

C€ PROFILE 2017

Control€xpert Redefining Rules.

o₃ Editorial

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Dear Reader,

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A great deal has been written and said about the subject of digitalization in the last year. There is Digitalization 2.0, 3.0, 4.0, etc. The digital transformation is essential for ensuring that it finds its place in the future. At Control€xpert we can confidently say that we are among those who have been embracing this development for more than a decade. But what's next? Digitalization 5.0? Connected cars? Artificial intelligence? Virtual reality becomes reality? Or something completely different?

For us, this question is an integral part of our daily work. The search for what comes next, for technologies and solutions that make our (and especially your) business model better, simpler, and at the same time more fascinating is one of the key issues to which we devote our time. It is our driver, motivation, and mission. It has allowed us to become a flag-bearer of the digitalization process. This is particularly evident in our portfolio. With products such as GlassCheck and Invoice-Check as well as the Web-based Postmaster[®] and C€ 2.0, it is possible to simplify, improve, and accelerate time-consuming and costly processes.

In this issue of C€ Profile we present current projects and developments from our company and take a closer look at some promising visions of the future. After all, one thing is certain: At Control€xpert we are already on the trail of the "Next Big Thing". In doing so, curiosity, a thirst for knowledge, and an urge to innovate go hand in hand with our vehicle and IT expertise. We are looking forward to the future – together with you.

We hope you enjoy reading the magazine and trust that you will discover many interesting insights!

Gerhard Witte

Kai Siersleben

"What's next? Digitalization 5.0? Connected cars? Virtual reality becomes reality? For us, the search for the 'Next Big Thing' is an integral part of our daily work."

EASYCLAIM THE SMART TTVE-SAVING MACHINE

49 M

smartphone users in Germany in 2016. In 2010 there were 14 million.

umes

a day on average mobile users check their cell phone.



29%

of all smartphone users state that their cell phone is the first and last thing they look at each day.

Claims Assistant.

Claims settlement now takes a matter of hours rather than 28 days. By using EasyClaim on the smartphone, the claimant is shown the settlement amount on their screen within the shortest space of time. At the same time, the workload of the person dealing with the case at the insurance company is reduced thanks to the automated process. After a successful start, the smart application has now been further improved.

The smartphone has long since been omnipresent. So why shouldn't it be used to speed up claims settlements as well? No sooner said than done as is so often the case at Control€xpert. EasyClaim has been market-ready since 2016, making it the first app to integrate the insurance holder into the overall process in a beneficial manner. Thanks to fully electronic settlement and the automated payment option on the part of the insurance company, previously time-consuming processing tasks are no longer necessary. So it is little wonder that there is so much interest in this innovation.

END CUSTOMERS ARE DELIGHTED BY EASYCLAIM

Following pilot projects with major insurers, the first findings are now on the table: End customers are delighted with the fact that everything was handled as smoothly as possible. Yet it goes without saying that there is always room for improvement. Accordingly, all the received feedback flowed directly into improving the application. Thanks to simple customer installation by configuration, customers can now be connected to the system much more easily and flexibly. In the latest version, the damage survey is conducted by means of two diagonal overviews of the vehicle. Furthermore, the app is now also multilingual throughout the entire process, which immediately makes it suitable for international use as well.

NO INSTALLATION NECESSARY WITH THE HTML5 VERSION

Besides the app itself, there is now also an additional Web-based Easy-Claim application. This brings further benefits. Installation is no longer necessary, for example, because the application runs in the computer's browser. This new option is also made attractive by the fact that the claim number doesn't have to be entered, and the HTML5 version is supplied to the business customer even more quickly. For repair shops it is the solution that reduces the administrative workload by enabling fast calculations and digital communication.

THE DEVELOPMENT **WORK GOES ON**

By expanding our client base and enhancing the applications, with every day that passes we gain new, valuable insights that go into further developing and improving EasyClaim. After all, only the best is good enough at Control€xpert. ■

BIG POTENTIAL

"When developing the end-to-end processes as part of our digitalization project in the area of vehicle accident claims, we reorganized the entire process from the perspective of the customer. At the same time, we are also inevitably reliant on a quick and simple way of determining the size of a claim. The EasyClaim app, which we use under the name Allianz Schaden Assistent (Claims Assistant), is ideally suited to this task.

A market research study reveals that our customers are particularly interested in such a solution. The findings show that two out of three test customers would use the app until the payout. The representatives and colleagues at Allianz Beratungs- und Vertriebs AG are also convinced that we have found a good way of impressing our customers with the Allianz



Karin Brandl, Head of Vehicle Accident Claims, **Departmental Director for Claims at Allianz** Versicherungs AG

The entire project began in mid-September 2015 and we knew by as early as the end of 2015 that the customers viewed the Allianz Claims Assistant as a good Allianz innovation. Since then, we have already been able to consider many of the customers' suggestions and requests when further developing the app.

The app is revolutionizing the way in which we handle claims. Instead of taking two weeks, we can now work through small claims within a matter of a few hours with the help of the app from Control€xpert. Yet it not only means that claims can be handled more quickly; customer satisfaction has also increased significantly."

BLOCKCHAIN UNFETTERED POSSIBILITIES

For many, it is considered the greatest invention since the development of the Internet: the blockchain. People expect this technology to do nothing less than fundamentally change our lives. It is also predicted to have a massive influence on the insurance industry. Reason enough to take a closer look at it.

> Most people will have stumbled across the term blockchain in association with the digital currency bitcoin. Yet while the anonymous means of payment is sometimes unable to shake off its dubious reputation, there are no such doubts about the digital architecture on which it is based. The blockchain is an extraordinarily secure and simultaneously transparent system that makes cryptocurrencies such as bitcoin possible in the first place. Before we come to the application areas, however, let's take a look at how it works

HOW DOES THE BLOCKCHAIN WORK?

Imagine the blockchain as a chain made up of virtual blocks. The same information is stored in each of the blocks. To be more precise, it is a decentralized protocol with which transactions between various parties can be executed and every change transparently recorded. Decentralized means that the protocol is not on any server or within any company – it is distributed across many different computers. You could even say among all participants. As such, there is no one single person who has power over the journal. Furthermore, the data is encrypted and monitored with the help of algorithms so that discrepancies and errors immediately stand out. This encryption and the decentralized storage guarantee that the blockchain cannot be manipulated.

The transactions – or rather the exchange of information of different kinds - are executed directly from block to block or from participant to participant. As a peer-to-peer technology, the blockchain simply makes intermediaries superfluous. To come back to the example of the aforementioned cryptocurrency at this juncture: A sender directly transfers the amount to

the recipient without having to utilize the services of a financial service provider or an online payment system. And this at least should give people an idea of the kind of influence the blockchain could have on our industry.

THE BLOCKCHAIN AS A **DRIVER OF INNOVATION**

It is clear that the blockchain makes it possible to exchange data without the intervention of a previously required third-party entity. Yet what or who takes on the role of this entity? How are activities and processes regulated without intermediaries? On the blockchain they more or less take care of themselves - with so-called smart contracts, for example. These are basically program codes in the form of an if-then statement: As soon as an event occurs with a direct connection to the content of a contract, it triggers the corresponding action. It is independent, transparent, and cannot be manipulated. An example: If the transaction for a car purchase is processed via the blockchain, the buyer receives a digital car key as soon as the defined amount has been credited to the sellers account. If an agreed installment has not been paid, access to the car will be blocked. Contracts are thus fulfilled completely neutrally, in keeping with the original agreement.

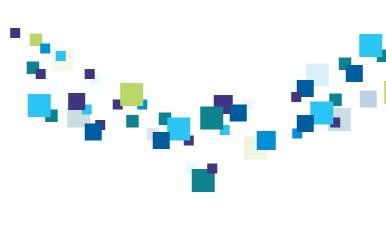
Insurance companies can work in a similar way to smart contracts in future. The insurer and the insured agree on a set of rules. The blockchain implements this set of rules fairly and neutrally. The driving behavior of the insured person could be analyzed via the blockchain and the premiums automatically adjusted. Careful drivers will be rewarded, while drivers who are prepared to take risks pay more. As a result, it isn't just companies that benefit from the advantages of direct transactions (including accelerated processes, security against manipulation, and transparency), but also customers. >>





WELCOME TO THE DAO

One company that is already enjoying the benefits of the blockchain is the DAO (decentralized autonomous organization). The task of the DAO essentially involves generating a digital currency (Ether, see box) by selling voting rights to stakeholders. The members or investors then decide together how to use the Ether that has been raised. You could call it a mixture of peer-to-peer credit (social lending) crowdfunding, and private equity not traded on the markets. Once a decision has been made, smart contracts take care of the rest. And 'the rest' means that from this point forward, neither the investors nor the DAO founders nor anybody else can intervene in the ongoing process – at least that's what people thought. In mid-2016 hackers managed to gain access to the system. Even though the problem was resolved within the shortest space of time, it nonetheless shows that the blockchain is still in the middle of a development process.



100110101111 11001010101001011 110 Bitcoin 00100 101111011110100 000101010010110 11010001111010

BENEFITS, RISKS, AND FORECASTS

The benefits of the blockchain are diverse and manifest: Huge savings can be made by automating previously manual processes. It thus becomes very cheap to conclude contracts. There is absolute transparency in all decision-making processes and activities. All transactions can be tracked by all participants at all times. And by storing all data in the blockchain, these transactions are secure against manipulation. Then there is the enormous scope and easy accessibility of the blockchain and the fact that it accelerates a wide range of processes. The risks relate to the number of legal issues yet to be clarified as well as the question of liability in the event of programming errors, which are essentially possible, though unlikely. Yet a great deal of work is being done in this area. The forecast: The blockchain will soon permanently change our industry as well.



