

TRANSFER

The Steinbeis Magazine

**Competence –
reliability, precisely
when it's needed**

Metabolism in 3D

Three-dimensional metabolic analysis

**Government communications
that promote dialog**

A study by the Steinbeis University Berlin

**“It's an idea that has stood
the test of time!”**

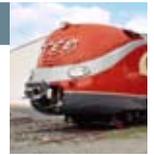
An interview with Günter Köhler

**Measurable and
comparable compliance**

Steinbeis Compliance and Integrity Monitoring

Contents

Editorial	p. 3
Perfectly shaped 3D printing of ceramic components	p. 4
Government communications that promote dialog A study by the SVI Endowed Chair for Marketing and Dialog Marketing at SHB	p. 5
This is Europe calling! European programs to support cross-border exchange in further education	p. 7
Building bridges through partnership Steinbeis consultation on innovation management and knowledge transfer	p. 8
“It’s an idea that has stood the test of time!” An interview with Prof. Dr.-Ing. habil. Günter Köhler	p. 9
Metabolism in 3D Three-dimensional metabolic analysis	p. 10
A perfect example of knowledge transfer SHB student has idea for innovative tow truck during lecture	p. 11
Up with quality and cost-effectiveness, down with controls and bureaucracy A certification partner for quality-driven companies	p. 12
New centers in the Steinbeis Network	p. 13
Outstanding Centers of excellence in health care	p. 15
Let’s wrap this one up! Differentiation in the packaging machine industry	p. 16
SHB spotlight	p. 18
Supporting SMEs in the transport sector POSMETRANS: an EU project to analyze innovation policies for SMEs	p. 21
Measurable and comparable compliance Steinbeis Compliance and Integrity Monitoring	p. 22
Personality in the spotlight The 3rd Stuttgart Competence Day on December 1, 2010	p. 23
Assisted growth: resource management in crop cultivation Steinbeis Transfer Center sets up ecological network	p. 24
A helping hand from telemetry SHB student investigates options for telemetric monitoring of diabetes patients	p. 26
Successfully solving intercultural conflicts Steinbeis develops mediation standards with EU partners	p. 28
A measuring system made out of plastic fibers Measuring stressed surfaces in 3D	p. 29
Selling a business successfully Steinbeis helps Metabo sell its production facilities in Meppen	p. 30
School, meet company Steinbeis Transfer Center breaks new ground in business games	p. 32
The Northern Black Forest Cup	p. 32
Another success for “Youth Start-Ups” Young founders make waves in Baden-Württemberg	p. 33
BACKBONE: e-learning for modern language teaching A Steinbeis cooperation with educational institutions in seven European countries	p. 34
The power of stories Corporate or brand identity as a springboard for corporate storytelling	p. 35
“There’s no panacea” An interview with Helmut Bayer, managing director of the Steinbeis Enterprise TQU Business GmbH	p. 36



News

News	p. 37
-------------	-------



Editorial

Dear readers,

the "Made in Germany" label stands for outstanding quality and reliability in every corner of the globe. To do justice to this trust invested by customers, certification is applied to products, services and even entire organizations and management systems. This endorsement of trust provides the cornerstones for client-business partnership, at home and abroad.

For certification to be broadly recognized, issuers need to be seen as competent, neutral and reliable. An EU directive on certification thus envisages compulsory approval of certifying organizations through a centralized, domestic accreditation office which would also be charged with ongoing monitoring.

In recent years, an almost unfathomable plethora of certificates and certification bodies have been established – especially in Germany. As a result, consumers can no longer tell how meaningful certain certifications actually are when applied to products or companies. Even those "in the know" are often totally unclear on what underlies various certifications, or if they are even a true stamp of quality in the first place.

Given these developments, the establishment of a single domestic accreditation of-

office tasked with overseeing the entire certification arena is a major opportunity, albeit also a huge challenge. Under the supervision of the German Federal Ministry of Economics and Technology, the DAkkS, a new German accreditation body, began this task on January 1, 2010 and started monitoring certification. Once the transition period ends in December 2014, it should be possible to refer to DAkkS accreditation to ascertain whether a certifying body genuinely possesses the competence and accreditation needed to carry out its task.

One can safely assume that internationally active certification bodies in particular, along with any other establishments that already fulfill the requirements, will be keen to gain DAkkS accreditation as soon as possible – as existing multilateral agreements mean this goes hand in hand with international recognition. So it will soon be possible for all interested parties including consumers to recognize "approved" certification by checking for DAkkS accreditation.

In July of this year, the Steinbeis enterprise EQ ZERT (European Institute for the Certification of Quality Management Systems and Personnel) was one of the first certification bodies to be accredited by the DAkkS as a



recognized certifier of management systems and personnel. As usual, this edition of TRANSFER features a variety of other successful projects. I hope it provides interesting reading!

Jürgen G. Kerner

Jürgen G. Kerner is head of EQ ZERT, the European Institute for the Certification of Quality Management Systems and Personnel. To read more about the challenges of high quality certification, turn to page 12.

3D printing of ceramic components

Perfectly shaped

Experts at the Steinbeis Transfer Center for High-Tech Ceramics have succeeded in producing ceramic components using 3D printing, a special rapid prototyping method. Based on computer-aided designs and 3D object scans, the team manufactured ceramic models and components from a variety of ceramic raw materials. As aluminum oxide (Al_2O_3) led to the best results, the project team then investigated the possibilities of 3D ceramic printing with this material in more detail. The project was sponsored by the German Federal Ministry of Education and Research.



Sintered engine block made of Al_2O_3

As expected, the printed components were highly porous due to their layered structure and the agglomeration of the individual granules. This meant only very low strengths were possible. As a result of the procedure, the properties of the components depended on their orientation in the printing chamber. The strength was lowest ($\sigma_0=5$ MPa) along the z-axis (the direction in which the layer structure was built up), at a medium level ($\sigma_0=10$ MPa) along the x-axis (the direction in which the printer moved), and highest ($\sigma_0=20$ MPa) along the y-axis (the direction in which the print head moved). As the adhesive constituents could not be applied via the print head, they were mixed into the ceramic powder as dry powder. The main constituent of the printer liquid was water.

used as more wear resistant composite materials after infiltration with metal melts.

Scanning electron microscope images of the material revealed a homogenous microstructure with crystals that had grown together well with pores of 1–5 μm . The Steinbeis team used regression and maximum likelihood methods to determine the average strength σ_0 and the Weibull modulus. This revealed that using commercially available raw materials resulted in relatively low green densities and strengths.

The Steinbeis study confirmed the findings of other research groups who have studied this and similar methods. Even complex powder preparations in which the granules had thin adhesive coatings were unable to produce higher green densities and strengths.

3D-printed ceramic objects have a variety of technical applications, such as filtration and bone replacement. The technique also allows component designs which would be impossible using traditional ceramic methods. Ceramics produced using the new method can also be

The ideal raw materials for the 3D printing process are currently not commercially available – they still need to be produced with special equipment in dedicated laboratories. Adding the adhesive in powder form is also not ideal – it would be better to deliver the adhesive via the printer ink. So using different types of printers, such as piezoceramic drop-on-demand printers, could allow for a wider range of inks.

In future research, the Steinbeis team aims to develop 3D printing methods capable of producing higher green densities and strengths – plus homogeneous strength, regardless of the ceramic's orientation in the chamber. For 3D printing methods to be successfully used to produce ceramic prototypes in high performance industries, components need to match the quality of those manufactured using traditional methods. This Steinbeis study is a major step forward in reaching these goals using new methods and equipment. Other key goals include being able to control important process parameters, and no longer being limited to a single printing technology.

Prof. Dr. Manfred Schumacher
Steinbeis Transfer Center for High-Tech
Ceramics
Vallendar
su0677@stw.de

 www.stw.de → our experts



Photo: © photocase.com/Boing

A study by the SVI Endowed Chair for Marketing and Dialog Marketing at SHB Government communications that promote dialog

As society continues to change in complex ways, balances of power in party politics have to cope with new rules of play. Societal change also rewrites the requirements that define successful communication between governments and their citizens. To establish political legitimacy, governments use a number of vehicles to communicate with the public. The Internet, brochures, press ads, posters and even events tell people what their government has to say. Governments can also conduct PR activities for the press as well as radio and TV outlets to help disseminate information on a broader scale. The overarching aim: to make governments' activities more transparent and involve citizens as much as possible in the reform process. But what underpins governments' successful communication? Jana Heinze, a Ph.D. candidate at the SVI Endowed Chair for Marketing and Dialog Marketing at the School of Management and Innovation at Steinbeis University Berlin, is investigating this very topic.

Given this situation, the SVI Endowed Chair conducted an empirical study on German government communications at the national and state level. The study was intended to draw a map that would empirically capture the key categories of government communications to be explored as well as identify defining features that had been shaped by the system and its players. In the first stage, twelve spokespeople from state governments and the federal government were interviewed in their capacity as experts. Follow-up empirical analyses will include a written questionnaire for state governments in Germany as well as focus group analyses

with citizens. This research project is receiving the gracious support of Deutsche Post.

The first research question focused on the size of the communication budget, how it was allocated, and the staff resources that state governments and the federal governments have available. Using the communications budgets of large companies as a benchmark, the study showed that the government has a limited budget, which considerably restricts the planning and use of communication vehicles. Given the tax financing, the hurdles that government communications must clear as they compete to

get their message across in a crowded arena are high ones. Whereas large companies can generate a high volume of communications that take the form of press ads, spots and posters – and ideally target them to very specific groups – governments must work with a comparably lower budget yet communicate complex political messages to the general public. Compared to companies, this puts governments in an outsider's role when fighting for the public's attention, something that is a most precious commodity. Although research points to the benefits of using inter-agency communications more aggressively, this latest spot-check reveals

a trend toward Germany's federal agencies communicating independently of one another, especially in relation to the federal government's press office.

The second research question looked at influencing factors and overall conditions which determine the arena of government communications. Changes in media take center stage; they could also be described as growth, acceleration and competitive pressure. These changes go hand in hand with the changing ways that target groups are consuming media – another result of the shift toward individuation. In light of this sea change, government communications could not ask for a better time to explore fresh approaches in identifying how to address target groups. The research is clear: Experts consider (Internet-based) vehicles to promote dialog a suitable way to circumvent the advertising filter and speak to citizens directly.

The thrust of **the third research question** was the communication channels that come into play for government communications. These channels are twofold in nature. Although the experts are primarily focused on directly and indirectly influencing the media via public relations, they also aim to pinpoint measures targeted directly at ordinary people, such as campaigns or brochures. However, these play a smaller role, due in particular to financial limitations. In line with other studies addressing government communications, the Internet has grown considerably more important among other individual communication vehicles. Communication forms designed to promote dialog help reveal just how much latitude government communications has. By prying apart the exclusive exchange of information between the government and media, these new forms create an opportunity to speak directly with citizens and involve them in framing policies. Here, the government functions in its ostensible role as a "communications interface," closing the gap between itself and citizens by adopting a "caseworker for civic interests" mindset.

The scope of **the fourth research question** covered two areas: the spectrum of what government communications is supposed to do in a twenty-first century democracy, and the objectives based on courses of action that key players set themselves. One of the central aims of government communications is to provide information to involve every citizen, thus helping to legitimize democratically elected institutions. The repertoire that drives the spokespeople's courses of action with regard to political players in the background embraces objectives that legitimize as well as objectives that are directed at power.

Found in **the fifth research question**, the detailed analysis of the structural framework of government communications reveals a number of indicators as to how and where government communications can bring itself up to date. (For details, see *Kommunikationsreform. Drei Perspektiven auf die Zukunft der Regierungskommunikation*, published in 2008 by the Bertelsmann Foundation in Gütersloh, Germany). The first control variable concerns the institutional legacy and resource allocation of government communications. An integrated communications strategy that is designed across multiple agencies and globally communicated can defuse the tension that arises between the autonomy of the ministries and the policy-making powers of the German chancellor – a tension that is also tied directly to the already low communications budget. As a result, it will prove essential to use the limited resources of government communications – both in terms of staffing and budget – efficiently and effectively. Immediate and continuous monitoring is also urgently needed to monitor the effectiveness of communication vehicles. Given rising costs and losses due to scattershot approaches in mass communications, today's tools used in government communications must be put under scrutiny. The second control variable in modernizing government communications pertains to the dialog potential of government communication and to relating

to target groups. Whereas companies have long since responded to this development and redistributed their communications budgets to benefit dialog vehicles, government communications is just beginning to cultivate a sustainable culture of political dialog. Excellent examples of this already in use are participatory budgeting and the communications platform direktzu.de/ aigner. The detailed analysis of the structural framework of government communications also reveals a number of indicators on how to implement various (dialog) communication vehicles in government communications. Here, the strategic springboard is and will remain PR work in the ministries; joined with the Internet to disseminate information, PR work will be able to reach a large target group. While reflecting the character of an integrated communications strategy, this broader appeal should be more aggressively supported by dialog communication forms to ultimately foster improved civic discourse in the public realm. International role models such as the United States have demonstrated that it is possible to involve citizens in a systematic fashion, both during election season and terms of office.

Jana Heinze
 Prof. Dr. Dr. Helmut Schneider
 SVI Endowed Chair for Marketing and
 Dialog Marketing
 School of Management and Innovation
 at Steinbeis University Berlin
 Berlin/Stuttgart
 su0405@stw.de
 www.stw.de → our experts

European programs to support cross-border exchange in further education

This is Europe calling!

In earlier times, leaving your home country to venture abroad was seen as an undertaking fraught with danger! Today, international experience is seen as an excellent building block – if not a prerequisite – for a successful career. The new realities of our globalized world mean that employees not only need to be able communicate in a second language, they need to understand the unique culture and market structures of business partners in other countries. A number of European Commission educational programs support this approach, and the Steinbeis Innovation Center for European Projects has EC accreditation as an official coordinator and project organizer for these programs.

Today, professional experience and skills and expertise gained through academic education are often not enough to guarantee a successful 30–40 year career and maintain an edge over competitors. And professional development measures are not the only way to keep learning after formal education. New kinds of informal learning are emerging – such as learning in everyday life, through changing working conditions, and in response to the demands of a constantly changing society.

At every stage of their lives, people learn for different reasons, in different ways and in different places. So lifelong learning is not restricted to educational institutions: as well as formal and informal learning in these institutions, lifelong learning includes informal learning in all kinds of locations.

The EC Lifelong Learning Programme was launched at the start of 2007. With a budget of almost € 7 billion – making it the biggest European educational program so far – the program facilitates the exchange of teachers and learners of all ages between different EU countries. It also promotes partnership between European educational institutions. Set to run until 2013, the Lifelong Learning Programme brings together a number of longstanding educational programs for schools, universities and professional education, complementing these with a Transversal Programme. A range of subprograms also cover education and professional development outside colleges and universities.



Photo: © photocase.com/Gortincoiel

The Youth In Action Programme funds informal extracurricular educational activities for young Europeans. It aims to help young people develop a sense of personal responsibility, initiative, and an interest in others. In particular, the European Voluntary Service enables young people to spend time in different European countries. This gives them insights into differences in the professional world and day-to-day life, and helps foster intercultural skills. The Leonardo da Vinci Programme is the only EU program dedicated to vocational education and professional development. It funds partnerships between European companies, chambers, management and labor, vocational schools and educational institutions. This includes facilitating the international exchange of apprentices, employees and instructors,

as well as students and teachers at vocational schools. The Grundtvig Programme is dedicated to adult education, and includes Learning Partnerships which enable lecturers in adult education to take part in professional development activities in other European countries. The program lays particular focus on older adults and those lacking basic qualifications.

