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**GRÜNDER
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DIGITALE INNOVATIONEN

Gründerwettbewerb – Digitale Innovationen

Digital Innovations – Competition for Business Start-ups



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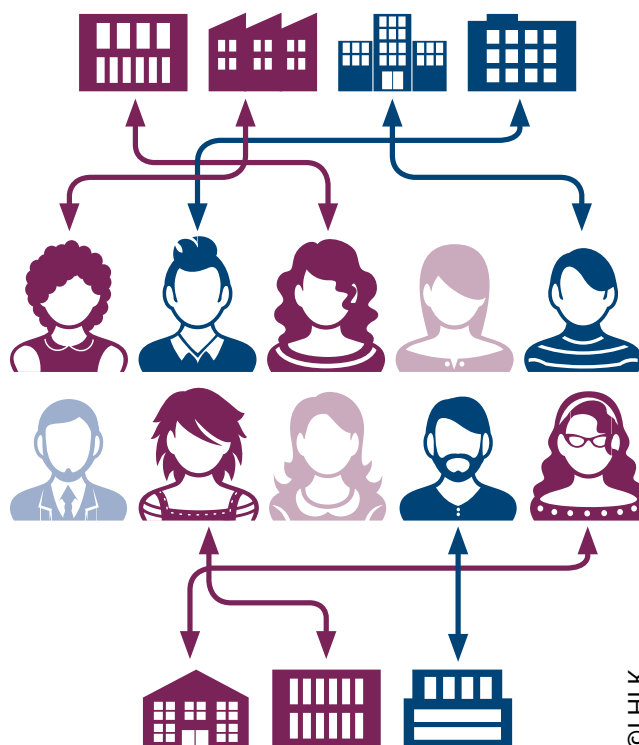


How SMEs and digital platforms are driving the success of the ICT industry

2016 was yet another successful year for the start-up competition. It marked the launch of the competition's fourth edition and its rebranding as the 'Gründerwettbewerb – Digitale Innovationen' (Digital innovations competition for business start-ups) at CeBiT in Hanover. The new design of the competition was adopted in response to the lessons learned from the 'Gründerwettbewerb – IKT Innovativ'. There are now two rounds, and more room has been made for start-ups to develop innovative business ideas and turn them into profitable businesses.

However, this has not changed the fact that the number of new companies being set up in Germany is falling. In fact, there has been a pronounced downward trend over recent years, for which there are two reasons: first of all, there are good opportunities for people seeking employment in Germany, and second, a strong tendency to avoid the risks associated with entrepreneurship. There is one exception though, namely ICT-based start-ups, including those engaged in software development. The number of tech-driven start-ups launched in this industry is stable or even growing slightly.

The outcomes of the 2016 trends barometer – a study commissioned by the Federal Ministry for Economic Affairs and Energy in order to learn first hand about the challenges associated with entrepreneurship – provide further evidence of this. The study is based upon a survey of young ICT companies that took place in the 'Gründerwettbewerb – IKT Innovativ' between 2011 and 2015.



70 PERCENT
of start-ups would welcome
additional matchmaking with SMEs

A general concern young entrepreneurs are faced with is a business environment in which financing is hard to come by. Despite the low level of interest rates, there is too little willingness to invest in start-ups. The outcomes of the trends barometer survey show that little has changed in this respect over recent years. This is one of the challenges that are holding back entrepreneurs in Germany – there is a lack of dynamism.

Partners for SMEs

If a company is to achieve dynamic and sustainable growth, it will first have to build strong ties with its customers and with partners. Young companies and established SMEs make very successful partners. SMEs depend on dynamic companies such as young start-ups in order to be able to keep pace with digitisation and to adjust accordingly. Young companies can bring flexibility, innovation, and a willingness to take on risks to the table – all of which are qualities that play an important role in the development of new products and services.