BLOCKCHAIN:

A decentralized, extendable protocol that is secure against manipulation

ETHEREUM:

A distributed system that provides the platform for smart contracts

ETHER:

Cryptocurrency, a digital means of payment

BITCOIN:

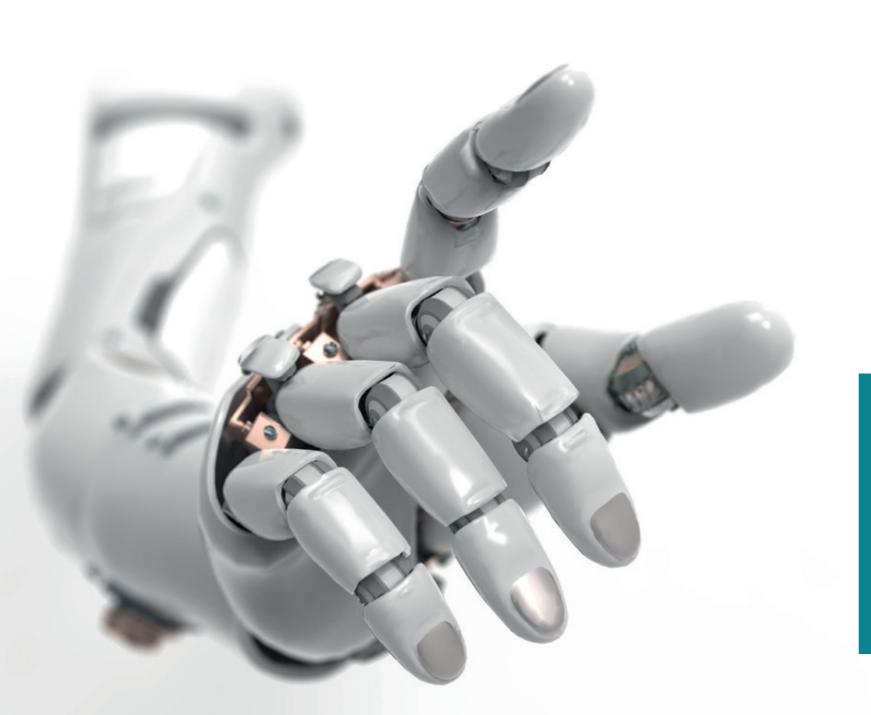
Cryptocurrency, a digital means of payment

SMART CONTRACT:

An electronic contract, self-executing and self-monitoring computer protocols

RESEARCH AND DEVELOPMENT THE INNOVATORS

Those who wish to play a part in shaping the future and even forecast what is to come must start today. Control€xpert has its own research and development department for this purpose. The head of the department, Dr. Andreas Witte, brings us up to date.









What has been happening in the last year?

In 2016 we concentrated particularly hard on three major themes that are closely linked to one another: business intelligence, big data, and artificial intelligence. At Control€xpert Germany, more than 20,000 cases are worked on in one day alone and we are conducting research into the kind of answers the huge amounts of data can give us. We have the necessary infrastructure thanks to our new data warehouse - in fact, it is similar to that used by Facebook and Google. This allows us to gain structured insights for our customers from the 2TB of data gathered every week, making it possible to react early to market changes and implement process optimization measures.

The keyword is artificial intelligence that sounds like science fiction.

ble criteria.

How might this look in future?

At major fleet operators, leasing compa-



The Control€xpert think tank is a nineman team that has been examining current and coming developments since 2015 and thus setting the course for the future.

Science, yes, fiction, no. Modern practices, such as those performed by neural networks, already make it possible to create prediction models that extend ever further into the future. In addition, we are working on driving automation forward. This includes automatic identification of damage patterns based on scientific and compara-

with manufacturers of drones and indoor

navigation systems in future.

What new things will 2017 bring?

The area of 3-D printing is a very exci-

ting one for us and things are develo-

ping quickly here: Last year a few hundred

in 2017. According to scientific studies, the

change - particularly in the automobile in-

dustry, the spare parts market, the trans-

port sector, and naturally the world of insurance. When the time comes, we will be

ready. It's all about sending data and that is

our business.

technology will be a significant driver of

thousand printers were sold worldwide, but several million are forecast to be sold

nies, and car rental firms the car return process is associated with time-consuming manual work. Nonetheless, many things are still overlooked. Such problems could be resolved by drones that fly around the vehicle in accordance with set rules and identify and document damage. We are



"The Internet of Things, telematics, and VR will have a big influence on the automobile industry in future."

Dr. Andreas Witte, Head of the Research and Development Department

Are there other areas which will be of relevance to Control€xpert in future?

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Of course. The Internet of Things, for example. Or autonomous driving, telematics, virtual reality (VR); the list goes on. As such, we always stay up to date with the latest scientific developments, engage in dialogue with experts and conferences, and cooperate with universities, as is currently the case with the University of Wuppertal, for example. It goes without saying that we work closely with all of our departments. Ultimately we only want to develop things that are of use to our customers. The fact that we cultivate such a communicative open space culture here at Control€xpert is very beneficial in this respect.

Autonomous driving has long since been a present-day subject

Andreas Witte (third from left) and the research and development team

HYPERLOOP INTO THE FUTURE AT 1,200 KM/H

"Build fast, test faster," Elon Musk, technological visionary and founder of SpaceX and Tesla, once said. This quote has become the motto for two start-ups. That's because both are involved in a fascinating race to see who can be the first to turn Musk's idea for the Hyperloop, a train that travels at the speed of sound, into reality.

When Elon Musk discovered in 2011 that the planned construction of the Californian high-speed train was set to cost 68 billion US dollars, he was seething with anger. There had to be a way to make it cheaper, faster, and safer! So he thought about an alternative and in 2013 he and his engineers from SpaceX came up with the idea of the Hyperloop, a train system where passenger capsules travel through a virtually airless tube at a speed of around 1,200 km/h. Besides being more than three times faster than the California High-Speed Rail (CAHSR), it only costs a tenth of the price.

THE TECHNOLOGY IS READY, **THE RACE HAS BEGUN**

The Hyperloop is driven by linear electric motors that are already used on the Transrapid. Power is supplied by tried-and-tested solar cell technology; the vacuum technology also already exists. Furthermore, the tube routes can use the infrastructure of existing highways, which will reduce land costs. However, Musk does not wish to build the highspeed train system himself. Instead, he invited anyone who is ambitious enough to give it a try. He prefers to concentrate on his plans to fly to Mars with SpaceX and drive e-mobility forward with Tesla.

Two start-ups have taken on the challenge: Hyperloop One, founded by investor Shervin Pishevar, and Hyperloop Transport Technologies (HTT), which is headed by a German, Dirk Ahlborn. Both companies have been involved in a hard-fought competition ever since. Hyperloop One has already successfully tested its drive system on a test site in the Nevada desert in 2016 and wants to start transporting freight in 2020, before carrying passengers the following year. Negotiations are currently ongoing for the first routes in Scandinavia and Dubai. HTT wants to launch the first fully functional Hyperloop in 2018; construction work on the test site in Quay Valley, California, has already begun

INNOVATIONS FOR THE BENEFIT OF EVERYONE

This competition is stimulating both the business and the emergence of new technologies. For instance, both start-ups are involved in the development of passive magnetic levitation technology, which continues to function in the event of a power outage. Research is being conducted into ways of harvesting the kinetic energy, with which power can be generated by passengers' movements. The search for more resilient materials and better solar cells is in full swing. New welding techniques are being developed and the sensor technology is also being constantly improved.

HTT is currently also cooperating with Deutsche Bahn – both are working together to build the "Innovation Train", on which the augmented windows also planned for the HTT Hyperloop are fitted. The windows with touchscreen functionality can display data, such as information on the destination. Screens will replace windows in the enclosed Hyperloop cabins and simulate the view outside. With so much innovation, one thing is clear: Even if Elon Musk's vision cannot be realized as expected, mankind will still have benefited from the attempt.

If Hyperloop does become reality, however, it will herald a new age of mobility. Airports could be better linked to cities and reached in a matter of minutes. Metropolitan areas located hundreds of kilometers from one another would more or less grow together; a journey from Hamburg to Munich, for example, would take just 45 minutes. Cargo at major ports would be handled more quickly, because more goods could be taken to and from the ports in a shorter space of time. There would also be fewer trucks on the road. And all of this is made possible by an environmentally friendly and relatively cheap technology. So it will be interesting to see who wins the race for the hyper-train. Ideally it will be both Hyperloop One and HTT – in the interests of us all. ■



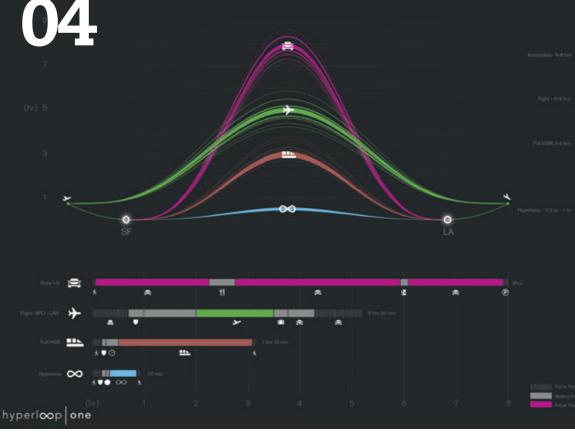


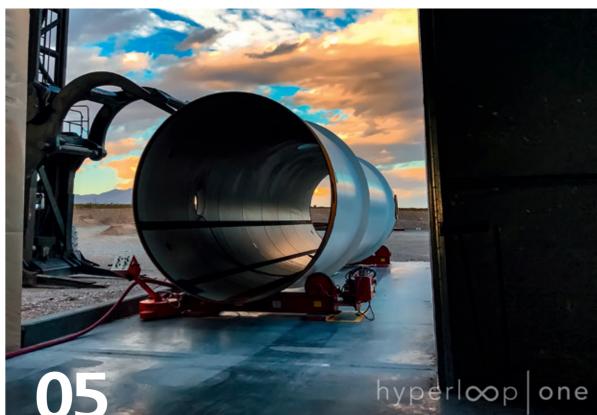


01. Hyperloop One – station concept 02. Hyperloop HTT concept 03. Hyperloop HTT – station concept 04. Infographic: journey time comparison 05. Hyperloop test site in Quay Valley, California, USA

Picture source: hyperloop-one.com







C€ PROFILE 2017

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DANIEL LAFRENTZ A brief profile

Daniel Lafrentz joined Control€xpert in July 2016 and is responsible for sales, operations, and business development in the MobileCheck department. The 42-year-old business economist previously held management positions at Deutsche Telekom and Vodafone and is an expert in market developments and trends in the mobile end devices segment.



WHY MOBILECHECK?

- The entire process is taken care of as soon as the claim is received, including correspondence with the claimant via a special hotline
- Big savings through the use of certified experts
- Fast throughput times thanks to a fully IT-supported process
- First-class performance in ascertaining damage by using the manufacturers' methods and diagnostic systems
- Top service for claimants thanks to manufacturer-authorized repairs at special rates for insurers



NEW AND IMPROVED

- Status information system gives case handlers a high degree of transparency
- Better and faster adaptability to customers' needs
- GDV link permits continuous digital processing of claims

ALL-ROUND EXPERTISE FOR ELECTRONICS CLAIMS

MobileCheck is the complete digital solution for checking claims for cell phones, tablets, and notebooks. The product handles every aspect of the case from the point at which the claim is received, including the letter requesting the damaged device, the technical inspection, the ascertainment of value, and the sending of the inspection report. More than 20 insurers have already made considerable savings as a result of this inspection process. And a look into the future promises many more new things.

Settling liability claims for cell phones and notebooks is a complex business: Actual inspection of the damaged goods is needed in order to check the plausibility of the claim. Determining the exact fair value and repair costs takes a lot of time and effort due to the wide range of models available and constant technological progress. Furthermore, processing cell phone claims typically involves numerous enquiries on the part of the claimant and is thus a laborious task for insurance companies.

THE DIFFERENCE

Score).