All key players in education – governments, businesses and employee associations – are in favor of mobility between European countries, especially for educational purposes. In recent years, the proportion of vocational students who spend time abroad has doubled to around two per cent per year. But compared to university students, this number is still too low. Oft-cited rea-

sions for this include insufficient information and concerns regarding organization and financing. Companies often cannot or are unwilling to send apprentices abroad for longer periods – even though experience has shown that even a short secondment to another country can be beneficial. In just a few weeks, young apprentices can gain new insights into different cultures and ways of working. Many also return feeling more self-confident, having dealt successfully with an unfamiliar situation. Inadequate foreign language skills are seen as a major stumbling block. In response to this common problem, the Steinbeis Innovation Center for European Projects offers special project-oriented language training. Spending just a few weeks in another country can also bring benefits – people who have spent time abroad are often much more motivated and more comfortable communicating in a foreign language.

Spending time abroad, however long, is an important tool in human resources work. As well as integrating time abroad into company apprenticeships, it can also be dovetailed into HR development. Promising young employees who spend time in another country not only benefit in terms of skills and expertise – they can even complete training in specific areas.

The Steinbeis Innovation Center for European Projects manages collaborative projects with partners from almost every EU country. Smaller companies and organizations without partners in other European countries, or those concerned about "drowning in bureaucracy", find the center's subsidized projects especially beneficial.

Dr. Ekkehard Lippold
Dr. Karen Lunde
Heidrun Walter
Steinbeis Innovation Center for
European Projects
Freiburg
su1099@stw.de

 www.stw.de → our experts

Steinbeis consultation on innovation management and knowledge transfer

Building bridges through partnership

One consequence of globalization is that large companies often become part of even larger corporations – while SMEs struggle not to fall by the wayside. Unless, of course, they link up with other SMEs to network their expertise and boost their competitiveness. The experts at the Steinbeis Consulting Center for Innovations Management and Know-How Transfer NORTH have in-depth experience in projects both with and for SMEs, and use solution-oriented concepts to implement projects successfully.



Photo: © fotocommunity.de/Esbjörn Strid

In modern business, great ideas and marketing concepts alone are not enough: to succeed, projects require professional support. Companies also need the right partners. One of 800 centers in the Steinbeis network, the Steinbeis Consulting Center for Innovations Management and Know-How Transfer NORTH was founded in 2010 and has already been involved in plenty of promising talks regarding partnerships between institutions and companies in the German states of Bremen, Hamburg and Schleswig-Holstein.

The center's first collaborative projects will be with CEON (Centre for Communication, Earth Observation and Navigation Services), a non-profit state institution in Bremen. Founded in 2009, CEON's main function is to coordinate Bremen state activities in the area of integrated, satellite-supported applications for navigation and logistics, plus maritime and atmospheric services. Together with partners from industry and academia, CEON initiates and implements demonstra-

tion and research projects for satellite-aided environmental and safety services.

CEON's activities overlap in certain areas with those of the Steinbeis Consulting Center for Innovations Management and Know-How Transfer NORTH. This lays the groundwork for successful cooperation in areas such as maritime security, the marine environment, logistics, navigation, civil defense (port security, coastal protection and dyke protection) and renewable energy. Initial joint workshops have already been scheduled, and both partners hope that the ideas generated in the workshops will become live projects soon after.

Christopher Scharf
Hans Protschka
Dorian Scharf
Steinbeis Consulting Center for Innovation
Management and Know-How Transfer NORTH
Hamburg
su1405@stw.de

 www.stw.de → our experts

An interview with Prof. Dr.-Ing. habil. Günter Köhler

“It’s an idea that has stood the test of time!”

Professor Köhler, in 1992, many challenges and issues brought on by German reunification were waiting to be tackled. But you didn’t beat about the bush. You founded the Steinbeis Transfer Center for Jointing Technology at today’s University of Jena. How did you know this was the road to take back then?

It was truly a time in which a lot of what we were facing was new to us. The University of Jena had reorganized its departmental structure, a change that also had an impact on the technical sciences department. I had just been named dean of this particular school, and this was right when Lothar Späth first visited Jena. There was a meeting in which Späth committed to keeping the technical sciences at the university; unfortunately, those efforts weren’t successful. Today, I often joke, “Späth showed up too late!” But it was this visit that introduced me to people at the Steinbeis Foundation. I was immediately won over by the idea of Steinbeis and I knew then and there that I would found a Transfer Center. The new institute, ifw – actually an outsourced version of my endowed chair at the University of Jena – was like nothing of its kind at the time. It’s an idea that has stood the test of time. Even today, we’re enjoying success.

After 15 years of success in working on projects at your STC, you decided in 2009 to found a German limited liability company within the Steinbeis Transfer Network. What prompted this decision?

Having Steinbeis as a partner member means closer ties between the ifw and the Transfer Center. My STC was responsible for most of the work in putting research results into practice within the industry – especially for real production assignments. In founding the company, we also wanted to promote Thur-

ingia as a business region and give employees a greater sense of opportunity. But our company remains part of the trusted Steinbeis Transfer Network, and we’re delighted to showcase that brand and contribute to its success.

Today, you run both companies out of Jena. You also have sites in the Czech Republic and Estonia. What do you want to accomplish with these locations?

Both Centers have partners in multiple German states. And we’ve even launched some activities outside Germany – in the Czech Republic and Estonia. But we believe that there are even more opportunities in those two areas to support technology transfer in line with Steinbeis principles. I’d like to help my associates there get all the support they need.

Jointing, welding and laser technology is an essential part of today’s production technology. What are some of the technological challenges you’re working on right now?

Jointing technology is an interdisciplinary technology that shows up in all types of industries. Here in Jena, we have a saying about this: “from micro to macro.” We’re also confronted with all kinds of jointing issues for various materials, whether metal, glass or ceramic. We’re always looking for new solutions and ways to advance and apply them. Naturally, we don’t offer every service associated with jointing technology; the spectrum of welding, soldering and bonding is extremely broad. One thing we focus on is processing that uses a beam, such as lasers and water jet cutting.

Aside from your scientific endeavors, you hold several honorary positions and are involved with an organiza-



Professor Dr.-Ing. habil. Günter Köhler

tion that helps the mentally handicapped and their families. You also run a seminar on wrought ironwork – and you’ve even written a short series of books, Art & Technology, in the Steinbeis-Edition. What else do you have planned for your most un-retiring retirement?

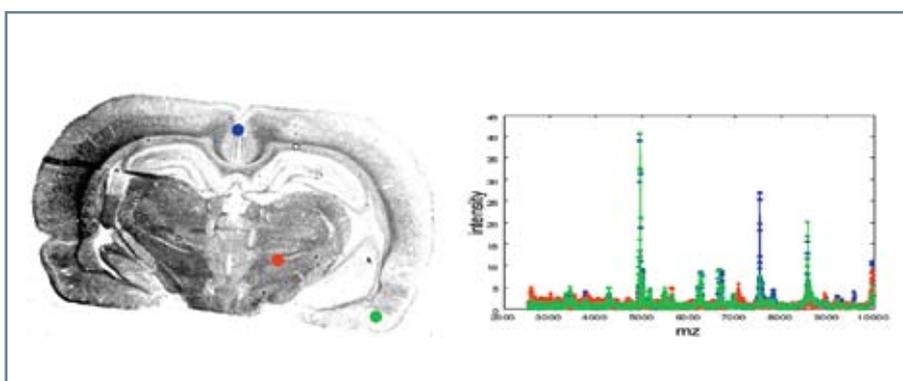
Humans are such complex creatures. For me, working in areas that aren’t really connected to my profession is equally engaging and compelling – and I find that these activities actually do have an impact on my profession. And it’s fun to work together with other people to contribute to art and culture. I had all of my schooling in Weimar, and the city had a profound effect on me. Art and culture are part of the fabric of Weimar, and you can also see how science and technology are present. Part of Weimar is also Buchenwald, the concentration camp – it’s on the city’s outskirts. I feel I need to do something so something terrible like this can never happen again. But my goals? Well, I want to do something to stay in shape. There are some books I’ve been wanting to read. And I’d like to work together with the citizens of Kadaň, the city of my birth in the Czech Republic, to establish something and help the people of Europe make Europe just a little bit better.

Steinbeis-Stiftung
Stuttgart
stw@stw.de
www.stw.de

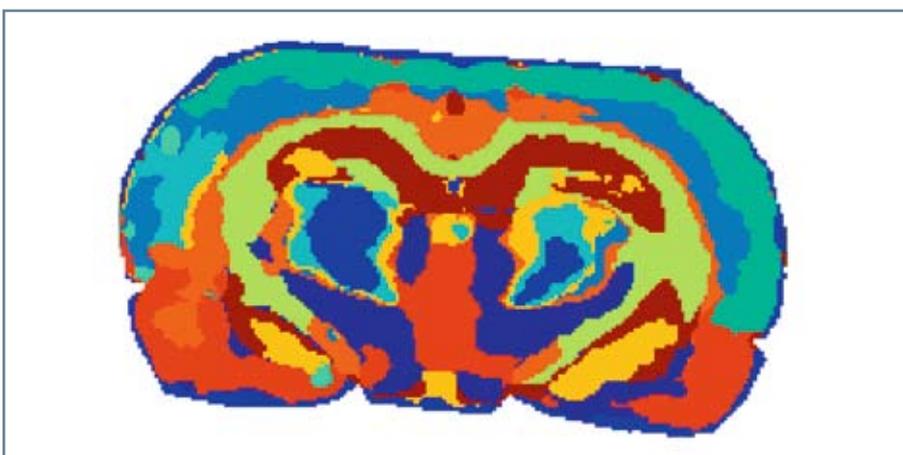
Three-dimensional metabolic analysis

Metabolism in 3D

Developing new compounds and therapeutics requires in-depth understanding of an organism's metabolism – something which can also be very useful for diagnosing cancer. But traditional techniques such as computerized tomography and histological staining methods only produce anatomical images, with little or no information on metabolism. The best way to fully understand an organism's metabolism is to use a complete protein spectrum, obtained via mass spectrometry (MS). However, conventional MS methods provide no information on the spatial distribution of proteins. The Steinbeis Innovation Center SCiLS (Scientific Computing in Life Sciences) in Bremen is working on the development of mass spectrometry methods that deliver 3D images.



A 2D tissue cross-section with three mass spectrums



Segmentation card of a 2D tissue cross-section

The development of matrix-assisted laser desorption/ionization (MALDI) almost ten years ago was a major step forward in expanding mass spectrometry to a spatial imaging method. This technique made it possible to select individual points in tissue to a high degree of accuracy and record their mass spectrum. MALDI imaging was the first mass spectrometry method capable of delivering information on the protein composition of individual tissue sections in 2D

spatial resolution, thus providing detailed spatial information on metabolism.

The data set that makes up a single MALDI image contains around 10^8 recorded values. Processing these values requires highly specialized automatic visualization and evaluation routines. In partnership with the company Bruker Daltonik, the Steinbeis Innovation Center SCiLS has developed a new method that divides 2D cross-sections into

segments where similar metabolic processes are occurring. This makes it possible to identify proteins in the tissue and consider them during cancer diagnosis, for example. The new method is based on a denoising technique that takes local data into account – a mathematical method for image processing.

The next challenge being addressed by the researchers at SCiLS is extending the 2D MALDI technique to three spatial dimensions. To do this, the center is currently developing technical process chains in a joint project with the Fraunhofer MEVIS Institute for Medical Image Computing and Bruker Daltonik. 3D MALDI imaging will make it possible to record and analyze the protein spectrum of an entire organ or lesion of diseased tissue, in all its complexity. This will enable specialists to directly investigate key oncological issues that can only be understood in the context of highly complex (heterogeneous) 3D tissue. This includes the distribution and metabolism of active ingredients in tumor tissues that have undergone highly complex pathological change, plus the response of these tissues to a treatment. For the first time, 3D MALDI imaging in organs and tissues would allow direct systematic analysis in these areas.

Adding a third dimension to the MALDI technique results in data sets of approximately 10^{10} recorded values. From a technical perspective, visualizing this 3D metabolic information is highly complex – while from a medical perspective, it still does not provide enough information for diagnosis.

To make sense of the data, it must first be correlated with 3D anatomical information (such as data obtained via computerized tomography). However, superimposing these two data sets, which were generated using entirely different measurement techniques, is complicated by the issue of image registration. The final result is a high dimensional image that combines the data from both imaging methods and visualizes both anatomy and metabolism.

The project is set to run until June 2012 and is funded by Bremen Economic Development (WFB). As well as the three main partners – MEVIS Fraunhofer Institute, Bruker Daltonik and the Steinbeis Innovation Center SCiLS – doctors from Helmholtz Zentrum Munich are also acting as an external advisory board for the project.

Dr. Dennis Trede
Prof. Dr. Peter Maass
Dr. Theodore Alexandrov
Steinbeis Innovation Center SCiLS
(Scientific Computing in Life Sciences)
Bremen
su1412@stw.de

www.stw.de → our experts

SHB student has idea for innovative tow truck during lecture

A perfect example of knowledge transfer

When young entrepreneurs study business, they often pick up ideas in lectures that they can use in their companies. Just like Dieter E. Albrecht, a bachelor's degree student at the Business School Alb-Schwarzwald, part of Steinbeis University Berlin.



Dieter E. Albrecht runs a breakdown recovery firm in Rottweil, south-west Germany, and is currently studying for a bachelor's degree in industrial business administration (IndustrialBBA) based on the Steinbeis Project Competence Concept. During a lecture, he struck upon the idea of designing an articulated vehicle that could recover heavy SUVs and similar vehicles weighing up to 3.5 metric tons, but could still be driven with a standard BE-class driver's license – even on Sundays, when many types of large vehicles are not allowed on the road in Germany.

After capturing his thoughts on paper and sketching the design, Albrecht started to search for a supplier to build the innovative tow truck. No sooner said than done, and the new universal tow truck was born. As well as conventional vehicle recoveries, the truck is also able to recover vehicles on difficult terrain. And thanks to its articulation and short length, it's highly maneuver-

able – perfect for urban areas. The novel tow truck is also suitable for long distance trips, as it includes seven air-conditioned passenger seats. All in all, this invention is nothing short of groundbreaking for the vehicle recovery sector, and Dieter E. Albrecht has already applied for a design patent from the German Patent Office.

Breaking down because of a technical failure is never a pleasant experience. But with vehicles based on Albrecht's design, recovery firms can rescue large vehicles like SUVs more quickly and easily than ever, passengers included. A great example of knowledge transfer in action – from the lecture theatre to the streets!

Berthold Villing
Steinbeis Transfer Institute Business School
Alb-Schwarzwald
Berlin/Gosheim/Rottweil
su0774@stw.de

www.stw.de → our experts



A certification partner for quality-driven companies Up with quality and cost-effectiveness, down with controls and bureaucracy

The process behind certifying a management system is an unparalleled instrument in agitating an entire organization and its employees – positively, of course. This instrument can unleash resources and talent while helping everyone focus on one common goal. It culminates in a kind of exam which an impartial evaluator assesses. Certificates help people taste victory, and represent an accomplishment that everyone can take pride in. And results should be celebrated. Taking the approach of “up with quality and cost-effectiveness, down with controls and bureaucracy”, the Steinbeis Transfer Center EQ ZERT has positioned itself as a certification partner for quality-driven companies and institutes.



One of the key advantages of certification is, when it's used properly, the drive toward continuous improvement that's guided by experts. This service, provided by the certification partner, should be used not only to maintain the management system, but to keep advancing it, without interruption – and with the assistance and recommendations of impartial experts. All of this requires the right certification partner.

explains Jürgen G. Kerner, head of EQ ZERT. EQ ZERT offers certification of quality, environmental and occupational safety management systems as well as the certification of quality and environmental management specialists.

