huge amount of interest among the participants who had the chance to **learn some first-hand tips and tricks from our electronics experts** and ask any practical questions they had. Questions from which we always learn something as well.



*Know-how*  
FOR SAFE ROADS

EXTENSIVE TEST PHASES WITH TEST VEHICLES ARE THE KEY TO DEVELOPING NEW CARS. WITHOUT THEM, IT WOULD QUITE SIMPLY BE IMPOSSIBLE TO GUARANTEE SAFETY ON OUR ROADS.

Just how complex the design of these vehicles can be is evident in the scope of the job brought to STAR COOPERATION by a southern German automotive manufacturer. The company wanted STAR's assistance on two projects to be carried out over a period of three years. The objective was to standardize measurement procedures and collect test data to simplify the **design of test vehicles**. As part of the first project, more than 40 wire harnesses of varying levels of complexity were to be defined and expanded to incorporate other wire harnesses over subsequent months. The second project involved the development of a **measurement technology conveyor cage** into a plug-and-play solution for a broad range of test driving objectives. In spite of a market bottleneck, our STAR experts were able to complete both projects to the complete satisfaction of the customer, therefore paving the way for many new development and testing departments. The products are now

delivered worldwide to locations and partners in Austria, America and South Africa. As a reliable supplier of cable products, we look forward to future projects for the development of customized measurement technology products.







## Concentrated competence - CLOSE TO THE CUSTOMER

BEFORE A VEHICLE IS ROADWORTHY, IT UNDERGOES MANY PHASES, THE FIRST OF WHICH ARE THEORETICAL. ONCE THESE PHASES ARE COMPLETE, THE PROCESS MOVES TO THE VEHICLE DEVELOPMENT WORKSHOPS. THIS IS WHERE THE DEVELOPMENT AND INTEGRATION PROJECTS OF THE MANUFACTURERS ARE PUT INTO PRACTICE. IT IS NOT UNCOMMON FOR THERE TO BE TOO FEW STAFF OR TOO LITTLE SPACE AVAILABLE FOR THE WORK – **THIS IS WHERE STAR COMES IN.**

Our customer, a manufacturer of passenger and commercial vehicles, was facing personnel shortages in vehicle conversion, measurement technology and mechanics. The crux of the problem was the lack of a flexible partner that could take on jobs on short notice. A job for STAR COOPERATION: we have a well-equipped vehicle development workshop in Sindelfingen which we set up for a customer in 2015. To start with, we provided our customer access to our own halls (measuring 180 square meters) and began to establish the necessary competences. To further improve our reaction times and handle additional orders from the customer from mid-2016 onwards, we expanded our facilities to include another hall encompassing 650 square meters of space. While a single STAR was sufficient to handle the workload early on, six experts were working on the project by the end of the year – with more set to join the team. With STAR as a reliable partner, the vehicle

conversion and construction operation developed smoothly. We took care of **measurement technology, electrics and mechanics** for passenger vehicles, vans and trucks with great success. Special attention was paid to the **repair and modification of prototype wire harnesses** and the design of engine line-ups. Another focal point was the application of the physical measurement technology to the engine components.

Our customer's logistics processes are now much more streamlined after finally having found a flexible partner for future workshops for measurement technology engineering in the vicinity. The substantially reduced response times, higher vehicle throughput and shorter idle times for the test benches and vehicles have also resulted in significant economic benefits for our customer. All of which is why we will not be bowing out on a high: further expansions and more STARS are already scheduled for 2017.

TOOLS, SOLUTIONS AND SERVICES:

*How can I master highly  
complex electronics?*



WE TREAD NEW PATHS WITH YOU.





IN CONVERSATION:

*Wolfgang Bern*  
DIRECTOR OF OPERATIONS  
AND CEO OF LOCAL MOTORS  
BERLIN GMBH



*Spontaneous, flexible  
and crazy -*

THAT'S WHY STAR IS THE PERFECT PARTNER FOR US

FOR WOLFGANG BERN, DIRECTOR OF OPERATIONS AND CEO OF LOCAL MOTORS BERLIN GMBH, INNOVATIVE MOBILITY CONCEPTS ARE THE FUTURE. He has no doubt about it, though he considers many of them to be pure theory at this point in time. Although some are political talking points, in reality, they will remain difficult to implement in the foreseeable future: "Anyone who believes that cities like New York or London are simply going to switch their entire infrastructure to intelligent solutions overnight is bound to be disappointed. At the same time, that does not mean that we should not be starting to work on implementing such concepts in reality right now – after all, they

are anything but pipe dreams. What we need at this juncture are new, specific areas that are designed for this type of mobility from the outset." And this is precisely the strategy he is pursuing with Local Motors. Innovative mobility concepts are implemented directly at the locations where they are needed via co-creation, 3D printing and micro-factories. Through this approach, the technology company is breaking with the conventions of the automotive industry. While the conventional development phase of a vehicle usually takes seven years, 'Olli', a self-driving electric vehicle, was developed into a drivable vehicle over a period of just six months – in part with the support of STAR COOPERATION.



WHEN LOOKING FOR A SUPPLIER FOR WIRING HARNESES, WOLFGANG BERN FOUND OUR EXPERTS.



And this is far from being the only remarkable thing about the autonomous bus, which also communicates intelligently with its environment. Just as innovative as the technology itself is the idea that gave rise to its creation and production. Designed by an online community, it emerged from a Germany-wide competition as the best of more than 80 ideas on mobility concepts of the future. The question as to why Olli found its way to the top of the winners' podium can easily be answered, according to Wolfgang Bern: "I think Olli's secret for success, beyond its forward-looking technology, is its human character. That might sound odd at first, but it makes a lot of sense upon closer inspection. Neither its design nor its dimensions correspond to those of a conventional vehicle. With its 2-by-4-meter frame as well as front and rear aprons that resemble a smiley face, Olli certainly stands out. You might even say that it looks cute. This is also the reason why the version we built is 98 percent the same as the original design."

