

TRANSFER

The Steinbeis Magazine

A Society Undergoing Change

Feature Topic: Diversity

Insights from Steinbeis experts

So if it's Agile, That'll Do?!

Steinbeiser Prof. Dr. Kai Renz takes a stand

Cultural Transformation in a Traditional Company

Steinbeis experts provide support with change management

Still a Long Way to Go: Digital Transformation in Sales and Marketing

Steinbeis experts and the specialist magazine Acquisa unveil the 2017 Digital Transformation Index

Editorial	03		
Steinbeis Swipe! So if it's Agile, That'll Do!?	04		
Why do a growing number of companies want to be agile? The Steinbeis expert Prof. Dr. Kai Renz digs deeper			
Feature Topic: Diversity – A Society Undergoing Change	05		
Insights from Steinbeis experts			
This Has Major Potential!	06		
Advising co-workers on the promotion of intercultural skills			
Navigating on Icebergs	08		
Diversity management and its role as a compass while society and work environments undergo change			
"A diversity of opinions results in people making better decisions"	10		
An interview with Professor Dr. Barbara Burkhardt-Reich and Professor Dr. Elke Theobald, directors of the Business Development Steinbeis Enterprises at Pforzheim University			
Coding is Cool	12		
Girls are also great mathematicians			
"Diversity within a company releases creative ideas and drives innovation"	14		
An interview with Dr. Jörg Hruby and Professor Dr. Thomas Hanke, directors of the Steinbeis Consulting Center Global Mindset & Leadership			
Diversity and its Role as a Success Factor in Companies	16		
Diversity and equal opportunity at the workplace			
"People are appreciated for what they are"	18		
An interview with Professor Dr. Armin Trost, professor for HR management at Furtwangen University (HFU)			
Victory to Diversity	20		
The advantages of setting up a company as a team			
Touching Frogs	22		
Dealing with and solving conflicts			
The Other View on Innovating	23		
Tap into diversity with the Competence Explorer!			
iENA: A Tradition of Innovating	24		
Steinbeis experts now in their tenth year alongside exhibitors at the international trade show of ideas and inventions			
Xavin: A Platform for Local and Emotion-Based Investments	26		
The Steinbeis consultant Mario Buric helps a team of business founders on the journey to self-employment			
Leaping into a Digital Future	27		
A business owner from Esslingen shows how digital transformation can be made to work in manual trades			
"For me, there's nothing more exciting than being at the forefront and witnessing the very latest technology"	28		
An interview with Dr. Christian May, manager of Transfer Platform Industry 4.0, the Steinbeis Innovation Center			
Spotlight	30		
Mission Germany	32		
Steinbeis experts develop export training concept for Estonian companies			
Consulting X.0 – Networking. Digital transformation. Convergence.	33		
The 2018 Steinbeis Consulting Day			
		Leadership.Education.Personality.	34
		A review of the 2017 Steinbeis Competence Day	
		Cultural Transformation in a Traditional Company	36
		Steinbeis experts provide support to a long-term change management initiative at K+S Kali GmbH	
		Welcome to the Steinbeis Network	37
		"Germany stands in its own way because of its incomparable jungle of rules and regulations"	38
		TRANSFER magazine talks to Dominik Fehring, director of the Economic Region of Ortenau (WRO)	
		Innovations Promote Sustainability in Forestry	40
		The Steinbeis-Europa-Zentrum (SEZ) acts as partner in the project Forwarder2020	
		What's That on the Roof?	42
		Steinbeis introduces a solar panel inventory to analyze the energy potential of universities in Hesse	
		Still a Long Way to Go: Digital Transformation in Sales and Marketing	44
		Steinbeis experts and the specialist magazine Acquisa unveil the 2017 Digital Transformation Index	
		Securing the Future: Comprehensive Integrated Management	46
		Steinbeis experts provide support with ISO-compatible risk and opportunity management	
		Current	47
		New releases from Steinbeis-Edition	50



Find an overview of all Steinbeis Enterprises and their services on www.steinbeis.de → experts

Dear Readers,



Wolfram Dreier is the director of the Steinbeis Transfer Center for Human Resources Management and Corporate Communications. After many years' experience as the managing director of municipal economic development bodies and the board member of a medium-sized mechanical engineering company, Dreier studied in his spare time outside work to earn an M.A. in Mediation and Conflict Management. His role as a business mediator involves supporting companies and organizations during periods of conflict and helping them with difficult decisions. Dreier is a member of a mediator pool at the competence center for nature conservation and energy transition (KNE), which is funded by the Federal Ministry for the Environment. He also provides support to local authorities and investors during citizen participation processes.

To contact Wolfram Dreier, write to wolfram.dreier@stw.de.

Let's start with this first edition of TRANSFER magazine in 2018 by briefly looking back at the focus topics last year. The four leading topics in 2017 were: Always on the Go; Achieve More through the Network; Thinking Laterally: Thinking against the Flow; Brave New World of Work!? These topics underscored the traditional competences offered by Steinbeis: innovation, technology, and change. Also, as is typical for Steinbeis, these competences were made tangible by linking them directly to the projects that were implemented with companies. The second big topic of this edition is "A Society Undergoing Change" and this is a direct reference to the picture of things changing continuously. Nonetheless, it does come after the main topic: diversity. So what's the link?

On the surface, diversity means nothing more than lots of variety. When you look at its societal impact, diversity is currently also heard in the context of refugees. What was until several years ago mainly considered a negative thing in conversation is now coming under an increasingly positive spotlight. The economic and political framework is changing rapidly and this is unveiling more and more opportunities for a society and world of work shaped by variety. Of course, as is often the case, a lot here depends on a positive attitude toward change and diversity. I for one am convinced that diversity is already a crucial driver of creativity and innovation for companies right now, and in the future this will be even more the case.

Diversity within companies or teams is reflected in a multitude of ways: women, men, older people, younger people, people experienced in an industry, people coming in from outside an industry, locals, people who moved to the area, people with different behavioral patterns, from different cultures, or with different political values, and also with different emotions. The fact that this diversity exists can, to use a metaphor, be considered an undiscovered treasure trove. Sometimes opening up this treasure trove or encouraging people to use it will throw a spanner in the works and some people will get emotional, which is probably not surprising. So in times of change and diversity, it's all the more important to have a solid foundation of trust, communication that is credible and genuine, and clear guidelines when it comes to dealing with conflict. This is because it is only when managers and their co-workers understand one another – despite their differences – and fully trust one another, that they can learn from one another, work together on goals, and be inspired to bring about something new. And the gold of diversity is extracted.