The Steinbeis certification institute EQ ZERT is accredited by the German Association for Accreditation as a certifying body for management systems and human resources. Underpinned by the multilateral accord of the European Cooperation for Accreditation as well as the International Accreditation Forum, EQ ZERT offers its customers an internationally recognized certification service.

To shape and refine management systems, EQ ZERT also offers various kinds of support. Customers can choose from accelerated or mini-seminars on quality and environmental management, or they can sign up for a quality management “starter package” to help them compile their own quality management documentation. Audit packages are also available for quality, environmental and occupational safety management systems, and EQ ZERT also provides practical guidelines on quality and environmental management.



Why are EQ ZERT certificates so well received? This can be attributed to more than just a way of working that's in line with real-life practices. Every auditor is also highly qualified and raises the bar extremely high in terms of performing quality work for this certifying body. “Even now, we continue to fine-tune our offer. And we're learning from our mistakes – and building on our strengths. That's how we can offer our customers the best possible certification service, now and in the future,” ex-

EQ ZERT practical guidelines are part of Steinbeis-Edition, which publishes selected titles authored by experts in the Steinbeis Transfer Network. With over 25,000 copies sold, EQ ZERT practical guidelines are a Steinbeis-Edition bestseller. In 1999, EQ ZERT published its first six practical guidelines on quality and environmental management as educational mini-brochures for the German-speaking market. Due to unceasing high demand, the Steinbeis Center updated the guidelines a number of times, eventually expanding them into a more comprehensive series of publications.

Even today, quality and environmental management are often misunderstood by interested parties and users. The result: unsatisfactory results in designing and launching the right management systems, as well as outright rejection by those responsible for these issues. Much is misunderstood and misinterpreted, and implementation is often laborious, lacking substantive meaning and benefit. This is precisely why EQ ZERT

thrashed out its first set of practical guidelines. This compact tool was specifically designed to help people better understand quality and environmental management, and offer them useful information on how to properly put theories into practice.

The practical guidelines focus on each theme as a separate entity. Specific chapters, however, go into greater detail, exploring indus-

try particulars and using examples to illustrate certain interpretations.

Jürgen G. Kerner
EQ ZERT European Institute for the Certification of Quality Management Systems and Personnel
Ulm
su0316@stw.de
 www.stw.de → our experts

EQ ZERT practical guidelines

Part of the Steinbeis-Edition lineup, the EQ ZERT publishing program addresses quality management with the following practical guidelines:

- Quality management in SMEs
- Quality management in service organizations (new)
- Quality management in nursing care facilities

- Quality management in hospitals
- Quality management in rehabilitation facilities (new)
- Quality management in doctors' offices

The following practical guidelines are also now available from EQ ZERT:

- Quality improvements: strategies and tools

- Environmental law for environmental managers
- Environmental technology for environmental managers

All published articles from EQ ZERT are written for readers who would like to design management systems that fit their companies and who are committed to continuous improvement that's efficient and effective.

New centers in the Steinbeis Network

The Steinbeis Network comprises around 800 Steinbeis enterprises spanning all fields of technology and management. Depending on the nature of their work, these may be Transfer Centers, Consulting Centers, Research Centers, Transfer Institutes or separate legal entities. The following new Steinbeis enterprises have been founded since May 2010:

Abbreviations:

SCC: Steinbeis Consulting Center

SRC: Steinbeis Research Center

SIC: Steinbeis Innovation Center

STI: Steinbeis Transfer Institute

STC: Steinbeis Transfer Center

STI Digital Innovations (Berlin)

Directors: Dipl.-Betriebswirt (BA) Carsten Rasner

Dipl.-Kfm. Frank Möbius, MBA

Dipl.-Ing. Fabian Zink

E-Mail: su1421@stw.de

Range of services

- Trend analysis
- Feasibility studies
- Business planning
- Competitive analysis
- Due diligence

- Business founder assessments
- Strategy planning
- Setting up of business intelligence

SCC Innovation and Subsidiesmanagement (Stuttgart)

Directors: Albert Nadler, MBA

Dipl.-Betriebswirt Oliver Buse

E-Mail: su1422@stw.de

Range of services

- Advice on public funding and subsidies
- Support with funded projects
- Technology and innovation promotion

STC Automotive Electronics & e-Mobility (Bremen)

Director: Prof. Dr.-Ing. Karl-Ludwig Krieger

E-Mail: su1423@stw.de

Range of services

- Evaluations and expert reports
- Technology assessments
- Process consulting
- Feasibility studies

STI Therapeutic Communication and integrated Therapy (Berlin)

Director: Prof. Dr. Hartmut Schröder

E-Mail: su1424@stw.de

Range of services

- Degrees in the field of complementary medicine, psychotherapy, consultation
- Transfer-based research in the field of health communication
- Consulting from therapists and institutions in the field of therapeutic communication and health communication
- Expert reports

STI Growth Management (Herrenberg)

Directors: Dr. Gerhard Keck
Dr. Joachim Sailer
E-Mail: su1425@stw.de

Range of services

GeneralMBA: a two year Project Competence Degree (PCD) running in parallel to full-time work, majoring in growth management, including certification in growth, Internet and new media, public, and architecture Management, culminating in a Master of Business Administration (MBA).

STI Body Related Therapy (Berlin)

Director: Dr. iur. Ernst Joseph Boxberg
E-Mail: su1426@stw.de

Range of services

- Studies in the field of complementary medicine occupational law (medical profession, medical and other healthcare practice, licensing regulation, complete and partial practice as a non-medical practitioner, all accounting options for doctors and non-medical practitioners, legal issues affecting doctors and other practitioners, liability in medicine, doctors' and other practitioners' oath of secrecy, social insurance law/professional ethics)
- Ethics in complementary medicine professions
- Degrees in therapies of the body (osteopathy, manual therapies etc.)

STI MBA and International Programs (Herrenberg)

Director: Ardin Djalali, M. A., MBA
E-Mail: su1427@stw.de

STI Strategic Corporate Relations (Herrenberg)

Director: Dipl.-Theologin Annette Horne
E-Mail: su1428@stw.de

SCC Business NLP (Witten)

Director: Regine Töpfer, M. A.
E-Mail: su1429@stw.de

Range of services

- Professional training and coaching for managers based on neuro-linguistic programming (NLP)

STC System Design (Deggingen)

Director: Prof. Dr.-Ing. Walter Commerell
E-Mail: su1430@stw.de

Range of services

- Consulting
- Applied research and development
- Expert reports
- Seminars

SIC Logistics and Sustainability (Sinsheim)

Director: Dipl.-Betriebswirt
Jens-Jochen Roth
E-Mail: su1431@stw.de

Range of services

- Research
- Consulting
- Implementation plans
- Project management

SRC Innate Immunity (Bonn)

Director: Prof. Dr. med. Eicke Latz
E-Mail: su1434@stw.de

Range of services

- Contract research
- Biomedical consulting
- Animal models, assay design, high content screening
- Pharmacological testing and experimental studies
- Molecular imaging

SRC HAREKA Sensors (Bayreuth)

Director: Prof. Dr. Dietrich Haarer
E-Mail: su1435@stw.de

Range of services

- R&D in the field of food and chilling technology

SRC ancoreStatistics (München)

Directors: Lucie Wink
Paul Schmidt
E-Mail: su1436@stw.de

Range of services

- Analyses
- Consulting
- Research
- Seminars

ADG-Institut an der SHB GmbH (Stuttgart)

Directors:
Dipl.-Betriebswirt (BA) Carsten Rasner
Dr. Jörg Schmidt
E-Mail: su1437@stw.de

SIC Open Innovation (Leipzig)

Director: Martin Lipsdorf
E-Mail: su1438@stw.de

STC Systems Engineering (Esslingen)

Director: Prof. Dipl.-Ing. Reinhard Keller
E-Mail: su1439@stw.de

Range of services

- Engineering services in the field of hardware/software/systems engineering
- Engineering services in the field of industrial communication

Centers of excellence in health care

Outstanding

Based in the German city of Bonn, the Steinbeis Consulting Center IfQO (Institute for Quality Management and Organizational Development) has built up a reputation for helping to found centers of excellence in the field of health care. In recent years, the center has focused on establishing centers to treat colorectal cancer in Germany. In parallel to this, a number of excellence centers to treat prostate, lung and skin cancer have also been created. The Steinbeis experts recently supervised the founding of a liver and gall bladder unit at the Karl-Olga Hospital in Stuttgart.

Thanks to detailed input from the German Cancer Society, a special catalog of criteria was laid down for establishing centers aimed at treating common tumors such as those encountered in colorectal cancer. The list included key indicators for certification. Currently, "modules" are being established for treating other types of tumors. For example, in late 2009, the German Cancer Society approved the way forward for colorectal cancer units to become certified pancreatic carcinoma modules, and for certification of oncology units through the OnkoZert program. Under this system, hospitals that treat different types of tumors in separate organ units can now pool overarching responsibilities and processes in one oncology unit, thus leveraging synergies for further structural and procedural standardization and optimization. This drive to provide exemplary treatment is now being extended to the multi-organ treatment of benign conditions, and not just cancer.

Over the course of 2010, the Steinbeis Consulting Center IfQO has been working with specialists to establish and certify the liver and gall bladder unit at the Karl-Olga Hospital in Stuttgart. Before setting up the unit, three key issues had to be addressed:

1. The liver, gall bladder and bile ducts are part of the same anatomical and functional system. Diseases thus require complex treatment, taking several organs into account.
2. The rate of tumors in these three organs is rising sharply. This is why colorectal cancer centers need setting up.
3. Earlier market analysis and requirement planning showed that there is a



Photo: © photocase.com/Mclo

significant need for oncological liver resectioning in Stuttgart, as there is no top-level expertise in this area in other local hospitals.

Given the fact that around a third of all patients go on to develop liver metastases after successful bowel cancer operations, there is a clear need for centers of excellence for liver treatment. The treatment offered by the liver and gall bladder unit at Karl-Olga Hospital in Stuttgart covers patients with benign and malignant conditions of the liver, gall bladder or bile ducts. As medical associations had not previously laid down certification criteria for either liver units or liver and gall units, in February 2010 the liver and gall bladder unit at Karl-Olga Hospital in Stuttgart became the first of its kind in Germany to undergo successful certification through the TÜV Süd technical inspectorate.

Specialists from a variety of in- and out-patient backgrounds have joined forces in the new unit to offer comprehensive medical treatment in this area. By pooling skills across all specialist disciplines – medical testing, diagnosis, treatment and aftercare – the aim was to provide patients with optimum treatment outcomes. A special aspect of the liver and gall bladder unit are the weekly meetings attended by all specialists, which ensure close collaboration between disciplines. At these meetings, interdisciplinary treatment concepts are agreed individually for all patients. These are then monitored during treatment. A team specialized in the psychological and social welfare of tumor patients supports these patients during treatment of their condition.

Another aim with centers of excellence in the health care sector is to establish highly

efficient structures and procedures. Here, an important role is played by information exchange at meetings and quality circles, and the resulting ongoing development of diagnostic and therapeutic procedures. Establishing interdisciplinary practice is an essential factor for these units that also requires support from outside the unit. After the initial phase, benchmarks must be applied according to criteria such as achieving minimum volumes. Units must also be open to second opinions from outside.

The lofty goals that the Karl-Olga Hospital liver and gall bladder unit has set for itself are reflected by the binding quality standards and key indicators the unit has introduced. These are based on evidence-based guidelines used by medical societies, although they sometimes go even further.

Conformity is checked and evaluated during annual audits and reviews. Certification also stipulates that precise data should be captured and standards must be adhered to. As well as improving quality, this also makes it possible to gather data, particularly on the treatment of patients with conditions of the liver, gall bladder or bile ducts, and this can be used to optimize treatment. So as well as sharing knowledge between service providers, a common understanding of quality and agreed quality standards are also a binding part of the unit's concept. Specialists at the unit plan, set up and carry out studies to further the development of treatment methods.

The liver and gall bladder unit at Karl-Olga Hospital in Stuttgart is considered a successful pilot project for setting up other

liver units. The Bonn-based Steinbeis experts have now provided input on more than 50 centers of excellence in the health care sector. The team sees this as confirmation that by working with partners to set up centers of excellence, it has been possible to significantly boost the level of expertise and care offered by the organizations involved.

Dieter Barwitzki
Steinbeis Consulting Center Institute for
Quality Management and Organizational
Development
Bonn
su1061@stw.de

 www.stw.de → our experts

Prof. Dr. med. Josef H. Fangmann
Dr. med. Eckhart Fröhlich
Karl-Olga-Krankenhaus
Stuttgart
Josef.Fangmann@karl-olga-krankenhaus.de

Differentiation in the packaging machine industry

Let's wrap this one up!

To answer the demand for competitive products and services, companies are under constant pressure to adapt – especially in export markets. This is a major challenge, especially given the increasing complexity of machines and equipment, and customer requests for made-to-measure solutions. A system developed by the Bremen-based Steinbeis Transfer Center i/i/d (Institute of Integrated Design) now offers companies ways to achieve differentiation, with a rapid-response, precise, intuitive new user interface and a modular machine program.

In the German state of Bavaria, not far from the idyllic lake of Chiemsee, is a small packaging machine maker called somic. A family-owned company, somic constructs machinery and equipment for making packaging used in the food and beverage, confectionary and pharmaceutical industries. somic machines are exported worldwide, and the company's core business is in highly efficient, flexible wrap-around packers and tray packers. somic also builds pack inserters and carton assembly units. Its machines produce all kinds of packaging, ranging from sachets to folding boxes, foldable cartons, cans, thermoformed packs, jars, bottles and tubes.

The complexity and level of customization of the machines somic makes has intensified in recent years. This means control systems and the machines' operators face a rising number of demands. So somic decided to focus on outstanding user interface design as a key tool to differentiate itself from the competition and enhance company branding. The company invited the Steinbeis experts from Bremen to work on an initial project to look into the development of an underlying system for creating a new, language-independent interface – for use worldwide in a number of product ranges made by the company.

The interface developed for somic is fast, intuitive to use, and remarkably simple to navigate. Navigation is reliable, information is clear, structures are user-friendly and processes are comprehensible. Operators now need less training, so changeover times are shorter, resulting in significantly more efficient and reliable control of processes and machines. Especially when under pressure, operators need to feel as if the system is helping them to master difficulties quickly. Different user levels mean that the system only displays information relevant to the current user. In times of globalization, interfaces that can be used in an operator's native language and employ universally rec-

ognized icons result in significant quality advantages, and thus competitive edge. The increasing complexity and customization of machines meant that the machine software had to be modular and adaptable to configuration needs. It also had to provide near-limitless options for arranging standardized mechanical and electronic elements. Finally, it had to cater to customer-specific groups of functions and individual templates, thus allowing somic to react quickly to a variety of customer requirements. Now, no two machines end up being the same. They are configured individually to match functional needs.