FAST INSPECTION AND IMMEDIATE REPAIR

THE PROCESS MAKES

With MobileCheck, Control€xpert offers insurance companies a future-proof solution for the fast settlement of claims for damaged electronic goods. A fully IT-supported process ensures that cases can be handled through to their conclusion in compliance data protection regulations: Control€xpert not only determines the plausibility of the claim, the fair value, and the cost of any repairs, but also takes care of all correspondence with the claimant via a special hotline. With this service, MobileCheck makes a significant contribution toward higher customer satisfaction ratings and an improved NPS (Net Promotor

The quality of the inspection is critical for enabling the insurance companies to get a proper evaluation on the one hand, but also make big savings on the other. The MobileCheck results speak for themselves: Around 35% of all inspected claims are not settled, either because the claimant does not send in the device (approx. 20%) or because the damage is implausible (approx. 15%). In a further 40% of inspected cases, it is possible to lower the value of the device due to previously existing damage, for example. Control€xpert cooperates with the device manufacturers' major contract repair shops in order to guarantee the quality of the inspections. The damaged device is sent there by the claimant free of charge. The employees are trained to work on the various models and use the manufacturers' tools and diagnostic systems. This makes it possible to determine the extent of the damage very quickly and with a high degree of precision. Assuming the damage is plausible, the device is repaired immediately after the inspection, if this is what the claimant wants – after all, the device is already in the repair

shop. The repair is authorized by the manufacturer, which means that existing guarantees are still valid. Insurance companies get the repair carried out at special rates as part of the MobileCheck process.

OUTSTANDING RESULTS

MobileCheck not only allows insurers to protect themselves against fraud attempts. Even in cases where claims are plausible, the inspection is more beneficial than a mere fair value estimate: In total, around 300 euros per inspected device can be saved compared with the gross claim value (or around 160 euros compared with the fair value) by reducing the amount payable as a result of inspecting the

condition of the device, ascertaining its actual value based on up-to-date information, and determining the exact cost of repairs. "The MobileCheck inspection is an essential tool for allowing insurance companies to ensure profitability and customer satisfaction in the area of general liability," says Daniel Lafrentz, head of MobileCheck at Control€xpert. "We recently added the inspection of damaged spectacles to our portfolio. The process is the same as that used for cell phones and notebooks, but of course the damage is ascertained by an optician rather than an engineer. This makes it extremely easy for the case handlers at the insurance companies." The department certainly isn't short of ideas. Here, too, it is ultimately about setting new standards now and in the future - in keeping with the Control€xpert motto "Redefining Rules".



Daniel Lafrentz, Head of MobileCheck



tions.

The second biggest challenge associated with C€ 2.0 is internationalization. Control€xpert now has 13 overseas offices throughout the world - from the USA to China. "Even though the tasks in other countries are naturally similar, there are also big differences here. Besides the obvious ones, such as currency and vehicle license plates, the statutory norms and thus also the processes are sometimes different to those used in our country," says IT product owner Stefan Zohren, describing the situation.

"Redefining Rules" is the motto of Control€xpert. C€ 2.0 is proof that our assertion in relation to continually setting new standards is not just smoke and mirrors. Which goals have already been achieved? And what does the future look like?

THE EVOLUTION

The C€ 2.0 department was founded in 2014. Today, a team of 25 employees from all over the world works on making existing applications and their processes even more efficient and preparing ourselves and our partners at home and abroad for the future.

FASTER, SIMPLER, **MORE STRUCTURED**

"A great deal has happened here in the last year," says Stefan Zohren, IT product owner at C€. The InvoiceCheck and AutoCheck applications have already taken the successful step to the next level, while GlassCheck and ExpertiseCheck are in the process of being changed over to C€ 2.0.

Furthermore, our standards deliver easily understandable and repeatable results. And the system can be easily readjusted. If an insurance company decides to make changes to its rules, for example, this is automatically taken into consideration in all applications." Last, but by no means least, C€ 2.0 permits the creation of a standard, structured C€ file from every document, with standard coding for spare parts, work positions, etc. This is a real highlight, because no matter which format the file is in when it is received, all documents are structured the same following data extrac-

PROFESSIONALLY NETWORKED

We have implemented a modular system that enables us to react to customer requirements quickly and flexibly. System components developed by us can be "modelled" into project-specific work processes with the help of visual tools. Among other things, Control€xpert uses BPM (business process management) systems from the market leader IBM to implement C€ 2.0 in the enterprise sector. This permits volume-dependent scaling at all times.

TECHNOLOGY AT ITS BEST

"Despite these differences, our team at C€ 2.0 is working on creating a standard basis on which everyone can easily work. Our aim is to produce a central and open IT platform on which our applications can be used worldwide."

EXPLORING NEW FRONTIERS

And what is planned for the future? "Naturally it remains our task to keep improving our products and the associated customer ties. In doing so, we will stay focused on the latest IT developments and incorporate them in our applications," says Zohren. One example is the portal function, which will enable our customers to work directly on our systems. "As such, we will be able to strengthen cooperation with our customers in future."

And since the aim of C€ 2.0 has always been to develop a standard with which simply everything can be checked, new business fields can be exploited. It is already possible to inspect smartphones, tablets, and similar items with MobileCheck. Soon it will also be spectacles. Maybe even bicycles. The possibilities are as wide-ranging as the claims themselves. So there are still a number of opportunities for C€ 2.0 to set new standards.

THE BENEFITS FOR INSURERS

- Supervision of (partner) repair shops, fair repair costs, correct repair processes
- Digitalization: fully IT-supported process, high degree of automation, structured data for simple (further) processing and post-analysis
- Reduced costs: lower repair and process costs
- Customer satisfaction: faster and more reliable inspection process, cost efficiency

THE BENEFITS FOR THE REPAIR SHOP

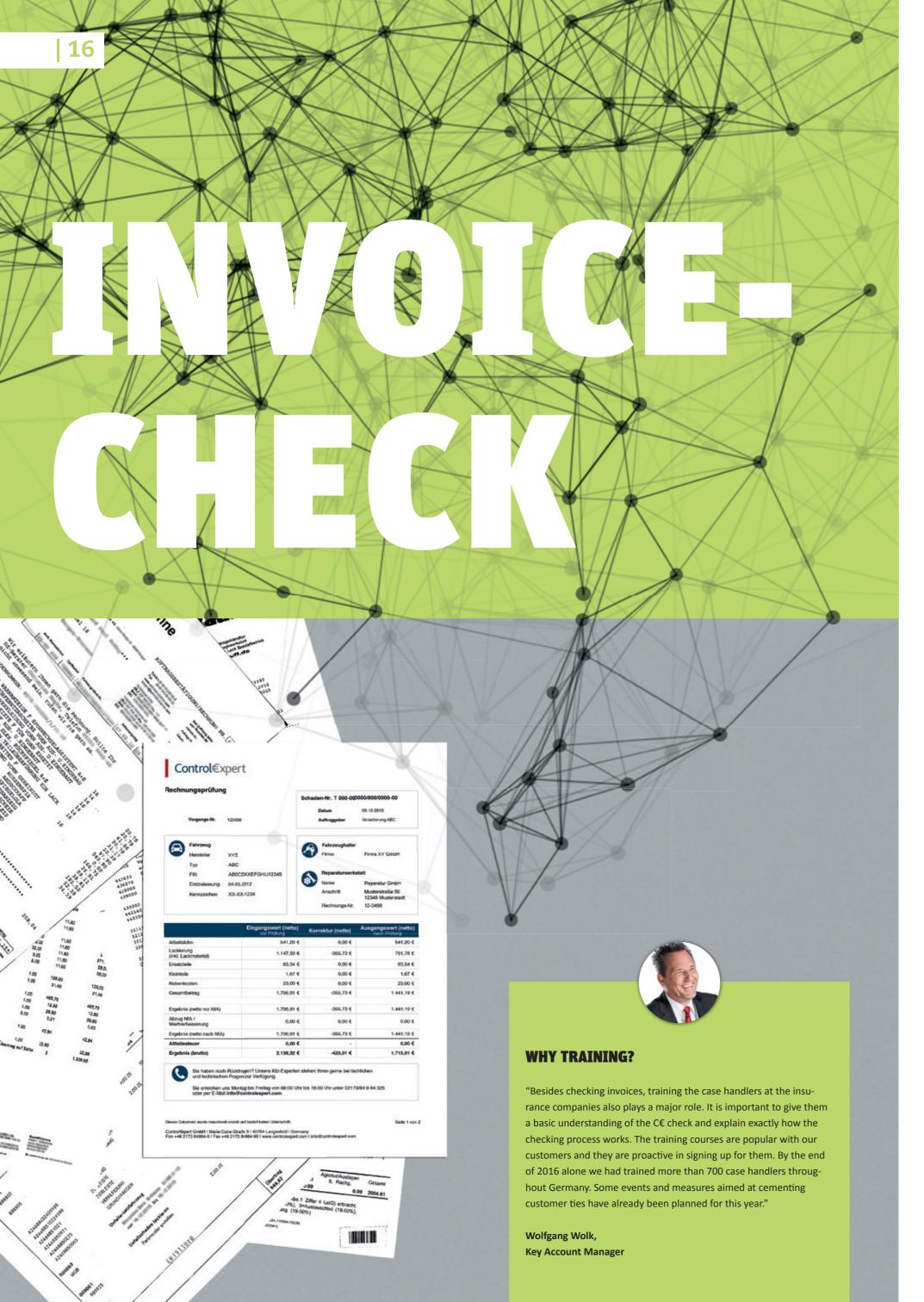
- High level of credibility, improved customer confidence
- Fast payout thanks to swift processing
- Technical communication on a level playing field with C€ experts
- Expert, professional, and prompt responses to repair steps



One of the two redundant Control€xpert data centers



Michael Erren – Product Owner, Kai Müller – Head of IT, and Stefan Zohren – Product Owner (from I. to r.)





CHECKING INVOICES ON A LEVEL PLAYING FIELD

InvoiceCheck, the unique way of checking bodywork repair invoices and their automated payment, has now been on the market for around three years. What has changed in the meantime? And what is the outlook for the future?

Repair invoices are a science in themselves. They are often anything but transparent. No clear breakdown of items can be discerned behind the set prices, every manufacturer has their own guidelines in terms of working hours and included items, and the list goes on. According to Nick Pawlak, head of InvoiceCheck at Control€xpert, checking a repair invoice requires a great deal of "painstaking detective work".



Something that no amount of digitalization or automation can manage is the skilled art of talking to the repair shops on the phone. Only welltrained employees are capable of doing this. "We perform a technical check at the end of each case. In other words, we telephone the repair shop directly to discuss any corrections or clarify any inconsistencies. As such, they are also given the opportunity to provide feedback. And we lighten the load of the insurance companies, because we deal with any enquiries from the repair shop on a level playing field between two vehicle experts." If there are no objections, the payment process can also be handled automatically using InvoiceCheck.

We are constantly optimizing our processes in order to make cooperation as easy and convenient as possible for our customers. As of recently, for example, every insurer has a named contact person so that every case handler has a direct line in the event of any queries. Furthermore, a growing number of insurance companies are recognizing the value of automated payment and are taking advantage of the opportunities presented by automated processing in order to save time and resources.