Be inspired by the following articles from our colleagues at Steinbeis and have the courage to enter the gold mine of diversity. Use diversity and change as an opportunity to innovate. I wish you success!

With kind regards,

Wolfram Dreier



So if it's Agile, That'll Do?!

Why do a growing number of companies want to be agile? The Steinbeis expert Prof. Dr. Kai Renz digs deeper

Agile – one of those modern buzzwords. Lots of firms want to finally "get agile" – and ideally they would "go agile" with all their projects, in all areas of the organization. Dissolving inflexible and rigid company process infrastructures would be a great way to boost customer benefit and deliver superior quality. And, it should make everything more fun for everyone. But is agility really so advantageous? And if it is, what's the best way to go agile? What's the underlying motivation for wanting to be agile, and can agility be simply ordered on prescription? These were the questions looked at by Dr. Kai Renz, Professor for software engineering at Darmstadt University of Applied Sciences and director of Agile Softwareengineering, the Steinbeis Transfer Center.

A firm is agile if everything it does revolves around the "agile manifesto". The Agile manifesto was originally a reaction to the so-called "software crisis" but the items it contains work in all areas where a group has to produce something for another group. The manifesto covers four key points:

1. Individuals and interaction over processes and tools.
2. Functioning solutions over comprehensive documentation.
3. Trust and collaboration over contract negotiation.
4. Permanently responding to change over adhering strictly to plans.

But is agility really so amazingly useful? Everyone is familiar with projects taking too long, coming in above budget, and getting out of control. And anyone who has had to implement or work on a medium-sized or large (software) projects knows all too well that estimating the exact costs and delivery date is like a Gordian knot. There are a number of sometimes complex reasons why big projects are so difficult, but usually there's one big reason: When you start a project, no-one can say for sure what's actually needed at the end.

I've often seen requirements that were considered extremely important when the project kicked off turning out to be of zero use in the end. And often the opposite was true: Functions that were really important at the end were not even been spotted at the beginning of the project. Despite this, many projects are planned as if people could more or less say at the beginning what should come out at the other end. For example, many fixed-budget projects are carried out based on a requirement specifications that are fixed at the beginning – but as the project moves forward, changing requirements are consciously brushed away. Often, the fundamental belief is that change is expensive. It seems easier to plan a project if changes are not permitted during the implementation.

With agile methods like SCRUM or KANBAN, software-engineers will try to work out what the project objectives are at the beginning as well. But the only factors that are specifically addressed are the ones that can be defined and are important at that given moment in time. The aim is to quickly – very quickly – deliver results that are useful to the customer. The fundamental attitude with agile projects is that change is good.

From my personal experience as a software developer and a team leader on software projects, I've seen that agile methods do indeed deliver useful results that can be realized more quickly for the customers. However, introducing agile methods within a company involves a number of obstacles.

Responsibilities change, as do the predictability of results, so it is essential that:

- Decisions regarding "how" are made as a team and no longer made alone by managers
- Everyone assumes responsibility: no more hiding behind a manager
- Communication between people is a major priority – for real, in all honesty

Management plays an important role when adopting agile methods. Previously it was responsible for all aspects relating to "what" and "how," whereas in an agile environment the task of management concentrates on "why." Management no longer decides how things are done; it explains why a project is important. A product owner then has the task of working out the specific user stories based on this "why" and setting priorities to be given to the team. The team decides by itself in short intervals which of the current requirements should be implemented. This way, management has a significantly more strategic focus. Managers who communicate boundary changes earlier and more accurately are a valuable asset for the people working on a project and are appreciated as such. In return, managers learn to stand back and stop deciding directly regarding "what" and "how." As time goes by, there is growing trust that the team deliver results on its own and works professionally.

What can a company do to get people to think differently and in agile terms? In keeping with the agile approach itself, it always makes sense to underpin any changes with comprehensive communication. But it's important that this is not just one-way communication. It's not about supposing what would happen if agile methods were introduced. It's about engaging in genuine dialog. It doesn't work if the uppermost echelon of management announces at a January kick-off meeting that the company will now use agile methods for everything. You can't prescribe agility. So it's crucial that agility is introduced step by step, ideally based on specific projects. It's also quite possible that not everyone is ready for an agile working environment. What sometimes happens is that team structures change because the team members redefine themselves or focus on different things. But if agile methods do work in projects and for the company overall, people will benefit from fulfilling work, useful results and an overall quality-increase.



Prof. Dr. Kai Renz

Steinbeis Transfer Center Agile Softwareengineering (Darmstadt)

kai.renz@stw.de | www.steinbeis.de/su/2129



Feature Topic: Diversity – A Society Undergoing Change

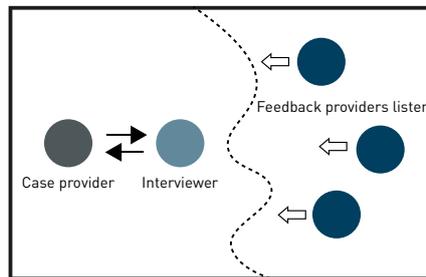
Insights from Steinbeis experts

Demographic change, skills shortages, increasing transnational business, the individualization of lifestyles, digital transformation, and the increasingly networked nature of the world we live and work in as a result of globalization: In the future, companies will have to get used to the fact that the workforce is becoming increasingly diverse and "colorful." Against this backdrop, the topic of diversity – consciously dealing with, appreciating, and respecting differences and individuality – is becoming more and more important. Companies in particular have a number of things to gain from working in heterogeneous teams. Such teams bring together different ways of looking at things, different opinions, and diverse experiences, and as a result they can boost creativity and play a decisive role in gaining competitive advantage.

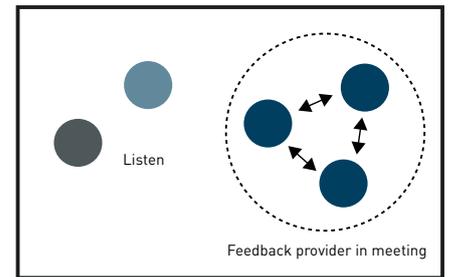
In this edition's Feature Topic, Steinbeis experts discuss how to leverage diversity and implement diversity management in business. The spectrum of topics they cover is as wide as it is diverse, ranging from receiving advice from co-workers to promoting intercultural know-how, supporting girls and women, diversity as a driver of innovation and key success factor (not just for established companies but also startups), how to deal with conflicts in a diverse workforce, and HR strategies in modern times of diversity.