Whenever both sides work together on an equal footing, they both stand to gain: start-ups benefit from being able to access SMEs' financial resources and the experience, and established companies gain access to new, innovative technologies. This shows how important it is to encourage this type of cooperation. Around 1 in 4 of the young entrepreneurs surveyed for the trends barometer had already worked with an established SME. More than 70 per cent would welcome additional matchmaking measures for start-ups and SMEs. Those in the industrial sector (especially machinery and manufacturing) and in the communications industry can see the greatest potential for this kind of cooperation.

Digital platforms and their growing importance

Another important trend that can help drive the growth of ICT start-ups is the platform economy. Digital platforms act as intermediaries between suppliers and customers and function like a market place, making products, services and technologies available to a large group of customers. There are platforms targeting private consumers and others aimed at corporate customers who want to use the technologies or services being sold to further improve their own products. Around 1 in 2 of the start-ups surveyed said they were convinced that there already is a market for this type of platform.

58 per cent of the start-ups surveyed said they benefit from existing platforms and 53 per cent stated that they have created their own digital platforms to sell their products. It seems that young companies are very well prepared for this trend, which is still gaining traction. The share of start-ups engaging in the platform economy may well increase further. Among those surveyed, 71 per cent said they expect digital platforms to gain additional importance and are convinced that they need to factor this in as they develop and adjust their business models. Almost two thirds of respondents said their business ideas are compatible with digital platforms and can be adjusted to incorporate this trend.

“Ambition and focus are key qualities for any entrepreneur”

To realise in time that the wheel axle is about to break. To prevent damage to the gears before the car has broken down. Both are possible using the software solution by COMPREDICT GmbH, a start-up created in late 2016.

Their software solution calculates the stress on the vehicle while it is in operation, creating load and use profiles and making it possible to predict the remaining lifetime of individual components. In a next step, the data generated by individual vehicles is transferred to servers anonymously for deeper analysis. This then provides for new insights about the fleet as a whole. The outcomes and the knowledge derived from it are then processed and made available to users via a dedicated interface. What is so unique about this approach is the absence of a need for any additional hardware to be used. The algorithms developed by COMPREDICT are purely based on data captured by sensors that are part of the standard equipment of the vehicle. COMPREDICT was presented with the special 'big data' award in round 1/2016 of the 'Gründerwettbewerb – Digitale Innovationen'. An interview with Dr.-Ing. Rafael Fietzek, Co-founder and CEO of COMPREDICT:

➤ *Where did the idea for COMPREDICT originate?*

We are automotive engineers with a great deal of experience and experts on vehicle technology and dynamics. The idea for the business stemmed from Stéphane Foulard's doctoral thesis. At this point, I had already supervised his master's thesis. Back then, however, we did not even dream about setting up a business together only five years later.

➤ *What is the business idea underlying COMPREDICT?*

Our load and use profiles can be used by suppliers and manufacturers in their planning and design work. Furthermore, vehicle owners receive exact and tailored information on the state of components and on any maintenance work that is required. The method and software we have developed can also be used for mechatronics systems beyond the automotive sector.



The COMPREDICT team (from left to right): Dr.-Ing. Rafael Fietzek, Dr.-Ing. Stéphane Foulard, Prof. Dr.-Ing. Stephan Rinderknecht

➤ *What role did competitions play in the genesis of your company?*

Competitions are an excellent tool for honing your ideas and allow you to receive feedback on your business model and its profitability. Winning the main and special awards in the 'Gründerwettbewerb – Digitale Innovationen' was a major success for us. Among the more than 300 teams taking part in the competition, we were the only one to win two awards. As you can imagine, that's a major morale booster and also puts you in the spotlight. This has made it easier to convince potential customers of our approach and to develop joint projects with well-renowned automotive manufacturers and suppliers.

➤ *What's your advice for prospective entrepreneurs?*

Stay motivated, believe in yourself, and think big! When you're at the stage of building a new company, it's normal to experience ups and downs. All that matters is that the overall trend is positive. This is why ambition and focus are two key qualities for any entrepreneur.

➤ *And, finally: Three words that summarise what it's like to be an entrepreneur?*

Productive, challenging, fascinating.

Further information available from: www.compredict.de

No more asking: “What should I wear today?”