In order to stay within the unusual production time frame, it was necessary to find flexible partners and service providers who would be able to cope with any eventuality. In search of a supplier for wiring harnesses, Wolfgang Bern ultimately found our experts in electronics. "When STAR initially asked me to drive from Hamburg to Sindelfingen, I was somewhat sceptical at first. It is a principle of mine to not believe any salesman who tells me that something is no problem. But at STAR, it was actually the case for once. The workshop in Sindelfingen, not to mention the – and I mean this in a positive sense – off-the-wall approach of the STAR employees convinced me immediately," laughs Wolfgang Bern. For him, the most important thing is to work together with people who believe in their ability to make the impossible possible.

"THE MORE I HAD TO DO WITH MEDIUM-SIZED COMPANIES, THE MORE EXCITED I WAS ABOUT THEM. MANY TIMES THE MAJOR PLAYERS ARE NOT ABLE TO ACT QUICKLY ENOUGH. Moreover, the automotive industry works in different cycles than we would need to implement our mobility concepts. In many cases, we are looking for a particular product. When we find it, it often turns out that it will not be on the market for another two years. But I need it in two weeks from now. That has often led to the need to restructure. We are a production-by-doing sort of operation – you have to be able to deal with setbacks. And STAR keeps up with us!"



"OLLI'S SECRET FOR SUCCESS,  
BEYOND ITS TECHNOLOGY,  
IS ITS HUMAN CHARACTER."







ON THE MOVE: AT FRANKFURT AIRPORT WE MET WOLFGANG BERN, DIRECTOR OF OPERATIONS AND CEO OF LOCAL MOTORS BERLIN GMBH.

When asked about the safety of the new mobility concepts, Wolfgang Bern is realistic: "The fact is that the relationship between availability and safety has to be right. The technology still has not reached that level of maturity that would enable us to convert the transportation concept from one day to the next. For example, today there are no sensors that can detect even very small objects. And then you have the fact that driving has to be looked at in a very individual light. If there are autumn leaves, a brick or even a child on the road, a person can recognize that and make a decision: drive around it or hit the brakes. **OLLI SIMPLY DETECTS AN OBSTACLE AND HITS THE BRAKES. SAFETY IS THE FIRST PRIORITY.**"

This sensitive distinction naturally has to be learned. But the greatest challenge will be to change people's thinking. In this day and age, humanity has a hard time dealing with deceleration."

Managing these changes will undoubtedly be one of the greatest challenges for the automotive industry. The process has now begun. The first Olli models have been 'brought to life' with our wiring. Things will certainly continue to be exciting, both for Local Motors and STAR COOPERATION, which will remain involved in this field in the years to come.