Peer Coaching for effective solution-findings in an international business context

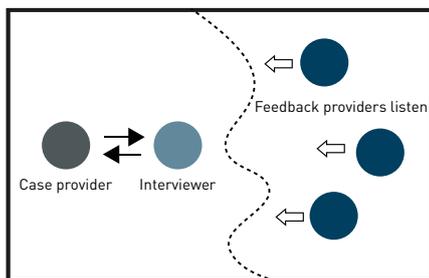
1. Situational analysis, issues, consulting brief



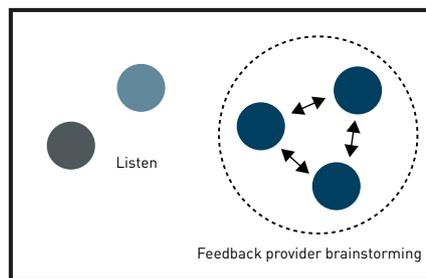
2. Feedback, assumptions, hypotheses, open questions



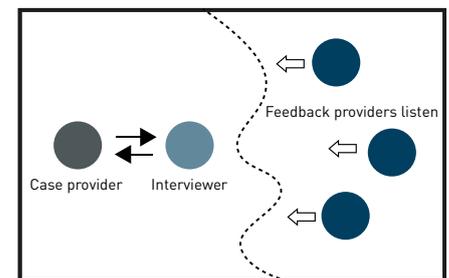
3. Focus on the future, determination of objectives and resources



4. Solution brainstorming



5. Identification of solution



This Has Major Potential!

Peer Coaching on the promotion of intercultural skills

Diversity offers a whole host of opportunities to companies, plus plenty of potential, but it also holds challenges and threats. Dr. Sabine Horst explains how companies can make efficient use of the potential offered by growing levels of internationalization and intercultural workforces, also exploring the importance of peer coaching. Dr. Horst is director of Competencies. Communication. Cultures. – the Stuttgart-based Steinbeis Consulting Center.

It all started with a business simulation, the kick-off for an international workshop for managers working alongside external consultants to look at different ways to solve urgent practical issues being faced by the participants in the workshop. The aim of the simulation was to lay a solid foundation for the next part of the workshop, which involved working on different business issues. Everyone knew that things would have to change – or get better – especially how people worked together. A number of problems needed to be dealt with, and in certain areas it would involve changing tack – the name of the game was “think again.”

The employer, a medium-sized company, had undergone major expansion over the previous two decades, especially at an international level, primarily through mergers and acquisitions. Whenever growth or integration initiatives were embarked upon, the focus lay solely in products, technology, and processes. In parallel to this, there were changes in the core field of business, partly fueled by digital transformation. People were increasingly under time and cost pressure, and this had a permanent impact on workloads. It was a similar picture with unforeseen challenges.

The aim of the workshop was to identify “pain points” and introduce changes, ideally based on concrete tasks. To do this, certain aspects would need to be pulled out of the complex subject matter to provide focus. In this case, the underlying assumption was that neglecting valu-

able resources and the potential provided by internationalization and intercultural aspects was creating barriers – and work. It was an assumption that needed checking.

The case study groups were set up to consist of six people from different countries and departments. The idea was for them to compete against one another. Which group would be the first to come up with the right answer to a given question in the defined time frame of 20 minutes? The groups were given cards with individual items of information, which initially appeared unconnected. There were also other rules.

After 14 minutes, one study group was convinced it had worked out the right answer and the team marched off triumphantly for a coffee. Everything felt relaxed. And it turned out they had indeed got the right answer. The second group came to the same conclusion in exactly 20 minutes as requested. They did, however, emphasize that this was an interim result as there was not enough time to check the answer. Instead, they did the checking over a cup of coffee. There was a certain sense of nervousness but things became noticeably more relaxed when their result also proved to be right. The third group was still nowhere near working out the solution after the 20-minute deadline. According to one participant: “We got bogged down in details.” The uneasiness felt by the “losing” study group was tangible during the coffee break and people avoided talking about it.

Everything experienced by the groups was important for the workshop as it reflected what happens in everyday work situations. One assumption was confirmed, namely that one of the levers required to solve current problems would be to address "interculturality" in a broader sense. All groups reflected on their work together and here are some of the excerpts of the factors that helped the first group win:

- The colorful mixture of participants due to the different countries, cultures, personalities, and specialist experts sometimes caused confusion, but when it was time to make important decisions it became a positive part of solving the problem, due to the different views and creativity.
- People switched between the different roles of moderator, provider of ideas, sceptic, mediator, decision-maker, etc. and interaction was dynamic, strongly influenced by a good sense of teamwork. Central to this within the team were the willingness to assume responsibility, respect, and empathy. The only role that was fixed was that of the minute-taker, who also carried out calculations. The person who did this worked in accounting.
- Working as partners of equals made it possible to strike the right balance between speaking time and inputting with personal, social, and specialist skills. "All in all, we had everything we needed," concluded one of the group participants.
- Feeling like you're part of the group made people more ambitious and also helped people enjoy working together. Experiencing work with co-workers by adopting different roles from the normal role at work helped the group members break down prejudices.
- Humor and keeping the atmosphere informal made it possible to feel more relaxed about misunderstandings, also due to different levels of language skills. One manager made an important contribution which, when she thought about it, was clearly about social aspects and relationships. Her actions and her impact on the group encouraged others to suggest their own ideas, unlike in some business meetings which, if anything, demotivate people.

All groups successfully identified constructive aspects and areas of improvement. Factors that were considered a hindrance included:

- People being intolerant toward mistakes, feeling a strong need to play it safe, or lacking confidence regarding their own competence. This was attributed to the influence of a large number of people in the groups as a result of their authoritarian or hierarchical culture.
- When people adhere rigidly to roles (and don't rotate tasks) the result is that skills are of limited effectiveness.
- Once decisions had been made, they were not challenged and as consequence people just kept on thinking in the wrong direction.
- Fundamentally misjudging levels of competence based on preconceptions or stereotypes.