Could the damage be caused in such a way? Nick Pawlak and his Invoice Check team check up to 1,500 items daily.

The InvoiceCheck team is now made up of more than 60 employees, most of them vehicle experts with a background in bodywork building, spraying, or mechanics. They initially worked at companies associated with a particular brand. To ensure that good use is made of this hands-on experience, the vehicle experts at Control€xpert also work in corresponding brand teams when carrying out the checks. A former VW expert will therefore work on the VAG team at Control€xpert.

"There were just six of us when we started InvoiceCheck," recalls Pawlak. "A great deal has changed since then. A growing number of insurers have recognized the potential of our invoice checking system and more than 30 customers now use the product. Our team currently checks up to 1,500 items daily."

This is made possible by ever improving links to databases, which permit an automated comparison with manufacturers' data. Things are also moving forward in the area of digitalization and automation. "Our new C€ 2.0 puts an end to invoice confusion. It allows us to identify every single item from any kind of invoice format. C€ 2.0 transforms everything into structured data."



Career background:

- Qualified engineer and assessor
- Assessor and testing engineer at DEKRA Automobil
- Worked at TÜV Süd in the project area (specializing in damage assessment and vehicle evaluation)

What I particularly like about Control€xpert

- Experienced company with the character of a start-up
- Motivated and smart colleagues for whom the job is more than just a job
- Forward-looking ideas always at the cutting edge
- The great relationship with customers

My goals for 2017 at Control€xpert:

- To gain even more satisfied InvoiceCheck customers
- To deliver good results with the fantastic InvoiceCheck team
- To create standards

My dream car: Porsche 991 Targa

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DIGITAL TRANSFORMATION **UNDERSTAND THE STRUCTURAL CHANGE OR GO UNDER**

The digital transformation is an ever-present subject. Yet it is all too often not really understood. It is also little wonder, however, since developments are as complex as they are fast and they affect almost all areas of society. At the same time, it is of huge importance that the changes to the framework conditions are fully understood, because only then will it be possible to formulate a target vision and strategy for the digital transformation.

Guest article by Professor Klemens Skibicki, economic historian

- Lives in Cologne
- Founder and managing partner of Profski GmbH
- Core member of the "Young Digital Economy" advisory board at the Federal Ministry for Eco nomic Affairs and Energy
- Professor of marketing and market research at Cologne

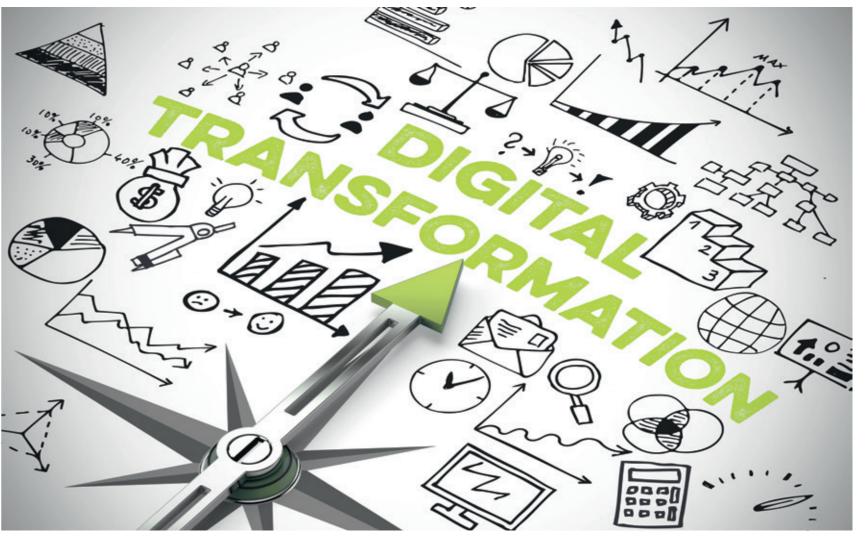
Without an idea of what the transformation means for one's own company, any way could be equally wrong or right. Business owners still all too often run away from it all in the hope that "things won't be that bad". Or they opt to take action and then only do something to make themselves feel better. It goes without saying that hoping is as unproductive as simply switching from paper to an iPad.

As is often the case, an understanding is the key aspect required for a successful transformation – particularly among the company's decision-makers. Yet even when first attempting to get to grips with the subject, the word "digital" generally focuses too much attention on the technological components. Naturally this is important, but merely an "enabler". The main task consists of understanding the new framework conditions for a network economy. The entire old "DNA" – in other words, the existing structure, culture, and skills - can only be questioned once this mental transformation has taken place. Only then will it be possible to adapt all of the processes and skills within the entire company to the possibilities presented by the digitally networked age. In short:

THE DIGITAL TRANSFOR-MATION IS TAKING PLACE

The starting point for this process should be the drivers of change that really affect all companies. Once this common understanding has been established, attention can be focused on the details. These can be found in the mobile Web, social media, and the Internet of Things. In this connection, people also talk about the network economy, particularly the "Internet of everything, everywhere, and everybody". While value chains and hierarchies were considered normal in the age of industrialization and were based on one-sided push communication and processes that were either arranged after one another or up-/ downstream, digitalization allows processes to run between two levels in all directions at the same time without any intermediate stops. This makes them faster, transparent – and much cheaper.

The Internet of Things is comparatively young. The combination of mobile Web and social media, on the other hand, is already much more advanced, which is why the focus is on this area. The mobile Internet simply removes the division between online and offline, different channels, or locations. People who are actually in the location can be linked with the entire world at the same time.



For today's twentysomethings this has long since been an omnichannel. Social media platforms are primarily used on mobile end devices. In other words, people communicate with others of their own choosing via social networks such as Facebook, LinkedIn, and WhatsApp. They talk about matters relevant to them; they share, like, and comment on things. The social networks allow them to hold conversations with no restrictions placed on location, space, or the number of people involved. They may talk about the weather, their favorite food, or pictures of cats, but they may equally share opinions, recommendations, and warnings on products and brands. Put another way: Mobile social media gives people access to the content and opinions of other people anytime and anywhere. What's more, this content is often more relevant to them as individuals than the communication of classic media and companies. Following this shift in market power in terms of availability of information toward the demand side, companies must relearn to listen, engage in dialogue, and work to elicit reactions from the other side of the market by creating relevant content. This "conversation principle" must be spread across all media communication, because promotional push communication can be blocked as irrelevant.

In the predigital world, companies learned to produce brilliant videos, posters, slogans, and press releases - and at the same time forgot how to engage in dialogue. The digital world not only makes this possible once again, but actually demands it. Companies have to understand that this dialogue hasn't only just become important, but always has been and was merely neglected by them. The sharing of information is the fundamental reason for human communication. Instead of "shouting" at customers with advertising messages, companies can and must learn to listen again and engage in interesting dialogue in order to earn their position in social media conversations taking place. The possibility to listen systematically on digital channels and actually be present where people are holding conversations has existed for a long time. However, it generally isn't considered a priority. This has to change. After all, the progress of digitalization and the use of digital media are irreversible. Only those companies that manage to establish a new closeness to the market and to customers will be able to make faster and (in the eyes of the customer) better decisions and squeeze out their competitors who are further away from the market in digital terms.

"The biggest difficulty" lies in establishing a joint understanding of the new framework conditions of a network economy." **Professor Klemens Skibicki**

"THE DIFFICULTY LIES NOT SO MUCH IN DEVELOPING NEW IDEAS AS IN ESCAPING FROM OLD ONES." John Maynard Keynes

(\mathbf{R})

Distribution of independent repair shops (green) and branded repair shops (white) with PostMaster® links in Germany

STEP BY STEP TOWARD PERFECTION

PostMaster[®] is the Web-based communication platform that links car dealerships, repair shops, manufacturers, insurers, leasing companies, and other service providers with one another, allowing time-saving, paperless, transparent, and automated management of claims and servicing processes.

Since the introduction of PostMaster[®] in 2010, Control€xpert has got quite a bit nearer to achieving its aim of revolutionizing claims and servicing work with the new possibilities presented by digitalization. No fewer than 4,600 repair shops now use the innovative tool and virtually all insurers and leasing companies and a number of manufacturers can be contacted electronically. >>

documents a day are processed using PostMaster®

70% of the top 100 car dealerships use PostMaster®







VMF SERVICE PLUS®

And the growth continues: The German association that represents the interests of independent fleet management companies (the VMF) and Control€xpert have got together to integrate the management process for servicing and inspection, VMF Service Plus[®], into PostMaster[®]. Much has also changed in the insurers' network of repair shops: A number of firms are now linked to PostMaster[®] and use the available modules to organize their work much more efficiently.

OPTIMAL NETWORKING

One example of the optimal way in which the parties involved in the claims process are networked can be seen in the commissioning module of the PostMaster® platform: The claimant reports the claim to the insurance company and requests a repair. The claim is entered on the system using PostMaster[®] and sent digitally to Control€xpert, where a repair shop is selected. A scoring module incorporated in the system determines which one is most suitable, based on parameters such as location and quality criteria. Immediately thereafter, the repair shop is informed - also via PostMaster® - and also receives the details of the job. The repair shop draws up an estimate and in turn sends it to Control€xpert

via PostMaster[®]. Once this has been checked, the job is then authorized via the PostMaster® platform. As such, the repair work can be carried out and the invoice issued quickly. This is then checked and approved by Control€xpert.

THE FUTURE OF POSTMASTER®

The next steps are already being planned: There will be an additional module within the PostMaster® platform which uses an automated process to arrange the appointment with the repair shop. Furthermore, there will be a module to measure and improve customer satisfaction. And EasyClaimGo – the automated claim reporting and management process via smartphone - will soon also be incorporated.

The list of benefits of the PostMaster® platform - future-proof, flexible, efficient, responsive, analytical, transparent – will get even longer by integrating new modules. This will help PostMaster® to take another step toward perfection – and Control€xpert doesn't settle for anything less.

MOHAG mbH

WHAT OUR CUSTOMERS SAY:

WERNER SÖCKER

Managing Director of the Weller Group

"With twelve locations in the Max Moritz Group, it became clear how important a fast link between all parties is nowadays. At BuK we rely on PostMaster[®] for digitally networking 16 different locations and save money as well as valuable time."



JAN BARTINGER Head of Servicing for Ford/Volvo/Opel,

"PostMaster® has been used at seven MO-HAG mbH locations since 2014. The benefits are obvious: Standardized processes with the *leasing companies and insurers and binding* authorization and invoice queries are taken care of quickly and digitally."

AUTOCHECK AUTOMATIC SUCCESS





"The combination of AutoCheck and PostMaster® provides the optimal basis for the efficient management of repair shop networks."

> Philipp Haac, Head of Operations

It all started with quality management for repair shop networks. It resulted in the development of a solution from which not only insurance companies and repair shops benefit, but also leasing companies and fleets: AutoCheck. What exactly is behind it?