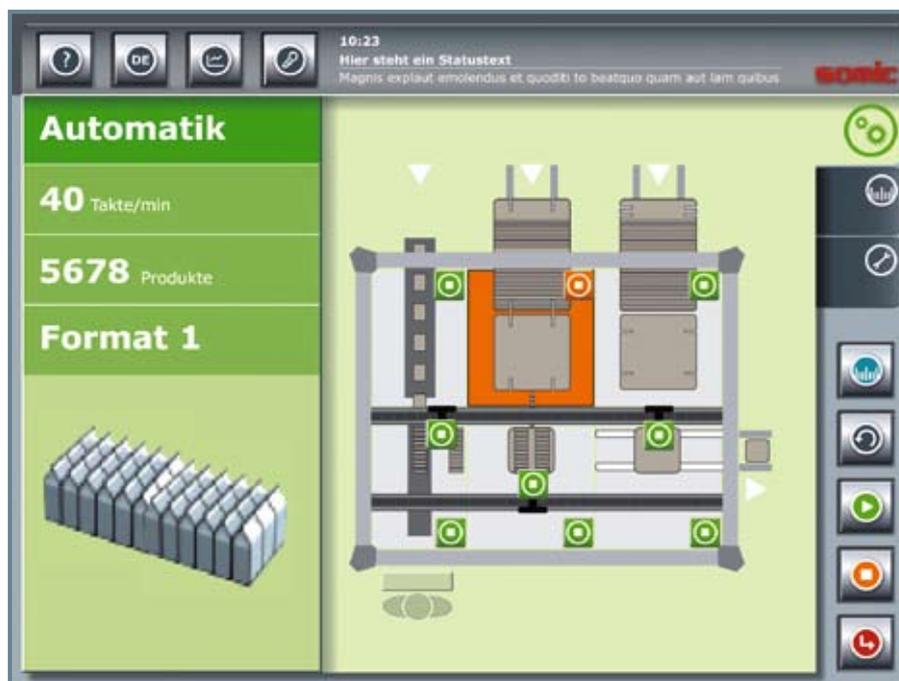
A second project with the *i/i/d* involved creating a uniform appearance for machines and equipment which had to be unique to somic. The result was a new housing for all kinds of packaging machines. The housing is made of aluminum segments screwed together, with room between for polycarbonate panels and doors. The design and appearance of the housing adds a clear, premium look to the machines and clearly reflects the improvement in terms of functionality, transparency, flexibility, compactness and accessibility.

The results of both projects were successfully launched at a 2009 trade fair in Nuremberg, allowing somic to stand out from the competition on two fronts. The brand image of the company has also been integrated into its corporate design, reinforced by the unmistakable interface, which marks a clear departure from conventional Windows-style icons. Simply by looking at a machine or its screen, users can immediately tell that it was made by somic.

The company's clients were extremely impressed by the new interface and machine frames. And as both new developments will gradually be rolled out to other parts of the product range, future development costs will be lower for somic. The development department has already been supplied with a design manual to allow it to make quick



A new-look somic packaging machine



Intuitive to use: the somic user interface

adaptations in the future by itself. After all, continuous change and optimization is already one of somic's cornerstones.

Prof. Dipl.-Des. (FH) Detlef Rahe, MFA
Steinbeis Transfer Center *i/i/d* Institute
for Integrated Design
Bremen
su0417@stw.de

www.stw.de → our experts

An interdisciplinary R&D institute, the *i/i/d* Steinbeis Transfer Center plans and conducts projects aimed at yielding user-oriented innovation on behalf of its clients – small and large companies from a variety of sectors looking for exclusive made-to-measure design solutions. The *i/i/d* helps companies and organizations develop products and services matched to their target groups and design communication processes.

Its preferred working model is integrated design (*i/d*): aligning development processes and innovations in parallel with technical trends at an early stage based on user needs – for greater customer acceptance and satisfaction, and ultimately greater success.

First certification courses for professional speakers

Speaking professionally: an art in itself

Mark Twain, the famous author of the adventures of Tom Sawyer and Huckleberry Finn, has said that a good speech has a good beginning and a good ending, both of which are kept very close together. Twain was much feared for his critical comments, and he'd clearly had to sit through too many bad speeches. A successful talk doesn't just enthrall the audience, it involves it. The audience interacts with the speaker, in thought and even verbally. Some people are fortunate enough to be natural public speakers and can captivate audiences immediately with their words and charisma. But perfect presentations can also be learned, as the Steinbeis Transfer Institute GSA at Steinbeis University Berlin (SHB) is showing.

The German Speakers Association (GSA) is the first educational establishment to offer official training on professional speaking. Lasting one year, in parallel to full-time work, the certified course is being offered under the direction of memory expert Markus Hofmann in partnership with SHB. The final qualification is titled "Professional Speaker GSA (SHB)".

"We want to make a significant contribution to the 'professionalization' of the presentation industry by introducing and safeguarding standards. Apart from enhancing performance on the pedestal, we also want to focus on managing the business side of professional speaking," explains Prof. Dr. Lothar Seiwert, GSA president and initiator of the GSA University.

Participants attend 8 weekend modules looking at the core competencies of a professional speaker. These include industry knowledge and experience, presentation skills and performance, marketing, PR and selling, business management, keeping organized and office administration. "I'm extremely excited about the course and am proud to say we've found the best people in the industry to give the lectures!" enthuses Markus Hofmann, CSP and director of the Steinbeis Transfer Institute Professional Speaker GSA. The lecturers include Sabine Asgodom, Germany's leading self-marketing expert, Siegfried Haider, an expert on expert events, high-profile TV coach Dr. Stefan Frädrieh, hardselling specialist Martin Limbeck, and Cristián Gálvez, a professional

host and expert on personality and making an impression.

"Professional Speaker GSA (SHB)" is a higher education qualification that can be acquired through a non-academic study program. The certificate is permanently valid and is awarded at an official ceremony at the GSA Convention to course participants who successfully pass the final exam.

Markus Hofmann
Steinbeis Transfer Institute Professional
Speaker GSA
Berlin/München
su1401@stw.de

www.stw.de → our experts

Kristina Schröder appoints commission members

Helmut Schneider appointed to family report commission

Kristina Schröder, the Federal Minister for Family Affairs, Senior Citizens, Women and Youth, introduced the expert commission responsible for writing the 8th Family Report to journalists in Berlin on 5 July. This year, the interdisciplinary commission of 8 academic experts includes as a new face Prof. Dr. Dr. Helmut Schneider, holder of the SVI endowed chair for marketing and dialog marketing at the School of Management and Innovation at Steinbeis University Berlin.



The 8 experts in family policy have been commissioned to write a Family Report entitled "Time for responsibility within the family". The report is being written on behalf

The commission members pictured with minister Kristina Schröder (Helmut Schneider second right)

of the German Federal Government and is due to be presented to the Bundestag and Federal Council in the summer of 2011. The aim of the report is to identify ways, within the current social context, to create an infrastructure that would enable families to take responsibility for themselves and each other. One of the main focuses will be issues relating to time – such as the importance of family time in everyday life, and issues relating to working hours, social infrastructures and the local community.

Alexa Luksch
SVI Endowed Chair for Marketing and Dialog
Marketing
School of Management and Innovation at
Steinbeis University Berlin
Berlin/Stuttgart
su0405@stw.de

www.stw.de → our experts

New SHB certification course for intercultural experts

Intercultural understanding – a core value

The Steinbeis Transfer Institute for Culture Transfer is launching a new SHB course in November 2010 for people who want to become certified intercultural experts. Intercultural understanding is a core focus of the Institute for Culture Transfer. The center created the course to foster cultural sharing within companies in response to today's social and economic challenges.

The center sees the course as a win-win project. It is based on the fact that although corporate identity is held up as a key asset in corporate mission statements, very few businesses mention the intercultural aspects of everyday business when describing their corporate values and goals.

Thinking and acting on an intercultural level includes areas like how to formulate recruitment advertisements, job interviews, selecting team members, and other business processes. It is about colleagues accepting each other's religious beliefs, being tolerant, and respecting other people. Easily avoidable mistakes are often made in communication – especially corporate communication. For instance, pictures in a German brochure may meet with a very different, unexpected reaction if used in brochures intended for other countries.

The SHB certification courses allows companies to train talented employees as intercultural

experts – so they can examine their company's intercultural sensitivity, change mentalities, launch new projects, and make thinking and acting on an intercultural level a core value. This is a refreshing and inspiring task for managers and supervisors working in management, HR and organizational development, organizational and industrial psychology, diversity and corporate communications. New professional skills are taught by leading instructors from the fields of cultural studies, philosophy, corporate communications, communication psychology, intercultural conflict management and mentoring.



Photo: © iStockphoto.com/kativ

Prof. Cordula Beelitz-Frank
Prof. Heidemarie Kurtscheid
Steinbeis Transfer Institute Culture Transfer
Berlin/Stuttgart
su1391@stw.de

www.stw.de → our experts

Series of events on professional management at School GRC

The Steinbeis Management Series

The School of Governance, Risk & Compliance (or "School GRC") at Steinbeis University Berlin is inviting Steinbeis associates, students and anybody else who is interested to the Steinbeis Management Series which started in September. Each event will be attended by representatives of politics and industry, who will take part in a panel discussion and answer audience questions on a variety of topics.

The next event, which takes place on 8 December in Berlin, is titled "Forensic Management – Investigations under data privacy". The panel will be made up of Bertram Raum (department III Federal Commissioner for Data Protection and Freedom of Information), Erik Liegle (Head of investigation, Deutsche Bahn AG), Barbara Scheben (head

of the Frankfurt forensic team, KPMG) Alexander Geschonneck (associate und head of Forensic Technology, KPMG). The panel host is Birgit Galley, Director of the School of Governance, Risk & Compliance.

The next event in the series will take place 9 February 2011 and tries to answer the question "Can you actually manage values?"

Melanie Reichelt
School of Governance, Risk & Compliance
at Steinbeis University Berlin
Berlin
su1142@stw.de

www.stw.de → our experts

Physical therapies on an academic level

Complementary medicine at Steinbeis University

Laws in Germany are strict: it is forbidden for an unregistered foreign doctor or non-medical practitioner to use traditional Far Eastern, native American or African healing methods unless they have successfully completed complementary medicine training. This is despite the fact that even the highly critical German public health bodies are not entirely hostile towards complementary medicine.

German social law refers to complementary health practices as "special therapy centers", a term encompassing all types of long-established, widely accepted medical treatment that fall outside the realm of conventional medicine. The Steinbeis Transfer Institute for Body-Related Therapy at SHB focuses on forms of complementary medicine that involve "manipulating" the body, such as massage, osteopathy and chiropractics.

Complementary and alternative medicine (CAM), insofar as it has a scientific or scientifically researchable basis, complements conventional medicine in areas such as the

treatment of patients with chronic conditions. This is precisely where the training offered by the Steinbeis Transfer Institute for Body-Related Therapy steps in, as there is currently a lack of professional training in this area in Germany. To be recognized by the government as "special therapy centers", alternative medicine practices have to maintain an up-to-date standard of general medical knowledge. The Steinbeis Transfer Institute investigates and supports therapy centers with the potential to gain official approval.

Representatives of these centers already work as authorized experts on medicine ap-

proval councils due to their scientific knowledge and practical experience in medical fields such as phytotherapy, homeopathy and anthroposophy. Until now, there were few avenues to pursue university-level training in this area in Germany. The Steinbeis Transfer Institute aims to close this gap through its teaching and research activities, and by offering academic training to successful CAM practitioners.

Dr. iur. Ernst Joseph Boxberg
Steinbeis Transfer Institute for Body-Related
Therapy
Berlin
su1426@stw.de

 www.stw.de → our experts

SHB creates new B.A. course for the book industry

Media management for booksellers and publishers

22 participants from publishing houses and booksellers embarked on their studies at "mediacampus frankfurt" in July of this year, marking the beginning of the first executive bachelor's program for the book industry. The degree has been set up as part of a cooperation between the School of Management and Innovation at SHB and "mediacampus frankfurt | die schulen des deutschen buchhandels".

The degree covers the areas of bookselling and management, as well as publishing and media management. Participants take the degree to dovetail theoretical aspects with everyday practice. "I want to be able to apply what I learn to my business, while learning theory through real-life examples", explains Heike Fechter, a bookseller at RavensBuch. Course participants also relish the opportunity to compare notes on issues in the publishing industry as well as those covered in the course.

Jointly organized by the School of Management and Innovation (SMI) and mediacampus Frankfurt, the B.A. program addresses the needs and opportunities presented by industry trends, through a business-oriented degree designed to foster careers. The SMI sees itself as a modern business school within the SHB, with a focus on the media and communications industry through its work with the SMI Center for Marketing, Media and Creative Leadership. "mediacampus frankfurt | die schulen des deutschen buchhandels" is the central training and employee

development body of the German Publishers and Booksellers Association and its regional associates.

Dagmar Weinrich
School of Management and Innovation
at Steinbeis University Berlin
Berlin/Stuttgart
su0405@stw.de

 www.stw.de → our experts

POSMETRANS: an EU project to analyze innovation policies for SMEs

Supporting SMEs in the transport sector

Most companies in the transport sector are small and medium-sized enterprises (SMEs), and together, they are responsible for most of the sector's jobs and turnover. But do transport SMEs benefit enough from funding programs and measures introduced under innovation policies? Or are the bureaucratic hurdles too high when it comes to project proposals and participation, and only surmountable by larger companies? As part of the EU project POSMETRANS, the Steinbeis-Europa-Zentrum is investigating this issue together with six project partners in Germany, Italy, Poland, Spain and Turkey.

Coordinated by the Steinbeis-Europa-Zentrum, the POSMETRANS project supports the introduction of innovative technologies and processes in the transport sector by analyzing corresponding policies. SMEs form the target group. The EU has granted funding of the project in the thematic programme Transport of its Seventh Framework Programme, and POSMETRANS will thus receive € 580,000 in funding between January 2010 and December 2011.

By surveying experts in research, industry, service and the public sector, the project aims to determine the scope of existing policies and programs aimed at funding technology and market-based innovation. The survey will investigate regional, domestic and EU-wide measures. Ultimately, its goal is to identify which technologies on the market are innovative and sustainable, and to what extent policy could encourage their adoption, especially by SMEs.

The project action plan includes the following objectives:

- to identify and overcome barriers to development in the transport and logistics sector
- to help prioritize actions and thereby boost efficiency in the transport and logistics sector, and to secure innovation and market-based growth in Europe in the long term
- to establish a standard system of professional training for employees in the transport sector, to ensure uniform quality to the benefit of clients and consumers
- to boost the efficiency of existing modes of transport through intelligent cooperation between involved parties.



The POSMETRANS project is a major step forward in establishing a common European transport system. As well as this, one of its main aims is to make funding programs more accessible to SMEs.

Prof. Dr. Norbert Höptner
Dr. rer. nat. Jonathan Loeffler
Robert Gohla
Dr. Aude Pélissier-Schecker
Steinbeis-Europa-Zentrum
Karlsruhe
su1217@stw.de

www.stw.de → our experts

Funding for transport technologies

As part of the Seventh Framework Programme, the EU is providing € 4.16 billion in funding for the area of transport. The aim of this funding is to encourage a sustainable approach to the environment, resources, safety and public health, while moving towards the goal of creating a safer, integrated, "green" and "intelligent" pan-European transport system. The main areas in which funding is available are:

Aeronautics and air transport

- Making air transport more environmentally friendly
- Improving the efficient use of time
- Customer satisfaction and safety
- Improving cost-effectiveness
- Protecting aircraft and passengers
- Future air transport

Sustainable surface transport

- Making surface transport more environmentally friendly

- Shifting modes of transport and spreading the load on transport corridors
- Sustainable urban mobility
- Improving safety
- Improving competitiveness
- Air transport of the future

Rail

- Safety
- Intelligent mobility
- Environmental considerations
- Innovative materials and production methods

Water transport

- Safe, efficient, sustainable waterways
- A competitive European maritime industry
- Management of changing trade partnerships

The Steinbeis-Europa-Zentrum gives advice on funding in these areas, and supports enterprises in the proposal bidding and in finding new project partners.

Steinbeis Compliance and Integrity Monitoring

Measurable and comparable compliance

When companies become implicated in affairs such as white-collar crime, events are followed closely by the general public and courts are stricter than ever in meting out punishment. There have been growing calls to arrest managers, board members and compliance workers under civil and criminal law. Firms increasingly have to prove to courts, shareholders and business partners that they have effective and up-to-date compliance mechanisms in place. The School of Governance, Risk & Compliance at Steinbeis University Berlin has now developed a monitoring method that allows companies to measure and compare compliance procedures.