To also make good use of the diversity of resources and the potential this offers at the workplace in finding creative solutions, the teams concluded that a professional tool would be needed. The method that was identified for doing this was peer coaching for leaders on same management level, and this had already proven successful while working through topics at the workshop. It had also been a success because it established a useful framework for the success factors identified by the group. To make sure the tool worked properly, it was given so-called leadership corners. These can be arranged differently to match different occasions and they can also be implemented virtually.

Diversity offers a variety of opportunities to business enterprises, but it also entails a large number of challenges. To ensure good use is made of every opportunity, it is therefore probably a good idea to approach the issue strategically, for example by introducing diversity management and providing development opportunities to managers and staff. In the example described above, the approach taken was tailored to an urgent problem and it showed that organizations and managers are capable of reacting quickly to situations, even without an overarching strategy. Nevertheless, in a world of growing diversity on a number of fronts, organizations and companies need to address this area on a variety of levels, adapting structures and systems accordingly and providing support and development opportunities to staff and managers.

Peer coaching offers the following structural benefits, which support the effectiveness of diversity as well as efficiency:

- Supports identification of new solution ideas in limited time
- Structures processes into individual stages, from clarifying issues to finding solutions
- Encourages diversity of perspectives, through feedback rounds and brainstorming
- Allows equal consideration to different communication styles
- Allocates Clear roles, clear tasks within individual stages of solution finding process
- Supports application of suitable meeting and visualization techniques for use in international contexts
- Encourages staff to reflect regularly on methods used and group dynamics

Image: Visualization of the stages of providing co-worker advice © Dr. Sabine Horst



Dr. Sabine Horst is director of the Steinbeis Consulting Center Competencies. Communication. Cultures. The services offered by the Steinbeis Enterprise range from management and human resource development programs to co-worker coaching, strategy and concept development for Human Resource Development, consulting on the Steinbeis Enterprise Competence Check, and advisory services and support

for SMEs when applying for ESF funding.



Dr. Sabine Horst
Steinbeis Consulting Center Competencies. Communication. Cultures.
(Stuttgart)
su1550@steinbeis.de | www.steinbeis.de/su1550



Navigating on Icebergs

Diversity management and its role as a compass while society and work environments undergo change

What impact does diversity have not just in terms of image, but also as a driver of innovation? What can companies do to furnish society with new ideas? The Steinbeis expert Beate Wittkopp looks at this and a number of other issues revolving around diversity and diversity management.

Birds of a feather flock together – and they have done for millennia, due to that familiar need for belongingness, a drive that is increasingly coming under scrutiny. This is because changes are happening in the everyday life we all share, breaking down barriers and creating room for new ideas. This is happening across all kinds of specialist disciplines, industries, and organizations, resulting in new interconnections and some unusual overlaps. These convergences are particularly powerful at fueling innovative flair. New forms of interdisciplinary interaction are emerging between different players in industry, as are a diversity of communication options and collaboration models between competitors.

The social megatrends of modern times – globalization, demographic change, and worldwide real and virtual networking – amplify these developments, but at the same time they spell an opportunity and a challenge for politics, business, science and academia, and society as a whole. The task facing everyone is to become more integrated and be a part of this diversity. Geographical location, cultural restrictions, organizational boundaries, and administrative restraints are no impediment to diversity. This is why, without wanting to over-emphasize the importance of this topic, I believe a smart diversity strategy can provide us with a compass during these times of change in society and the world of work.

Diversity management is not a program aimed at minorities. It's a sophisticated way of thinking, an approach that focuses on the horizon in order to identify different ways to work together and live together. To a certain extent, the scope and different aspects of diversity are like an iceberg.

The smaller bit at the top represents visible and measurable factors such as gender, age, origin, or human physique. The bigger and invisible part underneath are about impressions, values, attitudes, and experience. By appreciating people's different characteristics, views, and approaches and seeing people as a partner of equals, diversity can be guided in order to add value; stereotypes and reservations can be overcome. But the moment any individual aspect is overemphasized, there is a danger of division, as we see – depressingly – by looking at certain groups within our society. This is why leaders are needed who should act as role models and show they care – people are needed who can shift the goal posts to make way for diversification in such a way that leaders work alongside the workforce in implementing ideas on a practical level. To do this, it's not new rules that are needed but new resources.

There's no such thing as a one-size-fits-all solution when it comes to diversity strategies. Every business enterprise has its own DNA so it has to navigate its own way through transformation, or, if it wants to stay on the radar, it needs a suit that is made to measure. When it comes to competing in the market, diversity within teams improves the likelihood of identifying different solutions for the increasingly diverse nature of client needs and developing customer-specific business models. To react quickly enough, a company also needs to show clients that it can offer a variety of new skills and perform different roles. As a result, it is not an industry or the size of a business that dictates whether a diversity strategy is relevant or not – it's corporate culture and competition. To explain how this

works, three factors are briefly examined: working models, degree of internationalization, and generation management. As boundaries are eroded in the world of work, this has to be reflected in new employment and career models in order to open the door to new forms of collaboration. Traditional structures and organizations are making way for new developments, such as agile project management and even self-organizing networks. This significantly enhances participation and transparency, and in turn, mutual insight improves understanding. Selecting the right variety of communication channels and tools can greatly facilitate interdepartmental communication. Not only does model diversity fulfill the expectations of the workforce when it comes to personal factors in terms of compatibility and balance. It also promotes increasing levels of networking at work, thus significantly intensifying and accelerating transfer. It is already well known that the greatest potential to innovate and add value lies at the overlaps between different sectors of industry, companies, and science. Transcending previous methods of adding value, networks make it possible to create "crossways value creation chains" – a concept coined by S2i and the Steinbeis Transfer Center TransferWorks BW, and even registered as a brand device under the German names Querschöpfungsketten® (lateral value chains) and Querschöpfung® (lateral creation). A prerequisite for this is that people collaborate across different specialist disciplines, locations, and organizations, working as interdisciplinary and international teams. If a company can succeed in linking technological diversity with cultural diversity, the resulting form of diversity assumes a cognitive dimension and acts as an enabler of innovation.

