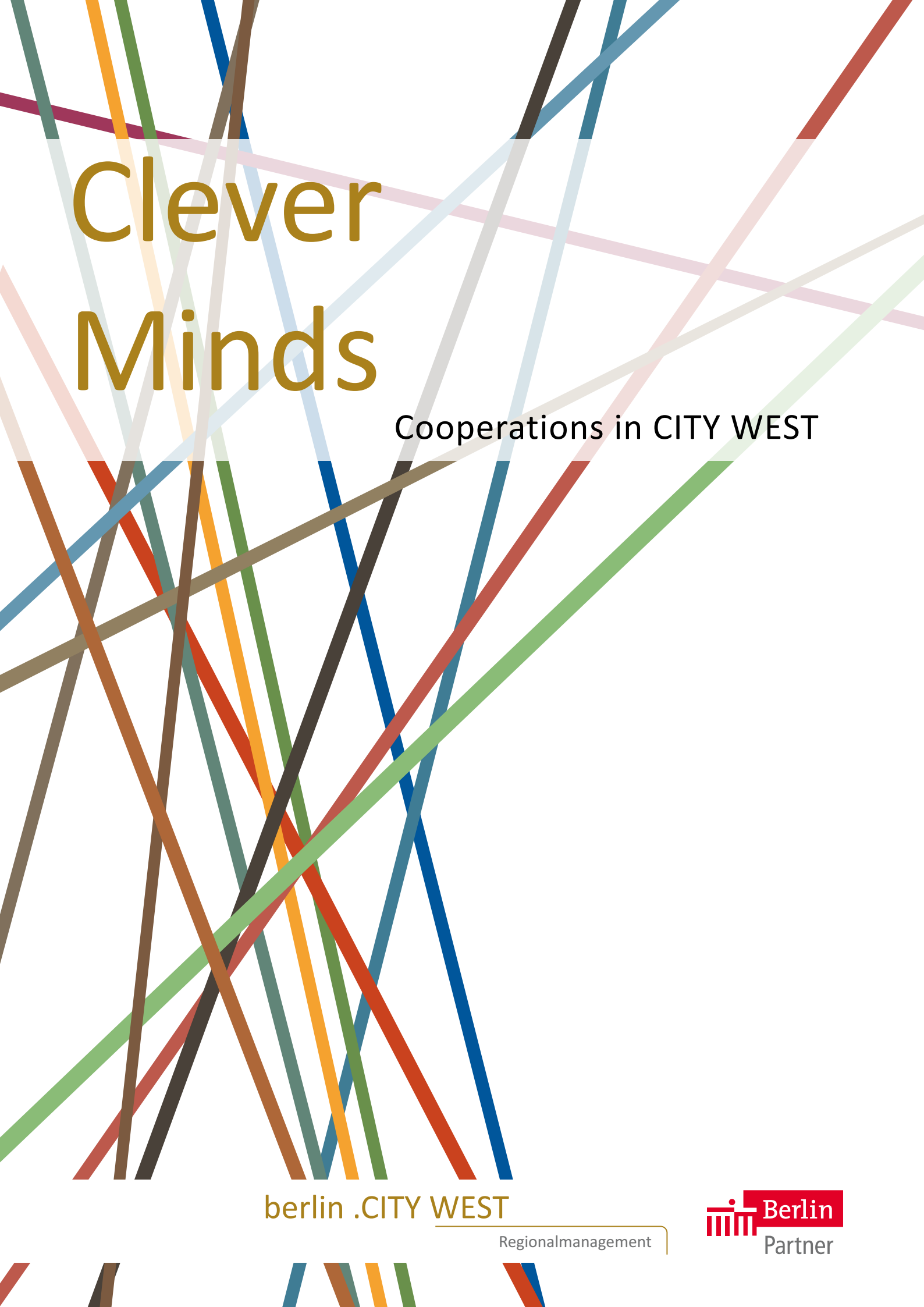




Clever Minds

Cooperations in CITY WEST

berlin .CITY WEST

Regionalmanagement



This magazine was also published as a supplement in the Sunday Edition of Frankfurter Allgemeine Zeitung on Nov. 18 2012 in the Berlin-Brandenburg area.

Copyright

The contents and design of this publication are protected by copyright and protected by other protective laws. The duplication of text, portions thereof and pictorial materials requires the prior approval in writing of Regional-management CITY WEST and Berlin Partner GmbH.

Berlin, May 2013

Clever Minds

Cooperations in CITY WEST

Joint Ventures between Business, Science and Research: A Close Look at the Opportunities

Logos listed on printed products, even entire web sites with visual and textual branding indicate that more companies are entering into joint ventures. The questions are: Who made which contributions? What motivated these people to look outside of their own fields and collaborate with others at desks, in laboratories or in production facilities?

In Berlin's City West, there are many joint ventures doing amazing things and improving the economy. This magazine looks at some of them. In each case, there is a clever mind behind the results.

In 2010, two universities that have shared one campus for decades looked over their dividing fence and discovered each other. They wanted to break down traditional barriers and seal this change with the joint brand, Charlottenburg Campus and a hybrid platform. The interchange between the technical and artistic disciplines has been fruitful. It should continue to be supported. Motivated people from the university and political sectors have championed this (see pp. 11-13).

Like hybrids, minds can combine opposing principles, such as teaching and researching at universities while simultaneously founding companies and consulting. Personalities appropriate for such platforms are people who can transfer knowledge in all directions between research efforts, the sciences and economics (among other, see pp. 6, 8, 17 & 19).

Everyone knows university names. Acronyms like PTB (Physikalisch Technischen Bundesanstalt) and HHI (Heinrich-Hertz-Institut) are more difficult. Several research facilities are located very close to the Technische Universität of Berlin [Berlin Technical University] and to the Universität der Künste of Berlin [Berlin University of the Arts]. These facilities provide the underlying research relevant for businesses and thereby provide start up help to companies while remaining in the background (see pp. 4, 5 & 7).

In particular, startup help can be obtained from the Charlottenburg Innovation Centrum and the Zentrum für Entrepreneurship [Center for Entrepreneurship]. New companies and people wanting to establish companies can obtain services there, so that their good ideas will not fail during the business start up phase, but will result in successful companies. Four renters will report on these issues on pages 14 to 17.

Centers are locations for cooperative efforts. Three-dimensional video service companies have been working together since August 2012 in the newly established 3D Innovation Center (p. 4). In contrast, cross-sector collaboration is occurring along the design mile on Kantstraße Street (p. 9).

Finally, there is the virtual location for collaboration: the Internet. One company has created a horizontal platform for offers; an innovation center researches and promotes "the Internet of Things". Some integrate the working world, others cross-link the home (pp. 18 & 19).

You will also find a list of logos in this publication. The partners who have made the Clever Minds project possible for the second time are listed on the last page. Still another good joint venture in City West.

Hedwig Dylong, Dirk Spender
Regionalmanagement CITY WEST

Preface

City West: A Community with a Future Full of Creative Variety



*Reinhard Naumann,
Mayor of borough Charlottenburg-Wilmersdorf*

The future of society is based on knowledge. Innovations represent the foundation for future investments and high-quality jobs. Good collaboration between research and science with the local economy is a significant basis for innovation and prosperity. In Berlin's City West, various established and new joint ventures are taking place in various industries. The exchange of knowledge and mutual stimulation are the core components for driving developments that lead the world forward and for continuing the qualification of the area. In particular, in the Charlottenberg Campus environment, there are a large number of joint ventures due to the proximity of the high quality educational and research facilities. These joint ventures are often almost unknown to the general public. Knowing about them is its own reward.

Clever Minds. Cooperations in CITY WEST is the second part of a project by Regionalmanagement CITY WEST, which arose in collaboration with the business services of Berlin Partner GmbH. This magazine is the result of a joint venture between institutions, which are united in the objective of promoting the economy, jobs and the image of the area. All of these clever minds share the fact that are located in the Borough of Charlottenburg-Wilmersdorf or collaborate closely with a partner close to that environment or across various regions.