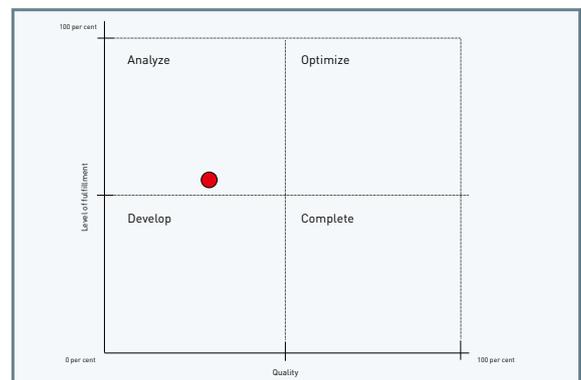
Professional compliance management systems span all areas of compliance management, from task formulation to managerial responsibility and compliance organization. The scale and nature of systems depends largely on the size of business and sector of industry. In German areas of jurisdiction, there are (still) few legal guidelines on organizing compliance, making the task of implementing compliance correctly and comprehensively all the more challenging.

The School of Governance, Risk & Compliance (School GRC) at Steinbeis University Berlin now offers medium-sized and larger companies a monitoring procedure to evaluate existing compliance processes without third-party input. This promotes interest within companies in developing compliance management systems and encourages people to assess how likely measures are to address the right compliance issues. The aim is to supply companies with made-to-measure instruments to fight corruption and knowledge loss – and demonstrate that management is doing a professional job. This monitoring technique also makes it possible to (re-)evaluate proprietary compliance systems in an objective manner. Simultaneously, firms can make industry comparisons and see the compliance level of competitors.

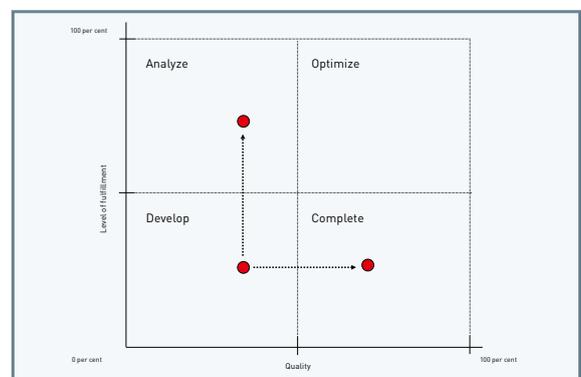
Steinbeis Compliance Monitoring focuses on the evaluation of existing compliance procedures, implementation, follow-up processes, the ability to react to non-compliance incidents, and sustainability. Following a stocktaking exercise looking at company procedures, evaluation criteria and suit-

ability testing, the findings are discussed with compliance managers. This ensures that the evaluation is based closely on business needs and takes into account the idiosyncrasies of the business. The evaluated firm receives weighted averages plotted on a diagram. These are expressed in terms of degree of completeness and quality.

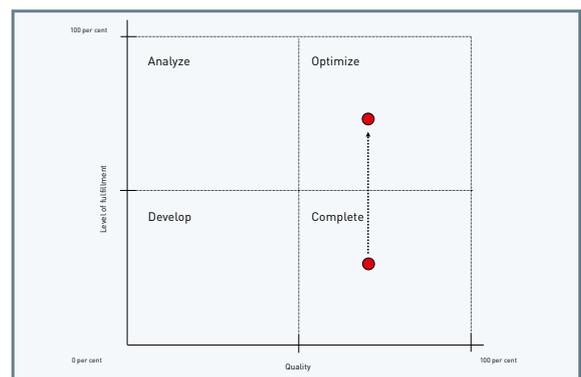
The diagram tells the company how comprehensive and professional its compliance management procedures are. A suitable and satisfactory result would lie in the "Optimize" quadrant. If the result is in the "Analyze" quadrant, compliance processes are receiving above-average attention but not enough is being done to implement them convincingly or (especially) efficiently. If compliance monitoring results in a score in the "Develop" quadrant, then the compliance system needs to be reorganized, implemented properly within the company or rendered more sustainable as a compliance management system. A score in the "Complete" quadrant shows that the company is still busy setting up compliance processes, but



The four boxes on the diagram are used to plot the company's position in terms of compliance.



Compliance procedures must become more effective! Even improving the quality of processes would result in a better compliance score.



More corrective measures would potentially bring procedures to an optimum level.

what has been undertaken until now is already good, if not excellent.

If necessary, staff can be surveyed after compliance monitoring using the Steinbeis Integrity Monitoring questionnaire, which looks at commitment to compliance procedures and implementation. The emphasis here lies in assessing the attitudes of people at the company, indicating the nature of company culture and underlying company values. Both instruments were developed by the School GRC in cooperation with the scientific director of the Corporate Integrity Management Steinbeis Transfer Institute, Prof. Dr. Kai-D. Bussmann. The expertise at School GRC is rooted in skills of a forensic, economic, legal and mathematical nature, as well as empirical research.

The Steinbeis Compliance and Integrity Monitor also undergoes continuous improvements and is updated in keeping with insights from scientific disciplines, as well as legal developments relating to prevailing laws and statutes. Organizing compliance procedures properly takes regular monitoring and assessment to minimize longer-term risk, protect companies preemptively from improprieties and eliminate lack of knowledge among employees.

Christiane Hahn
School of Governance Risk & Compliance
at Steinbeis University Berlin
Berlin
su1142@stw.de
 www.stw.de → our experts

The compliance management system

A suitable compliance management system, geared to existing recognized standards, should be based on the following strategic aims:

- **Early risk detection:** Identify risks pertinent to compliance before laws are broken.
- **Prevention:** Avoid the violation of laws or guidelines and create awareness among staff and key business partners.
- **Damage limitation:** Earlier detection of existing and potential violations.
- **Compliance-conducive corporate culture:** Only senior management can promote this and lead by example.
- **Sustainability:** All interest groups affecting a company's business processes must be taken into consideration and involved.

The 3rd Stuttgart Competence Day on December 1, 2010

Personality in the spotlight

Over the past thirty years, the world of education has focused strongly on teaching and applying knowledge in real-life situations. But now, we find ourselves having to re-evaluate this approach: the German economy needs to maintain its position in a future filled with uncertainty. The issues this raises will be addressed at Steinbeis University Berlin's third Stuttgart Competence Day, to be held at the Stuttgart "Haus der Wirtschaft" (House of Commerce) on December 1, 2010. This year's theme: "Competence. Personality. Education."

The innovations of today can be long obsolete by tomorrow. So staying innovative – wanting to change things and being able to, even radically – is a key competitive differentiator. We can no longer rely solely on an elite educated in the ways of yesterday. We need people who are able to take decisive action, manage themselves and react creatively in open-ended, unpredictable, complex and fast-moving situations – and, ultimately, solve unfamiliar problems. But how can people make the right decisions when there is no standard solution? It all comes

down to the values which guide our actions – like the points system on a railway, to use Max Weber's famous analogy.

The 2010 Stuttgart Competence Day is being staged by Steinbeis University Berlin for the third time. This annual event looks at competence from a variety of angles. The day's patron is Prof. Dr. Annette Schavan, the Federal Minister for Education and Research. Attendance is free, although registration is required.

Competence.
Personality.
Education.



To see the latest schedule of events and register online, visit www.stuttgarter-kompetenztag.de and click on English at the top of the page.

Steinbeis-Stiftung
Stuttgart
anja.reinhardt@stw.de

Steinbeis Transfer Center sets up ecological network

Assisted growth: resource management in crop cultivation

The systematic cultivation of crops began over 12,000 years ago, laying the foundations of agriculture – necessary to support growing populations. But it took another 7000 years before irrigation systems were developed in response to constant water shortages. Initial methods were primitive, albeit revolutionary for their time. By channeling water from distant sources, pumping it to higher ground and storing it there, agriculture could be developed on a larger scale. In many parts of the world, artificial irrigation is a prerequisite for crop cultivation, so it plays an essential role in feeding the world's growing population. Even in Germany, many areas of agriculture would not be possible without artificial irrigation. The Müllheim-based Steinbeis Transfer Center for Identification Media & Identification Management has been addressing this and related issues for over two years.

Especially in Germany, irrigation holds enormous potential to save money. Countries like Israel, that rely heavily on irrigation, have already developed advanced technology tailored to local conditions. But in Germany, most crops are irrigated naturally – by rain. However, most rainwater evaporates or drains away and thus does not reach crops.

Although drip irrigation systems now allow controlled irrigation of crops, they are not used widely enough and are not tailored to the precise needs of farmers in Central Europe. Last year, the Steinbeis Transfer Center for Identification Media & Identification Management set up a network of SMEs and end users to address this problem. The Federal Ministry of Economics and Technology is funding the network as part of its national ZIM-NEMO program. The name of the network is "Assisted Growth – resource management in controlled crop cultivation". Led by the experts at the Steinbeis Transfer Center, the network includes five technology companies, one distributor, two end users, and a scientific advisory board made up of university experts. The operation of the network is managed by an experienced consulting partner.

The Steinbeis Transfer Center for Identification Media & Identification Management has been focusing on green technology for some time, especially developing technologies and strategies for using resources in crop cultivation. The project is co-managed by Armin

Bäuerle, head of the Transfer Center, and Ronald Maier, network manager at T+T Technologie- und InnovationsConsult GmbH.

The launch phase of the network focused on developing a handful of initial ideas into marketable products. The QUBE-Box is an agricultural logistics system that allows nutrients to be directly distributed over fields in the form of granules or powder. This system has already undergone live testing in a related area: wood pellets for heating and electricity generation. In the future, the QUBE-Box will be used in fields to deliver nutrients for direct addition to the water in drip irrigation systems. Individually controlled irrigation makes it possible to deliver nutrients directly, saving resources via precise metering.

The FAN flipflow, an intelligent valve-based water distribution system with an independent control unit, is currently undergoing live tests. FAN flipflow was originally developed as an irrigation system for frost protection. During frosty weather, plants need extra irrigation to prevent ice damage. In the past, fields were watered manually by farmers switching irrigation systems on and off. With FAN flipflow, this happens automatically and is governed by sensors – even several fields can be automatically irrigated in this way. Finally, the Nutrigator – currently being designed by the network – will help farmers reap even more benefits from these irrigation products. Modular in design, the Nutrigator

will make it possible to control complex irrigation systems and up to entire chains of irrigation systems.

The Nutrigator is all about "nutrification" – delivering nutrients to crops via irrigation. Using the QUBE-Box for nutrients in granular and paste form, plus premixed containers for liquids, nutrients can be precisely metered and delivered to crops via irrigation in a controlled manner. In the future, the quantity and delivery method of water and fertilizers needs to be tailored to the type of crop and the size of the area under cultivation. Farmers can manually configure the control software, allowing them to take full control of automatic nutrification and irrigation.

If long term forecasts are right, water is set to become an even more precious resource in Central Europe. Yet especially when it comes to agricultural irrigation, not sufficient technologies have been developed to ensure a sustainable and efficient use of water – and the few technologies that have are hardly in widespread use. All the more reason for the Assisted Growth network to dedicate itself to solving this problem.

Armin Bäuerle
Steinbeis Transfer Center for Identification
Media & Identification Management
Müllheim
su0584@stw.de

 www.stw.de → our experts



Photo: © NETAFIM/Reber GmbH

The Assisted Growth network

Even before the network was founded, two end users were already brought on board: ambitious young farmer **Michael Fuchs**, and the island of **Mainau**, a garden island on Lake Constance in south-west Germany. nu-systems became the network's new distributor in 2010, and will be responsible for marketing the products developed by the network.

The Assisted Growth network is based in the Markgräflerland region in south-west Germany (near the city of Freiburg), where most of the companies also have their headquarters. Just two of the network partners are

located outside this region. **A+S Aktuatorik und Sensorik** in Prenzlau is responsible for developing and manufacturing the project's electronic components and control systems, while **GS Form- und Stanzteile** (based in Villingen-Schwenningen) has created a new business division (GS Identtechnik) dedicated to communication technology as part of the network. Its job is to develop technologies which will enable central and remote control of irrigation systems. The Steinbeis Transfer Center for Identification Media & Identification Management is developing the software to do this, in partnership with **Computer-Hirsch**, using special greenhouse

software licensed by Steinbeis through the Weihenstephan-Triesdorf University of Applied Sciences. Plastics processor **Rieger Kunststoff-Verarbeitungs-GmbH** and **GIEMA** are responsible for constructing the system. Rieger is specialized in plastics processing and is currently developing a systems which uses hydraulic methods, thus avoiding expensive electronics. GIEMA is specialized in plant construction and metering and distribution technology, and is applying its expertise in paint and plaster metering to the addition of nutrients in liquid, paste and granular form.



Foto: © iStockphoto.com/Diane White Rosier

SHB student investigates options for telemetric monitoring of diabetes patients

A helping hand from telemetry

Chronic conditions such as diabetes are among the main cost drivers in the German health care sector. As a result, an increasing number of health insurance companies and health care providers are setting up health care management initiatives in an attempt to lower these costs. Peter Ewig is a product manager for AnyCare, a Stuttgart-based health care company. As part of his MBA studies with the School of International Business and Entrepreneurship at Steinbeis University Berlin, he launched and managed a project entitled "Using telemedicine in health care management for diabetics".

Diabetes, especially Type 2 (adult-onset) diabetes, is a lifestyle disease. Alongside a suspected genetic predisposition, the main causes of this condition are poor diet and insufficient exercise. Current estimates indicate that 8–10 % of Germans have diabetes, mostly Type 2. Projections suggest that diabetes and resultant comorbid conditions are responsible for annual costs of € 22–30 billion in Germany alone – a figure which is set to grow.

Diabetes is just one of a number of chronic conditions that are creating ever-increasing costs in the health care sector as they become more widespread in the population. The introduction of the 2009 German Health Care Fund established a new basis for the financing of statutory health insurance. Instead of simply bearing medical costs, health insurance companies are now supposed to play a role in managing the health of their customers. One way to do this is by setting

up (or buying) health care management systems. "Health care management" refers to approaches that attempt to provide patients with the appropriate level of health care resources, or to inform them of these resources, based on economic considerations.

Technological progress has had a positive impact on health care management initiatives, especially telemedicine. It is now possible to provide telemetric services to a large

number of patients using relatively simple telemetric applications. For instance, in patients with heart failure, weight gain caused by increased water retention indicates a deterioration in the patient's condition. But with daily weight monitoring using a set of telemetric scales, it is now possible to detect this at an early stage, thus avoiding expensive hospital stays. Telemetric monitoring and response is normally carried out by a medical services center on behalf of the insurance company, or by a health care provider.

Chronic conditions like diabetes are ideal candidates for telemonitoring. With this in mind, AnyCare assigned Peter Ewig a project entitled "Using telemedicine in health care management for diabetics", to be completed as part of his MBA at Steinbeis University Berlin. The aim of the project was to develop a framework and potential products which would allow telemetric monitoring of diabetes patients to be integrated into new or existing health care management initiatives at AnyCare.

Once the condition has progressed to a certain stage, diabetes patients have to measure and record their blood sugar level regularly. Telemetric care is based on providing these patients with devices that also transmit this data to their doctor or medical service center. All companies developing telemetric methods of this nature are currently facing the same problem: in Germany and elsewhere, there is a lack of scientific evidence pointing to the most effective method for different subgroups of diabetics (both economically and in terms of the patient's health). This unknown factor makes it very difficult for companies to develop telemetric monitoring methods for diabetics. Yet telemetric monitoring holds tremendous potential to save money in the health care sector.