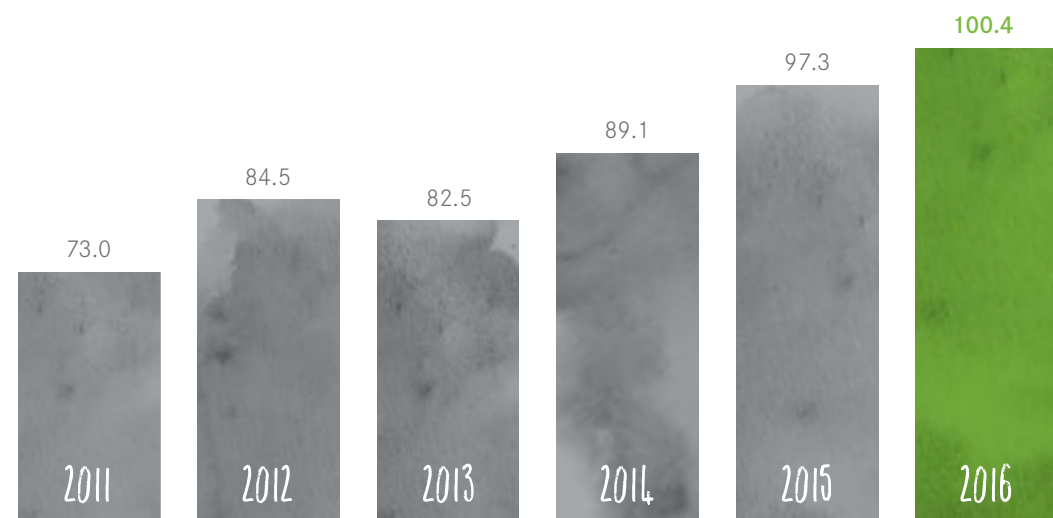
# Facts & Figures

OVERVIEW OF THE MOST IMPORTANT KEY FIGURES

# 2016



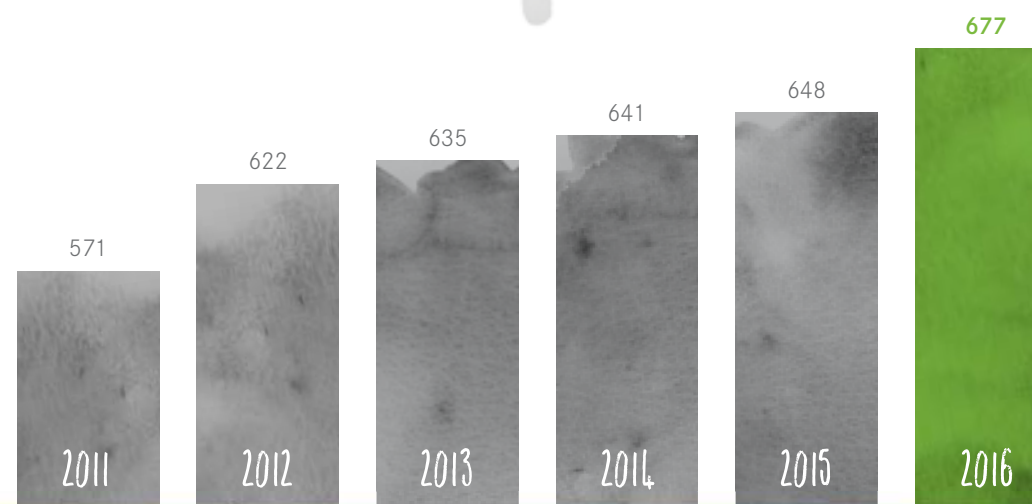
## 2016 | EUR 100.4 MILLION TURNOVER



### TURNOVER DEVELOPMENT

OF THE STAR COOPERATION GROUP IN EUR MILLION

## 2016 | 677 EMPLOYEES



### EMPLOYEES

OF THE STAR COOPERATION GROUP

STAR COOPERATION 21.6

2015

STAR SYSTEMS 4.9  
STAR PUBLISHING 40.4  
OTHERS 5.2  
STAR ELECTRONICS GMBH\* 6.8  
STAR CHINA 1.5  
STAR ELECTRONICS GMBH & CO. KG\*\* 4.2  
STAR ENGINEERING 17.7  
STAR DISTRIBUTION 15.2

STAR COOPERATION 23.5

2016

STAR SYSTEMS 5.4  
STAR PUBLISHING 38.7  
OTHERS 5.9  
STAR ELECTRONICS GMBH\* 8.8  
STAR CHINA 1.6  
STAR ELECTRONICS GMBH & CO. KG\*\* 4.4  
STAR ENGINEERING 17.4  
STAR DISTRIBUTION 15.9

Note: 2016 values prior to conclusive confirmation of currently ongoing audit of accounts. In order to present Group turnover, the cumulative value of the individual subsidiaries was adjusted for internal turnover (consolidating entries).

STAR COOPERATION 173

2015

STAR SYSTEMS 39  
STAR PUBLISHING 107  
OTHERS 5  
STAR ELECTRONICS GMBH\* 70  
STAR CHINA 26  
STAR ELECTRONICS GMBH & CO. KG\*\* 27  
STAR ENGINEERING 150  
STAR DISTRIBUTION 51

STAR COOPERATION 160

2016

STAR SYSTEMS 50  
STAR PUBLISHING 126  
OTHERS 5  
STAR ELECTRONICS GMBH\* 68  
STAR CHINA 26  
STAR ELECTRONICS GMBH & CO. KG\*\* 27  
STAR ENGINEERING 137  
STAR DISTRIBUTION 62

Note: Employee information excluding apprentices, interns, working students, bachelor students, master students, temporary employees and subcontracted employees. \* formerly BERGER ELEKTRONIK \*\* formerly Eberspächer Electronics



“ The digital transformation brings new trends on an almost hourly basis. At the same time, we still need to be able to rely on the conventional means. Only those who master the individual mix of the various channels will be able to convince customers of the quality of their products. ”



*Ramona Kaden*

MANAGING DIRECTOR STAR PUBLISHING | STAR DISTRIBUTION

#### STAR PUBLISHING GMBH

<b>107</b> Employees 2015	<b>126</b> Employees 2016	<b>14</b> Employees 2015	<b>14</b> Employees 2016
<b>EUR 40.4 million</b> Turnover 2015	<b>EUR 38.7 million</b> Turnover 2016	<b>EUR 1.7 million</b> Turnover 2015	<b>EUR 1.5 million</b> Turnover 2016

TURNOVER AND EMPLOYEE DEVELOPMENT



*Tobias Utz*

MANAGING DIRECTOR STAR ENGINEERING

“ Our customers set trends and use new technologies – this leads to changing project requirements for service providers. Our employees bring both capabilities to the table: technical training and a keen interest in new developments. ”

<b>150</b> Employees 2015	<b>137</b> Employees 2016	<b>EUR 17.7 million</b> Turnover 2015	<b>EUR 17.4 million</b> Turnover 2016
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STAR ENGINEERING GMBH | TURNOVER AND EMPLOYEE DEVELOPMENT

“ Anticipatory shipping, multichannel logistics and on-demand delivery as well as customer-specific, integrated supply concepts will continue to change logistics as we move into the future. This is why we believe it is a priority to create long-term added value for our customers with our innovative concepts. ”



*Alexander Schüle*

MANAGING DIRECTOR STAR DISTRIBUTION | STAR PUBLISHING

<b>51</b> Employees 2015	<b>62</b> Employees 2016	<b>EUR 15.2 million</b> Turnover 2015	<b>EUR 15.9 million</b> Turnover 2016
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STAR DISTRIBUTION GMBH | TURNOVER AND EMPLOYEE DEVELOPMENT



“ In just a few years' time, intelligent vehicles will completely change the way we travel – digitization is revolutionizing the automotive industry. We help our customers recognize and capitalize on strategic opportunities along the way. ”



*Nicolai Stiekel*

GENERAL MANAGER | STAR CONSULTING

<b>75</b> Employees 2015	<b>80</b> Employees 2016	<b>EUR 9.1 million</b> Turnover 2015	<b>EUR 11.0 million</b> Turnover 2016
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STAR CONSULTING | TURNOVER AND EMPLOYEE DEVELOPMENT





*Eckart Blan Ramona Kaden*

MANAGING DIRECTORS OF SENSE & IMAGE GMBH

“ Planning and implementing efficient marketing campaigns is the first step towards success. But to do so, you need to look a little further down the road – we see great potential in 2017, primarily in marketing automation and lead generation. ”

**16**

Employees 2016

**EUR 1.4 million**

Turnover 2016

SENSE & IMAGE GMBH | TURNOVER AND EMPLOYEE DEVELOPMENT

“ Creative business ideas generate new value creation opportunities and agile after sales solutions – in conjunction with the possibilities of digital innovations such as blockchain, mobile and hybrid cloud solutions, premium service concepts can also emerge for premium products. ”