The people who live and work in this area are convinced about the quality of their environment and serve as ambassadors for City West in economic, cultural, social or ecological regards. I would like to thank all of the participating institutions and their employees for their involvement in the creation of this magazine and invite all interested parties to create their own image of the City West educational and scientific community and its exciting environment oriented towards the future.

Networking in the Third Dimension

The Industry now shares a Location in the Form of the Berlin 3D Innovation Center

As Dr. Philipp Rösler, German Minister of Economics, presses a red button, it is now Year 3 Anno Avatar. The button looks just like the one that Willy Brandt pressed 45 years ago as television entered the age of color. Having the Minister push this button also has its effect: adding the third dimension to a former two-dimensional world, on time at the opening of the 3D Innovation Center by invitation of the Fraunhofer Heinrich-Hertz-Institut (HHI).

“We were only a network for a long time. Now, we are also a location”, says Kathleen Schröter, Executive Manager of the 3D Innovation Center, as she glances at the wall, where the signs of the joint venture partners have been mounted. The signs include important people from the industry as well as research institutes, technical universities, broadcasters and telecommunications companies, from Dolby, Loewe and Zeiss to the Technische Universität of Berlin, Deutsche Telekom and Sky. so far they have been working isolated from each other. Now, they are visibly networking in order to push forward the 3D industry together. In Germany, the 3D Innovation Center is unique for its kind, but even in an international context, this platform is something special.

While the 3D market is booming in China (the Chinese government even included the idea into their five-year plan), the three-dimensional market has not truly arrived in the German living room. “Three-dimensional production expenses are still quite high at the moment”, says Dr. Ralf Schäfer, Chairman of the Steering Committee for the 3D Innovation Center and Manager of the Image Processing Department at HHI. He is convinced that the breakthrough will first come with autostereoscopy, meaning once 3D televisions that do not require 3D glasses are ready for the market.

For that reason two of the new platform’s workgroups are working on autostereoscopy and financially efficient stereo viewing production for that reason. Other companies are working in fields such as providing industrial and medical applications,

archival applications, quality assurance or marketing in three dimensions. “We are offering a multi-level partnership program with Bronze, Silver, Gold and Platinum levels”, says Kathleen Schröter. “Thereby, the joint venture partners are able to determine their investment according to their objectives, and how much they are willing to pay annually.”

The interests of the partners are quite different. Where some partners want to conduct joint research projects focusing predominantly on the networking of smaller companies (SME) with the larger ones in the industry, others partners want to test their developments using the lounge-like presentation areas in the Center as well

with the Best Paper Award at Europe’s largest broadcast conference, IBC.

The popcorn machines that were temporarily constructed for the opening of the 3D Innovation Center have become part of the Center’s fixed inventory. In the technology room, the electricians completed the final adjustments. The work has now been started and the first workgroup meeting has been completed. “New partners will always be welcome”, says Ralf Schäfer. “There are still a couple of free spaces on the wall. If necessary, we can simply make the signs smaller or display the partner’s logos on a screen. In 3D, of course.” (suh)



Dr. Hans-Joachim Grallert (HHI Chairman), Dr. Philipp Rösler, Dr. Ralf Schäfer (from left to right), © Jana Denzler Photography

as its live 3D studio, theater with editing room and 3D laboratory.

As an engineer, Dr. Schäfer has been working on the issue of three-dimensionality since the Eighties. The many years of research have paid off. A suggestion from HHI has just been accepted for the development of a standard for encoding video, which will make cost-efficient transmission of 3D TV possible without the need for glasses. For their work, HHI was presented

3D Innovation Center
Fraunhofer Heinrich-Hertz-Institut
Einsteinufer 37
10587 Berlin Germany

Visitors’ Address
Salzufer 6
Entrance Otto-Dibelius-Straße
10587 Berlin Germany

www.3dinnovationcenter.de

The Vision of Intelligent Power Cables

ubitricity is implementing an innovative EV charging infrastructure system. The Physikalisch-Technische Bundesanstalt provides for international leadership in security of measurement systems

Presently, the expensive recharging stations for electrical mobility systems seem impractical for recharging a car or two. Knut Hechtfisher and Dr. Frank Pawlitschek, founders and managing directors of ubitricity Gesellschaft für verteilte Energiesysteme mbH [distributed energy systems company with limited liability], want to make some changes in this area. Their solution is small and fits into a box, currently about the size of a brick.

Their concept is called "Mobile Metering". It moves the meter technology from the recharging station to the car or power cable. It merely needs a cost-efficient system power socket without any expensive metering technology to replace recharging stations. Vehicles would carry their own meters. Such systems would be the foundation of a comprehensive recharging network, according to the vision of the two lawyers, who made the entrepreneurial leap in 2008.

"Our objective is a smart combination of intelligent technology, economic feasibility and legal requirements", says Knut Hechtfisher about the project, which will be sponsored by the German Ministry of Economics and Technology until 2014. He didn't have to look far for an experienced partner. Located a mere couple hundred meters from the ubitricity premises in Charlottenburg, the Berlin institute of the Physikalisch-Technische Bundesanstalt (PTB) [German National Metrology Institute] is hardly known to the public but an international leader in technology and standard development.

The task of this facility established in 1887 is to represent units of measure, such as kilograms, meters & seconds, and ensure their suitability and capability as units of measure. "Just as there must be a reasonable system for measuring currency for the economy to work, there must be a reasonable system of measurement", says Professor Hans Koch, Institutional Director of PTB in Berlin. In the case of ubitricity, Dr. Norbert Zisky, Manager of the PTB Workgroup for Data Communication and Security, is also working on a secure means of exchanging electronic measurement data. He is responsible for ensuring the process will operate smoothly, identify every system, measure the power consumption, link the data with the time and transfer all data about the vehicle to the central database system by radio. "Validation of the data sources



Knut Hechtfisher (top left),
Dr. Frank Pawlitschek © Ubitricity

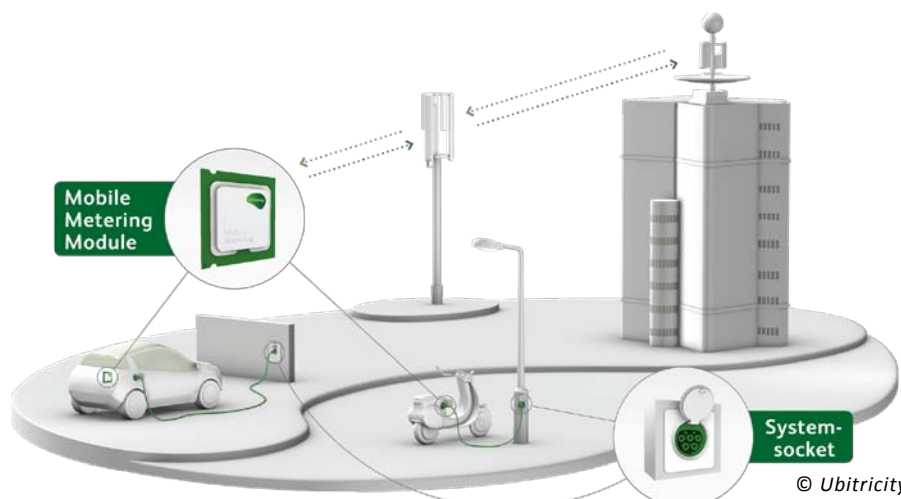


Dr. Norbert Zisky (bottom right)



must be possible so that these sources can be trusted", says Dr. Zisky.