The biggest savings are expected among groups of diabetics currently responsible for major costs in the health care sector, or those groups likely to cause high costs due

to a combination of factors – such as the medications they need and the stage their condition has reached. Companies who want to tap into this market segment and benefit from these potential savings should make use of a set of tools, to ensure they are able to address different aims and situations. For telemetric monitoring of diabetics, this set of tools comprises a variety of telemedical devices, diabetes training materials, digital medical records, access to a medical service center, and a network of doctors involved in the patient's monitoring. With all of this in place, it is possible to set up a six-month training program (for example) for patients with Type 2 diabetes and resultant comorbid conditions which would include telemonitoring. During the program, patients would learn about diabetes and its consequences via telephone, and a medical service center would record their blood sugar values via telemonitoring and discuss them with the patient.

If the patient's doctor is involved, the transmitted blood sugar values could confirm two things: a) that the patient is adhering to the treatment, and b) that the treatment is working. This approach aims to stop the condition from progressing to a more advanced stage – thus preventing costs from ballooning – by improving the patient's ability to manage their condition. Round-robin methods involving the patient, their doctor and the medical service center can be especially effective.

Due to the amount of technology involved, the cost-benefit ratio should always be kept in mind when it comes to telemetric monitoring of diabetics. Ultimately, monitoring programs will only become an established part of the statutory health insurance market if they pay for themselves (by compensating for the cost of monitoring through savings). Despite this, it is also important to ensure that as well as saving costs, telemedicine does not lead to a deterioration in the level of care provided to patients. It is important that patients do not feel that they

are being discriminated against or even "checked up on". As a result, programs of this kind need to be assessed not just in economic terms, but also from the patient's perspective. The main recommendation in Peter Ewig's MBA project is that AnyCare should try to gain as much experience as possible in telemetric monitoring of diabetics, as quickly as possible. In fact, AnyCare has already taken its first steps: AnyCare TeleMed Diabetes, the first system for telemetric monitoring of diabetics, was launched at the end of 2009.

AnyCare GmbH

AnyCare GmbH was founded in 2000 as a subsidiary of Thieme, a medical publisher founded over 100 years ago, and ViaMed, a medical services company. Together, ViaMed and Thieme provide a solid, unique foundation for implementing high quality measures for patient monitoring, managed care, disease and health management, and prevention programs. At AnyCare, doctors, psychologists, health economists and experts from different health care professions work together to improve quality, transparency and efficiency for the company's clients in the health care sector.

AnyCare offers individually tailored solutions to statutory and private health insurers, hospitals, medical practices, partners in industry, and patients.

Patricia Mezger
School of International Business and Entrepreneurship at Steinbeis University Berlin
Berlin/Herrenberg
su1249@stw.de

 www.stw.de → our experts

Steinbeis develops mediation standards with EU partners

Successfully solving intercultural conflicts

As economies become increasingly international, international partnerships and global trade are not the only things on the rise – employees and teams are also becoming increasingly culturally diverse. Occasionally, this can lead to conflicts. EU Directive 2008/52/EG acknowledges the complexity of these types of intercultural disputes and suggests mediation as an appropriate method to resolve them. Since 2009, the Steinbeis Consulting Center for Mediation of Business and its European partners have been developing new standards and methods for resolving international legal disputes through mediation, as part of the EU-funded Leonardo da Vinci program.



Photo: © iStockphoto.com/Carmen Martinez Banus

The EU Mediation Directive (2008/52/EG) calls on every EU member state to legally regulate the mediation of international civil disputes under its jurisdiction. The deadline for the implementation of this directive is May 2011. The new directive will make it possible to resolve international legal disputes – such as disagreements between suppliers and customers, R&D partners or claims for compensation – more quickly, effectively and economically than is currently possible using conventional litigation methods. As studies have shown, conflicts both between and within companies can have a paralyzing, protracting and impairing effect on cooperation. It can also dent corporate image and cost a lot of money.

The German Federal Ministry of Justice has now drafted a bill to regulate this type of mediation in Germany for the first time, finally recognizing alternative dispute-solving methods other than conventional lawsuits.

This central focus of the new EU directive – the resolution of international legal disputes – also involves the Steinbeis Consulting Center for Mediation of Business, which has offices in Leipzig, Stuttgart, Vienna and Budapest. A number of other partners in Germany, Italy and Poland are also involved in the project. These are specialized in mediation and intercultural disputes. International legal conflicts are not just complex in formal and legal terms, they also involve challenging cultural considerations and can be exacerbated

by different languages, behavioral and working patterns, values and communication styles.

One aim of the EU-funded project is to develop training and teaching concepts for mediators of intercultural disputes. These should help them deal more elegantly with difficult situations, mediate successfully and identify mutually acceptable solutions. To do this, the project partners are investigating the nature of intercultural disputes, including conflicts within companies or international teams. To do justice to the different cultures and nationalities involved in international disputes, mediators generally co-mediate in pairs or teams – so that the make-up of the mediation team reflects the different cultures involved. The project partners are developing special methods for this form of co-mediation.

The methods developed in this project are not only of benefit to mediators involved in dispute resolution. They are also a good basis for identifying potential areas of conflict at an early stage and developing preventative strategies, so as to preempt disputes and avoid the negative effects that they inevitably bring.

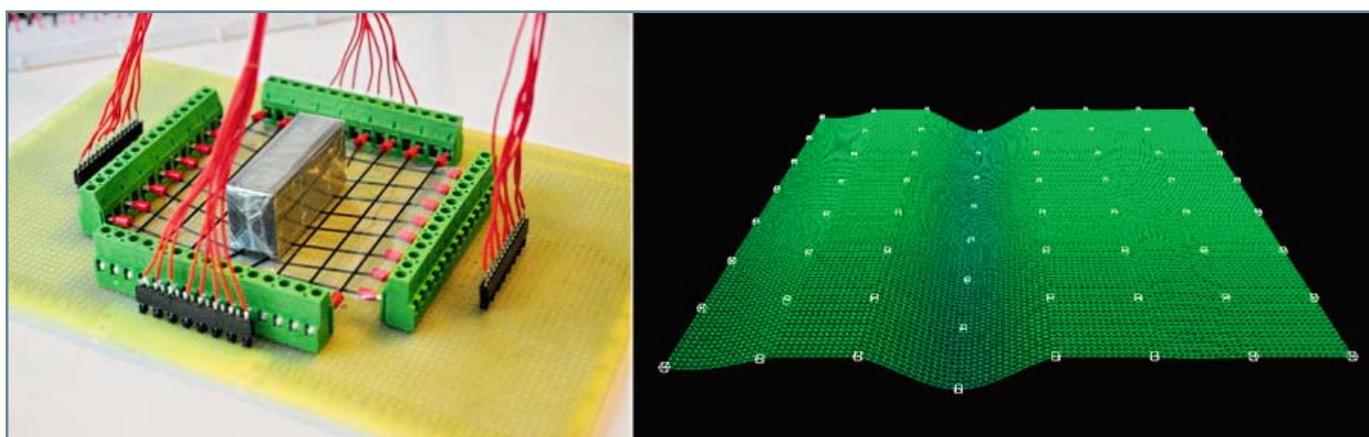
Bernhard Böhm
Dr. Gernot Barth
Steinbeis Consulting Center for Mediation
of Business
Leipzig
su0941@stw.de

 www.stw.de → our experts

Measuring stressed surfaces in 3D

A measuring system made out of plastic fibers

By developing and using innovative materials, researchers at the Steinbeis Innovation Center for Application-Oriented Material, Production and Process Technology have successfully created a novel measuring system with hitherto unforeseen properties. The secret: extrinsically conductive plastic fibers. In partnership with the Zwickau-based firm Sächsisches Metall Zentrum, the Steinbeis experts also equipped the new measuring system to share data wirelessly. A specially designed computer program then displays the measurements in 3D. This innovative measuring system has potential applications in ergonomics, mechanical and plant engineering, as well as automotive industry.



A surface under mechanical stress being measured (left) and the resulting 3D representation

Weight-saving materials are in high demand in industry – especially in automotive and aerospace engineering. As such, these materials – especially plastics – have to withstand an increasingly wide range of conditions, which means companies now require special new measuring systems, techniques and equipment for these materials. As the industry currently lacks the right tools to measure local stress in plastic components which are stretched, deformed or subject to mechanical stress, developing measuring equipment made from these materials is a priority.

As part of a research project sponsored by the German Federation of Industrial Research Associations, the Steinbeis Innovation Center for Application-Oriented Material, Production and Process Technology joined forces with Sächsische Metall Zentrum to develop a 3D static and dynamic measuring system using extrinsically conductive plastic fibers.

Extrinsic conductivity (extrinsic = from outside) refers to the proportion of a material's conductivity that is due to the introduction of foreign atoms into its crystal lattice. (Source: Wikipedia)

The measuring system consists of a series of extrinsically conductive plastic fibers which can be integrated into textiles. The electrical resistance of the fibers varies depending on how they are bent. This information is recorded by a data capture unit, then processed and visualized in 3D by special software – thus showing the level of mechanical stress.

A tubular version of this measuring system could conceivably be used to directly measure people's feet and record gait during running. This would have a variety of useful applications, such as measuring how well shoes fit and recording foot positions before, during and after sporting activity.

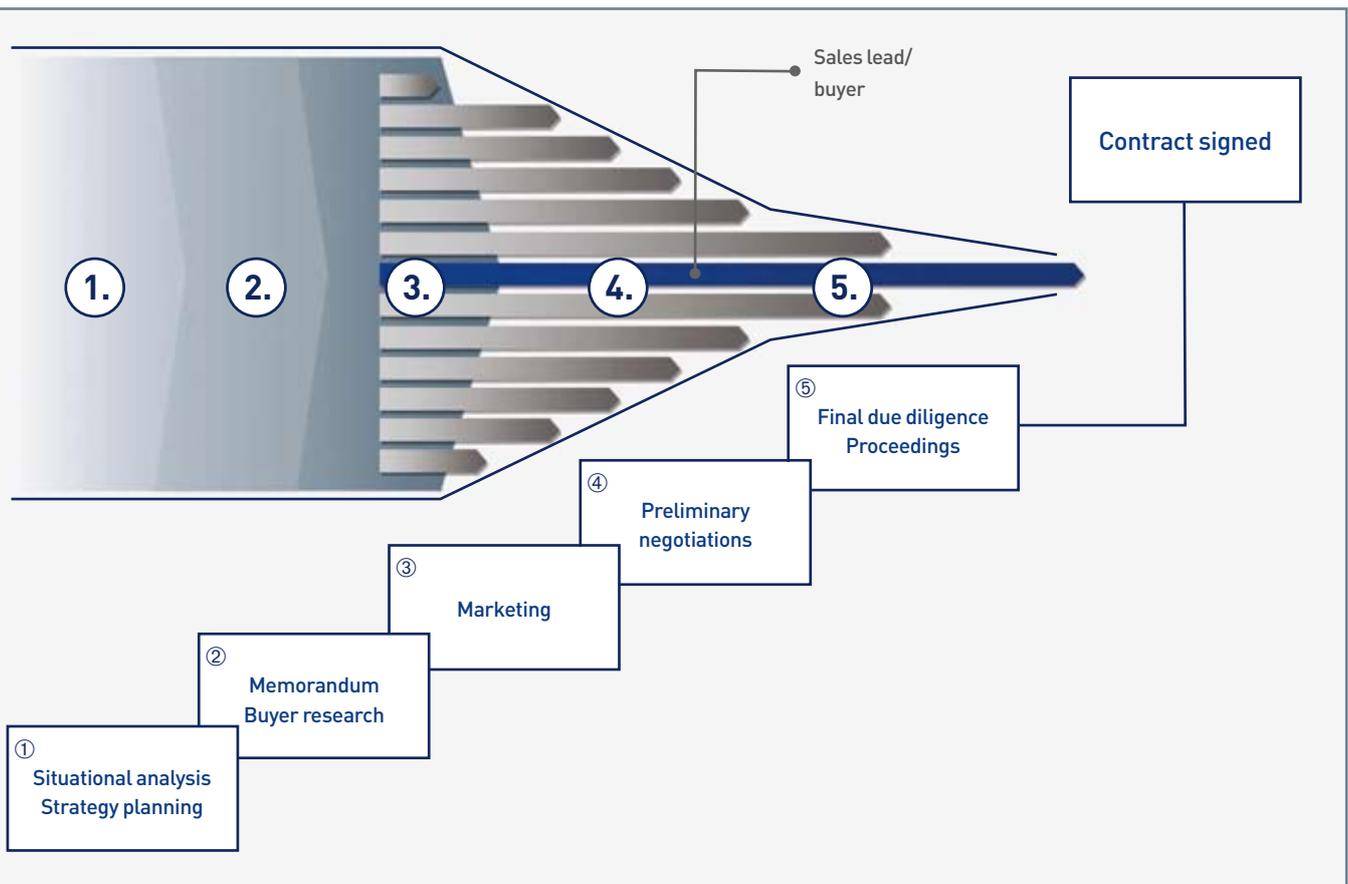
Matthias Neubert
Anjum Saleem
Nico Herbig
Robert Meichsner
Alexandru Söver
Prof. Dr.-Ing. Lars Frormann
Steinbeis Innovation Center for Application-Oriented Material, Production and Process Technology
Zwickau
su1145@stw.de

 www.stw.de → our experts

Steinbeis helps Metabo sell its production facilities in Meppen

Selling a business successfully

When larger companies are forced to close down a factory for strategic reasons, jobs are lost and product supplies and quality go through a time of uncertainty. It does not have to be this way, as Steinbeis Consulting Mergers & Acquisitions showed on a project for Metabo, which had earmarked a factory in Meppen for closure. The experts found a buyer able to offer the factory good long-term prospects and save around 60 jobs. The buyer, a member of the Purkart group of companies, took over the factory in July.



The systematic selling process according to M&A

As part of the strategic realignment, Metabo had announced in late 2009 that work at the factory in Meppen was to be halted and the factory closed. "It was a key strategic move, to focus on production in Nürtingen and Shanghai," explains Horst W. Garbrecht, Metabo CEO. Metabo still felt a sense of commitment toward the employees at the site and was keen to help them make a transition. But there was also a risk that once the factory had been closed, operations would have to be switched quickly to new suppliers and this could cause production, supply and quality problems with products being kept in-house.

It was at this point that Metabo turned to Steinbeis Consulting Mergers & Acquisitions GmbH (SMA). Its aim was to find an investor as soon as possible despite difficulties in the market – the economic crisis had led to a drop in metal processing sales and overcapacity. The investor should be in a position to scale down production in the medium term and rebuild it through its own business. "It was no mean task," says Andres Georgiadis, CFO at Metabo.

SMA took a systematic approach to the M&A process, from the situational analysis to the

signing of the contract. Following a comprehensive business and situational analysis, looking at the weaknesses and potential of the factory, a sales package was pulled together. Next, the Steinbeis experts carried out market research and identified around 300 potential buyers and investors in Germany and neighboring countries. Each was written to, followed up by a telephone call to highlight the investment opportunity. It was a long-winded process but it resulted in a shortlist of 25 potential buyers. A confidentiality agreement was signed and the leads were shown around the factory to assess the

level of potential and mull over future plans.

There then followed several rounds of talks and negotiations, resulting in two serious contenders for the sale. Both went through due diligence proceedings. Parallel to this detailed negotiations were held on take-over terms and contractual arrangements. As the site was to be sold as part of an asset deal, a comprehensive set of agreements was needed, over and above the sales contract.

Parallel final negotiations, right down to detailed contractual talks with several investors, are especially important when the seller is under time pressure and thus not in a position to start the selling process all over again if negotiations break down. Under these circumstances, the seller could "have its arm twisted". Further, especially with complex contracts, the "devil lies in the detail". Michael Pels Leusden, who headed up the project at SMA: "To achieve the best terms for the seller, we generally recommend talks with several parties rather than putting all your money on one horse."