A growing number of insurance companies are relying on their own network of repair shops or use the services of various network partners in order to guarantee consistent quality with a transparent cost structure for accidental damage repairs. We developed AutoCheck so that everything runs virtually by itself. The highlight: It not only automatically checks the claim calculation, but also processes the invoice digitally.

As a result, an extensive partner network can be efficiently managed in conjunction with the PostMaster® platform: Once the claim has been reported, the insurance customer is guided to the nearest repair shop within the network, which may include independent or branded businesses. The repair shop draws up an estimate for the repair, everything is digitally sent to Control€xpert and then automatically checked by AutoCheck. A response is provided within two hours, authorizing the repairs, for example.

Thanks to a set of integrated rules and the constant improvements being made by Control€xpert, the entire process is digital and highly automated, from the authorization of jobs to the subsequent payment.

This cuts process costs for the insurance companies and the network partners. And the repair shops save a great deal of time. Furthermore, fast payment of invoices means that they don't have to wait long for their money, which in turn improves their liquidity and room for maneuver. In the end, structured claim and settlement data is available, which is used for automated follow-up processes, creating a win-win situation for every party involved in the claim process.

The specialists at Control€xpert have naturally thought one step further ahead: What applies to insurance companies and their claims handling processes can also be applied to leasing companies. These companies are clearly convinced: AutoCheck is now used by LeasePlan, Alphabet, and Athlon.

We look forward to further chapters in the success story. Even more insurance and leasing companies are sure to discover the potential of AutoCheck for themselves. After all, in conjunction with the enhanced PostMaster® platform, digital claims management becomes easier and more efficient than ever before with a network of partner repair shops.



First repair shop network goes live in 2006

All communication goes digital thanks to the PostMaster[®] platform

The degree of automation rises to 50% and more

Managing invoices within the process becomes possible

Payment transactions can be automated

Commissioning portal facilitates direct routing of the insured party to the partner repair shop

The entire process can also be used for the claims management of leasing companies



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DIETER JACOBS

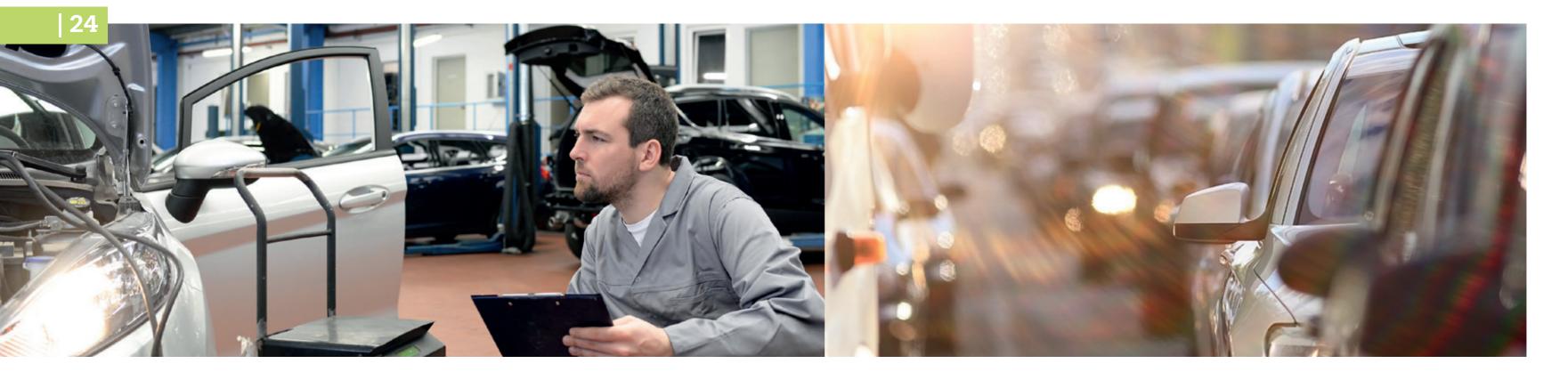
Fleet Management Executive at LeasePlan Germany

"We have been successfully working with Control€xpert in the area of servicing management for more than six years. It was time to take the next logical step and also incorporate claims management. LeasePlan Germany benefits from systematic checking of estimates and a high degree of automation."

AUTOMATIC BENEFITS WITH AUTOCHECK

- High degree of automation for saving a great deal of time and efficiently organizing resources
- Structured data sets for greater transparency and follow-up processes, such as managing invoices
- PostMaster[®] platform
 for optimal networking
 and extensive quality
 management

Perfect basis for reports and benchmarks



CLOSE INSPECTION WITHOUT INSPECTING

Why not give it a try!

Test SV-HonorarCheck and see for yourself how quickly and easily you can gain profound insights. One call to Jörg Breuer on +49 2173 849 8484

is all it takes.



Jörg Breuer, **Sales Manager** An analysis of assessor's fees has shown that there are sometimes big differences when it comes to invoice items. Checking them not only gives insurance companies the potential to save money, but also makes it possible to identify overpriced items and establish fair and transparent market prices for all assessors – all completely effortlessly.

An analysis of assessor's fees has shown that there are sometimes big differences when it comes to invoice items. Checking them not only gives insurance companies the potential to save money, but also makes it possible to identify overpriced items and establish fair and transparent market prices for all assessors – all completely effortlessly.

Following a vehicle liability claim with more than minor damage, the claimant is entitled to a refund for the cost of an assessor's report. However, there is no clearly regulated fee system for these assessors like those used for lawyers, doctors, or architects. Accordingly, there is a great deal of room for maneuver when issuing invoices. In a judgement dated July 22, 2014 (VI ZR 357/13) and April 26, 2016 (VI ZR 50/150), Germany's Federal Court of Justice ruled as follows: "An assessor's fee significantly above the normal prices does not adequately represent the amount of work involved under the terms of § 249 BGB (German Civil Code)." Above all else, the price of extras varies considerably. Is it plausible nowadays, for example, to charge three euros or more for a digital photo?

With SV-HonorarCheck (Assessor-FeeCheck), Control€xpert gives insurers the opportunity to have the invoice for the assessor's fees checked in line with database-supported processes and specific sets of rules. From millions of reports generated over the last 14 years, we have our own database in which the basic fees from actual, up-to-date, and location-specific assessor's invoices are stored. Besides the basic fee, any additional items or repair shop services can be checked, such as fees for the use of lifting platforms or dismantling fees.

The insurance company then receives a transparent report with structured data, which can also provide clarity in the event of a legal dispute. The process behind it is automated, which means that everything can be managed fully automatically. This makes it particularly efficient and also effective, so it really is worth inspecting more closely.

GOOD TO KNOW:

SV-HonorarCheck can also be called upon on an individual basis, if the insurance company has no grounds to perform a complete check of a report. This allows insurers to check fees







AN OVERVIEW OF THE BENEFITS OF SV-HONORARCHECK

randomly in the event of inconsistencies. Or they can perform their own analyses on cost trends in order to improve the system of rules even further. There are so many reasons why taking a closer look is worthwhile. And with this automatic and highly efficient process, which brings significantly more than it costs, there is no reason not to use it.

SV-HONORAR-CHECK

MARKET FINDINGS

100 assessor's report checks		
39%	23 %	38 %
	with corrections to the basic fee	with corrections to the extras

Our team Matthias Kurzhalz, Patricia Dobrowolski Claudia Schreiber, Ela Bentkowski (from left)



Meeting Reports are discussed in the team



Work process A discussion is held on the current legal situation for assessor's fees



Savings generated thanks to the use of extensive databases as well as rules that are in line with the market



Structured claim and payment data provided

CE INTERNATIONAL FROM LANGENFELD **TO THE WHOLE WORLD**

Control€xpert exports its innovative process optimization services all over the world and is now based in 13 countries with 14 offices. The C€ International team ensures that everything runs smoothly everywhere.

When a problem arises in one of Control€xperts overseas offices, the three-man team made up of Michael Kubijowicz, Jakob Otting, and Markus Hillebrand is on hand to help. Whether there is an IT issue, processes are not running smoothing, or figures, data, and facts are needed, the rapid response team is always the first contact partner. Furthermore, the International team is always the first port of call for visitors coming to Langenfeld from abroad.

ALWAYS ON HAND

The team travels all over the world, bringing along its expertise to negotiations and providing its knowledge of the German market. All three team members proactively support our partners at customer meetings and address the individual needs of local markets. "Every country is different; every culture unique. With regard to the claims market, however, the needs overlap by as much as 80%. The rest can be adapted locally," says Jakob Otting.

THE GROWTH CONTINUES

The team still has much to do, because Control€xpert naturally also continues to grow internationally. "In Germany all our core products were changed over to the C€ platform in 2016. Our aim is to make this platform available everywhere internationally as well," says Michael Kubijowicz. "We are continuing to press ahead with automation and digitalization. In Italy, Brazil, and Poland, for example, we are seeing the first cooperation partnerships with insurance companies that use EasyClaim, our smart claims manage ment system for smartphones." >>



INTRODUCING...

Michael Kubijowicz, Head of International, Key Account Manager

What is your background?

I joined Control€xpert immediately after completing my business administration degree and have been key account manager in sales ever since.

What are the biggest challenges internationally?

I see three main tasks here: Making the existing solutions flexible enough to transfer to other markets, using our long-standing experience in digitalization and automation to provide international markets with suitable solutions, and of course actively using the knowledge transfer in both directions in order to learn from each other.

What drives you – personally and professionally?

Above all else, I would like to actively support corporate growth and integrate international colleagues and offices as best I can. Away from work, I would like to spend as much time with my son as possible; playing football, hiking, sailing, and snowboarding.

What was your first vehicle and why?

My first car was a Golf Mk III. I earned the money to buy it by working in a foundry during the vacation.

INTRODUCING...



"The USA is a huge growth market for us; this is where trends are set. In the International team we will continue to work closely together in order to benefit from everybody's different experiences."

Nicolas Witte, Head of Corporate Growth

DEVELOPING **NEW COUNTRIES**

Besides continuing to expand existing international locations, it goes without saying that new countries should also be developed. There is a focus on similar markets. "We are already active in Spain, so Portugal would be an obvious choice. Or our presence in the USA would make Canada a conceivable step," says Nicolas Witte, who after successfully working for Control€xpert throughout Europe is now head of corporate development and board member in the USA. "Our neighbors in France and England are naturally also of interest and talks are already ongoing here." In addition, Control€xpert's international customers – including AXA, HDI, Mapfre, and Generali – are asking more frequently whether cooperation in other countries would be possible. Talk is of Malaysia and Croatia here. "We are a global partner to Allianz and we are working on further cooperation partnerships of this kind." Witte, who supports the International team, contributes his sales expertise and his knowledge of customer and market needs. He is especially hoping that a great deal will come from the dialogue with the American market. "The USA is a huge growth market for us; this is where trends are set. In the International team we will continue to work closely together in order to benefit from everybody's different experiences." It will be interesting to see which boundaries Control€xpert will cross in future to revolutionize the insurance market. There is definitely huge potential anyway.

INTRODUCING...