This results in the creation of new tasks and growing demand for specific skilled workers. Demand is intensified by demographic developments, skills shortages (especially in fields of new technology), and internationalization. Faced with the competition, companies have to position themselves as attractive employers with attractive things to offer and direct this at totally different target groups – and that also means offering a suitable degree of diversity. The stronger a company wants to be in the global market, the more important it becomes to possess intercultural know-how, since culture shapes thought and action. As a result, internationalization must be sufficiently developed within the workforce, and that includes the management board. Internationalization may intensify the competition for customers and skilled workers, but it also opens the door to new resources. To tap into this potential, a company must be in a position to develop intercultural skills and foster understanding within teams. On this basis, cooperation across different locations can help a company successfully access new markets. This, incidentally, is not a one-way street. Currently, well over 50% of all foreign students directly or indirectly return to their home countries after graduation. This offers companies the possibility to "reverse" integration across their international sites, and this is also a form of diversity management.

There are also differences between generations in terms of how they think and act. As a rule, these are initially perceived as a challenge, but they can be particularly useful when it comes to internal knowledge and information management. Generation management is now a particularly interesting field of growth, with some companies already spanning up to four generations within the same business unit, and the scope of ages covered will broaden due to demographic developments. It is therefore important for senior management to foster a work environment that prevents new topics from becoming segregated off and stops

different groups becoming mutually excluded. The first priority has to be to offer all workers an equal opportunity to show they are still willing and able to perform. This involves offering a treasure trove of measures tailored to the different target groups in terms of staff training, occupational health management, life phase-centric HR policy, and an array of employment models with the potential of offering a healthy work/life balance and support with career planning. This allows a business to portray itself as diverse, both internally and externally. A carefully chosen diversity strategy can thus act as a fundamental building block of corporate culture within a company. It can also act as a compass, pointing to the values of a company and providing an example to society. Being able to think beyond the horizon and beyond cultures and functions also entails developing the skills of individuals, which is also fully in keeping with the Steinbeis philosophy, and this can be used to solve complex problems together, pushing divisive issues into the sidelines in the process. This way, diversity in expertise and personal views can unleash tremendous power.

Reference links:

- www.anders-innovieren.de
- INQA (the "new quality of work initiative"): www.inqa.de
- The diversity charter: www.charta-der-vielfalt.de/die-charta/

Image: © istockphoto.com/bowie15



Beate Wittkopp is director of the Steinbeis Transfer Center TransferWorks BW. The services offered by the Steinbeis Enterprise span a variety of transfer methods in the field of digital transformation, equal opportunity strategies against a backdrop of cultural change within companies and society, talent scouting in math, IT, science, and engineering, and initiatives with a focus on technology-driven networks.

Wittkopp plays an active role in the Steinbeis Network as a member of the DaSi and ECC group, as well as the Just Test(bed) IT initiative. She is a member of the LVI (the association of regional industry in Baden-Wuerttemberg) and LR BW (the Baden-Wuerttemberg Aerospace Forum); she represents the LVI on a state initiative called "Women in MINT Professions"; and she is an advisory board member of the lightweight construction association Leichtbau BW. Wittkopp works with a number of strategic planning groups at the Baden-Wuerttemberg Ministry for the Economy, Employment, and Housing with a focus on digital transformation and equal opportunities. As a board member of the Future Work special interest group, which comes under the umbrella of the Baden-Wuerttemberg: Connected (bwcon) initiative (which promotes hi-tech in the state), Wittkopp is closely involved in the development of agile working models and career models.



Beate Wittkopp
Steinbeis Transfer Center TransferWorks BW (Schönaich)
su1755@stw.de | www.transferwerk-bw.de



“A diversity of opinions results in people making better decisions”

An interview with Professor Dr. Barbara Burkhardt-Reich and Professor Dr. Elke Theobald, directors of the Business Development Steinbeis Enterprises at Pforzheim University

Professor Dr. Barbara Burkhardt-Reich and Professor Dr. Elke Theobald, directors of the Business Development Steinbeis Enterprises at Pforzheim University, spoke to TRANSFER Magazine about the conditions required for employee diversity to contribute to the success of a company and why promoting women is still of great importance.

Hello Professor Burkhardt-Reich, hello Professor Theobald – there can be no question that diversity is a fixed part of work environments. But just because you have a colorful team, it doesn't automatically mean you'll be successful. What's the starting point for a business for diversity to be worthwhile for the workforce?

A colorful workforce only leads to success if employees are perceived for their totally specific and different competences, if these are valued, and if they're put to use accordingly within the business. Diverse teams are only successful if diversity of opinion is seen as an enrichment, since a diversity of opinions results in people considering different ways of looking at things and this helps make better decisions. For this to work properly, an open corporate culture is required. Seeing diversity as an opportunity means pulling together heterogeneous teams in which the different competences complement one another. This is the job of managers, so it's not just about having colorful teams, it's also about the guiding principles of leadership, which should include how to successfully handle diversity.

One area your Steinbeis Innovation Center is involved in is women in leadership positions and it's also the sponsor of the Spitzenfrauen BW project, which looks at leading women in the state of Baden-Wuerttemberg and offers a careers website for women and firms in the state. Why is this topic so important to you?

We see lots of young women at the university who come to us from school with better grades than their male counterparts, and often they then graduate in their degrees with better grades. Our female students typically also get off to a good start in their careers, but after a couple of years their male colleagues are ahead of them on the career ladder. For us, this is an important motivation to do something to change this situation. We want to show that women have everything it takes to work in management positions but that the framework conditions within companies also have to be right for women's careers. In our view, equal participation between men and women also means that qualified women should have the same opportunities to enter management as men. To do this, we provide the women involved in our project with access to a network with a wide range of services; for the compa-



nies there are lots of instruments and food for thought on creating a work environment that offers equal opportunities.

Do you feel there is a particular need to promote the advancement of women in certain target groups?

There is certainly a highly urgent need to take action here. We have female academics in our community from a migratory background who have some shocking things to report. We'd like to name a few examples: a woman not being invited to an interview with a foreign name but after marrying and changing her family name to a German name, the same woman received an immediate invitation. Drastic changes in the behavior of colleagues towards women during telephone conversations after a name change. And even more serious: a leading woman working as a managing director for the foreign subsidiary of a German company discovering that her career path would never have been possible here in Germany. What all these examples show is that the role models and stereotypes are so deeply engrained that something has to be done urgently within these companies. They're handing away valuable potential!

In a working world dictated by globalization and digital transformation, the topic of diversity will become more and more important. What can companies do to prepare for these developments?