The complex parallel approach meant that Metabo had two excellently matched investors to choose from. The entire legally binding contract was negotiated to completion with both parties. Both intended to keep running the factory on a smaller scale, only along slightly different lines.

"The fact that the new owner wanted to keep on as many of the people as possible, whose jobs were otherwise threatened, was key to Metabo in choosing the right buyer," emphasizes Horst W. Garbrecht. The Metabo decision finally came down in favor of MP System GmbH, a member of the Purkart group of companies which also includes Purkart Systemkomponenten GmbH & Co. KG from near the Czech border. The company considered the site in Meppen a good fit with the rest of its portfolio.



Purkart specializes in the efficient processing and finishing of metals. One of its core strengths lies in the manufacture of ready-to-mount assembly modules for the automotive industry, construction industry and sectors such as air-conditioning, printing machines and hospital equipment. Purkart was founded in 1995 and has since grown to 190 employees. "Meppen fulfills all the prerequisites for us to expand further in our core business: metal processing. We were won over in particular by the experience and skills of the workers and the modern facilities," says Mike Purkart, managing director at MP System GmbH.

The company has also acquired the license for a brand called Elektra Beckum, which enjoys a strong tradition in the local area. Purkart plans to continue selling welding equipment, wood-splitting machines and jigsaws for firewood under the brand name, which Metabo dropped from its range at the beginning of the year. "We could also envisage branching out with the new brand into new, expanding sectors such as the solar industry," says Mike Purkart. Under the agreement, the company is not, however, allowed to make products that clash with the Metabo range. Another core activity for Purkart is supplying sheet metal parts to Metabo. The Metabo product range was unaffected by the change in owners.

metabo®

Metabo's Andres Georgiadis sums up: "From the beginning, SMA did a sterling job. We were delighted with the solution as it saved around 60 jobs in times of economic difficulty and provided us with a new supplier and tenant."

Steinbeis Consulting Mergers & Acquisitions GmbH

Steinbeis Consulting Mergers & Acquisitions GmbH (SMA) offers a comprehensive portfolio of services relating to corporate transactions, with an emphasis on:

- The sale of companies
- Company acquisitions
- Succession planning
- Selling companies during a crisis
- Raising equity/private equity
- Company refinancing
- Company evaluations

Michael Pels Leusden
Steinbeis Consulting Mergers & Acquisitions
GmbH
Mannheim
su1297@stw.de

 www.stw.de → our experts

Steinbeis Transfer Center breaks new ground in business games

School, meet company

Political debates over education are increasingly turning the spotlight on how schools and companies can work together to mutual benefit. Discussions on how students leave school unprepared for their professions, the dropout rate and graduates' lacking sense of direction indicate just how important it is for students to figure out what's next – while still in school. Since this did not previously fall within the schools' primary mandate, innovative ideas and support services need to come from other sources. This is what prompted the Steinbeis Transfer Center Business Development at the University of Pforzheim to develop business games for high school students. The Center is breaking new ground by offering this new instructional and learning tool to blended teams of trainees and high school students.

Business administration games help teenagers learn about the world of business in a fun environment. At the same time, these games impart experience and knowledge while encouraging young people to think and act for themselves. This is a good fit with what companies require – companies who are looking for opportunities to bring top talent on board. As a result, they can nurture teenagers' interest in their company at an early stage. Business games that blend teams of high school students and apprentices help shape a sense of professional direction while identifying young people with plenty of potential. Content forms the cornerstone of every game, and all share three objectives:

- Working together across disciplines and types of schools: Interdisciplinary work is

an integral part of today's world of employment. High school students and apprentices play on the same team – they don't compete against each other. How various team members' strengths come together makes up the flow of the business game.

- Honing critical thinking skills: The highly sought-after specialists of tomorrow will need to be able to synthesize information from complex relationships in business.
- Bringing entrepreneurial thinking to life: Every company wants employees who are self-starters, take ownership, think about their actions, and do their part to drive the business. This behavior can be groomed during high school and apprenticeship programs.

Every team of young entrepreneurs is tasked with positioning a company against its competitors in the market; in the next stage, the team must navigate its company as successfully as possible through four simulated years of business. In one business game day, teams of six young entrepreneurs play against up to nine other teams. Market competition, economic activity and the effects of the teams' decisions are depicted via computer simulation.

Prof. Dr. Barbara Burkhardt-Reich
Steinbeis Transfer Center Business
Development
Pforzheim
su0587@stw.de

 www.stw.de → our experts

The Northern Black Forest Cup

The idea of a business game featuring blended teams of high school students and apprentices debuted in a pilot project in association with the German city of Mühlacker. Snapped up by the Northern Black Forest economic development association, the project moved onto a larger stage. 2010 is the third year of the Northern Black Forest Cup (Nordschwarzwald Cup) competition.

Although the high school students and apprentices had to form teams and cope with the challenges of a business game on a Saturday, the atmosphere of the four rounds of competition remained laid-back.

What do the high school students and apprentices experience during business games like this? One participant summarized: "The material prizes we could win were nothing compared to the experiences we gained and

the fun we had. [...] Over the course of the day, we realized again and again how 'serious' and real this all had become. We'd been talking about 'our money' the entire time, or 'all those bikes lying around in the warehouse'. [...] Maybe not tonight, but maybe tomorrow we'll wake up and realize that considering we knew nothing about business administration, balance sheets and assets, we did really well!"

Young founders make waves in Baden-Württemberg

Another success for “Youth Start-Ups”

There are now lots of school competitions, and people seem to be constantly thinking up new ones. But it is rare for a school competition to be as successful as the “Youth Start-Ups” project, which is run by the Steinbeis Innovation Center at Pforzheim University and sponsored by the Federal Ministry of Education and Research. “Youth Start-Ups” has become the only business-based competition to be added to a national list of core school competitions by the KMK (the Standing Conference of the Ministers of Education and Cultural Affairs of the German Federal States).

The number of active participants in the 2009/10 round of the competition was 3,593. The Steinbeis Foundation has supported the competition from the outset by sponsoring the main prize. Once again this year, the winners will be taken on a trip to the United States, where a unique study trip awaits them in Silicon Valley.

The theme of the competition is “Business in schools”. Students found virtual companies based on innovations. The overall aim of the Youth Start-Ups project is to engender interest among young people in entrepreneurship – as people willing to take entrepreneurial action will play an increasingly central role in the working environment of tomorrow. Affluence and employment will not be created by knowledge alone, but by the entrepreneurial application of innovation. The Youth Start-Ups project can train young people to think and act entrepreneurially, arming them with skills for their future careers.

The Youth Start-Ups competition is open to apprentices and young adults in their final 2–3 years of secondary school (or about to start an apprenticeship). The typical age range is 16–21. Participants are encouraged to teach themselves about how to start and developing a business.

The first stages of the competition involve drafting a convincing business plan for the innovative product, trading concept or service. This business plan lays the foundations for the second stage: the business simulation. Now participants pit their wits in the market against virtual competitors. Business decisions have to be made as students experience peaks and troughs and witness the effect their decisions have on the company. The best teams from both stages of the competition make it to the final.



A Steinbeis cooperation with educational institutions in seven European countries

BACKBONE: e-learning for modern language teaching

BACKBONE is an EU-funded project involving partners in Germany, France, the UK, Ireland, Poland, Spain and Turkey. A Moodle-based e-learning platform offers new e-learning and blended learning opportunities to schools, universities and vocational institutions. The main pedagogic principle behind BACKBONE is Content and Language Integrated Learning (CLIL) in a constructivist learning environment. The Steinbeis Transfer Center for Language Learning Media is one of two German partners in the project.



The BACKBONE search software provides access to exercises and learning material.

Across Europe, subjects like history and biology are increasingly taught not in the country's native language, but in a second language – frequently English. This approach is known as bilingual education and forms part of the pedagogic concept of Content and Language Integrated Learning (CLIL). In this form of teaching, the main focus is on the subject at hand; the second language is merely used as the medium of instruction. As a result, students learn the second language in an authentic context, through real communication.

The CLIL method holds huge potential. It can help improve general language and communication skills, help students become more

that aims to integrate content and language learning. Here, e-learning plays a major strategic role. The CLIL resources developed as part of the BACKBONE project include video interviews in English, German, French, Polish, Spanish, Turkish and ELF (English as a Lingua Franca, as spoken by continental Europeans). Each language is represented by 25 to 50 interviews. The interviews have an average length of 10 minutes. They have been transcribed and pedagogically annotated with regard to thematic and linguistic features. The project team also developed language learning modules and instructions for communication exercises on certain subjects.

confident in using a second language, and boost their communication skills in relation to specific subject areas. CLIL is not just used to teach subjects bilingually in schools; it is also used in general language teaching, especially when studying a country, its culture and literature.

The learning materials and exercises made available to teachers and students are crucial to the success of any kind of approach

The BACKBONE search interface developed for the project provides free access to the interviews and learning materials. It supports pedagogically motivated search processes with thematic and linguistic categories as well as lexical searches with words and phrases. Sample courses based on Moodle have been tested in real learning situations and have demonstrated how BACKBONE search results can be used for individual or collaborative learning activities in an e-learning environment with web tools such as forums, chats or wikis. The tools developed in the project also include software for the transcription of video and audio recordings, for the thematic and linguistic annotation of transcripts, and the online management of learning resources. These BACKBONE tools facilitate a "do it yourself" approach empowering teachers to collaborate in the creation and pedagogical deployment of authentic content for web-based language learning and teaching. The software is made available under an open-source license.

Dr. Petra Hoffstaedter-Kohn
Steinbeis Transfer Center for Language Media
Tübingen
su0423@stw.de

www.stw.de → our experts

Corporate or brand identity as a springboard for corporate storytelling

The power of stories

People love stories. The media does, too. Two good reasons to leverage the power of storytelling in corporate communications. To help companies tell their own stories, the IMD Institute for Branding and Design (part of the Steinbeis Transfer Center at the University of Mannheim) has developed an approach that could be described as the missing link between traditional communications and the dynamic world of Web 2.0.

In mature, saturated markets, companies need to use what they offer to distinguish themselves from the competition with razor-sharp precision. Until recently, traditional advertising was the medium of choice to achieve this. Companies would formulate a "reason why," a "unique selling proposition" whenever possible, a "consumer benefit", plus additional benefits – and then find a suitable "tone of voice." This style of advertising shaped the short-winded stories that were "pushed" through selected channels into the market.

This "controlled release" in communications no longer reflects how companies actually communicate. Today's communications are, at the very least, a conversation. Even worse: With the invention of blogs, communities and other online social media, communication can happen without the company doing anything – or even knowing about it. Given this loss of control, leading advertising agencies are confident when they deem that advertising is dead. Now the search is on for new approaches, new ideas, new solutions.

In spending time with companies to help boost their profile and strategically realign their communications, the IMD pulled together an approach that smoothes the transition between traditional, advertising-heavy communications to a new paradigm of networked, instant communications that are easy to navigate and monitor. The approach is called "The 5 levels of activity in strategic corporate and brand communications."

This approach unifies ideas and methods regarding corporate identity (CI) that have been around since the 1970s into one strategic concept, and uses this concept as a springboard for all future corporate and brand communication activities. In the first stage of work, the IMD begins to develop a CI or brand identity by placing equal emphasis on developing a consistent look and feel – the corporate or brand design – and formulating a brand or corporate story that both creates and communicates an identity.

The brand or corporate story works as a long-term narrative and the central element that communicates the brand or corporate identity. No matter what media are used or whether one-off, short, medium or long-term communications come into play, the story acts as a thread of continuity in terms of content.

During the next two stages, the corporate brand story is dramatized for advertising purposes and properly prepared for use in a variety of separate media. In a number of projects, IMD was able to successfully prove that this approach worked.

The Steinbeis experts in Mannheim joined forces with Phoenix Solar and Wirsol Solar



to develop authentic yet inspiring corporate brand stories based on an existing CI. The solar industry is quite young, and both sales and the intensity of the competition are growing by leaps and bounds. Wirsol Solar, for example, no longer simply lists its spectrum of services; instead, the company uses new stories to illustrate the history of independence in energy supply – made possible by the sun's energy. Distilled into one slogan, the story of "solar independence" caught on in the U.S. market by playing with the country's founding and the way the U.S. perceives itself. This new, definitive look and feel – the corporate design (CD) – equips the company with a powerful instrument to manage its own brand and monitor communications across all media channels.

Equally competitive is the NGO/NPO arena. Attention, members and donors are hard-fought. The German Central Institute for

Social Issues, for instance, estimates that nearly 2,000 individual and charitable organizations conduct nationwide fundraising in a market worth billions. Here, too, IMD carried out CI and CD projects for the German wing of the UN refugee agency, Doctors Without Borders and the German Workers' Welfare Association (AWO). The "meta-level" of service and the stories it generated helped make these NGOs truly distinct:

- the German arm of Doctors Without Borders expresses its worldwide emergency services with "Human. Unconditionally"
- the German wing of the UN refugee agency has positioned itself as the "advocate for refugees on behalf of the world"
- the AWO now speaks more decidedly, and with more emotion, as "the assertive advocate for social issues in policy-making."

What's more, by integrating the corporate or brand story into CI, the 5 levels of activity in strategic corporate and brand communications provide a narrative anchor for conversations in social media and Web 2.0 – where companies have little to no control. Embedded in comprehensive CI, the corporate or brand story builds a much-needed bridge between traditional communications and the dynamic world of Web 2.0.

Prof. Axel Kolaschnik
IMD Institute for Branding and Design
(part of the Steinbeis Transfer Center
at the University of Mannheim)
Mannheim
su0027@stw.de

www.stw.de → our experts

An interview with Helmut Bayer, managing director of the Steinbeis Enterprise TQU Business GmbH

“There’s no panacea”

Mr. Bayer, Bain & Company, a management consultancy, recently reported that managers are feeling increasingly underserved by management tools. Has this approach stopped being useful?

Overall, I believe that methods and tools are there to help managers make decisions with regard to strategy, products and processes. In my experience, people don't always fully understand why they're using tools. So tools are being used just for the sake of using tools – and the context and underlying idea fall by the wayside. As a result, success doesn't materialize, and the blame falls on the tools. Today's economic constraints give us the opportunity to whittle down the number of tools while integrating really useful ones into a more holistic approach. You see, it isn't just about leveraging the right tool; it's about being able to overcome challenges.

Rankings show that benchmarking is an uncontested leader when it comes to tools. Yet a majority of managers also reported dissatisfaction with it. Sounds like a paradox – can we take this as a cry for help from managers?

Benchmarking goes hand in hand with the hope of finding the philosopher's stone. When companies use benchmarking to seek out new momentum for the business, this means a lot of work and eats up resources because you need to compare your company to others. Since many companies recoil at this investment, the results they see are superficial at best.

Bain & Company make it clear that some tools do in fact work and enjoy a high level of satisfaction – as long as they're used to full capacity. So, there's a panacea after all?



Helmut Bayer

I've been a consultant, trainer and managing director for 20 years, and I've never encountered a tool that could be called a panacea. What I can say is that less is often more when these tools are used with the consistency and continuity that they deserve.

Bernd Rindle
TQU Business GmbH
Ulm
su1103@stw.de

www.stw.de → our experts

Second iNTeg-Risk conference looks at new technologies and emerging risk

A step closer to joint European risk management

Building on the success of the first iNTeg-Risk conference in 2009, another conference was organized this year by the European Virtual Institute for Integrated Risk Management (EU-VRi), this time entitled "Dealing with multiple and interconnected emerging risks".

The long-term application and development of new technology is not just central to research and science. In business and politics there is also hope that further efficiency gains can be made. But it is often difficult to research the risks posed by new technology, so the aim is to deal with these risks together, across Europe, on a common foundation. Given the plurality of the parties involved, this goal is by no means self-evident. As a continuation of the first conference in 2009, the next event in the early summer of 2010 laid the foundations for a "European answer" to the question of which potential risks are created by the emergence of new technologies and how they should be addressed.