In principle, PTB is open to anyone who has a question about weights and measures and their regulation. Conducting exclusive research is not the point, as Dr. Koch states, "Our core purpose is to represent units of measure, but we are not simply a governmental agency. We are also a research institute expanding the boundaries of measurement technology. We're not doing that in an ivory tower as "art for art's sake", but rather so that research as a joint venture has a practical effect on the economy, as is the case with ubitricity." Mr. Hechtfisher's vision does not stop with intelligent cables. He wants his system to be a harmonious component in the smart power grid, so that vehicles serve as batteries and above all use renewable energy sources, "We simply want to connect the system components that are already there, the power grid, the socket and the vehicle, using technology that is already there such as mobile communications. The only thing missing is a smart user, so we are placing intelligence in the car or the power cable." (suh)



© Ubitricity

Physikalisch-Technische
Bundesanstalt
Abbestraße 2-12
10587 Berlin Germany
www.ptb.de

ubitricity - Gesellschaft für
verteilte Energiesysteme mbH
Helmholtzstraße 2-9
10587 Berlin Germany
www.ubitricity.com

Where Science goes Corporate

Dieter Bimberg is considered the Lord of Nanos. He has done much in His Field making Technical Contributions and Above All helping Startup Companies



Prof. Dr. Dieter Bimberg © TU Berlin/Dahl

Professor Bimberg views himself as a midwife. Anyone going to his office, just past the “delivery rooms”, will quickly understand this term as a different type of birthing assistant. “Caution: Danger to Life” is posted on the laboratories in the Institut für Festkörperphysik [Institute of Solid-state Physics] at the Technische Universität of Berlin (TU), where Dieter Bimberg leads the center for nano-photonics. “In a word, we are the nursery, but we want these children to learn to run one day and not lie in the cradle forever.” “They” are freshly “baked”, or graduated, physicists who possess two things: a brilliant idea and the spirit for establishing a spin-off company. Dieter Bimberg helps them with this last issue.

The physicist is the connection point between science and economics in the field of nano-physics. Usually, it was Professor Bimberg, who gave the currently successful company owners the necessary push in the direction of entrepreneurship. “A spin-off company is a full-time job. It’s not something that you do part-time. I’m a university professor, hardly a businessman”, says the Department Head of a roughly 30-person workgroup. “It really is a good thing, when younger people have the chance to establish a company.”

Two of the companies, whose establishment Professor Bimberg supported, are PBC Lasers and VI Systems. Professor Nikolay Ledentsov, who did research as the Humboldt Fellow to the Professor Bimberg’s chair, has moved on in the meantime, if not far. With his team at VI Systems GmbH, he moved across the street into Hardenbergstraße 7, where he is developing fast lasers and electro-optical components for data transmission.

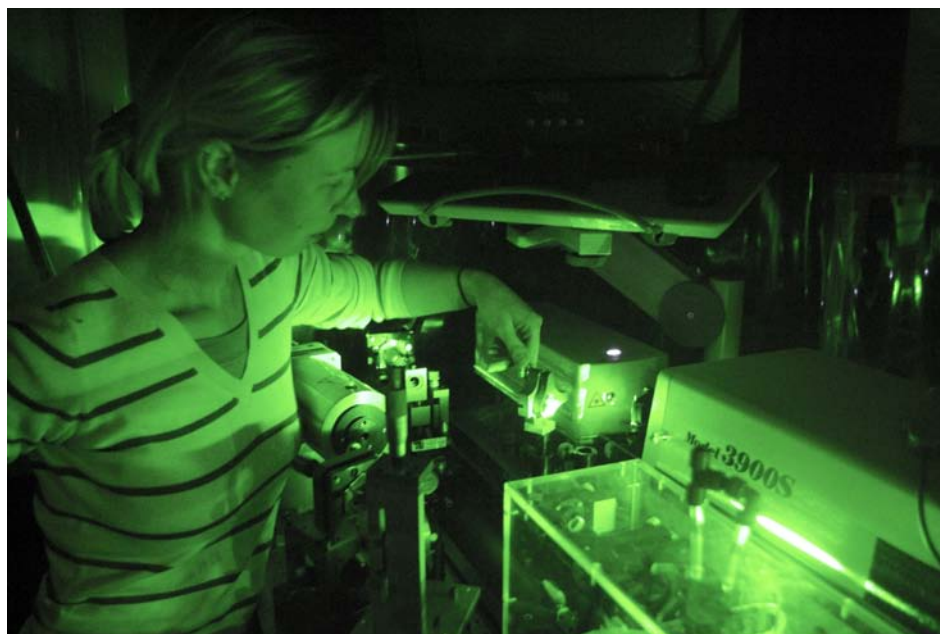
PBC Lasers GmbH manufactures high-performance lasers for processing materials. They are also located in Charlottenburg, in the same building as Dieter Bimberg, because the teams of younger TV spin-offs may keep their old offices initially and use the high-tech laboratories for a fee. “This allows us to use the full capacity of the la-

boratories even on the weekend. TU helps people cover their expenses, but not for free. On the other hand, these spin-offs gain the significant advantage of being allowed to use millions of euros of investments without making the investments themselves”, according to Professor Bimberg, who further supports the new business people not just in the form of educated recruits and scientific knowledge.

He knows the mechanisms in the business, knows how to register patents and gain financing. “The importance of having contacts is often underestimated and the more experienced business people have larger networks as a rule”, the septuagenarian (but still employed at the TU) continues. Ultimately, the State, and the society along with it, benefit from such joint ventures. They get taxes from the newly established companies, thus money that they once invested as public funds into research.

In addition to PCB Lasers and VI Systems, there are many other companies active in the field of optics in Berlin, such as u²t Photonics (see the next page), Laytec and many others. Together with scientific facilities like the Heinrich-Hertz-Institut of the Fraunhofer Group or the Ferdinand-Braun-Institut for High-frequency Technology, they represent the Optics Valley of Berlin in terms of knowledge and industry. Although the Berlin companies in the field of nano-physics have long operated at the global level, they can be reached at home by foot. The proximity of the infrastructure should not be underestimated as an advantage, as Professor Bimberg points out, “Berlin is really not poor and sexy, but rather fairly wealthy, in the scene of great founders.” (suh)

Adjusting a laser beam in the nano-photonics lab © TU Berlin/Dahl



Technische Universität Berlin
Institut für Festkörperphysik
Hardenbergstraße 36
10623 Berlin Germany
www.ifkp.tu-berlin.de

VI Systems GmbH
Hardenbergstr. 7
10623 Berlin Germany
www.v-i-systems.com

A Top Spin-Off with Hertz

The Fraunhofer Society's Heinrich Hertz Institut has enabled u²t Photonics AG to take a Leap with "Safety Net" measures and more

Fifteen years ago, their names had not yet been combined into a formula. Today, the company u²t Photonics AG is in their possession. In early 1998, Andreas Umbach, Günter Unterbörsch and Dirk Trommer were still working in the laboratory of Fraunhofer's Heinrich Hertz Institut (HHI), constructing optical components. At that time, the HHI was struggling to deal with the loss of major research customers and therefore promoted the formation of spin-offs; one of them being that developed by Andreas Umbach and his colleagues. "A safety net was developed for us so that we could jump in at the deep end", says the physicist.

While most startup companies first have to find a way to acquire further capital, Mr. Umbach and his co-workers were able to get started right away. The HHI provided a laboratory for a fee, arranged an exclusive licensing agreement with u²t Photonics and also guaranteed Mr. Umbach and his colleagues a path to return to work scientifically in case the spin-off faulted. It did work out though. Today, Mr. Umbach manages roughly 150 employees and is the head of a successful company with a subsidiary in England.

u²t Photonics operates in an industry most people only know from pure e-commerce companies like Google, Facebook et al.. In the field of fast data transfer, the further

you move down the supply chain the more invisible the companies become to the public. "Our visibility is extremely low, but the effect created by this relatively small industry is enormous for society", adds Mr. Umbach, who has specialized in manufacturing very fast optical receivers and detectors, without which any YouTube video could not find its way through fiber-optic networks around the world.