The average woman spends 17 minutes per day pondering what she should wear. Time you can now use for other things, thanks to DailyDress. This new app takes care of that decision for you.

Every day, it suggests new outfits for you, tailored to the weather and for various occasions. DailyDress uses what is in your wardrobe and combines the clothing items you own with new purchases. The potential for this handy app for everyday use was obvious to the jury of the ‘Gründerwettbewerb – Digitale Innovationen’, which presented DailyDress with a recognition award in round 1/2016 of the award. Co-founder Jennifer Schäfer tells us more about the genesis of the app and the work at DailyDress.

➤ *When and where did the initial idea for DailyDress originate?*

Laura and I have known each other since we were teenagers. After we graduated from university, we met again in a bar in Hamburg, where she told me about her doctoral thesis in neurosciences. She was working on the cognitive mechanisms underpinning decision-making. We discussed how handy it would be to have an app that would decide for us in the morning which clothes we should wear that day. But it took a few months until we decided to develop this kind of app ourselves. It was when we took my work colleague Marius, a screen designer, on board.

➤ *The women in your team outnumber the men. Do you feel that you are having to overcome more obstacles than your male colleagues?*

Yes and no. At the beginning, especially, it was difficult for us as women promoting a fashion app to be taken seriously. At the same time, having more women on the team gave us opportunities to pitch our ideas in settings where we might have not been accepted had we been a male team. At first, we found this affirmative action slightly odd. But we no longer care about this. What counts is that we are able to show everyone just how good our idea is.

➤ *DailyDress passed the beta stage with full marks. What are your plans for your start-up during the next five years?*

Once we have established ourselves on the German market, we will definitely expand to Europe. Fortunately, DailyDress is highly scalable and therefore not too difficult to internationalise. If we venture further into the future, the principle of having self-learning algorithms take over our decisions could be used in many other fields as well, for instance for deciding which meal we should eat at lunchtime.

➤ *What is your tip for prospective entrepreneurs?*

Do you really want it? Then you'll find a way to succeed. There is so much support available, such as the 'Gründerwettbewerb', or EXIST, which can give you access to financing, coaching, and networks. That's a great thing about Germany. And even if it doesn't work out, it's not the end of the world. So my tip is: Go get the information, get going, and don't be afraid!

➤ *And, finally: Three words that summarise what it's like to be an entrepreneur?*

Self-fulfilment, flexibility, independence!



The DailyDress team: from left to right: Jennifer Schäfer, Laura Karim, Marius Murtz

Further information available from: www.daily-dress.de

“We can track buses, why not cows?”

Can digitisation help generate profits for the dairy industry whilst also delivering animal welfare? “Yes!”, says Sebastian Baumbach, Managing Director of InnoCow and winner of the main award presented in round 1/2016 of the ‘Gründerwettbewerb – Digitale Innovationen’. The Kaiserslautern-based team of entrepreneurs has developed a diagnostic tool for capturing the activities and vital parameters of cows.

“At the heart of the system, there is a collar fitted with sensors that capture the animal’s behaviour and movements in real time. Our tracking system uses self-learning algorithms to analyse this data and assess the animal’s health status. Via a web application, farmers can thus access all the information they need to tell if a cow is in heat or affected by disease”, says Mr Baumbach by way of explaining the product.

The idea for InnoCow came to Baumbach three years ago, more or less by coincidence. At the time Baumbach, who has a degree in computer science, was working on a research project conducted by the German Research Center for Artificial Intelligence, which was about tracking public buses in Kaiserslautern. He attended several start-up events, where he learned from prospective start-up entrepreneurs involved in agriculture that there are products designed

to tell when a dairy cow is in heat or ill, but that these tools come at a high price and do not reflect the state of the art of the technology. This led Baumbach to think: “Why don’t we use the technologies that we have developed for tracking buses and optimising bus schedules to assess the health status of dairy cows?” The idea for InnoCow was born.