This is the task being tackled by a European Commission project looking at iNTeg-Risk ("Early Recognition, Monitoring and Integrated Management of Emerging, New Technology Related Risks"). The first results of the joint project are now available, including instruments such as the creation of a web-based risk atlas to capture global risks, and the Safetypedia project, a kind of wiki on safety. An evaluation of the results, and how this should be used, was the main issue discussed at the one-week conference in Stuttgart. Other events during the week focused on issues such as the measurability of risk and semantic networks. Another topic was an instrument that analyzes in-

formation on the internet to recognize the indications of new risk.

Prof. Dr.-Ing. Aleksandar Jovanovic
European Virtual Institute for Integrated Risk
Management (EU-VRi) EWIV
Stuttgart
su1167@stw.de

 www.stw.de → our experts

Steinbeis-Europa-Zentrum coordinates a consortium

A network for bio-active plant ingredients

As part of the NEMO funding module of ZIM, the Central Innovation Programme SME of the Federal Ministry of Economics and Technology, the Steinbeis-Europa-Zentrum has been granted funding to set up a network for "bio-active plant ingredients" in Baden-Württemberg. The network already has 16 members from industry, research and marketing and is aimed at promoting "bioactivity and health" in the state. The role of the Steinbeis-Europa-Zentrum since August: to coordinate the network consortium for a year, with the objective of establishing the network in Baden-Württemberg in the long term.

The network aims to improve the understanding of secondary plant compounds and their effectiveness, and to improve ingredient quality. It also aims to boost the contribution made toward scientifically proving the health benefits of secondary plant compounds. Further, by linking up research and medium-sized companies, resources and synergies should be created, adding transparency for consumers through clear communication and marketing strategies.

The Federal Ministry of Economics and Technology's ZIM scheme promotes innovation and competitiveness at small and medium-sized enterprises (SMEs), as well as among handicraft businesses and people involved in unaffiliated professions. The aim is to provide long-term support, promote growth, and safeguard and create jobs. ZIM is a national funding program open to SMEs in all areas of technology and industry, as well as research establish-

ments closely involved in or working with industry.

Anette Mack
Steinbeis-Europa-Zentrum
Stuttgart
su1216@stw.de

 www.stw.de → our experts

Steinbeis researcher awarded enterprise medal

Major recognition

The director of the Steinbeis transfer center for Geoinformation and Land Management, Prof. Dr. Martina Klärle was awarded a major prize from the State of Baden-Württemberg in July: the enterprise medal. This medal is the highest award bestowed by the Baden-Württemberg Ministry of Economics. It is awarded to people and companies in recognition of outstanding services to the regional economy.



Martina Klärle receiving the award from economics minister Ernst Pfister

"It was a really wonderful surprise. I'm thrilled that my commitment to climate protection and my contributions to rural areas is being recognized in this way," says Martina Klärle. Ms Klärle's work also sets clear signals for young girls: "Currently, only 8 per

cent of young women go into a MINT profession [Mathematics, Informatics, Natural Sciences and Technology], and 26 per cent of them do MINT studies. Nothing is more inspiring than inspirational people like you!" says Ernst Pfister, economics minister, in bestowing the award.

Professor Klärle plans to continue her work in this area. Her research project to identify the solar potential of all rooftops, which has already found its way into industry, took a major leap forward with its latest version, SUN-AREA 2.0. The professor from Frankfurt has made SUN-AREA 2.0 even more useful to businesses, so as well as showing how suitable a roof is for solar panels, it even recommends the type of equipment to go on

each roof. For every building, a profitability calculator shows the payback on any given solar panel based on current pricing models. Now, no longer does the system only calculate this for conventional uniform rooftops, it also works with special shapes such as arched or undulating roofs. Klärle's SUN-AREA project has already demonstrated that more than 20 per cent of German rooftops are suitable for solar power generation – enough to answer the entire private electricity demand.

Professor Klärle also works in other areas, not just solar energy. This year she will complete her sustainability research project "Erneuerbar KOMM!". Her work will result in a guide for local communities to identify the potential of renewable energy in their area, so it is particularly targeted at small and medium-sized communities. The guide will allow communities to calculate potential without third-party help.

Prof. Dr. Martina Klärle
Steinbeis Transfer Center for Geoinformation
and Land Management
Weikersheim
su1072@stw.de
www.stw.de → our experts

Stuttgart's "Haus der Wirtschaft" hosts 8th seminar

Modern grinding technology and microfinishing

The 8th seminar on "Modern grinding technology and microfinishing" took place at the start of the summer with around 260 attendees. The topics revolving around different aspects of grinding technology and microfinishing were presented by specialists from research and industry. The seminar was organized by Prof. Dr.-Ing. Taghi Tawakoli, head of the Steinbeis Transfer Center for Advanced Engineering Technology at Furtwangen University.

The seminar was opened by ministry representative Günther Leßnerkraus from the Baden-Württemberg Ministry of Economics, followed by a series of up-to-the-minute talks by presenters from industry and research institutes.

A defining feature of Baden-Württemberg is that it is home to the highest concentration of manufacturing companies involved

in mechanical engineering, the automotive industry and medical technology in Europe. The success of this regional economy lies not in producing cheap products, however, but products of premium quality. This high quality has been achieved by mastering the science of microfinishing and grinding technology. The scale of industry response to the seminar confirmed the level of interest in the topics and the strong expecta-

tions and requirements placed on new developments in microfinishing and grinding technology.

Prof. Dr.-Ing. Taghi Tawakoli
Steinbeis Transfer Center
Advanced Engineering Technology
Buchenbach
su0349@stw.de
www.stw.de → our experts

The 2010 Baden-Württemberg Competence Prize for Innovation and Quality Outstanding – not just in the south of the country

The 2010 Baden-Württemberg Competence Prize was presented at the "Control" trade fair to Klaus Fischer, owner/manager of the Fischer group of companies from Waldachtal and to the Igersheim-based machine maker Wittenstein alpha. Now in its third year, the prize comes under the patronage of Steinbeis and is an initiative of the Ulm-based Steinbeis enterprise TQU Group and trade fair organizer P.E. Schall. It recognizes the achievements of companies in reconciling the challenges of innovation and quality, and then translating this professionally into practice – resulting in sustainable and measurable commercial success. This year, the Mahr GmbH, a producer of production measurement technology also received a special award for business excellence.

At the ceremony, Professor Dr. Heinz Trasch, Chairman of the Steinbeis Foundation Board, explained that Klaus Fischer had been awarded the prize for "continual excellence in innovation and quality, in combination with exemplary social commitment." Especially in the latter area, the jury found his work outstanding not least for engendering an extraordinary company culture. The Fischer group of companies has been the epitome of innovation, quality and service for more than 60 years, with Klaus Fischer at the helm for half of this time. Under his leadership, the medium-sized company has developed into a global business, with products sold in every corner of the globe. Fischer registers over 14 patents per 1000 employees a year, placing it second on the list of major patent registers in Germany. Klaus Fischer already received the Federal Cross of Merit in 2007 for his outstanding contribution to in-house and external training and employee development. Speaking at the ceremony, Fischer described the award as a "formidable honor, especially because it recognizes the link between innovation and quality, in combination with long-term, positive results." As well as describing this recognition as "personal praise," Fischer accepted "the award with delight, on behalf of all employees at the Fischer group of companies."

Explaining the decision, Helmut Bayer, jury member and director of TQU Business GmbH, said, "Expanding the Competence Prize categories to recognize individuals and their work with associations is a further signal of the need to acknowledge performance and



Prizewinner Klaus Fischer (fourth from left) with the Competence Prize jury

the acceptance the Baden-Württemberg Competence Prize has gained since its introduction three years ago." The jury's job was to pick a winner from a shortlist of ten. The original number of candidates was over 100. To gain an appreciation of how much Wittenstein alpha deserved its prize, the jury visited the company, which as well as presenting the example submitted in its application, portrayed the image of a genuine, exemplary company. The jury was particularly won over by its concerted efforts to improve products and processes through innovation activity, resulting in a significant reduction in warranty costs – which could be considered a benchmark for the entire sector.

The jury also judged the company Mahr worthy of an award for its digital calipers, a fur-

ther step in consolidating the market standing of the company. The jury was particularly impressed by the systematic approach taken by the company and its clearly organized product development processes. These take user requirements into account early in the process, reflecting these in the work and targets set in development, sales, marketing, production and financial accounts. Mahr received particular praise for its observance of the very highest standards and interaction with the production site in China, which is also an example to the sector.

Helmut Bayer
TQU Business GmbH
Ulm
su1103@stw.de

 www.stw.de → our experts

New releases from Steinbeis-Edition

Experts.Sharing.Knowledge.

Steinbeis-Edition publishes works mirroring the scope of the Steinbeis Network expertise.

All titles can be easily ordered via our online shop, at www.Steinbeis-Edition.de.

Twitter Marketing.

To the players belong the spoils!

(Twitter-Marketing.

Wer mitmacht, gewinnt!)

S. Salmen, H. Beckmann (Editors)

ISBN 978-3-938062-90-6



The use of social media applications is quickly gaining a lot of ground in the corporate world, evolving into an integral part of our workday. Nielsen market re-

search data indicates that usage of Twitter, a microblogging service, among German-speaking Web users grew by over 335 % between 2009 and 2010. Considering that nearly a quarter of all tweets either praise or complain about companies, products and services, the intense expression of authentic opinion that this service facilitates should not be underestimated.

How can companies use this microblogging service in an eloquent way to reach their marketing objectives? This publication shares the expertise of 14 authors in the field and in research. The first section showcases empirically substantiated uses of Twitter – both on a strategic and operational level – to help companies efficiently achieve their marketing objectives and set their marketing strategies in motion. Extensive checklists and tips on selecting Twitter clients offer additional guidance. The second section explores the spectrum of Twitter's uses, ranging from veteran social media managers at Deutsche Telekom (who run the @Telekom_hilft account), BMW, Sympra (a PR agency), and Know How!, an educational services company. The book closes with a look at the legal opportunities and risks inherent in micro-

blogging, and suggests courses of action. This reference work is ideal for PR, sales, marketing and entry-level professionals who would like to enhance their social media marketing mix.

About the editors

Prof. Dr. Sonja Salmen and Prof. Dr. Helmut Beckmann manage the Heilbronn-based Steinbeis Consulting Center for Electronic Business (EB).

iNTeg-Risk Conference 2010.

New Technologies & Emerging Risks: Dealing with multiple and interconnected emerging risks

A. Jovanovic, O. Renn, O. Salvi (Editors)

ISBN 978-3-938062-33-3 | engl.



When, in October 02, 2006, about 25 professionals from EU industry, academia and research organizations met in Stuttgart, at premises of the at the time newly

incorporated European Virtual Institute for Integrated Risk Management (EU-VRI, www.eu-vri.eu), three issues were shaping their brainstorming meeting: "New Technologies", "emerging risks" and "integration". It was clear that there were significant R&D needs in this area. The result of the brainstorming was the project iNTeg-Risk (Early Recognition, Monitoring, and Integrated Management of Emerging, New Technology related, Risks).

Over 80 institutions and companies with about 300 persons work in project tasks. The project involves the combined EU and stakeholders' effort. At the iNTeg-Risk Conference 2010 with the Topic Dealing with multiple

and interconnected emerging risks, they share their results, further plans and visions, both among themselves and also with other interested stakeholders. The project deals with emerging risks of New Technologies taking examples from 17 different single applications, including topics like risks related to CO₂ capture and sequestration, risks related to production and use of nanomaterials, risks related to storage of hazardous materials and other similar high-priority issues.

About the editors

Prof. Dr. Aleksandar Jovanovic is Head of the European Virtual Institute for Integrated Risk Management and Managing Director of Steinbeis Advanced Risk Technologies. Olivier Salvi works at the European Virtual Institute for Integrated Risk Management.

1st Energy Conservation Symposium.

Technology trends for non-residential buildings

(1. Energietechnisches Symposium.

Techniktrends für Nichtwohngebäude)

Steinbeis Transfer Institute Building and Property Industry (Publ.)

Conference proceedings for the symposium held on March 3, 2010 at the University of Applied Sciences Zittau/Goerlitz

ISBN 978-3-938062-92-0 | E-Book



Bringing sustainability and energy efficiency to buildings is one of the most important areas of activity and accomplishment in driving innovations in build-

ing technology. What provides the momentum? Climate change, rising prices in energy markets, limited fossil fuels and the ever-

growing demand for indoor temperature control. Building and technology solutions need to make economic and environmental sense, and they need to emerge from creative, open dialog between universities, research facilities and industrial enterprises.

The Energy Conservation Symposium at the University of Applied Sciences Zittau/Goerlitz and the Steinbeis Transfer Institute Building and Property Industry showcases selected technology trends in the generation, storage and use of energy alongside structural building solutions and energy-efficient building operations. In the spotlight: knowledge transfer between researchers, developers and users, to encourage development and dissemination of technical solutions that stand the test of time. Held twice a year (once in Stuttgart, once in Zittau), each symposium focuses on different themes.

About the editor

Part of Steinbeis University Berlin (SHB), the Steinbeis Transfer Institute for Building and Property

Industry offers a Master of Science degree program in Real Estate based on the Steinbeis Project Competence Concept, as well as a certification course in real estate energy management.

Eco-Innovation – Turning ideas into marketable results. Key success factors of SMEs for exploiting and disseminating EU RTD results in Eco-Innovation

H. Welck (Lead author), C. Schlicke, T. Puerta, A. Davies, T. Gaspar, A. Sciuto, K. Joonasson, A. Sherrard, E. Karacsonyi
ISBN 978-3-938062-91-3 | engl.



How can Small and Medium sized Enterprises (SME) generate valuable project results by participating at European research projects? What strategies are used for this purpose by successful SMEs? What are the success factors for a successful exploitation? These questions were in the focus of the EU-

project "ECOINNO2SME". Steinbeis-Europa-Zentrum as coordinator of the EU-project has analyzed the participation of SMEs and their Key Success Factors for successful exploitation and dissemination of research results. The investigated projects' activities were all in the area of Eco-Innovation: Life sciences (Biotechnology, Food), Environment and Energy. This publication provides a summary of the project results and can be used as a guideline for Do's and Don'ts for SMEs during the lifecycle of a research project.

About the authors

Main author Hartmut Welck is a project manager for life sciences at the Steinbeis-Europa-Zentrum. Co-authors Charlotte Schlicke and Teresa Puerta are project managers for environmental and energy technologies at the Steinbeis-Europa-Zentrum.

Yvonne Hübner
Steinbeis-Edition
Stuttgart
yvonne.huebner@stw.de
www.steinbeis-edition.de

Publication details

Transfer. The Steinbeis magazine
The magazine for Steinbeis Network employees and customers
Edition 3/2010
ISSN 1864-1768 (Print)

Steinbeis GmbH & Co. KG für Technologietransfer
Willi-Bleicher-Str. 19
70174 Stuttgart
Phone: 0711 – 18 39-5
Fax: 0711 – 18 39-7 00
E-mail: stw@stw.de
Internet: www.stw.de

Editorial coordinator:
Anja Reinhardt
E-mail: transfermagazin@stw.de

The author of each article is responsible for the content.
The views and opinions expressed in the articles do not
necessarily reflect the views and opinions of the editors.

Concept and design:
i/i/d Institut für Integriertes Design, Bremen

Overall production:
Straub Druck + Medien AG, Schramberg

Photos and images:
Unless stated otherwise, photos and images were provided by
Steinbeis Enterprises and project partners named in this magazine.

cover image: © photocase.com/designer111

137073-2010-03