In the meantime, u²t Photonics has become a global player, whose export share is over 90 percent. The safety net provided by HHI is no longer needed by the company, but the cooperation between the two is still strong. "The HHI was a good stepping stone. We are still researching together and using their manufacturing line for our semiconductor production", says Mr. Umbach. Although only being seldom in the laboratory, he does not regret the shift from scientist to entrepreneur. "I can still work innovatively. We are creating something that is purchased and included in many products. That is continuously a great feeling." (suh)

u²t Photonics AG
Reuchlinstraße 10/11
10553 Berlin Germany
www.u2t.com



Andreas Umbach



The newest generation of 100-Gbit/s coherent photoreceivers

Research with Social Significance

We click cheerfully through the normal day, however, the clicks on Google, Facebook and their associates are not free. They cost energy. Transporting a bit from Berlin to Oregon (the location of the Facebook server farm) consumes power. Because the number of Internet connections is increasing and the amount of data growing, researchers are working on making transmission as efficient as possible.

Accomplishing this requires the work of nano-physicists, which harnesses the atomic particles of light for transmitting the data. The timing of the photon is interrupted, which slowly triggers the electron. Where data was once transported over copper cables, lasers now send our Google inquiries as bits and bytes through fiber-optic cables.

Today, research is improving the "interconnects", meaning those points where electrical signals are converted into light using drivers and lasers, or vice-versa by means of a receiver back into an electrical signal.

Computers require a lot of energy to move this information back and forth between processors and memory. If the present generation of computers remained unchanged, two atomic plants would have to be constructed by each mainframe in order to feed the energy needs. Since this is still an absurd idea, scientists are working on converting the data highways into data freeways. (suh)

The Aesthetics of Bits and Bytes

Where Other Artists work with Brushes, Joachim Sauter uses a Keyboard

Joachim Sauter moves between the worlds. He connects things that do not seem to belong together at first glance, but harmonize perfectly when one looks closely: algorithms and aesthetics, virtual things and reality, multi-layered art and functional design. In doing so, he is always one step ahead of everyone else.

While most creative artists viewed computers with mistrust in the Eighties, Professor Sauter began to surmise the potential of the technology. "We were trailblazers

the limits of this new medium. At the beginning, they puzzled through the field of virtual reality and presented the Earth in three dimensions on the screen years before Google Earth. "We worked together on the language and grammar of the Internet, which many people are now using daily", says Professor Sauter, who has become the creative head of an 80-person team.

Near to Wittenbergplatz, ideas about his works are being created inter-disciplinarily, which are in demand around the world

with the Kinetic Rain piece. In this piece, twelve-hundred-sixteen raindrops made of copper-coated aluminum move through a computationally-designed dance and lend the departure terminal of Singapore Airport an atmosphere with the potential to raise gooseflesh.

While others allow themselves to admit the success of Professor Sauter's format, the designer is still scrutinizing himself to-day. The distance between ART+COM and his master class at UdK amounts to 2.8 ki-



Prof. Joachim Sauter | A joint venture with Selux, the Berlin lamp manufacturer: the Manta Rhei OLED light

and simply recognized the change in from the paradigm of pure tools to light media earlier than most", says Professor Sauter, who currently impresses people with interactive installation and media-based architecture to such an extent that they heap renowned design awards upon him today. Three years before becoming Germany's youngest professor for media design at the Universität der Künste [University of the Arts] in Berlin (UdK), Professor Sauter established his own studio, ART+COM, which he manages together with Andreas Wiek as a stock company in the meantime. There, together with designers, programmers, engineers and artists, he explored

in fields such as industry, culture, services and research. Professor Sauter often plays with the collaborative and reactive qualities of the new media and blurs the limits. With the Duality installation in a new building complex in Tokyo, stepping on an LED surface triggers light waves, the impacts are measured and converted into real water waves in the neighboring pools. Computer-generated motion interests Sauter. The kinetic lights called "Manta Rhei" combine the mechanical movement of metal plates with the immaterial motion of the light. Beauty is always the thing that invites observers to decrypt the jumbled messages or simply to reflect upon themselves, such as

lometers and thirty students force the professor to continue to reflect on his works. "The two activities fertilize each other. I do give my students ideas, which are then lost for me, but the lesson is priceless. It is my Fountain of Youth." (suh)

ART+COM AG | Kleiststraße 23-26
10787 Berlin Germany
www.artcom.de

Universität der Künste Berlin
Grunewaldstr. 2-5
10823 Berlin Germany
www.medienhaus.udk-berlin.de

Networking Across Fields

A Conversation with the Manager of the Stilwerk Berlin Center

Susanne Hörr: *Dr. Nielius, Stilwerk Berlin was opened thirteen years ago on Kantstraße and you have managed it since 2007. Last year, an event called "Designmeile Kantstraße" [Design Mile on Kant Street] was organized for the first time. What is its background?*

Sylvia Nielius: The idea for Designmeile Kantstraße was based on the desire to create a local network of providers oriented towards design. The section between Savignyplatz and Breitscheidplatz has many high-quality establishments in the fields of retail, art, culture, gastronomy and the hotel industry. Until now, the businesses located there have acted as lone wolves. The initiators want to follow the philosophy of cooperation instead of competition. Thirty participants were convinced that more could be achieved by working together towards the same goals.



Which goals united them?

It was about sharpening the location profile. With the help of a network, the value of the image of Kantstraße could be increased and location branding became possible. The combined value of the major business at the location connected them.

How did you know which values the business people would have? How did the business operators know their value to their customers?

Today, types of life styles can be defined through research on the one hand. The companies were not being scientific about this however. Rather, they were relying on years of experience and the local traditions.

Which goals did the network specifically follow?

The network strove to achieve cross-industry cooperative efforts in the indicated fields. New relationships were started by meeting

their neighbors. Contact was made with new customers through joint location advertisement. Designmeile Kantstraße was developed as a brand with a logo and an Internet presence, which represented an important step for amplifying the economic effects.

What developments do you expect to achieve with the network in five to ten years?

The network initiators expect the Designmeile Kantstraße event to become something of high value and an annually occurring event. Accomplishing that will require a high degree of private investment, both in the personal as well as financial realms. The goal is for the partners to view their events as initiatives of the Designmeile during the year and advertise them on the Designmeile web site.



Dr. Sylvia Nielius

How will changes in personnel and businesses be handled?

Certainly in ten years, the network will not consist of the same people who are driving it today. Values like quality, cultural life style and sustainability will however remain consistent even through changes in personnel. The location has a great deal potential thanks to its proximity to the Bahnhof Zoo and Kurfürstendamm. The demands for quality will continue to exist.

Designmeile Kantstraße | www.designmeile-kantstra%C3%9Fe.de

Initiatoren:

copa GmbH | www.copaliving.de

Regionalmanagement CITY WEST | www.berlin-city-west.de

stilwerk Berlin | www.stilwerk.de

City West

City West is one of the two major central communities in Berlin and includes the boroughs of Charlottenburg-Wilmersdorf, Tempelhof-Schöneberg and Berlin Mitte. Spread over 635 hectares, the community offers numerous potential benefits. From Stuttgarter Platz to Urania and from Spreebogen to Lietzenburger Street, City West is a shopping paradise, entertainment district, educational and research center, and cultural location as well as a residential and business area. (rm)



- 7 Grunewaldstr. 2-5 | 10823 Berlin Germany
- 11 Wittelsbacherstraße 18 | 10707 Berlin Germany
- 18 Prinzessinnenstrasse 20 | 10969 Berlin Germany

Campus Charlottenburg

Charlottenburg Campus is the brand that has united the Borough of Charlottenburg-Wilmersdorf, the Technische Universität (TU) of Berlin and the Universität der Künste (UdK) of Berlin. This campus is a place with a special flair and wants to grow with more partners. Even now, it provides a platform for working jointly with the surrounding research institutes, companies, initiatives and cultural shops. The creative milieu of the two universities represents the core. The TU is understood to be a renowned university in the German capital in the center of Europe. It is also one of the greatest technical universities in Germany.