*Oliver Wessner*

MANAGING DIRECTOR STAR SYSTEMS

**39**

Employees 2015

**50**

Employees 2016

**EUR 4.9 million**

Turnover 2015

**EUR 5.4 million**

Turnover 2016

STAR SYSTEMS GMBH | TURNOVER AND EMPLOYEE DEVELOPMENT

“ The need for intelligent networked systems is growing apace and calls for customized integration solutions. Our expertise in network technology opens up new paths for the connectivity of tomorrow. ”



*Henning Lange Zoran Cutura*

MANAGING DIRECTORS STAR ELECTRONICS

STAR ELECTRONICS GMBH

**70**

Employees 2015

**68**

Employees 2016

**EUR 6.8 million**

Turnover 2015

**EUR 8.8 million**

Turnover 2016

STAR ELECTRONICS GMBH & CO. KG

**27**

Employees 2015

**27**

Employees 2016

**EUR 4.2 million**

Turnover 2015

**EUR 4.4 million**

Turnover 2016

TURNOVER AND EMPLOYEE DEVELOPMENT

“ The ways in which we work together will change and become more flexible. Important keywords here include co-working, smart collaboration and the start-up mentality. These are fundamental characteristics that we at STAR incorporated into our company values from the outset. ”



*Katharina Hennigs*

MANAGING DIRECTOR STAR EQUIPMENT

Employee information excluding apprentices, interns, working students, bachelor students, master students, temporary employees and subcontracted employees.





## STAR *Magazine*

The path taken by STAR in 2016 was not just full of interesting projects. We also encountered many stories, big and small: all around, on waysides, at junctions and bends. From sustainability issues to awards and events, they added flair, excitement and variety to our journey.

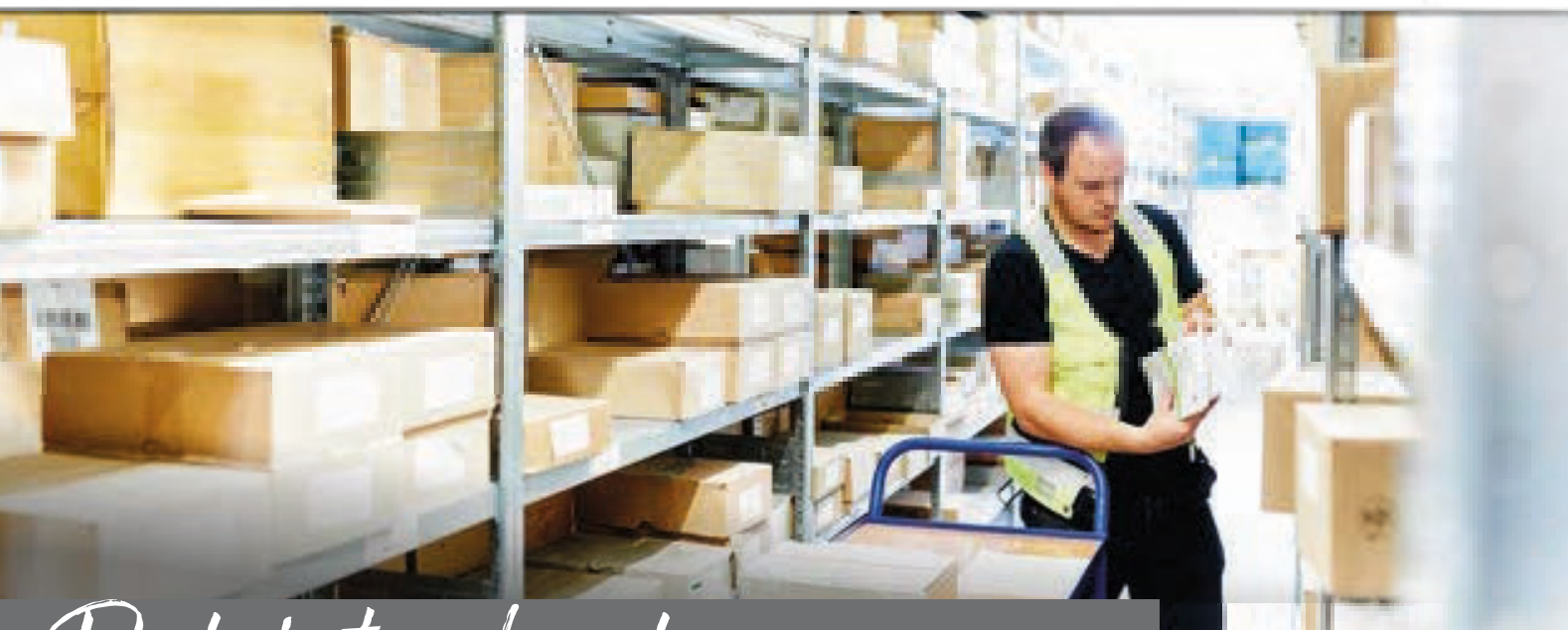




## NEW WAREHOUSE LOCATION IN KORNWESTHEIM

*To keep pace with our ever-expanding logistics division, STAR COOPERATION opened another location in Kornwestheim in late 2016.*

With nearly 10,000 square meters of warehouse and office space next to the GVZ logistics center in Kornwestheim, our logistics experts have created the ideal conditions under which to complete their contract logistics projects and deliver services to the automotive industry and its suppliers.



## Distribution logistics

BY THE BOOK

LIVING UP TO STANDARDS – WITHOUT HAVING TO GET INVOLVED. THIS WAS THE SCENARIO THAT BROUGHT OUR CUSTOMER, A LEADING EUROPEAN AUDITING FIRM, TO STAR COOPERATION.