Asked what the biggest challenge for start-ups is, Baumbach says it’s lack of experience with building a company and leading a team. This, he says, has made competitions like the ‘Gründerwettbewerb – Digitale Innovationen’ all the more important for him: “In addition to the cash prize, it’s getting feedback from an experienced jury on your product that is highly valuable for a young team of entrepreneurs. And of course we also benefit from being in the media, which is extremely important if you want to find new partners for cooperation and attract investors.

Baumbach’s advice to prospective entrepreneurs is to keep asking for feedback from various experts and institutions. The key to success, he says, is to use this feedback to conduct a critical review of your plan and to keep honing it.



The InnoCow team from left to right: Matthias Wein, Christine Adam, Sebastian Baumbach and Tim Ebert

Further information available from: www.innocow.de

“The team are what makes or breaks it”

Lightweight parts for industry, inspired by nature. This is what the CellCore 3D team have been working on, and it is for this work that they were awarded a main award in the 1/2016 round of the ‘Gründerwettbewerb – Digitale Innovationen’. René Giese, CEO of CellCore3D explains the idea underpinning the project and gives us some insights into the start-up scene.

➤ *Lightweight structures, inspired by bionics. What’s the idea underpinning CellCore3D?*

Lightweight construction allows for a more efficient and sustainable use of natural resources and is increasingly being used across many different industries. At a time when conventional approaches, such as composites, are reaching their physical and ecological limits, nature is giving us many examples of how structures can be designed in other, highly efficient ways and be lightweight.

This type of construction can help reduce structures’ weight by as much as up to 50 per cent and also allows for other functional properties, such as vibration and noise absorption, damage tolerance and safety levels to be designed in a precise way. Multifunctional parts that combine load-bearing capacity and functional properties open up new opportunities for further reducing the weight of traditional structures and installations. Aerospace and the automotive industry, in particular, depend on parts that are lightweight, but also highly rigid.

➤ *What gave you the idea for your project?*

One of our founding team, Paul Schüller, did his doctoral degree in materials science at TU Berlin. His work made us aware of various structures and their properties. We thought about how these structures could be designed to deliver certain properties and how exactly this can be calculated. Since then, we have tweaked our mathematical models to the point that it is now possible to create parts for industrial use that can be produced by 3D printing.



The CellCore3D team: Paul Schüller (left) and René Giese

➤ *Now that you have won one of the main awards in the ‘Gründerwettbewerb – Digitale Innovationen’, what would you say is the advantage of participating in a competition like this?*

The main thing is that you get attention. When you’re starting out as a young start-up, you’re a blank sheet of paper. But once you take part in a competition of this kind and win this competition, the public will take notice. Also, taking part in the competition forces you to once again hone your idea and really scrutinize it. And the award money should also not go unnoticed. It really helps us a lot.

➤ *Cellcore3D is based in Berlin. Would you say that Berlin is a mecca for the start-up scene?*

I think that Berlin is a fantastic place to be for start-ups working in e-commerce. If you’re involved in fintech or hightech, there are better cities for this, where the framework is better.

➤ *A short final question: what does it feel like to set up a company?*

It’s exciting and a challenge.

Further information available from: www.cellcore3d.com

Ten tips for start-up entrepreneurs

From the jury



“As an entrepreneur you will need stamina and capital. My advice to all participants would be to know your market and to focus on the best-possible user experience. If you also have the power and perseverance of a top athlete, you will be able to translate your talent into expertise and success. The network set up by the ‘Gründerwettbewerb’ is there to support prospective entrepreneurs in all matters linked to setting up a company, and it has what it takes to provide good momentum: financial support, coaching and mentoring, and many contacts with stakeholders from business.”

Anja Schaar-Goldapp has 30 years' worth of experience working in information and communications technology. She is the successful founder and managing director of LINEAS Systems GmbH (a software company) and a member of the board of the German Society for Computer Sciences, which she represents on the jury of the “Digital innovations” Competition for Business Start-ups.



“You should start your financing rounds before there is an urgent need for financial resources. This will allow you to build a network in an early stage, practise how to pitch, and get some feedback on your idea – all of which helps you prepare for that decisive presentation when you face the investors.”