UdK is one of the major artistic technical universities with a wealth of tradition around the world, as well as the only one that has united all fine arts disciplines and provided them with a relationship to science.

The Borough of Charlottenburg-Wilmersdorf has been actively promoting its scientific center with an orientation on the future. The central theme has been deepening the existing collaboration between the three institutions as well as initiating new projects and joint ventures showing the way into the future of education, research, science, art and economics. Hybrid Plattform is one such joint venture (see the following page). Shifts in perspectives, altered points of view and lateral thinking are expressly desired. A high attractiveness for politics and neighbors to the west of the city's middle area accompany this great, shared potential for innovation. (cc)

Campus Charlottenburg
Straße des 17. Juni 135
10623 Berlin Germany

Manager of the Business Office
Petra Schubert
petra.schubert@tu-berlin.de

www.campus-charlottenburg.org



Campus Charlottenburg
The art of ideas.

- 1 Campus Charlottenburg Business Office
- 2 Hybrid Plattform
- 3 3D Innovation Center
- 4 Physikalisch-Technische Bundesanstalt
- 5 Ubitricity
- 6 ART+COM
- 7 Medienhaus UdK
- 8 Designmeile
- 9 Zentrum für Entrepreneurship
- 10 Panoramawurfkamera
- 11 Carzapp
- 12 CHIC
- 13 Humedics
- 14 Brightside Games
- 15 Kopf, Hand und Fuss
- 16 Institut für Festkörperphysik TU Berlin
- 17 u²t Photonics
- 18 Jovoto
- 19 Institute of Electronic Business
- 20 Connected Living
- 21 Heinrich-Hertz-Institut
- 22 VI Systems
- 23 PBC Lasers

Outside the Box

Interdisciplinary Cooperation is the Future. The Technische Universität of Berlin and the Universität der Künste of Berlin have created a New Type of Hybrid Platform for This Purpose

People are looking everywhere, such as from a small space station down on the Earth, out into the space using giant telescopes or at tiny human cells using microscopes. All too seldom do people look outside of the box, or at least at the other side of the street. Sometimes, simply turning their heads left or right and looking three buildings down the street would be enough. Hardenbergstraße Street is a good place to try this exercise, because there is a great deal to discover on that street, for example worlds of knowledge and entire uni-

tangible location. In the meantime, the platform has opened a proper office for this reason. Real people work at real desks there. They are in the UdK at Einsteinufer 43. Once the appropriate financial support was granted, this ambitious project began its journey.

“We want to be a type of satellite”, says Christoph Gengnagel. He is the Professor for Constructive Design and Support Structure Planning in the discipline of Architecture at UdK, as well as being the Project Coordinator for Hybrid Plattform

of the Creative Accommodations on and around the Charlottenburg Campus], in short “Navi BC”, which sounds a bit like the beginning of a new era, whereby BC might stand for “Before Cooperation”, meaning before the joint ventures.

In fact, with Hybrid Plattform, a new age of cooperation may be beginning for both universities, because research and development teams today no longer consist of members of a single discipline. Today, physicists are working together with computer scientists, architects and chemists. Electro-technicians contribute their knowledge just as graphic designers and mathematicians do. Experts in computer engineering and microelectronics are now also cooperating easily with professors from the discipline of digital media design. Interdisciplinary cooperation is the catchphrase of the future. This is exactly the point, where Hybrid Plattform is intended to help. It should bring experts from various disciplines together quickly and easily. Project ideas can be easily written up on Hybrid Plattform’s Internet site.

“With Plattform, we can close the vacuum that has existed between the universities for a long time”, says Professor Marc Alexa. He teaches electronic technology at Technische Universität. Together with Professor Jussi Ängeslevä, the 38-year-old is working intensively on the new platform. Once, anyone working outside their discipline was considered a black sheep. “Today, we are something of a golden calf”, Ängeslevä says and laughs. The Finn teaches digital media design at UdK in the courses of visual communications and art and media. Both professors are not afraid of contact. “Really, no one need fear other people”, says Professor Alexa, because ultimately no one would dispute others in their discipline in this form of collaboration. No one need feel threatened by co-workers, since everyone comes from different fields.

If two universities, or even only two professors from different disciplines, meet each other, there may be practical problems, because two different paradigms, two different jargons, often collide. For example, the participants had to reach an understanding about basic terminology.



Prof. Christoph Gengnagel and Barbara Stark



versities. Two that have recently discovered each other are the Technische Universität [Technical University] of Berlin and Universität der Künste [University of the Arts] of Berlin (UdK). For some time, these two institutions have been jointly collaborating under the Charlottenburg Campus brand name. For some people, this is not enough. People like Christoph Gengnagel and Barbara Stark, who have brought the so-called Hybrid Plattform to life with the help of additional motivated employees. Somewhat cryptically, the Internet site about the platform reads, “Network and interdisciplinary project laboratory for pioneers and lateral thinkers”. Thereby, the platform should not simply exist as an abstract concept on the Internet. It should be real,

along with Barbara Stark, who is the Manager of the Research Department at TU. The objective of this satellite will be “... attracting the best people from both sides of the street”, as Professor Gengnagel explains it.

However, the responsible parties want even more. In a few years, Hybrid Plattform should become a real institution, tangible and lively with a fixed anchor in university life. The standard case, one might say. A fixed institution that makes the teaching, research and developments “at the interface between science, research and design” possible. The idea arose from the “Nachhaltige Vitalisierung des kreativen Quartiers auf und um den Campus Charlottenburg” [Sustainable Vitalization

The term, dimension, may have a different meaning for different people.

From a purely administrative view, this means that the hierarchies of TU and UdK are coming together. The new platform should therefore also provide entirely practical advantages in the future. If co-workers from the two universities have been working on one project together for a while, the following lesson tends to result from this, as Christoph Gengnagel remembers. The content of the project was great, but was very nerve-racking in its execution, because one university's administration organ can quickly dominate everything and become a bureaucratic monster.

One project, which currently being conducted and researched jointly, is the so-called "Rethinking Prototyping" project. In addition to the TU and the UdK, the Fraunhofer Institut für Produktionsanlagen und Konstruktionstechnik [Production Systems and Design Technology] and Telekom Innovation Laboratories, which are

also located on the Charlottenburg Campus in City West, are also cooperating. The concept of the prototype, the archetype of a production series, is the focus of the research. It was long considered the core of all design and technical processes. Until now, function has often also determined appearance, or appearance has only allowed a certain function. This may change in the future. One of three research teams identified under the name Beyond Prototyping is addressing the question of prototypes from the Rapid Manufacturing viewpoint of production technology. Translated, this means something like rapid manufacturing. Components can be manufactured quickly and flexibly, without using tools, purely from the design data. Before manufacturing, the product can thus be analyzed and optimized at the virtual stage. Thereby, the procedure is not only an option for inexpensive production but also one with effective use of materials. With Rapid Manufacturing, the focus is always on the direct manufacturing

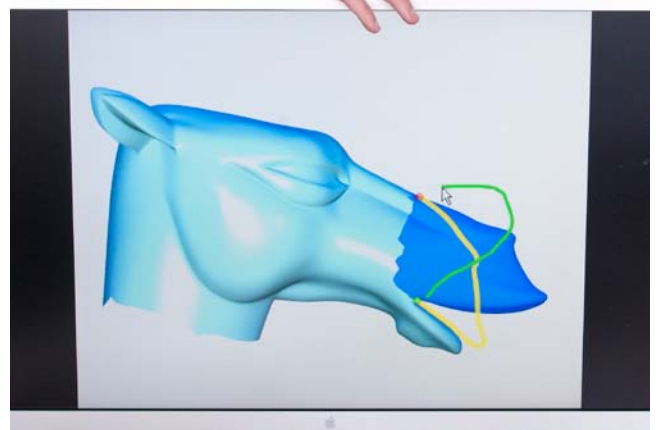
of the end product. Thus, the prototype may potentially become obsolete in the future. The end users can then design their own unique products and become a type of hybrid thereby. Looking outside of the box is rewarding in every regard. (spa)

Hybrid Plattform

c/o Universität der Künste Berlin
Einsteinufer 43
10587 Berlin Germany

www.hybrid-plattform.org

Prof. Jussi Ängeslevä, Prof. Marc Alexa (right)



Back to Basics

Wednesday morning just before 9 am at Hardenbergstraße 38, the halls of Old Minerology are already bustling. A so-called pitch seminar will start shortly. A trainer from Silicon Valley has arrived specifically for this. The students and prospective business founders will learn how best to present their ideas quickly and thereby gain the interest of potential investors.