With the business expanding, our customer found that it was unable to meet the specific supply requirements of its training facilities at the academies in a way that was both cost-effective and adequate in terms of quality through its internal staff alone. At the same time, the producer of the company's hardware was not able to offer cost-effective distribution directly to the training facilities – this was another reason to outsource the supply chain and call in the assistance of a proven expert in logistics: STAR COOPERATION. The three-month implementation phase encompassed the enhancement of the distribution process to include unique identification of

the hardware as well as serial number recording with the delivery note. Another task was to set up a workstation for modifying the hardware. The aspects of **order management**, warranty and replacement claims processing as well as retrofitting of hardware according to special requests stated on the customer's order were just the tip of the iceberg. Other facets included multilingual customer support, which we continue to provide today, and the **warehouse and inventory management** system, which we were able to optimize. We also continue to be responsible for shipping and customs processing, return and complaints management and customer invoicing. With this project, we were able to create the ideal conditions for more powerful scanning processes across the entire non-automotive field and enhance technical PC hardware capabilities. We have received excellent feedback from the markets. The academies in particular are extremely pleased with the quick provision and processing of requests.



*"We could not have wished for a more appropriate prize-winner for the premiere of our Partner Award."*  
André Schuster, Senior Partner Manager Bissantz

## BI PARTNER ISSUE AWARD

For the first time, the software company Bissantz & Company has presented an award to one of its partners – and the debut award went to STAR.

Together, our IT and consulting experts use the DeltaMaster (developed by Bissantz) on a range of business intelligence projects for our customers. The award is especially welcome given that it is a reflection of the importance of our collaboration with our partners and other service providers.

## CERTIFIED SOFTWARE TESTERS AT STAR

Only a tested IT system is a good IT system. Platforms, programs, networks and apps have to prove their worth in demanding tests. Test management is a solution devised by the digitization department and does just this. STAR officially confirmed that it had this expertise in 2016. Seven STARS went back to school and passed the written exam to receive the qualification of **ISTQB® Certified Tester Foundation Level**.



## THEORY BECOMES *practice*

FROM WINDMILLS TO CARS THAT DO NOT NEED A DRIVER. AS FAR BACK AS ANCIENT GREECE, THE GODDESS AUTOMATIA WAS REVERED FOR BEING THE PERSONIFICATION OF AUTOMATION. AND THE SENTIMENT STILL APPLIES TODAY: ONLY COMPANIES THAT ALWAYS KEEP THEIR EYES ON THE BALL ARE ABLE TO REMAIN COMPETITIVE OVER THE LONG TERM.

This was no secret to our customer, a leading automotive manufacturer from Stuttgart. That is why the company launched a project with the aim to enable customers to use a standardized appointment booking system on a mobile, tablet, laptop or PC device to book appointments online at the dealer of their choice. After issuing a request via the company portal, the customer would be able to check later on whether the dealer has responded. So far, so good. That said, theory and practice are often worlds apart. This is why the STAR expert team was called in to take a closer look at the concept. Between the concept design, tests and final quality assurance check, we took care of the entire test management process for the application. The overall objective was to automate the manual tests. After defining the objectives in consultation with the customer, we succeeded in automating the regression tests by utilising external software with keyword-driven and data-driven testing. Our approach was a complete success. *The solution led to significant cost savings, more comprehensive coverage of requirements within the same time frame and a faster production launch for the application. This handed our customer a competitive advantage and ensured 100 percent satisfaction among the end-customers.*







## NEW MOBILITY PARTNERSHIP



STAR was an exhibitor for the second time at the **HANNOVER MESSE** in 2016. This time around, we presented our new partnership in the field of mobility – the Stuttgart-based Fraunhofer Institute for Industrial Engineering IAO studies how people seek to embrace

mobility now and in the future and develops appropriate, future-proof business models to meet those needs. This holistic view of mobility of the future fits perfectly with the consulting and implementation expertise of STAR COOPERATION.

## PROCESS CONSULTING

## Clothes make the man

FROM SENSIBLE OFFICE CONCEPTS TO THE BEST EQUIPMENT AND MATERIALS, THERE ARE MANY THINGS THAT CAN IMPROVE THE QUALITY OF A WORKSTATION. WORK CLOTHING IS NOT NECESSARILY THE FIRST THING THAT COMES TO MIND.

However, it is actually extremely important and the drawbacks quickly become apparent when it is not available. To keep things from reaching this point, we helped our customer, a leading automotive manufacturer, with process optimization and on-site coordination. Tracking the service provider that makes and sells the work clothing for the workshop and customer service employees streamlined the organizational channels and made the reporting methods for the clothing line more professional. In the project period from January to October, we organized two international market events for our customer, during which various market representatives were informed about the new developments. Our customer was able to reinforce the relationships between its headquarters and the respective national branches. The feedback from the demanding customer environment was 100 percent positive – and our customer was extremely pleased as well. We are delighted that the customer is now planning to draw on the interdisciplinary capabilities of STAR COOPERATION in the future thanks to the success of this project.