Christian Nagel, member of the jury of the ‘Gründerwettbewerb’ is co-founder of Earlybird and one of the partners in the firm. He has excellent business nous and knows how to spot a successful idea. With a volume of more than 700 million euros, Earlybird is one of Europe’s largest venture capital investors.



“Every individual has the potential to change the world. In a small way, in their neighbourhood, and also in their own company. This is why my tip to any prospective entrepreneur is the following: follow your passion, give free reign to your creativity, and think about how change be successfully delivered. Think outside the box. Think beyond what others may be expecting of you.”

Andera Gadeib, member of the jury of the ‘Gründerwettbewerb’, has set up a string of businesses (Dialego, MartMunk and lets-balance.de). She is a well-established expert on digitisation, providing advice to listed companies and public-sector institutions. She is also a member of the ‘Young Digital Economy’ Advisory Board at the Federal Ministry for Economic Affairs and Energy and a member of the board of bitmi, the German Federal Association for SMEs in IT.

From the project team



“Any business idea that is promising and economically viable will always be created in close dialogue with prospective customers and also with your partners in the value chain. This is why young entrepreneurs are well advised to use every opportunity to showcase their idea and their product or service, and to ask for broad-based and diverse feedback.”

Wolfram Groß has 20 years experience working as a project leader commissioned by the Federal Ministry for Economic Affairs and Energy (and previously for the Federal Ministry of Education and Research). In 1990, having previously worked in the private sector for several years, he joined VDI/VDE Innovation + Technik GmbH.



“If you want to venture into self-employment, you need to have an idea and a product that customers want to buy. For a start-up to be able to successfully establish itself on the market, it must know its customers and the industry, and it needs to have a good idea of what customers need.”

Birgit Buchholz has been working for VDI/VDE Innovation und Technik GmbH since 2000, providing advice and support to technology-driven start-ups. Within the team organising the ‘Gründerwettbewerb – Digitale Innovationen’, she is in charge of coaching and mentoring the winning teams, and of hosting seminars and workshops.



“Fail at an early stage, learn quickly!” It is important to test and validate your idea as soon as possible. If you allow for too much time for development, for instance, there’s a strong likelihood that whatever you’re working on will turn out to be something that doesn’t really meet customers’ needs or expectations. It’s better to make many small mistakes rather than a few big ones.”

Stefan Petzolt is part of the start-up team of the ‘Gründerwettbewerb – Digitale Innovationen’. His role includes overseeing the workshops and other support measures offered to start-up teams. Prior to joining VDI/VDE Innovation und Technik GmbH, he was an entrepreneur and COO in the Berlin start-up scene.

From former winners of the award



“There are many advantages to setting up a start-up as a team. It means that each person brings their own capabilities and expertise to the table and that you can master the first challenging phase together. However, it is important to remove some potential bones of contention at an early stage. How much time do the various team members want to put in in the future? Who owns what stake in the company? What happens if someone’s plans for the future change? Who is in charge of what? If you answer these questions at an early stage, you will avoid a situation whereby each team member approaches the initial stage of the project with their own divergent ideas and everyone is then left disappointed. It is true that these are uncomfortable questions to discuss. But if you and your colleagues are able to agree on the answers, you will be able to rely on your ability to have additional difficult discussions with them in the future, should these prove necessary.”

Birgit Bärnreuther won a recognition award in round 1/2010 for Userlutions. Her service RapidUsertests.com is aimed at website and app operators and allows them to have their products’ user-friendliness assessed by test users from all over Germany. The process is quick, straightforward and inexpensive.



“To all the prospective women entrepreneurs in the tech scene, I’d like to say: don’t let yourself be scared off by the fact that this is a male-dominated industry. It’s always difficult to change someone’s prejudices. And we women don’t need to act like men in order to do a convincing job. Just like everyone else, we should be self-confident and assertive and stand up for our opinions.”