Jakob Otting, Business Development Manager

What is your background?

I am an economist with a master's degree. Before coming to C€ I worked in international business development (Chamber of Commerce) and gained experience in the automotive sector at SEAT in Martorell.

What are the biggest challenges internationally?

The biggest challenges are the differences between the markets and the various claims processes. We are confronted with different challenges and obstacles in every country. In keeping with our motto "Redefining Rules", we adapt our processes to each situation with creativity, skill, and passion.

What drives you – personally and professionally?

I am driven by the desire to make things a little better every day; striving for improvement and trying to move things forward in a dynamic team with a good working atmosphere. I like to relax by playing sport, listening to music, and enjoying the occasional glass of beer with friends.

What was your first vehicle and why?

It was a Peugeot Vivacity 50 cc moped so that I could still get to the neighboring villages after they rolled up the sidewalks.





Markus Hillebrand, VP Sales, APAC, Hong Kong

"I have been working internationally in the area of BPO/IT sales for a number of years, primarily in communication with China. Now I

In my dealings between the Western and Asian worlds, I see how the cultures cope with change and the fast pace of life in very dif erent ways. I am driven by being able to observe up-close how the mony of the West is shifting toward the Asian region – and by ing able to act as a mediator between the two worlds

HONGKONG

The team is currently made up of Steven Yuan (director), Markus Hillebrand (sales), and Nicole Chan (car expert/automotive consultant). Steven and Markus take care of the existing business with the Allianz and also acquire additional customers for us in the market. Nicole has a wealth of experience from repair shops in Canada and Hong Kong and also speaks Cantonese, Mandarin, and English.

Reasons for establishing an office

Firstly, there is the contract with the Allianz. Furthermore, in Hong Kong we would also like to look after top insurers that Control€xpert already looks after in other countries (e.g. AXA, Zurich). The potential to make savings on the Chinese market is huge. Even though the insurers are very innovative on the customer side (e.g. with apps and telematics), the invoicing methods of the repair shops are still very inefficient.

Aims, vision, or outlook

We would like to serve the top five insurers on the market and establish Control€xpert as the only inspection agency on the market.

INTRODUCING...

Ignacio Cava, Country Manager, Spain

"The Internet was still in its infancy during my management degree; it was only just beginning to become more prevalent. There were no cell phones and digitalization was just an idea, something for theorists and scientists. Now it is tangible. And I am relatively new to Control€xpert and my role is to digitalize the Spanish market. I am looking forward to the success that C€ will enjoy in Madrid, in the heart of Spain. I am very confident about this.

On a personal level, I am a proud Spaniard and a father of two children: a six-year-old son and a four-year-old daughter. I am also a keen mountain biker and sailboat captain."

SPAIN

What were the highlights in Spain in 2016?

For a start, Control€xpert has successfully established itself on the Spanish market. Five of the top ten insurance companies were and continue to be interested in test phases with various C€ products. One test has already been successfully completed and two further tests will have been conducted by the end of 2016 in the area of GlassCheck and Expertise-Check.

What are the particular features and challenges associated with the claims process in Spain?

You could say that insurance companies in Spain currently use checks primarily in small areas. Accordingly, all the processes offered by C€ are nowhere near exhausted just yet. One challenge certainly lies in proving ourselves on the Spanish market as a reliable service provider with significant added value and potential to make savings. Given our products, services, and expertise, we can be very confident of achieving this.

What is expected for 2017?

I am very optimistic about 2017 in terms of our developments. In January we are starting to work with an insurance company in the area of GlassCheck. The results of the test phase convinced the customer. We are confident that we will soon also be able to convince other customers of the benefits of our tests.



COLOMBIA

Control€xpert Colombia began 2016 with a test for the Allianz. Shortly afterward came the next pilot phase for Seguros Bolivar. The time then came to set up a local team. This is currently made up of two vehicle experts, a developer, a head of operations, and a country manager. As a team, we make sure that the high professional, technical, and commercial standards associated with C€ services also meet the requirements of our customers in Colombia. To this end, we analyze our customers' needs and suggest improvements to each customer's portfolio based on the findings.

In Bogotá there are 16 vehicle insurers that handle around 300,000 claims per year. The insurance sector is registering steady growth. In December 2015, there were 2.34 million vehicles registered, a rise of 9% on 2014. This is an excellent situation for us! Tests are currently ongoing with the aspiring insurer Equidad Seguros.

Our office in Bogotá is located in one of the most key areas from a cultural, gastronomic, and business perspective. The "93 Park" is one of the city's most exclusive areas.

Christian Zimmermann, Business Development Manager, Switzerland

What drives you – personally and professionally?

What was your first vehicle and why?

Searching for new challenges and broadening my horizons.

A Renault R5 – I couldn't afford anything better on my budget.

INTRODUCING...

Carolina Borrás, Country Manager, Colombia

"In Bogotá I did a bachelor's degree in economic sciences and a master's in marketing. Before joining Control€xpert I worked as a marketing manager and general director at various companies in the automotive sector in Colombia. I was also responsible for the Colombian Automobile Club at management level for a long time.

I spend a great deal of my spare time at the fitness club. Part of my personality involves setting myself goals and achieving them through stamina and hard work."



SWITZERLAND

What is the biggest challenge in Switzerland?

The three languages spoken on the market (German, English, and French) are especially noteworthy. This results in distinctive features with regard to adapting the product portfolio that is successful in Germany.

Explain your vision for Switzerland in one sentence.

Control€xpert will have similar success in Switzerland to that achieved in Germany; all the relevant companies would like to work with us.

C€ PROFILE 2017

INTRODUCING...



A REASON TO REJOICE IN THE FAR EAST

Control€xpert China acquires a major new customer in the vehicle insurer CCIC.

The customer base of the C€ office in China is growing. "It is The customer handles a large number of claims every year with immense pleasure that we announce the formation of a contract between our subsidiary in China and one of the biggest vehicle insurers on the Chinese market," said global China at the end of November on the occasion of the contract signing.

During the official ceremony at the CCIC headquarters in Shanghai, both parties stressed the importance of the project as a milestone for greater transparency and automatic handling of processes as well as a blueprint for the industry as a whole.

due to the size of the market. Control€xpert China specia lizes in the automated checking of processes to identify peculiarities in relation to the price of spare parts and labor, CEO Kai Siersleben, who met with the CCIC management in repair methods, and fraud, based on algorithms and artificial intelligence.

> "We sincerely congratulate our team in China on this success and will follow the project with interest," said Kai Siersleben.

"We are looking forward to working with Control€xpert! We are convinced that the internationally proven C€ system will also be of benefit to us. We are especially expecting to see big improvements in data entry and the standardization of labor prices. Yet we are also very interested in making good use of other features and benefits of the C€ portfolio."

H. Peng, Project Manager, China Continent Property & Casual Insurance Company



ONE-WAY TICKET TO MARS

The human urge to explore has reached a new stage that must be overcome: colonizing Mars. The US foundation Mars One wants to achieve this ambitious aim by 2026 and take the first four volunteers to the red planet. And 28-year-old Robert Schröder from Darmstadt could be on board – without a return ticket!



"Journeying into the unknown and discovering new things would be a dream come true for me."

Robert Schröder, 28, Darmstadt, **Electrical Engineering Student**

Even as a child, Robert dreamed of flying into space. Naturally he was equally enthusiastic when he heard about Mars One. The Dutch foundation was set up in 2011 with the plan of sending the first four astronauts on the sevenmonth trip to our neighboring planet.

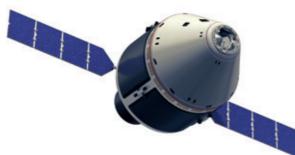
Anybody prepared to start a completely new life was able to apply for a seat on board. It goes without saying that Robert applied, along with 200,000 other people. As a physics laboratory assistant and electrical engineering student, researching and tinkering around are in his blood. And journeying into the unknown, discovering new things, and always finding the right solution to unforeseen circumstances would be the ultimate challenge for the young man.

In 2015 he found out that he was among the last 100 candidates for the mission and the very last German. The third round started in September 2016, a strict selection procedure, after which 24 candidates will ultimately remain. According to Schröder, the ability to work as part of a team is primarily examined here, because this will be severely tested on the mission. It will reveal who is 100%

ready to start a new life on Mars - because there are no plans for a return flight with Mars One.

For the last 45 years, the American space agency NASA has been talking about sending people to Mars within 20 to 30 years. The reason why it has hitherto been unable to turn these announcements into reality is also due to the fact that nobody knows how to get the astronauts safely back to earth after the successful mission. The technology is not yet advanced enough. This is precisely why Mars One doesn't want to bring the astronauts back

But what drives a young man to leave his home planet forever? "The idea of achieving something on Mars with a crew that will endure forever would be the most amazing thing," says Schröder enthusiastically. His parents find their son's Mars plans "not at all good, of course". On the other hand, they now know him and his stubbornness well enough to stop themselves trying to influence him directly, says Schröder. He currently doesn't have a girlfriend who perhaps might dissuade him from his plan. >>





"Dreams can only be fulfilled when people firmly believe in them." Robert Schröder

FLY TO MARS AND NEVER RETURN

He shares his enthusiasm for the mission with the man behind Mars One, the Dutch entrepreneur and engineer Bas Lansdorp. He says that the most exciting events currently taking place on planet earth are unfortunately wars and economic crises. And people need a counterbalance to all of this; something positive that they can get enthusiastic about, that would inspire them. Those who take part in the mission will be a hero for the entire world, says Lansdorp. Just like Neil Armstrong and Buzz Aldrin when they first set foot on the moon in July 1969.

The necessary finance is set to be raised by selling the television rights. This will allow the entire world to see what life is like on Mars. People are already watching the candidates on their TV screens as they go through the selection procedure and will follow them until the final crew members are selected. This is no problem for Schröder: "People have the right to be there as the candidates go through these stages. After all, it will be mankind who practically selects the first crew to take off into space."

THE START OF AN **UNCERTAIN FUTURE**

However, the 24 potential Mars colonizers will first have to undergo a ten-year training program before the actual time comes. The candidates will be trained in teams of four in all fields of knowledge that are essential to this mission, such as mechanics, electrical engineering, botany, medicine, and psychology.

The adventurous man from Darmstadt has no doubts about the feasibility of the mission. "Before the first crew flies to Mars, six other unmanned spaceships will have had to take all the technology there that we need for the colony," says Robert. "They are the same spaceships in which we will also fly and they will also have to land safely." And Mars One will certainly source its technology from companies that have been doing it for decades. The rockets

made by the private aerospace company SpaceX are set to be used for the flight to Mars, for example. These rockets have already turned the company owned by US entrepreneur and visionary Elon Musk into an important supplier to the International Space Station (ISS).