## STAR SUPPORTS THE BIM AWARD FOR THE FIRST TIME

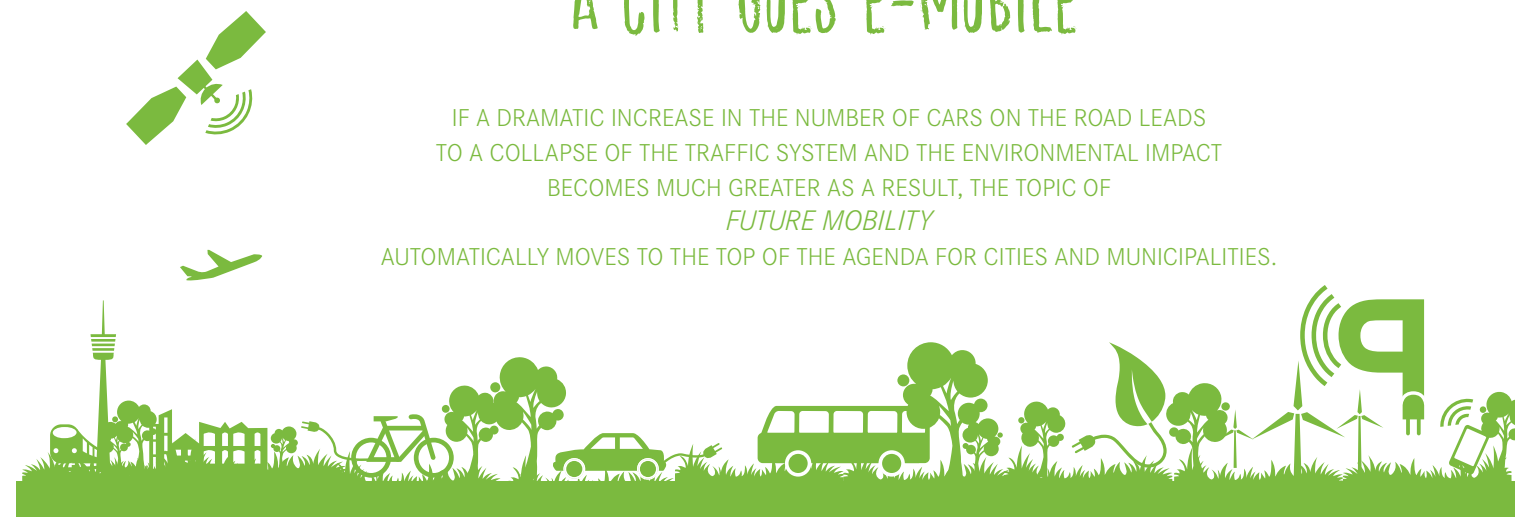


Building Information Modelling (BIM) – that means using digital and object-oriented information such as virtual 3D models in architecture and construction. BIM CLUSTER STUTTGART presented the BIM AWARD in 2016 for the first time to highlight expertise in the implementation of BIM processes in the region. STAR was there as a sponsor with its experts in Virtual Engineering and actually sponsored, designed and produced the award, a depiction of Stuttgart's TV Tower, using 3D printing.

## A CITY GOES E-MOBILE

IF A DRAMATIC INCREASE IN THE NUMBER OF CARS ON THE ROAD LEADS TO A COLLAPSE OF THE TRAFFIC SYSTEM AND THE ENVIRONMENTAL IMPACT BECOMES MUCH GREATER AS A RESULT, THE TOPIC OF *FUTURE MOBILITY*

AUTOMATICALLY MOVES TO THE TOP OF THE AGENDA FOR CITIES AND MUNICIPALITIES.



Over the past few years, a medium-sized city on the outskirts of Stuttgart was increasingly given to considering how to promote the mobility of its population in the future while simultaneously protecting the environment over the long term. The approach by city hall was to set a good example, which is why it devised a plan to convert the entire municipal vehicle fleet to electric vehicles – provided that the financial situation and the infrastructure would allow for such a development. To find out, the Fraunhofer Institute for Industrial Engineering (IAO) was commissioned to conduct a feasibility study. This is also where STAR came into the picture. Since 2016, the New Mobility department has been working with Fraunhofer IAO on inter-modal mobility concepts for companies and the public sector. For

the case at hand, Fraunhofer IAO determined that it would indeed be economical to convert the fleet almost entirely to electric vehicles. In close coordination with city hall, our partnership is now offering the same service to companies based within the city limits, i.e. analyzing their respective vehicle fleets in terms of the potential for environmental and economic optimization. It is even possible to conduct a practical trial using an electric vehicle fleet. And who knows? Perhaps in a few years, the city will have the highest density of electric vehicles in the country.



## New ideas and inspiration IN VIRTUAL ENGINEERING

IN APRIL 2016, STAR WAS ACCEPTED AS A MEMBER COMPANY OF THE **VIRTUAL DIMENSION CENTER (VDC) FELLBACH**, GERMANY'S LEADING NETWORK OF EXPERTS IN VIRTUAL ENGINEERING.

Technology providers, service providers, users, research institutions and multipliers within this network work together on 3D simulation, 3D visualisation, product life-cycle management and virtual reality. We look forward to a great deal of technical input, interesting contacts, fresh ideas and new areas to explore.







## Gold sponsor of CyberOne Award



For the second year running, STAR COOPERATION actively supported the **CyberOne Hightech Award Baden-Württemberg** event, which was hosted by our partner bwcon. In addition to our commitment as a gold sponsor of the event, Oliver Messer, Managing Director at STAR SYSTEMS, was once again a member of the jury and assessed over 70 business plans from fledgling start-ups from south-west Germany in the run-up to the award ceremony. The winners were Ad-O-Lytics (1st prize), Werz Innovations (2nd prize) and EnFin (3rd prize).

Images: bwcon



## A PIPE DREAM NO LONGER: AUTONOMOUS DRIVING

WHO ISN'T INTRIGUED BY THE IDEA OF GETTING INTO A CAR, OPENING THE NEWSPAPER AND LEAVING THE DRIVING TO THE CAR?

Although we are not yet that far along, the first self-driving car engineers are starting their training now so that they can take development in the field to the next level. The programme was initiated by four players with an interest in further developing the subject: Mercedes-Benz, Nvidia, Uber subsidiary OTTO and DiDi. One STAR was able to gain one of 250 places from a field of over 11,000 prospective participants. **We are very proud of this and look forward to seeing what developments he will convey from this exciting field.**

SEA

SEO

SEM

## STAR IS GOOGLE PARTNER

Since 2016, STAR COOPERATION has been an official partner of the Internet's top dog, Google. That means that our certified e-commerce consultants are not simply experts in all matters relating to search engine optimization and marketing. It also means that they can put into practice all the steps required to achieve a higher Google ranking, thereby ensuring that our customers' web sites are found in the vast universe of web sites on the internet.