To cope with these changes in the world of work, a company has to change its corporate culture. This can be used as an opportunity to create so-called "opportunity spaces" for women's careers. Some of the key concepts that come up in this context are moving away from a culture of physical presence and organizing time and space more flexibly instead; changes in career models, away from "careers in chimneys" to careers in rotation; transparency when it comes to career mechanisms; moving away from rigid hierarchies toward a collaborative management style, which, moreover, is a crucial prerequisite for bringing together teams as part of digital transformation. The concept of careers needs to be redefined and made more appealing again for the young generation. Personal goals need to revolve around a motivation to shape things, around exciting projects, not this underlying idea that careers are hierarchical. So companies need to re-examine the role models and stereotypes that are still in place, and of course this means adapting management styles.

Image: © fotolia.de/Gundolf Renze



**Professor Dr.
Barbara Burkhardt-Reich**



Professor Dr. Elke Theobald

Professor Dr. Barbara Burkhardt-Reich and Professor Dr. Elke Theobald are directors of the Steinbeis Transfer Center and Steinbeis Innovation Center for Business Development, based at Pforzheim University. The key areas of the Steinbeis Enterprises are schools and business, entrepreneurship education, professional orientation in schools and educational institutions, women in positions of leadership, marketing intelligence and management monitoring, online marketing, and marketing communications.

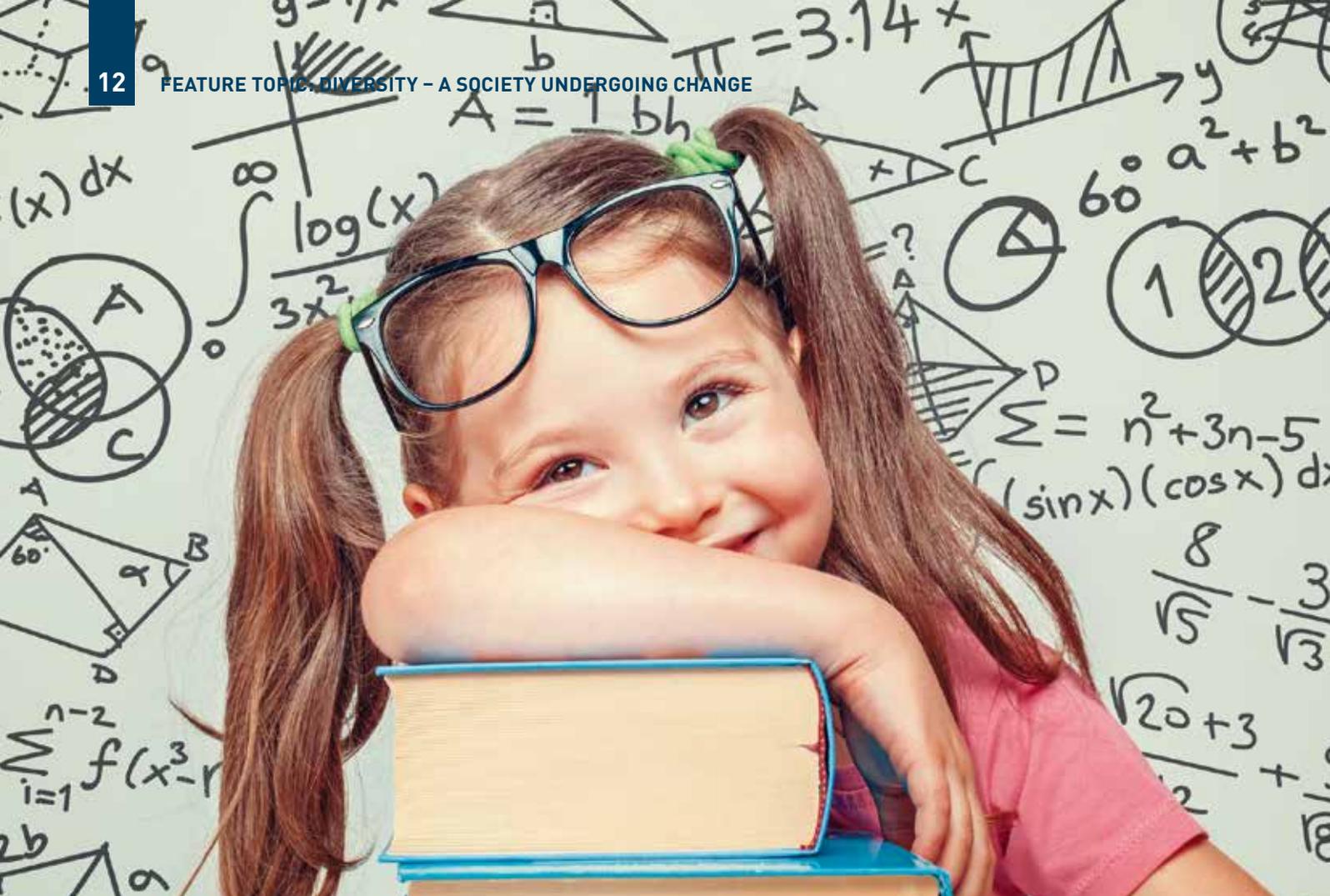


Professor Dr. Barbara Burkhardt-Reich

Professor Dr. Elke Theobald

Steinbeis Transfer Center Business Development, Pforzheim University
(Pforzheim)

su0587@stw.de | www.szue.de | www.gmindset.com



Coding is Cool

Girls are also great mathematicians

To not just cope with digital transformation in the years to come, but also drive it, you have to start by looking at the things that inspire people, pique their curiosity, and motivate them to learn new things. It is especially important to avoid stereotyping people and instead, see diversity as an opportunity. This is something Christine Regitz, Vice President for User Experience at SAP and member of the Steinbeis Board of Trustees, is committed to.

I've seen a really weird gift doing the rounds in Germany. All sorts of people (parents, grandparents, and friends) seem to enjoy giving this gift to girls. They're T-shirts (typically in pink) with "Math is an Asshole" emblazoned on the front. Every time I see it, I'm speechless. And I'm politely understating things. That's not the sort of present you should appreciate. It's like a Trojan horse – on two levels. On the one hand it suggests that math is a pain or hard work. On the other, it's saying that girls aren't really made for math anyway. Both messages are toxic. We need to ask ourselves something: What does a pithy message like that say about the person wearing the T-shirt? And what does it say about us as a nation, the land of great writers and philosophers? There have to be better ways of investing in our future. I know it is meant to be (self-)ironic, but overall the statement just reinforces stereotypes and as an enlightened society, that's something we cannot afford (and shouldn't be able to afford). Incidentally, the same holds true if someone suddenly decides to replace the word math with something like computer science or technology.