Preparing the start-ups for the market and testing the ideas with potential clients as well as finding financial support is an important focus of the start-up service. Today, it is about changing the world with an idea, or at least improving it a little. Such as could happen through the private car-sharing concept of the TU startup Carzapp, for example. This new company will be given support from the TU Startup Service as always.

The Chair for Entrepreneurship and Innovation Management and the Startup Service represent two of the supports provided by the Center for Entrepreneurship at TU. “Research, teaching and practical application all working hand-in-hand”, says Professor Jan Kratzer, the chair holder. There are seminars, workshops and alumni reunions. Contact with the young founders is tight and intensive. No one should be left to face their problems alone. In this, the Center is unique in German university landscape.



Prof. Jan Kratzer, Agnes von Matuschka

Over the past few years, according to Professor Kratzer, many significant changes have occurred. Almost no one is getting the issue of establishing a company as part of their course of studies today. In the meantime, there are mandatory and optional seminars in the various course studies. The concept has proven the responsible parties right. In 2011 alone, more than 16.000 new jobs have been created by spin-offs from TU Berlin. Roughly 60 percent of the companies choose to remain permanently at this location. (spa)

TU Berlin Gründungsservice/Gründungswerkstatt
Hardenbergstraße 38 | 10623 Berlin Germany
www.gruendung.tu-berlin.de



The Throwable Panoramic Camera

Jonas Pfeil (throwing), Björn Bollensdorff, Qian Qin (clockwise)



Throw It High

In principle, a video is responsible for everything and the three million people that have watched it. There were two million clicks in one week in October 2011. Even for a video clip platform like YouTube, this does not happen every day. Then, there were these 2,000 email messages as well. Most of them contained the message, “We want this thing and we want it now”. “We didn’t do anything except responding to emails for a month, in some cases in the original language”, remembers Jonas Pfeil. The response was always the same, regardless of the language, “No one can buy this thing”. In general, the 29-year-old said, “We really didn’t want to establish a company”.

This thing that caused so much excitement is the so-called “Panoramawurfkamera” [Throwable Panoramic Ball Camera], currently still neon green and the size of a handball. However, if everything goes according to plan, the camera will soon be the size of a grapefruit. Regardless of the size, the camera is a discovery that never existed before, because it can make full-spherical panorama pictures. It only needs

to be thrown upwards [] and does not need to be caught. “You simply let it fall to the ground”, says Jonas Pfeil. The camera is very easy to use, which is its beauty.

An accelerometer automatically determines when the camera reaches the highest point of the flight. Thirty-six little cameras, with two mega-pixels resolution each, will then record a panorama picture, top, bottom, right and left, no problem. All 36 cameras are connected to each other and centrally controlled. The pictures can then be transferred using a USB cable or wireless. What makes this camera unique is its ability to capture scenes that contain moving objects like cars or people. This has not been possible before, because overlapping of the individual pictures was a problem. [] The photographer had to turn slowly in a circle and shoot roughly 50 pictures, so that the panorama would be complete. Nothing should change during the shoot. Now, one throw captures everything.

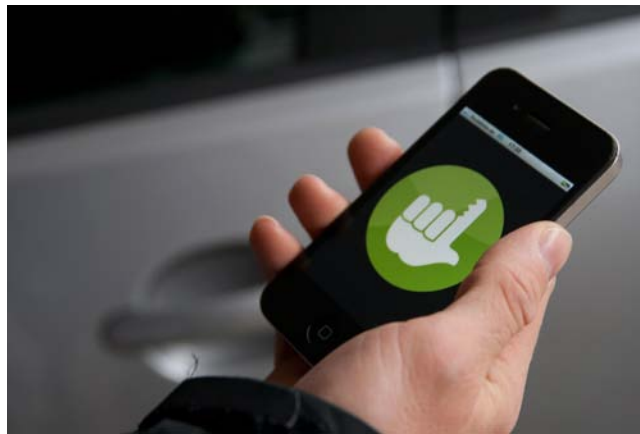
In the meantime, Jonas Pfeil, Björn Bollensdorff and Qian Qin actually have established a company. This occurred on Octo-

ber 4th, after a year of planning. The three young entrepreneurs met while they were studying computer engineering at Technische Universität of Berlin. Establishing their own company, “this wasn’t a life goal for us, as it is for so many others”, Jonas Pfeil says soberly. However, the Manager of the TU Startup Service, Agnes von Matuschka, would not let it go. Now, the three

are sitting in one of the Startup Service’s small offices in the Old Mineralogy building. They have already registered an international patent on their discovery and have just received support through the Exist scholarship for business startups. In general, the three feel quite good as company founders. (spa)

Panoramawurfkamera
Technische Universität | Alte Mineralogie
Hardenbergstr. 38
10623 Berlin Germany

www.jonaspfeil.de



Sahil Sachdeva and Oliver Lünstedt (right)

Mine? Yours? Ours!

Two young guys meet at a university event—this could be the start of a story about a boozy evening. Wrong. Great stories start this, and even some revolutions. The two young men in this case are called Oliver Lünstedt and Sahil Sachdeva. They met on the Venture Campus at Technische Universität of Berlin, a project of the TU Startup Initiative. A little later, an idea became reality and the two started the company, carzapp.

With their idea, these businesspeople might be able to change how cars are shared from the ground up, because in the future not only professional rental agencies or vehicle manufacturers will rent cars, but private people as well. “Our idea was to avoid putting more cars on the streets. Instead, use the ones already there but seldom driven by their owners”, explains Mr. Lünstedt. Up to ten new cars could be replaced by a shared car.

Wittelsbacherstraße 18 is a quiet, tasteful, almost staid-appearing building, not a location where one would expect to find a new startup company. The door opens and provides a view of a long entryway with white walls and parquet flooring. In the conference room, there is a large table and similarly large pictures on the walls. Oliver Lünstedt explains almost apologetically, “We’re sharing offices with three other startup companies.”, including an insurance agent, who insures vehicles. The company is working together with the agent and can therefore offer insurance policies that have been specially tailored to the requirements of sharing private cars.

The little revolution begins with a nondescript box, the so-called ZappKit. This hardware is then installed in the car. The ZappKit includes a mobile radio and a GPS device. The doors can be locked

and unlocked by an app. “ZappKit works with over 90 percent of all vehicles”, says Oliver Lünstedt. The important pre-requisite is a central locking system, so that the renter and owner do not have to meet and exchange keys. A second key is stored in the car. “For security, the ZappKit also includes a theft prevention system”, says the 28-year-old. In springtime, the company will start beta testing. The ZappKit will then be installed in about 100 vehicles for testing purposes. The renter can determine the rental price within certain limits. Oliver Lünstedt figured roughly four euros per hour plus a mileage surcharge for mid-class car, including insurance and commission.

carzapp wants to go one step further. Since October 2011, the company has been part of the „Schaufenster Berlin-Brandenburg“ project [Berlin-Brandenburg’s window on electrical mobility]. Together with E.ON and DLR work on one of the Schaufenster core projects is currently underway. The goal is to combine car sharing and electrical mobility. For example, one could then lease an electrical vehicle for three years and rent it privately during that time. (spa)

carzapp GmbH
Wittelsbacherstraße 18 | 10707 Berlin Germany
www.carzapp.net

Breathe Deep, Please

Sometimes, a single call can completely change a person's life. This was the case for Martin Stockmann and Karsten Heyne. With one call and the question "Is anyone at the Freie Universität of Berlin working with infrared spectroscopy?" an idea took shape six years ago, which has allowed the two to write medical history in the meantime. Dr. Stockmann and Professor Heyne developed a method permitting the current function of the liver to be measured immediately and precisely. Using the so-called LiMAx test (Liver Maximum Capacity), the patient can remain in bed and, by means of a test procedure based on their breathing, be measured in real time. There was nothing like this in medicine until now, neither for the liver nor for any other organs. "There aren't any other systems that would be comparable with ours", says Doctor Stockmann, Senior Physician at Berlin's Charité.