Caroline Dabels is a co-founder of AmbiGate and winner of the main award in round 1/2015. Her start-up has delivered eReha, an IT-based therapeutic exercise system that comes with feedback in real-time and is designed to encourage greater physical activity in the workplace. It can also be combined with regular physiotherapy. Within the company, Caroline Dabels is in charge of all matters linked to business management.

From former winners of the award



“The best advice for prospective start-up entrepreneurs will come from entrepreneurs who have already been there. I, for instance, talked to entrepreneurs in the biotech industry who had already successfully created and built a company. It is extremely valuable to be given tips and hear about highs and lows. This is especially true for start-ups in the high-tech sector, of which there aren’t that many. It also makes a lot of sense to participate in open start-up competitions such as the ‘Gründerwettbewerb’. Competing with other start-ups and getting the feedback from the jury is free of charge and very helpful, and often you will even be given coaching.”

Lutz Kloke and his team have developed a bio3d printer, which can be used to print small human organs and tissues that can be used in pharmaceutical testing, for instance. Their start-up called Bloodline was presented with a recognition award in round 1/2016 for the technology they use.



“When you’re an entrepreneur, you should start talking to prospective customers as soon as possible, and interact with them. For instance, it can make good sense to define a certain period of time during which you talk to at least one person per day who is using your product or a similar one. This will allow you to gather important information about customers and get valuable feedback on your product.”

Leo Marose and **Stefan Berntheisel** won the special award for digital education in round 1/2016 for their dataX Academy. This interactive learning platform is designed for providing training to employees who want to acquire skills in the field of data science and big data.

“Even localisation experts get lost.”

The self-driving car is already there. This highly automated operation depends on precise and robust recognition capabilities of the vehicle. But in an urban environment, especially, tracking can prove tricky because of the many different factors that come into play.

This is where the software developed by Chemnitz-based start-up NAVENTIK comes in: the company won one of the main awards in round 1/2016 of the 'Gründerwettbewerb – Digitale Innovationen' for its pathfinder technology.

Whilst researching driver assistance systems, the founders of NAVENTIK had realised just how difficult it was to generate precise and robust data based upon satellite navigation. This is what led them to develop their pathfinder technology. This technology uses GPS and other navigation satellite data, but also data generated by the car's own sensors to calculate its exact position. Sources of error are analysed and errors compensated for. The technology delivers the same level of precision as a receiver worth tens of thousands of euros – and it does so at a low cost.

Despite the fact that the start-up could boast an innovative technology, the first step after creating the company was by no means easy. The team from Chemnitz were faced with a number of challenges, including of a financial nature. They pitched, explained and delivered – often without receiving any response from prospective investors. This made the moments when an investor recognised the potential of the pathfinder technology all the more valuable. It meant that they were willing to accept that the sales curve would go up slowly rather than in the short term.

The young company was able to benefit in start-up competitions in several ways. These competitions generate a great deal of attention and are often associated with financial support. The young start-up team did not think twice about participating in the 'Gründerwettbewerb – Digitale Innovationen'. What attracted them to the competition was its national reach, the distinguished jury, and the prestige associated with it.



The NAVENTIK team, from left to right: Sven Bauer, Robin Streiter, Michael Jüttner, Peter Kalinowski

And their involvement in the competition was a true success. Winning an award made them all the more certain that they were on the right track, and it also helped with acquiring customers and investors. NAVENTIK took the detailed feedback provided by the project team on board and adjusted its plans accordingly.

The team from Chemnitz has put a lot a great deal of passion in its start-up, following the motto “It's not a job, it's a passion”. Their advice to prospective entrepreneurs is to truly believe in the business idea. Needless to say that this should be a very good business idea indeed, and that it will meet with lots of objections. If you're able to give a convincing answer to a string of questions being thrown at you, there should be nothing to stop you going ahead with setting up your company.

Ever since their trip to Namibia, the NAVENTIK team have known that even localisation experts are not always able to determine their exact position. The team, who have known each other since their student days, had ventured into the African wilderness for a special kind of teambuilding experience. They ended up spending three days and night in the middle of nowhere – completely lost after their car had broken down.

Further information available from: www.naventik.de

“Our motto is: keep going, everyone else also puts their trousers on one leg at a time.”