Math, computer science, the natural sciences, and technology are not a playing field with a no-entry sign for girls (neither in terms of specialist topic nor from an intellectual standpoint), or a realm only reserved for the male sections of our society. Girls and women are just as at home in this area as a smartphone is at home in their purses, or they drive cars

and boats, and fly airplanes, or they sit on the board of Europe's largest transportation company, or they calculate orbits for space missions.

In times of transformation and quantum leaps in digital technology, it's neither cool nor frankly appropriate to reinforce stereotypes or be derogative about women – even if the statisticians will now scream, because the figures prove otherwise and student numbers point to women supposedly not being interested in such subjects. This by no means proves that they're not actually interested. All that the statistics say is that women are not represented in these areas. Maybe the approach being taken to interest girls and women in math, IT, and the natural sciences is wrong. Maybe the goals and methods used to teach math or science subjects are wrong. Or maybe some of the underlying factors are not right for more girls to discover that they have a talent for math, computer science, the natural sciences, and technology and for them to receive training in this area. Something definitely has to be done about this, because one thing everyone agrees on is that none of these topics are wizardry, there's no big secret about them. There are plenty of examples and role models of women who work in all of these areas – women with a huge amount of expertise, even if they are usually only known as experts by people involved in the specialist area. Apparently, they are much less known among the general public, the media, and talk shows.

If we really do want to change things – which is essential, given the diversity and complexity of this world and the rate at which it is changing as a result of digital transformation – then the place where we need a fundamental shake-up is in education. If you want to meet the challenges of digital change as a society in whole in the future, you have to start in the place where curiosity and playfulness are still unrestrained and uninfluenced by clichés. The path ahead for mathematical and scientific interests is set in the very early years of life – and this applies just as much to boys as it does to girls. Inevitably, this is also key to all subsequent decisions in life, such as career choices, general setups, or development options – not just for individuals but also for society as a whole.

Is it possible to design a fast-track "education rocket" that sets to work early? This doesn't mean we start turning children into IT nerds at kindergarten, and it certainly doesn't mean we should teach kids how to swipe tablets and smartphones. But it can't be wrong to allow children to explore technology and their environment through play, in keeping with each age group. They have chemistry sets, Lego, and dolls' strollers, so child-friendly starter kits for the world of digital technology would provide an initial, low-threshold entry point. Digital education needs to be more challenging from the very first day at school, even if it is based on factors or a curriculum that is suited to each age group. A course needs to be set for children to gain insights into IT by forging links to math or even physics. And this should be a compulsory part of education. Seeing IT or math lessons as an option, isn't an option. To have a fighting chance in any career – as an office clerk, a warehouse assistant, a surgeon, or a salesperson – you surely won't win any medals without an education in digital technology. We're convinced at GI that digital education must be provided from the perspective of technology, sociocultural aspects, and actual application. A fundamental understanding of how a technology works and what it's capable of is just one part of the story. The other part is to understand how software programs are used, why they're useful, and also issues such as copyright and data protection. A third aspect relates to the ethical and philosophical categories digital technology and applications fall into. To understand these aspects, separate teaching would be needed to establish a fundamental understanding and orientation, although this should also reflect interdisciplinary aspects.

People should think again if they believe girls prefer learning different subjects and are being left behind by digital education or are being stifled. Without wanting to question collective learning as a whole, individual subjects such as math, physics, or digital education could be taught separately. This would give girls a chance to learn and try things out without the influence of clichéd comments. A variety of tests and studies have shown that girls are even stronger and achieve better results in these subjects. This assumes, of course, that the curriculum is kept the same. Then acquiring knowledge is fun, unleashes creativity, and unveils potential.

If you don't start with the fundamentals, you don't set the railroad switch for math, computer science, and digital education, and you miss the train – and the train is now accelerating. You also lose the race against time and miss out on all the talent, especially female talent. That, incidentally, means not just women in IT or women with

an education in math, but also all the diversity they have to offer and the positions they strive for.

To put it plainly: Digital technology affects all areas of work, everyday life, our lives, and our thoughts. Not one stone will be left on another. But we should see this positively. With solid training and a fundamental understanding of digital technology and processes, there will also be lots of occupations for women where technical, mathematical, and digital know-how will be needed, just maybe not entailing any kind of detailed specialist knowledge: in healthcare and nursing professions, education and administration, in catering and restaurants, and in the manual trades. Getting involved, managing processes, and questioning processes corresponds to a deeply rooted female need to be part of what is happening. Why would women want to get left behind when it comes to digital solutions? It just doesn't make sense. But they must – and will – recognize the developments of time. So if you actually don't want to develop user interfaces or become a female engineer, you can thrive as the go-between and point of communication between software developers and end users.

More things need to be normal or a matter of course, with less stereotyping in a society of knowledge and diverse working environments. We need a 360° view based on different abilities to solve problems, revolving around different reference systems, experiences, and approaches. The challenges of digital change, already something of a challenge for us today and tomorrow, are highly complex and cannot be mastered with monocultures. That is also why we need to inspire girls early in math and computer science. So I would love to see lots of girls wearing a T-shirt with big letters saying "Coding is cool. I'm going for it!"

Image: © fotolia.com/Myst



Christine Regitz studied business administration and physics at the University of Saarbrücken and Bari University (Italy). After a stint as a consultant for IDS Prof. Scheer, she has worked in a variety of roles and areas of software development at SAP since 1994, where she is currently Vice President for User Experience. In 2015, Regitz was appointed to the SAP supervisory board. She is also a member of the Board of Trustees

of the Steinbeis Foundation. Regitz works in an honorary capacity for GI, the German computer science association, where she is the vice president. She was a spokesperson for the Women in the Computer Science group and supports a variety of initiatives aimed at networking and raising the profile of women in IT.



Christine Regitz
Gesellschaft für Informatik e. V. (Bonn, Berlin)
www.gi.de



Diversity and its Role as a Success Factor in Companies

Diversity and equal opportunity at the workplace

Some companies still struggle with the idea of taking on older applicants, or applicants with different ethnic backgrounds or socio-cultural heritages, or even the disabled. Yet there are so many good examples of how such differences promote harmony and make it possible to set up successful teams, as the Steinbeis expert Wolfgang Natzke explains.