Robert has often gone through the scenario in his mind: the rocket launch, the acceleration to around 28,000 km/h, and then, after separating from the rocket stages, the short journey in the Dragon spaceship to the Mars Transit Vehicle (MTV) waiting in earth's orbit, where an assembly crew will connect the fuel tanks and engines to the MTV. The Mars crew changes over to the MTV, the assembly team gets out, the engines are ignited – and then there is no turning back. "There must be ever more people who are prepared to take a greater risk," says Robert Schröder. When Columbus crossed the Atlantic, he also had no idea what would be on the other side.

Schröder, however, already has an idea of what awaits him on Mars. If everything goes according to plan, he will be 39 years old when he arrives. The year would be 2027 and Robert Schröder would be – as he now envisions – perfectly trained, quite serene, and definitely childless. And he has big plans: "We will achieve many new things on Mars. Perhaps large greenhouses with little lakes in which we can breed fish," he enthuses. He talks about Martian lava tubes that can probably be hermetically sealed so that leisure facilities can be built, such as a badminton court. Later on, he envisages that it will also be possible to start a family on Mars.

It goes without saying that he will miss many things on earth - he will have to forego his steaks up there, for example. They want to grow vegetables and at the very most eat insects. That won't be easy, which is why he wants to really make the most of the time he has left on planet earth. He still wants to go to Antarctica, for instance. And try cave diving. Will there be any time to do these things with the next stages coming up? One would certainly hope so.

More information on the Mars One mission is available at http://www.mars-one.com

1972 Last moon landir

> 2011 Mars One founded by Bas Landsdorp

2016 Third round of the selection procedure

2022 First cargo mission with exploration tool kit

2027 The first four astronau land on Mars





IT DEPARTMENT CONTROLEXPERT CREATES AGILITY

Teamwork is everything at Control€xpert. This is naturally also the case when it comes to product management. As the name suggests, this branch of our IT department is responsible for developing, testing, and improving our products. And since Control€xpert always takes its guidance from the best, the teams' work processes are also state of the art.



Kai Müller, Head of IT

In a similar way to the industry giants Facebook and Google, the eight product management teams use "agile software development". The principle is to react flexibly to changes on the customer and market side in order to be able to create both innovative and customer-oriented software solutions.

For Kai Müller, head of the IT department, this approach is one of the keys to Control€xpert's success. "Customer requirements were previously just gathered together, put down on paper, divided up among the team, and then worked through in their entirety. This took a long time. And in the end it often became clear that the requirements had changed in the meantime – and nothing really fitted together any longer. If the tasks become ever more complex, it is easy to stumble, which is why they must be dealt with step by step in the right order."

This is how it is with agile software development: After the product owner (in the agile development) has precisely defined the requirements together with the customer, the tasks are clearly prioritized and mostly divided into two-week stages known as sprints. Once a sprint has been

completed, the results are presented and the next stage is planned. The progress and challenges are discussed in brief daily meetings. As a result, the entire team is always kept informed about the project status and can react immediately as and when necessary, if the aim of the sprint is threatened. The scrum master is responsible for ensuring that the team can work undisturbed and all processes function smoothly. Kai Müller is convinced of the benefits of the new agility: "Our employees like transparent processes and the self-reliant approach to work and justify the trust placed in them with a high degree of commitment, team spirit, and - very important - adherence to deadlines."

Furthermore, at Control€xpert we want to keep inspiring our teams, which is why we hold an "Exploration Day" every 14 days to work on technology matters that don't necessarily have to have anything to do with the specific projects. Or we have an informal round-table meeting once a week to present and discuss the latest issues and trends. Everybody is asked to contribute something here.

This is how innovative ideas come about, with which we redefine the rules





"WORKING IN A FULLY **DEVELOPED MULTICULTURAL SOCIETY IS ENRICHING FOR EVERYONE.**"



At Control€xpert since: 5.1.2014 Something of which I am especially proud: The C€ 2.0 platform My goal for 2017: To launch C€ 2.0 for international colleagues

> Stefan Zohren, 50 C€ 2.0 Product Owner

"I ESPECIALLY LIKE THE HIGH NUMBER OF EXCITING AND **CHALLENGING PROJECTS.**"

The successful launch of EasyClaim among our biggest insurance customers

To increase the degree of automation and the international rollout

At Control€xpert since: 10.1.2013

My goal for 2017:

EasyClaim Product Owner

Thomas Baier, 34

Something of which I am especially proud:





"I FIND THE INTERNATIONAL FOCUS AND CONSTANT **EXPANSION ESPECIALLY APPEALING.**"

At Control€xpert since: 12.1.2005 My goal for 2017: To implement numerous international projects

> Masha Behrashi, 46 Software Developer

"I AM ESPECIALLY PROUD OF THE BROWSER-BASED LAUNCH OF EASYCLAIM."

At Control€xpert since: 8.12.2014 My goal for 2017:

To learn, learn, learn! Above all else, a great deal about new trends and technologies. Something of which I am especially proud: My colleagues!

Steven Wobser, 20 Trainee IT Specialis

"I ESPECIALLY LIKE **MY BRILLIANT COLLEAGUES AND THE GOOD RELATIONSHIPS.**"

At Control€xpert since: 12.1.2005 Something of which I am especially proud: The implementation of GlassCheck in C€ 2.0 My goal for 2017: To use C€ 2.0 for all glass customers

> Joachim Knoben-Heinrichs, 45 GlassCheck Product Owner

"I APPRECIATE THE URGE" **TO INNOVATE AT CE AND THE EXCITING CHALLENGES.**"

At Control€xpert since: 2.1.2016 My goal for 2017:

To position and push forward the C€ 2.0 platform internationally

Quoc Tri Dung Trinh, 42 Senior Software Enginee

"MY GOAL FOR 2017 IS TO IMPLEMENT THE C€ 2.0 PLATFORM."

At Control€xpert since: 12.1.2002 I especially like at Control€xpert:

The freedom to contribute my own ideas and implement them together with the team. The huge opportunities for C€ in our market. And the relaxed atmosphere that still feels like the spirit of a start-up.

> Lars Wolter, 38 Head of Software Development

And action! Link to the video: http://bit.ly/2hKISgm



"I CAN REALIZE MY POTEN-TIAL IN THE JOB AND I ALSO HAVE SUPER COLLEAGUES – PERFECT!"



At Control€xpert since: 2.1.2009 Something of which I am especially proud:

VMF Service Plus[®] – and its ongoing development

My goal for 2017: To make the paper-based and VMF process one unit (C€ 2.0)

Stefan Kollek, 30 FleetControl Product Owner

C€ PROFILE 2017

A guest article by Matthias Hohensee, chief Silicon Valley correspondent for Wirtschaftswoche

• He has lived in Silicon Valley since 1998

• He was there to witness the rise of companies such as Yahoo, eBay, Google, and Facebook

SILICON VALLEY INSIGHTS RECIPE FOR SUCCESS: BREAK THE RULES





"We are regularly in Silicon Valley to explore the latest trends with future researchers. We also work closely with specialists there on the subject of digitalization."

Gerhard Witte, Founder and CEO of Control€xpert

Silicon Valley is increasingly not just setting the trends, but also the pace in the automotive industry – such as automated driving and electrical drive systems.

Rules are there to be broken. Problems are solved later on. This is the only way in which really great things can happen – according to those in Silicon Valley anyway. With success: The founders of the search engine Google didn't ask the owners of websites for their permission to catalogue the content found therein, they simply did it. Facebook founder Mark Zuckerberg launched the forerunner of his social network at Harvard University against the will of the management. Uber made it possible for private car owners in San Francisco to carry passengers without a taxi license. Airbnb turned tenants into part-time hoteliers, sometimes against the will of the property owners. However, since their services are also useful and popular, Google, Facebook, Uber, and Airbnb are now among the most valuable companies in the world. So it is only in keeping with this trend that Elon Musk, currently Silicon Valley's most

ambitious entrepreneur, now also wants to use this proven recipe for success to give his electric car manufacturer Tesla Motors a new boost and once again force the automotive industry's hand. "All Tesla vehicles leave the factory equipped with technology for autonomous driving," announced the multibillionaire grandiosely in October. And this not only applies to the luxury Tesla Model S sedan and the Tesla Model X SUV, with prices starting at 60,000 dollars, but also the mid-range Tesla Model 3, which is set to enter production in the fall of next year and serve the mass market with an entry-level price of 35,000 dollars. There have already been 400,000 advance orders. Even though the self-driving functions have to be activated for a fee, which can cost up to 8,000 dollars extra, Musk can nonetheless now boast of having created the world's biggest fleet of autonomous vehicles. By the end of 2017 he wants to

demonstrate how it is possible to drive the 5,000 kilometers from Los Angeles to New York "without even having to touch the steering wheel."

TIMETABLE FOR AUTONOMOUS **DRIVING VASTLY** ACCELERATED

This is not necessarily due to technical hurdles, but in order to have more time for extensive tests, prevent risks, and avoid provoking the regulatory authorities. The Federal Motor Transport Authority has already prohibited Tesla from using the term autopilot in Germany. >>

Typical Musk - the native South African attacked the traditional automotive industry more than ten years ago when he came up with the idea of bolting together a series of notebook batteries to produce a highperformance rechargeable battery and fitting them in an electric car. In the beginning they didn't take him seriously. The bosses of the automobile groups and their advisors were convinced that the future would lie in combustion engines with lower consumption or hydrogen-powered fuel cells. People viewed purely electric vehicles as competitively unviable, primarily due to the expensive batteries and limited range.

thanks to his private fortune amassed Weber, then Daimler's chief research officer, at the beginning of 2016.

ALL WELL-KNOWN MANUFACTURERS **ARE GOING ELEC-TRIC AND AUTONO-**MOUS

built up a loyal fan base in the USA in



Musk nonetheless managed to keep Tesla Motors above water financially, not least through the online payment transaction service provider PayPal as well as his total power of persuasion. It was also with the help of backers such as Daimler, which invested around 50 million dollars in the project in May 2009. And as it became clear that Tesla was growing into a competitor, it sold its stake five years later for around 780 million dollars. "I always joke that we are hitherto the only ones who have made any money from electric mobility," said Thomas

Despite severe financial losses, Tesla has particular. And thanks to its perseverance it has also forced the automotive industry to react. All well-known car manufacturers now have electric vehicles in their range, or



Tesla – nonstop progress

have at least announced electrically driven models. It is a triumph for Musk, but also a huge problem, because if the competitors also sell electric vehicles, Tesla will lose its special position.