Gesture-control for computers and augmented-reality glasses? Want to take notes in thin air? Something that would have sounded futuristic just a while ago has now been turned into reality by Kinematic. Christoph Amma and his team from Karlsruhe applied for round 1/2016 of the 'Gründerwettbewerb – Digitale Innovationen'. In 2017, Kinemic received an award for their idea at CeBIT in Hanover.

➤ **Mr Amma, you want to improve industrial processes by introducing gesture control. What's the idea underpinning your technology?**

The basic question was: how can we enable people to handle computers or take notes without having to interrupt their usual work patterns? The answer to this is software that enables gesture control, including user-friendly augmented reality glasses. Wearables, such as wristbands fitted with sensors, are used to capture gestures and our software then passes the information on to the devices that are to be controlled.

➤ **What is so unique about your idea?**

Unlike other software providers that often depend on visual tracking by camera – a method that is less robust and requires a great deal of calculation capacity – ours uses only the movement data generated by the wearables. Furthermore, our 'software-only' solution can be used for different types



The manual for a vehicle's maintenance work can be used by gesture control.

of devices. Our control system is particularly suited for use in the industrial field, where manual labour has to be interrupted for the worker to use a technical system. Our technology eliminates the need for the worker to touch the device. Instead, they can operate it hands-free – something that is particularly useful in a sterile environment or if special work gloves must be worn

➤ **What was a major challenge for you when you started your company?**

The most difficult challenge was to turn a scientific approach into a marketable product. This transition is a major step and for someone with a science background, there is a danger that you underestimate the complexity of it. The process of turning an idea into a product tends to take longer than anticipated.

➤ **What tips would you like to pass on to prospective start-up entrepreneurs?**

First of all, it's important to have a strong team that is able to confront problems openly and has a strong and constructive feedback culture. The team ought to challenge one another and drive each other to ever new heights. That's the most important thing. Besides this, it is also important to keep calm and carry on. In the early stages, especially, there will often be other firms or new start-ups that have similar ideas, and this can make you rather defensive. But you shouldn't let that get to you too much. Instead, keep focusing on your own ideas and targets.



The Kinemic team: from left to right Christoph Amma, Fabian Winnen, Marcus Georgi, Tomt Lenz

Further information available from: www.kinemic.de

“Our first office was in a cellar, like it should be for an ICT start-up, but we did have windows.”

Empty refrigerators that independently order new food, assisted-driving systems for parking, and machines that exchange data in the smart factory. The Internet of Things (IoT) is gaining traction. A growing number of devices are hooked up to the internet and able to independently communicate and network with one another.

However, this smart networking also means that devices are gaining ever deeper insights into users' personal space and into company networks. For users to be able to securely exchange data within the IoT at minimum risk, we need universal security solutions for data traffic.

This is where PHYSEC comes in. “Our technology has the potential to guarantee for high levels of security for all systems within the IoT”, says Heiko Koepke – one of the two founders of the start-up, which won a main award in round 1/2016 of the competition. “Dependable IT security will be the most crucial point when it comes to future acceptance of the IoT and its growth.” The IoTree platform by PHYSEC allows manufacturers to digitise objects and connect them to the internet. Moreover, it provides for a simple tool for encrypting this information in a secure way. At the heart of this security solution are cryptographic keys that are generated to ensure that the connection between the objects

involved is authentic and secure. Data integrity and security is the number-one success factor when it comes to digitising products and processes.

The idea was hatched by Christian Zenger at the time when he was working on his doctoral thesis at the Horst Görtz Institute for IT Security (HGI) in Bochum. “Being close the only degree programme dedicated to IT security in the whole of Europe and therefore having motivated students close-by is an advantage, as is being involved in the higher-education institutes' network for entrepreneurs and prospective entrepreneurs.”, says Heiko Koepke. And in fact, PHYSEC GmbH is still headquartered in Bochum. “But today our office is no longer in a cellar”, says Koepke with a smile.

“Focus on customer needs and on communication.”