Until now, the function of the liver could only be measured indirectly. Blood levels and biopsies were unreliable and took time to process. Dr. Stockmann and Professor Heyne, a professor of physics at the FU, happily explain it using the following ex-

Prof. Karsten Heyne



PD Martin Stockmann MD



ample. If a liver is removed, completely normal liver values can be measured in the first minute. The reduction in health takes several days. Blood levels from yesterday therefore cannot say anything about a liver the day after tomorrow. For major operations like a liver resection, knowing precisely how well the liver is working is important. Too much of the liver is removed from up to ten percent of the patients, according to Doctor Stockmann. What often happens then is that the liver does not sufficiently regenerate and grow afterwards. This may lead to liver failure and death in 50 percent of the cases.

With the LiMAx test, methace is introduced intravenously. This material will only break down in the liver. This results in carbon dioxide ($^{13}\text{CO}_2$) markers as well as Paracetamol. The FLIP device, a type of mobile breath analyzer, then measures the ratio of $^{13}\text{CO}_2$ to normal CO_2 during exhalation.

The function of the liver can be calculated from this value.

Dr. Stockmann had already been researching the new procedure for ten years. Once it had proven itself in medical studies, technical implementation began. For this, he collaborated with Professor

Heyne. Neither had considered the possibility that, in addition to their careers as professor and senior physician, they might become business people. "But at some point, we concluded that we would have to make a decision", says Professor Heyne. Neither pharmacology companies nor medical technology businesses were showing any interest. "So that it would not remain little more than a research project, we would have to make it ourselves", was the thinking. At the end of 2009, they established Humedics together with Wilfried Heyne, an experienced manager, with financial support from the high-tech founders' fund. The first office was setup in the Heyne family's attic. Since 2011, Charité Biomedical Fund, managed by Peppermint Venture Partners, KfW, IBB Beteiligungsgesellschaft [stock corporation] and Vente-gis Capital AG have been participating and the company has moved its offices into the CHIC founders' center. In March 2012, Erwin de Buijzer was added to the business management of Humedics GmbH. (spa)

Humedics GmbH
Marie-Elisabeth-Lüders-Str. 1
10625 Berlin Germany
www.humedics.de

CHIC!

Brightside Games & Humedics reside in the Charlottenburg Innovations Centrum (CHIC). As CHIC renters, the companies enjoy a broad spectrum of support services for spin-off companies, above all from the TU and UdK. Startup companies receive economic support in the form of consultation, moderate rent prices and central services in the former Gerling Building on the Charlottenburg campus.

In April 2011, CHIC was able to transfer the 1,500 square meters and has been reserved in the meantime by twenty-five companies. The renovation of the second part of the building, consisting of 4,500 square meters, should be completed by 2014. (rm)

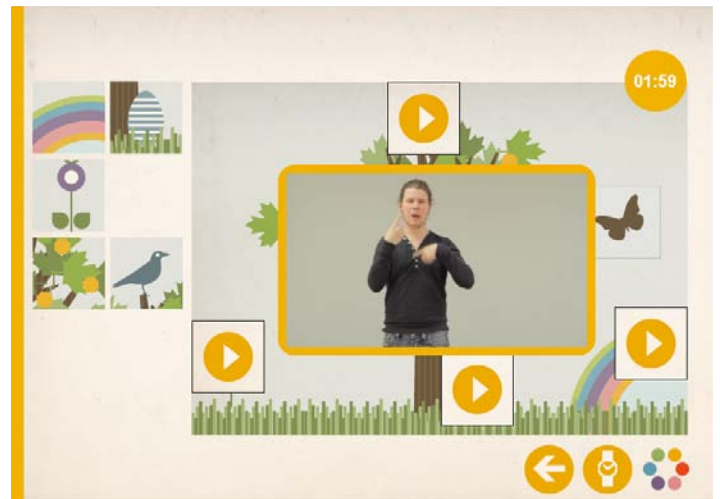
Without Words

Some music does not need instruments or lyrics. Some music does not need sound. It can only be seen. It is brought to life through the movement of hands. Fingers dance up and down, hands turn circles and arms swing from side to side. Anyone wanting to sing along does not necessarily need a voice, according to Stefanie Trzecinski's thinking. For her, music is above all emotion, which can be expressed by gestures just as well as by words. Music and emotion is what Stefanie Trzecinski would like to convey and she wants deaf and hearing-disabled children to have access to music. With the help of the *Kleine Helfer* [little helpers] software, this will become more possible in the future. Elementary school children do not just learn to sing songs in sign language. They also learn metaphors and their significance. "Spoken language is full of metaphors, which don't exist in sign language however", explains Ms. Trzecinski. She is sitting on a sofa with a laptop on her knees, and smiles. "That has become wonderful", says this lady with the short, dark hair. With this, she meant the learning software that had been running on the laptop, and which can be purchased for a protective fee of fifteen euros. The learning software was developed by students of Humboldt Universität. Together with Genia Börner-Hoffman, Ms. Trzecinski taught the new media seminar at the Institut für Rehabilitationswissenschaften [Rehabilitative Sciences] this last winter semester.

The little helpers are a magnifying glass, a flashlight or a watch, for example. There are five of them, each an icon for a game. The starting point for each game is a children's song, such as Rolf Zuckowski's song "Jahresuhr" [Year's Watch]. As soon as someone clicks the song, a music video starts. The video was made available by the German children's broadcaster, Ki.Ka. The lyrics are displayed in an additional window, sung in sign language. Afterwards, the game starts. As part of the game, the children have to answer questions, such as, what drops from the trees in the Fall? All questions are topically oriented on the song with three answers for selection. "Combining pictures, words and sign language in the games was important for us", explains Ms. Trzecinski.

The project has been realized by Brightside Games. Johannes Giering and Thomas Bedenk were portrayed last year as „Clever Minds in City West“. "This is how I became aware of these two", says Ms. Trzecinski. When she talks about the collaboration with the game developers, she starts to rave: "They are very quick, communicate very clearly and extremely professional." For Bedenk and Giering in turn, the project was a special challenge. "Developing educational software was something excitingly new for us", says Johannes Giering. Ms. Trzecinski and Brightside Games both agree. There will be sequels. (spa)

Kleine Helfer learning software



KOPF, HAND + FUSS gGmbH
Amerika Haus
Hardenbergstraße 22
10623 Berlin Germany

www.khuf.eu/News

Brightside Games UG
Marie-Elisabeth-Lüders-Str. 1
10625 Berlin Germany

www.brightside-games.com

Johannes Giering, Thomas Bedenk (right) | Stefanie Trzecinski © bildbeute.de



Have You Got An Idea?

Jovoto gets Everybody Together: Nowadays solutions are a collective achievement



Prof. Thomas Schildhauer, Prof. Wolfgang Hünnekens, Bastian Unterberg (from left)

Ideas are a difficult issue. First you need one, then it should catch on and, in best-case, change the world. Those days are gone when masterminds sat in their chambers and had a flash of genius. The times when major companies only awarded their contracts to renowned agencies and designers are past as well. Today, ideas are based on grassroots democracy.

They can be conceived by more than 40,000 people. Forty thousand people means the equal number of characters with even more opinions and dozens of cultural groups. All discussing, suggesting, criticizing and improving at any time across the globe. They are all part of Jovoto, a gigantic think tank.