## Jupiter, Mars and Co.

FOR MANY, THE PLANETS IN OUR SOLAR SYSTEM WOULD BE THEIR FIRST ASSOCIATION WHEN THEY HEAR ABOUT PLANETARY GEARBOXES. HOWEVER, THERE IS MUCH MORE TO IT THAN ONE MIGHT SUPPOSE.

You do not have to extend the list very far to see that servo right-angle gearheads, system components such as rack and pinions as well as lifting and platform technology have little to do with the vast expanses of outer space. Still, that does not make them any less interesting – after all, the love is in the details, not the size. Alas, sometimes interest alone is not enough to communicate complex technical situations in a clear way. And this is why our international customer opted to work with us. The objective: to explain topics that are not exactly everybody's cup of tea in a simple and understandable way. And as we all know, a picture is worth a thousand words. The idea was to create a **TELL ME! explanatory film** based on a

well-crafted storyboard, drawings, voice recordings as well as animations and present a high-quality end product that clearly conveyed the technical matter at hand. The project also consisted of creating animations based on step data that would enable our customer to transmit complex content, processes and tools to the end customer. At the same time, we managed to embed some brand communication through subtle branding in each of the films. The products serve a purpose internally as well – e.g. for employee training. Curious? Then simply google it, check out our explanatory film and show off your newfound knowledge at the earliest opportunity.

## NEW BRANCH IN MUNICH

**The STARS in Munich have a new professional home.**

In June 2016, the Munich-based arm of STAR moved into a striking new office in Langfeldstraße. The premises were shown to customers from Munich and the surrounding area at the official housewarming party in July. The 450 square meters of modern, well-appointed office space offer up to 30 employees the perfect conditions for serving customers and completing projects.





## IMPORTANT EXCHANGE IN AFTER SALES



STAR has been a member of **Kundendienst-Verband Deutschland e. V. (KVD)** since July 2016. The group is Europe's largest and most important professional association for service directors, service experts and young customer service professionals in a broad range of industries and companies of all sizes. For STAR, membership in KVD represents a good opportunity to network with colleagues from the field of after sales, exchange experiences and knowledge and keep abreast of the latest service trends.

## After sales takes off - worldwide

GREY IMPORTS, EXCESSIVE PRICE LEVELS, THE STRONG NEGOTIATING POSITION OF MAJOR CUSTOMERS, MARKET GROWTH OR EVEN LOW-QUALITY FUEL – THERE ARE MANY FACTORS THAT CAN LIMIT THE SUCCESS OF AFTER SALES IN FOREIGN MARKETS.

Static pricing processes are another issue, as they make it even more difficult for many companies to make an impact on the market. Sensing that it was failing to make the most of its own pricing tool, an international automotive manufacturer turned to STAR COOPERATION with the task of designing and implementing a new pricing strategy. In concrete terms, the focus was a campaign aimed at optimizing and reorganizing pricing in Australia, Thailand, Malaysia, Indonesia and Romania – an extremely diverse group of markets. A team of seven after sales experts provided a comprehensive service package for

the customer, incorporating market analysis, studies, business cases as well as implementation and communications of the new rebate model to the individual dealers. The customer was completely satisfied with the results. We succeeded in creating transparency, increasing life-cycle pricing, enhancing the brand image, improving TCO and enabling the markets to conduct independent, professional pricing policies. We, too, were grateful for the chance to take part in such an interesting project with many unique cultural features – we look forward to working on the projects to come.

**EXPERTISE, PASSION AND AN INTERDISCIPLINARY CHARACTER –**  
THIS IS THE BASIS ON WHICH OUR STAR CONSULTANTS WORK EVERY DAY TOGETHER WITH AND ON BEHALF OF OUR CUSTOMERS.



Based on a scientifically sound customer survey, the quality and professionalism of the work of our consultants have once again led to our being awarded the TOP CONSULTANT rating. We are delighted with this honour, as it shows that STAR COOPERATION has an outstanding reputation in the consultancy sector in Germany, especially in the field of after sales.

**TOP CONSULTANTS  
ARE AT HOME  
IN BÖBLINGEN**

## PRICING:

### USEFUL USE CASES

TOO LARGE, TOO COMPLEX, TOO SHORT-LIVED OR TOO WEAKLY STRUCTURED – THESE ARE JUST SOME OF THE ADJECTIVES ONE MIGHT USE TO DESCRIBE BIG DATA, I.E. DATA VOLUMES THAT CANNOT BE EVALUATED WITH CONVENTIONAL MANUAL METHODS DUE TO THE REASONS ABOVE.

The problem is primarily one for institutions such as banks, government agencies and major companies. Our customer from the automotive industry was also facing the challenge of finding a way to automate its pricing. The experts of STAR recommended that the company draw on use cases. This strategy makes it possible to describe the outwardly visible behaviour of a system from the user's point of view. The user could be a person, a role or another system. The key aspect is that the user interacts with the system as a means of pursuing a particular objective: in this case, price stability. Together with the customer, we developed the concept, evaluation and selection process and the pilot test for the selected use cases in order to implement them in a pilot project at operational level. Fine-tuning the algorithms and the roll-out of the use cases, which implied significant cuts to the

current processes, were key challenges. However, the result was worth it: a good deal of enthusiasm was generated thanks to a significant reduction in effort and expenses with regard to pricing, consolidation of resources on the central products as well as improvement of the quality of pricing through the use of an expanded information basis. It also led to a desire to delve even more deeply into the topic in the future.