The two founders of the ICT start-up are now aware that the biggest challenge is to turn a technology into a user-friendly product. “For us, this meant that we first had to gain an understanding of how the market for IT security works, what customers' expectations are, and how we can address these using our technology.”

The team found that participating in the ‘Gründerwettbewerb – Digitale Innovationen’ helped them raise their profile among potential customers and get into touch with seasoned business people and new entrepreneurs. ‘Gründerwettbewerb’ is the most renowned competition of its kind at federal level. The feedback we received and the seminars we were invited to attend after winning the award were very valuable, beyond the mere financial prize”, says Koepke.

➤ *And what about the two young entrepreneurs' take on the start-up scene in Germany?*

Thrilling, challenging, and exciting.



The PHYSEC team (from left) Dr.-Ing. Christian Zenger and Dr. Heiko Koepke

Further information available from: www.physec.de



‘Gründerwettbewerb – Digitale Innovationen’, Competition for Business Start-ups

By organising the ‘Gründerwettbewerb – Digitale Innovationen’, the Federal Ministry for Economic Affairs and Energy wants to encourage entrepreneurship in the field of information and communications technologies (ICT). The main goal here is to harness the potential for entrepreneurship in Germany and encourage a greater number of ICT-based start-ups.

What can you win?

Feedback

All participants in the ‘Gründerwettbewerb – Digitale Innovationen’ will receive a written assessment of their idea, outlining its strengths, weaknesses, opportunities and risks (SWOT analysis).

Main awards

Up to six main awards worth €32,000 each.

Part of this sum (€7,000) is paid out after the award ceremony. The remaining €25,000 can be used for the purpose of establishing a GmbH or AG based in Germany, within twelve months after the award ceremony.

Awards

Up to 15 additional awards, each worth €7,000.

Special awards

The Federal Ministry for Economic Affairs and Energy will also look to present special awards for projects that tie in well with the Digital Agenda. These special awards will be worth up to €10,000.

Coaching, mentoring, training, networking.

All of the award winners are invited to participate in a coaching and training programme targeted to their needs, and to attend selected specialist trade shows and workshops.

How do you apply?

The ‘Gründerwettbewerb’ Competition for Business Start-ups is a competition for ideas. You should present the idea for your company on a maximum of 15 pages. There is no need to present a business plan in full. You can upload your documents online, at www.gruenderwettbewerb.de.

Deadlines for submissions

Each year, there are two rounds of the competition. Each round is divided up into two phases. The best 50 ideas make it into the second phase so that these start-ups have a chance to use the feedback they have received in phase 1 of the competition to review and rework their ideas.

Dates

Round

Phase 1: 1 January – 31 March

Phase 2: 1 June – 30 June

Round 2

Phase 1: 1 July – 30 September

Phase 2: 1 December – 31 December

The deadline is 6:00 p.m. on the final day of submissions.

If the date of submission falls on a Saturday, Sunday, or a public holiday, the deadline is moved to the first working day of the following month, 6:00 p.m..

Eligibility criteria

The competition is open to natural persons whose permanent place of residence is in Germany. The prospective company must be based in Germany.

Where participants have already registered a corporation (GmbH or AG) on the basis of the business idea they want to present in the competition, this must not have happened earlier than 4 calendar months prior to the submission of the online registration form for a round of the competition. This does not apply for businesses incorporated as UG (Unternehmergeellschaft (haftungsbeschränkt)).

Applications for the 'Gründerwettbewerb – Digitale Innovationen' can be renewed twice in the following rounds of the competition, and using the feedback that has already been provided.

Hotline

If you're interested in participating in the competition or have already registered, you can obtain additional information from our hotline or via email, Mon-Fri from 9:00 a.m. to 5:00 p.m.,

Tel.: +49 30 310078-123

Email: info@gruenderwettbewerb.de

How are the award winners selected?

The jury

The Federal Ministry for Economic Affairs and Energy relies on the support of an independent jury composed of representatives from business and science as it decides who is to be presented an award. The jury members' names can be found on www.gruenderwettbewerb.de.