Now autonomous driving is set to preserve the marque's appeal, which is why Musk is already taking risks that no established vehicle manufacturer has hitherto dared to take - or at least not as offensively marketed as the Californians. Since October 2015 the newer Tesla Model S sedans have featured an autopilot that can stay in lane and keep their distance, automatically park, or drive out of the garage by themselves at the touch of a button. It is essentially a high-quality driving assistance system that attracted its mostly technically minded owners to test its limits. The experiment ended fatally for one 40-year-old high-tech entrepreneur. His Tesla was on autopilot in May 2016 when it crashed into an articulated truck, supposedly because its white trailer was not recognized as an obstacle. Although it appeared to be a bitter setback for Tesla, it only served to further motivate its boss. Instead of burying his head in the

sand, he has now dared to come out even further. According to Musk, the 35,000 road traffic fatalities in the USA alone. almost all of them due to human error, are the best argument in favor of autonomous driving. Without hesitation, he changed his supplier, the Israeli start-up Mobileye, and instead used a self-developed system with additional sensors in order to be able to put his own stamp even more firmly on the project

SCRAMBLE FOR EX-PERTS IN ARTIFI-CIAL INTELLIGENCE

Since then, the race for supremacy in the area of autonomous driving has picked up speed – and it is primarily being driven by Silicon Valley. Whether Volkswagen, Daim ler, BMW, Ford, General Motors, Toyota, or Bosch - all established vehicle manufactur ers have massively expanded their research laboratories in the high-tech valley in

recent years and are scrambling among themselves for experts in autonomous driving, robotics, and machine learning. Many gained initial experience at Google, which continued an autonomous driving program started by German expert Sebastian Thrun at Stanford University and has been testing robotic cars in Silicon Valley for years.

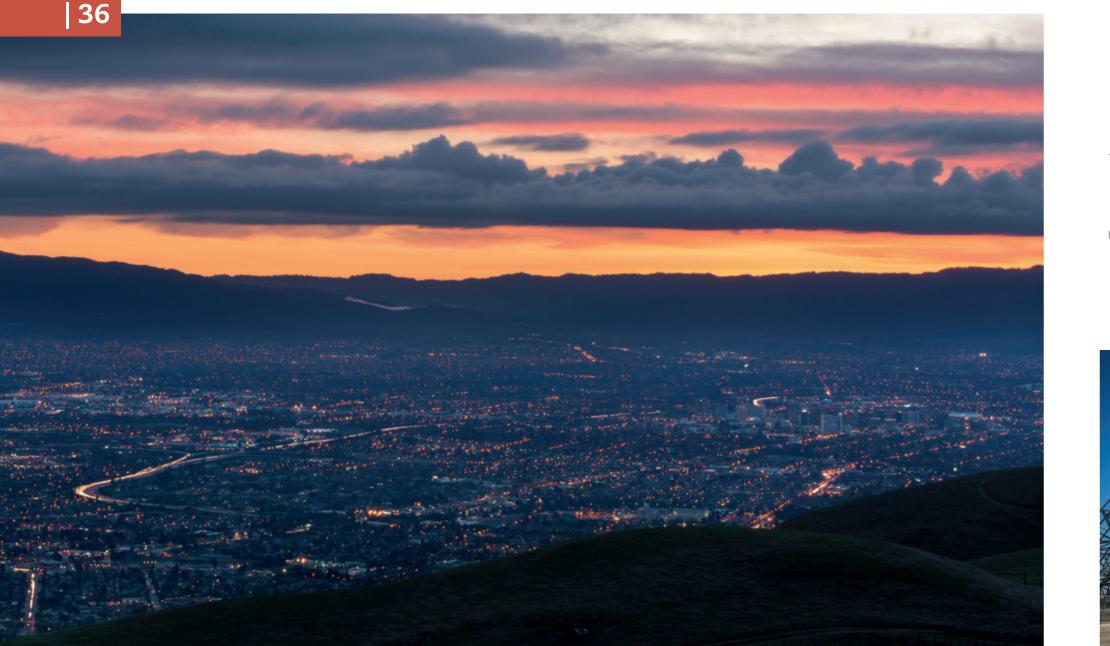
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Since there is little talent around with such experience, seven-figure salaries are not uncommon. Or they immediately become multimillionaires - like the founders of the Silicon Valley start-up Cruise, which the automotive group General Motors acquired in March for 581 million dollars, plus another 400 million dollars in performance-related bonuses, if the Cruise founders can actually successfully transfer their system for autonomous driving to the General Motors models. The Bolt electric vehicle is set to be the first - the direct competitor to the Tesla Model 3.

INSURANCE **INDUSTRY UNDER** PRESSURE

It is already clear that the dynamics associated with autonomous driving is forcing the insurance industry's hand. After all, if the autonomous driving systems work as promised, collisions should be a thing of the past. And with lower loss amounts, insurance premiums will also fall, which will put pressure on the income of insurers On the other hand, it is not yet clear who will be liable if a system doesn't function correctly and causes an accident. However, it will be at least another 15 years before nothing but automatic vehicles will be on the roads.





SINGULARITY **UNIVERSITY:** THE FUTURE WILL BE **EXPONENTIAL!**

The world is currently in the middle of the digital revolution. Growing digitalization is driving forward technological development exponentially. Will computers soon completely take over the role of thinking for us and what will the future of humanity look like then? "That is actually inconceivable," say the visionaries at Singularity University in sunny California, "but we are working on it."

1997 **ASCI RED computer** Processing power: 1.3 teraFLOPS 55 million US dollars

The institute's task is to train the world's decision-makers to think exponentially in order to solve the global challenges of the world with the help of new technologies. You could say that the course for the future of humanity may be set here.

OPTIMISTIC LOOK INTO THE FUTURE

The developments of recent years demonstrate that this new way of thinking is needed, especially in the area of computer technology. As Moore's law from 1965 states, the power of computer chips doubles approximately every one to two years. In 1997 the processing power of the ASCI RED computer was 1.3 teraFLOPS – and cost no less than 55 million US dollars. In 2006 the PlayStation 3 games the world of science, business, and politics. Singularity console was capable of 2.1 teraFLOPS – and cost just 499 US dollars. In 2015 the super-small Raspberry Pi Zero was launched onto the market, which delivers as many as 191 teraFLOPS – and costs just five US dollars. Today there are already computers that have reached the processing power of the human brain with 10,000 teraFLOPS. If this trend continues as expected, in 2045 there will be computers with the processing power of all the human brains combined. Sceptics see this as the end of humanity. The visionaries at Singularity University see things differently.



499 US dollars

31.18 US dollars (per teraFLOP)

the human brains combined

37





Silicon Valley is one of the world's most important locations for the IT and high-tech industry. It is where companies such as Apple, Google, Cisco, and Tesla are based. And it is also the home of Singularity University. The think tank was founded in 2008 by aerospace engineer Peter Diamandis and Raymond Kurzweil, one of the most innovative minds of our time.

technological development by the year 2045. However, he looks into the future with optimism. The technologies that are also developing exponentially in the course of growing digitalization provide a little foretaste. DNA analysis of the human genome cost 2.7 million US dollars in 1999, for example. Eight years later, the figure was just 350,000 US dollars; by 2014 it was only 1,000 US dollars. Genetic research has benefited enormously from this development, as has medicine.

It will be possible to develop new drugs within a much shorter space of time and at a fraction of the previous cost; nanotechnology will lead to completely new treatment methods. Kurzweil believes it will even be possible to upload human intelligence, including a person's own consciousness, in digitalized form and thus almost achieve immortality.

So will that spell the end of humanity? Perhaps humanity as we know it today. In any case, the exponential development of technology will advance our own humanity to an extent that is currently beyond our capacity to imagine. That is why it is so important to channel the exponential progress in the correct manner today and make the intellectual tools available to the decision-makers from University is based on this idea.

And there is every chance that the visionary Kurzweil will be proved right with his forecasts for the future. After all, at the start of the 1990s he made far in excess of 100 predictions and "86% of those came to pass."



86% of the more than 100 predictions he made for the future from the 1990s are now reality.

Raymond Kurzweil, California, 68, Author, Inventor, Futurist Picture source: su.org



30 exponential steps Distance 25x



CONTROLEXPERT **IS ACTIVE**...

... not just when it involves setting new standards for every party involved in the claims and servicing process, but also for people within and outside the company. Quite a lot has happened here.

ATMOSPHERE

SPORT AND GAMES

And at Control€xpert, encounters also take place outside of working hours - at our group sports activities, for example. The colleagues think of something and those who feel like it can join in. "C€ walks" meets



"C€ runs" – every Wednesday evening

The C€ Christmas party 2016

A DAY FOR OUR LITTLE EXPERTS

Children are our future. And since the future is a matter close to Control€xpert's heart, our employees' little ones are treated to a special program. In the "C€ Junior Club" the children can take a look behind the scenes and find out what their parents do all day. In a playful way, they learn a lot about cars, data processing, and languages. What does an engine look like on the inside? Where is a car's crumple zone? And what are the different parts called in English? In addition, the youngsters tried their hand at programming for the first time, discovering at the same time that mum and dad's work is really fun.

The highlight for the girls and boys is without doubt the subsequent drive in various classic cars from automotive history. With so much enthusiasm it would be no surprise if we hadn't attracted a few future employees. After all, you can never start early enough.

CHRISTMAS IN A SHOEBOX

Children are also the focus of another project actively supported by Control€xpert and especially the C€ employees. More precisely, it is about children in need throughout the world. The "Christmas in a Shoebox" initiative brings them love, joy, and hope during the festive season. For many a child the shoebox is their first ever Christmas present.

Our employees really worked flat out to bring a smile to the faces of the children with the shoeboxes full of presents. A total of 170 shoeboxes were packed up. We would like to take this opportunity to once again thank everybody involved sincerely for their incredible commitment.

Control€xpert's great strength is its combination of IT and vehicle expertise. In addition, there is the experience built up over the course of several decades – this is something that nobody else can recreate that quickly. In order to extend our lead, our employees further their knowledge at the new C€ Academy. From the latest repair methods and manufacturerspecific technology to foreign languages and management skills, the entire C€ training program is brought together here. We continue to work on our success with the weekly internal training day. Furthermore, we successfully cooperate with external partners such as KTI, Dekra, and external coaches. In addition, the C€ Academy is an integral part of the C€ quality management process. After all, you never stop learning.

FIRST-CLASS WORKING

Good ideas mostly come about while talking, no matter where or when. It may be in the morning by the coffee machine, or at lunchtime in the canteen, or even during the legendary C€ Christmas party. And of course refreshments are always welcome on such occasions. That is why it goes without saying that everyone at Control€xpert can help themselves to fresh fruit, coffee, tea, and water. It is the encounter that counts.

every Tuesday after lunch for a stroll. Both runners and walkers are very welcome at "C€ runs". Participants manage distances of between three and ten kilometers every Wednesday evening, depending on the ability group. And in "C€ spins" fitness fanatics can build up their stamina once a quarter on an exercise bike.

Alternatively, people can get together to play games. The event is cooperative, highly strategic, and always communicative. Classics such as Taboo are played by masters, while for others Flash Point: Fire Rescue or Exploding Kittens is a completely new experience. Ghost Stories, Dixit, Mice and Mystics, Sellsword – there is a wide range available. Anyone who likes the idea of a monthly board game evening is welcome to join the group of up to seven gamers.

A good mood is essential for a creative working atmosphere. At Control€xpert it works because we like to share the things we have in common - an enthusiasm for cars, sport, games, and for new ideas.

At the "C€ Junior Club" children get an insight into their parents' jobs – photo: M. Mönikes

CONTROLEXPERT GOES BACK TO THE CLASSROOM

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