## TEST BENCH EXPERTS REVEAL THEIR SKILLS

Another event in 2016 was **AUTOMOTIVE TESTING EXPO (ATE)**, the leading international trade fair for measurement and testing technology, which was held in Stuttgart in June. For our engineering experts, the ATE is an event that is not to be missed. They were delighted by the countless interesting encounters at our booth. It gave them the opportunity to discuss our services in the fields of mechanical automation, component test benches, applications for test benches, technical services and digital assembly instructions.



**WHEREVER OUR  
CUSTOMERS ARE,  
WE ARE THERE**

**STAR COOPERATION now has a presence in Heimsheim as well.** Namely a new workshop facility. For, when our customers express the desire to have us nearby, we make it possible and seek the suitable space for the respective project. In this case, the project primarily involves vehicle services such as for tyres and wheels for premium vehicles. We can now provide these services with in a comfortable distance of our customer.





## A PLACE FOR *creative ideas*

In October, our team at the STAR headquarters in Böblingen celebrated the official opening of our brand new **STAR innovation workshop**. The workshop is a hub for creative exchange – a place where teams can retreat to in order to work on new ideas and innovations. In view of its purpose, the space was outfitted with a range of facilities intended

to foster creativity, including a virtual reality system. This is further proof of the important role that **innovation management** plays at STAR. For us, innovation is the wellspring of new services and solutions. This is also why collaboration with and support for the start-up scene in Baden-Württemberg is becoming increasingly important at STAR.

## Sterntaler

### RAISING MONEY FOR REFUGEES AND SICK CHILDREN

Pizza, ice cream and Christmas cookies: these were just a few of the treats the STAR apprentices served to their colleagues in 2016, gathering donations as they went. The money raised last year will go to three different initiatives: the hospice **Hospiz Stuttgart** wishes to remodel one of its rooms reserved for severely ill children and their families. The **Freundeskreis Flüchtlinge Böblingen** and **Arbeitskreis Asyl Sindelfingen** refugee associations will use the funds for language courses and group excursions in order to help refugees adjust to their new lives and integrate into society.

If, contrary to expectations, there is anything left over from our Sterntaler campaigns, we will donate the food to the food bank in Böblingen, which provides food to the homeless and deprived in the area.



## STAR INSIGHT – BETWEEN ART, POETRY & MUSIC

### FROM CALLIGRAPHY TO JAMES BOND:

AT THE QUARTERLY STAR INSIGHT EVENTS, ENCOUNTERS ARE THE FOCUS – WITH EACH OTHER, OF COURSE, BUT ALSO WITH THE ARTS. WE INVITED OUR PARTNERS AND CUSTOMERS TO THESE SPECIAL EVENINGS ONCE AGAIN IN 2016.

#### STAR INSIGHT I

Less is more – this was the motto of the opening exhibition titled ‘SO’ by calligraphy artist Sigrud Artmann. Through her work, she wants to stimulate thought processes in the minds of her audience – and she succeeded in doing so in mid-January as part of the first STAR Insight event.

She combines her continuous pursuit of minimum word content with her passion for the partially forgotten craft – in this age of digital media – of calligraphy, which is dedicated to achieving the perfect aesthetic balance and which forms the starting point of her art. Those who had never pondered the interaction and significance of words, letters and abbreviations certainly did so after seeing her compelling works of art.

#### STAR INSIGHT II

In the second quarter, we set off in search of James Bond. In her motivational speech ‘007 instead of 00-nothing’, profiler Suzanne Grieger-Langer explained before an audience of 50 invited STAR Insight guests how to protect oneself against manipulation of all kinds in day-to-day professional life. Just how successful that can be done with words as well was demonstrated in the poetry slam held just after the speech. This novel duel gave our crowd the opportunity to select a winner from four of the best slam poets in Germany. In the end, the audience chose the only female participant, who had presented a thoughtful poem reminding listeners how important it is to simply say thank you now and again.

#### STAR INSIGHT III

The third edition of the popular STAR Insight series – **START-UP DAY** – shone the spotlight on just how diverse the start-up scene is in Böblingen. Of the original 17 applicants from the region that were given the chance to present their concepts in a preliminary selection round, five finalists had the opportunity to introduce their ideas to the guests and appeal for support with an elevator pitch in late October.

The winner was then chosen via smartphone in a secret vote. The team from eMovements, whose idea was inspired by a grandmother living on a hillside, took first place. Their electric-powered walker ‘ello’ was designed to give physically disabled people a greater sense of security on difficult terrain while increasing their level of mobility and enabling them to remain independent for longer. The idea was not just a hit with our jury – health insurance companies have also already shown interest in the patented product.

After the award ceremony, the Grüne Salon was transformed into a rock-and-roll club featuring renowned pianist Florian Scharnofske. Guests were invited to let down their hair and have a dance to round off the evening.

#### STAR INSIGHT IV

The STAR Insight series concluded with the ‘Illusion and Reality’ exhibition by colourful artist and university lecturer Beate Blankenhorn. In her works, which make use of traditional painting techniques, she depicts the artists, writers, philosophers and people who have shaped her life with their works – sometimes Blankenhorn herself is visible in the group portraits, sitting on the sofa next to Marcel Proust, Virginia Woolf or Albert Camus.

She uses her pictures to tell stories for her audience to discover – and she certainly had the full attention of our guests.







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**By the way:** Frank Steinmann, his friends and their projects with STAR are not real. However, they do resemble some of our customers and their respective challenges. If you perhaps recognize yourself here and there, any similarity is coincidental and not intentional. Our mutual journey with Mr Steinmann ends here. We hope that you have had as much fun accompanying him as we have.

TREADING NEW  
**PATHS**  
TOGETHER





**STAR COOPERATION GmbH**

The STAR COOPERATION is certified according to DIN EN ISO 9001:2008.

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