"Ideas that would not have been implemented become reality here", says Bastian Unterberg. Six years ago, the 34-years-old had the idea for this network. The student from then has become first a company founder and a very busy businessman in the meantime. Jovoto officially started operations at the end of 2008. A subsidiary in New York has been in business since two years.

Unlike social networks like Xing, Jovoto does not only work horizontally. It is not about putting together the same and connecting people with similar positions and similar careers. "Our idea was a vertical network, where people do not just see the resumes but also the way in which a person works", says Professor Thomas Schildhauer. He teaches at the Universität der Künste (UdK) Berlin (University of the Arts) and manages the Institute of Electronic Business as a director. Bastian Unterberg studied at the UdK and worked as a project manager during his last Semester, where he developed his project idea. Still today Thomas Schildhauer and his colleague Wolfgang Hünnekens are contributing Jovoto as business angels. None of them ever dreamed that this idea would develop to the largest independent network in Europe. Major companies like Deutsche Bahn, Coca-Cola and Maggi use the ideas that have been generated in this network.

The concept behind Jovoto sounds simple and ingenious, giving companies the chance to initiate an announcement in the network. Consider for example Starbucks: each year the company produces approximately a billion paper cups. Until 2015, the company wants to reduce their waste by a quarter. How does this work?

"Fourhundred-thirty ideas were submitted and the announcement has been clicked more than half a million times", Thomas Schildhauer remembers.

As often, the idea is just the beginning. The other network members can comment, criticise, make suggestions for improvements, and vote for the idea. The concept with the most votes wins the announcement and the prize money. The prize may amount to 70,000 dollars. After the competition, the company can decide to implement an idea and exclusively purchase the exploitation rights to it. Even those, whose ideas do not win, benefit through the karma algorithm. "This is the reward for having an eye for good ideas", says Professor Schildhauer. Those who often vote for the ideas that finally win receive points, so-called karma points. "In this way the companies can identify the persons with an intuition for brilliant ideas", says Mr. Unterberg.

Despite the reduced hierarchy of the Jovoto world, there was an obstacle, which seemed to be difficult to surmount in the beginning. "We had to develop a common language", says Bastian Unterberg. With the creative community on the one hand and the companies on the other, Jovoto operated between them, as kind of a negotiator. For Bastian Unterberg it is still a learning process. "All of these rules, the common language and the respect, these are things that you cannot find in a textbook." (spa)

Jovoto GmbH
Prinzessinnenstrasse 20
10969 Berlin Germany
www.jovoto.com

Institute of Electronic Business e.V.
An-Institut der Universität der Künste Berlin
Hardenbergstraße 19
10623 Berlin Germany
www.ieb.net

When Bread-making machines talk to Televisions

Together with Fifty Companies, TU Professor Albayrak is working hard on a Network Home at the Connected Living Innovation Center

“That is absurd!” This is one of the sentences that Prof. Sahin Albayrak, Dr.-Ing., often heard, when told others about his ideas. He had the same experiences as other visionaries before him, who wanted to take new approaches.

Even his Connected Living innovation center, established in 2009, is only one step ahead of real life. There in the showroom on Berlin’s Ernst-Reuter-Platz [Ernst Reuter Plaza], bread-making machines are communicating with televisions and smart bikes with refrigerators through a tablet PC.

“We are interested in conceiving solutions that support mobility, are energy efficient and save resources”, says Professor Albayrak. He is a professor for agent technology in operational applications and telecommunications at the Technische Universität of Berlin (TU).

An aging society that wants a beautiful future needs appropriate solutions, solutions that Sahin Albayrak wants to deliver. He provides them by networking homes, by programming electrical devices and software-based wizards to hold the residents’ hands. They help save power, support healthy diets and find the right television programs. The key to the whole idea is a

little chip, through which previously isolated devices are connected to each other over existing power lines. Plug them into the power and its done.

Within only a few years, the information technologist has succeeded not just in networking living rooms with kitchens and workout rooms, but also with creating a network of Berlin residents with important sponsors from science, energy management, the entertainment and telecommunications industries and the healthcare industry. Connected Living, which has been associated with Deutsche Telekom, various institutes of the Fraunhofer Society, the AOK health insurance company, Miele and Loewe, EnBW and Vattenfall.

He brought roughly 50 companies together at his desk, which had previously been competitors. “We can only make progress, if we make a start, work together and see that we don’t need to fear each other”, says Professor Albayrak, who established the Distributed Artificial Intelligence (DAI) laboratory at the Technische Universität of Berlin immediately after he graduated. In the meantime, it has become one of the largest research institutes for smart services and smart systems in Germany with 150 employees.

Showroom on Ernst-Reuter-Platz © Connected Living/Matthias Steffen



Prof. Sahin Albayrak © TU Berlin/Dahl

At a time when computers were running slowly, Professor Albayrak believed that they would drive us crazy and that according to Moore’s Law, microelectronics would become increasingly more capable and would become fast enough that washing machines and electricity meters would be able to communicate with each other. He was right. Today, washing machines are capable of starting themselves automatically at times when power is inexpensive.

Even if the health wizard for the networked home appears to be a pretty game with its computer-animated fitness programs and the nutritional wizard seems like a tasty tidbit with its calorie and nutritional content indicators for lemon chicken, Professor Albayrak and his team are dealing with serious issues like demographic shifts. “We scientists have to provide services and show solutions for problems, such as with an intelligent home that supports senior citizens.” Over one hundred homes should now be networked as part of the pilot phase. “Mine vision is an intelligent home for every pocketbook”, says Professor Albayrak. His own home is already rather smart today. It even knows when the lawn will grow. (suh)

Connected Living e.V.
Helmholtzstraße 2 - 9
10587 Berlin Germany
www.connected-living.org

Contact:

Regionalmanagement CITY WEST | Hedwig Dylong
hedwig.dylong@berlin-city-west.de | Tel. +49 (30) 31 01 52 00

Berlin Partner GmbH
info@berlin-partner.de | Tel. +49 (30) 39980-0

Imprint

Publisher:

Regionalmanagement CITY WEST

Eislebener Straße 9
10789 Berlin

www.berlin-city-west.de

Joint Partner:

Berlin Partner GmbH
Investor Services Charlottenburg-Wilmersdorf
c/o Borough Administration at Charlottenburg-Wilmersdorf
Business Promotion
Otto-Suhr-Allee 100
10585 Berlin Germany
www.berlin-partner.de

Consultation:

Charlottenburg Campus Business Office

Conception:

Hedwig Dylong | Katrin Mates | Dirk Spender

Editing Staff:

Hedwig Dylong | Katrin Mates | Thomas Krah

Layout:

Thomas Krah

Text:

Susanne Hörr (suh) | Stefanie Paul (spa) | Regionalmanagement (rm) | Campus Charlottenburg (cc)

Translation:

ZIS - Zentrum für Internationale Sprachdienstleistungen

Berlin, May 2013



Senatsverwaltung
für Wirtschaft, Technologie
und Forschung



Senatsverwaltung
für Stadtentwicklung
und Umwelt



berlin .CITY WEST

Regionalmanagement

The Regionalmanagement of City West is a measure on the part of the Boroughs of Charlottenburg & Wilmersdorf in the City of Berlin in collaboration with the Senate Committee for City Development and Environment, the AG City e.V. and the Chamber of Commerce of Berlin. This measure is being promoted by the Senate Committee for Economics, Technology and Research as part of the “Verbesserung der regionalen Wirtschaftsstruktur” joint task [Improvement of the Regional Economic Structure] and as part of the “Aktive Zentren” [Active Neighborhoods] city development program by the German Federal Ministry for Traffic, Construction and City Development. The Planning Association of Dubach and Kohlbrenner have been contracted in cooperation with Prostadt GmbH. This publication is being published as part of the public relation efforts of Regionalmanagements CITY WEST in cooperation with Berlin Partner GmbH.