If you're Brazilian, the name Garrincha will be music to your ears. This name is inseparably linked to the World Cup titles of 1958 and 1962. It's a name that some use to describe the best soccer player of all time, even above Pelé. The real person behind the name Garrincha was Manuel Francisco dos Santos, and for him success was anything but handed to him on a plate. Born in the Brazilian jungle, Garrincha had to overcome a number of personal impediments. From birth, he had a deformed spine and his left leg was actually 6cm shorter than his right leg. After a series of operations, he was able to move around properly and walk, but he remained bowlegged on the left with a knock-knee on the right. He began playing soccer, more for therapeutic reasons than for the sport, and developed a talent that must have left people dumbfounded given his apparent physical handicaps. Garrincha mocked his opponents with his crazy-looking, almost slapstick dribbling, which clearly should not even have been possible with his "handicap." The Brazilian author Nelson Rodrigues once even referred to him as the Charlie Chaplin of soccer.

His story almost sounds like something from a teaching book but it reflects the significance and benefit of diversity in business and our society in general. The tale of Garrincha is an example of how people with physical disabilities can be of benefit to a team. In fact, modern professional soccer could be used as a blueprint for the success that's possible when you integrate people with cultural differences.

In 2015, the Apple CEO Tim Cook said, "I think the most diverse group will produce the best product; I firmly believe that." Several years earlier, his company had already made a commitment to greater diversity. To boost its diversity, last year Apple started hiring more people from the Far East (25 percent of new recruits), Hispanics (15 percent), and non-Caucasians (11 percent). According to Apple, half of its new recruits now come from "groups whose representation in tech has been historically low," which Apple defines as "Women, Black, Hispanic, and Native American."

Social diversity is more than just the latest buzzword, and more and more firms, universities, and political interest groups are becoming involved in this area in a variety of ways. The potential offered by diversity and heterogeneity is increasingly being seen as an opportunity to trigger innovative and creative processes in research, business activities, teaching and study, society, and politics. In today's world of work, aside from professional qualifications, an increasingly important role is now played by communication skills and the social competence offered by workers.

In 2006, four companies in Germany introduced a Charter of Diversity. In the final sentence of the program, they said: "We are convinced that living diversity and appreciating this diversity has a positive impact on

the company in Germany." Since 2010, the initiative has been sponsored by an association of the same name under the patronage of the German chancellor. By 2017, some 2,700 German firms – including well-known corporations and a variety of SMEs – as well as academic bodies, social institutions, and authorities had signed on to the charter. The signatories have made a voluntary commitment to declare as employers that they will create or promote equal opportunities among the workforce. Their belief is that the German economy can only be successful in times of globalization and demographic change if they make full use of the diversity of employees. The aim of the diversity charter is thus to engender a work environment and an organizational culture that ensures all employees are valued and supported equally.

To provide a basis for such diversity management, a four-stage model can be used. This makes it possible to capture the differences and commonalities of employees and make them tangible or understandable. The further any dimension moves away from the center of the model, the more adaptable and changeable it becomes. Naturally, the first stage of the model entails focusing on people's specific personality. The second stage involves arranging the "inner dimension" around this personality – things that make a person almost unmistakable: nationality, ethnic origin, religion or beliefs, disability, age, sexual orientation, and identity. The third stage consists of forming the "external dimensions." Aside from income, training, and work experience, these are personal habits, leisure time activities, a person's appearance, his or her marital status, whether someone is a parent, and location factors. Finally, the fourth stage addresses organizational dimensions, such as a person's function, the things they work on, the department they belong to, how long they have been at the company, whether they are a member of a union, their place of work, and management status. Although well-functioning diversity management should take all of these dimensions into account on a holistic level, in practice it is mostly the inner dimensions that are likely to be significant.

In a world that is becoming increasingly global, appreciating people for their heritage and the multicultural nature of the company's workforce is of inestimable importance to success. Appreciation – which, incidentally, does not have to be unidirectional – can focus on something as simple as the foreign languages spoken by employees, or their intercultural skills. Such factors can be the key to new, foreign markets.

The basis for functioning collaboration between people of different origins can only be an open company culture in which there is mutual understanding regarding differences and similarities and that this understanding is promoted. Furthermore, this is also an opportunity to tap into new customer groups that have not yet been explicitly targeted. It is also becoming increasingly important to expressly respect individual employees' religions and their personal values. For example, a growing number of companies and organizations appear to be observing the official vacations of different religions and they are offering corresponding foods or setting up "quiet rooms." The idea is that employees, no matter which religion they follow, feel comfortable in the company.

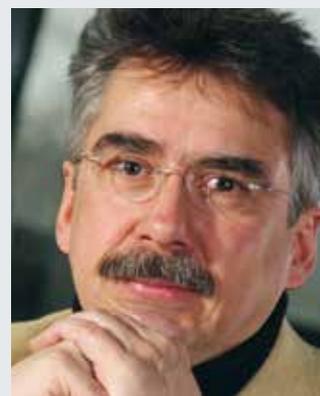
Given demographic change, age factors are now becoming increasingly important. Team members of different ages offer different kinds of knowledge and experience, and this can be mutually beneficial. To en-

sure employees stay with companies as long as possible, ideally until they retire, it is important that businesses can offer pleasant working conditions, for example, or development opportunities matched to the needs of different age groups.

Diversity management can also help a company make better use of the capabilities and special potential offered by people with physical or mental disabilities. A term one often hears in this context is the accessible workplace. The same applies to sexual orientation. In the past, many employers considered such factors a purely personal issue for employees but in the meantime many recognize that being open-minded regarding such factors can be highly motivating and empower people.

Finally, to a certain extent gender performs a dual role in diversity management. Given demographic change, women are increasingly regarded as an area of potential that has been insufficiently honored or tapped into in the past. Furthermore, a number of studies have concluded that more and more important key competences in the world of work (including team spirit, organizational skills, and the ability to work under pressure) are becoming increasingly natural to women. As a result, the goal can only therefore be to make more use of the female workforce in all areas of the employment market in the future.

Image: © pixabay.com/suewest



Wolfgang Natzke is the director of Business Management and Innovation, a Steinbeis Transfer Institute at Steinbeis University Berlin (SHB). His institute offers services with a clear three-pronged focus on problems, solutions, and success. These range from certification courses to the planning and running of practice-based workshops, training, and specialist seminars in the following areas: organizational and HR development, recruitment, innovation management, and the optimization of leadership.



Wolfgang Natzke
Steinbeis Transfer Institute Business Management and Innovation
(Porta Westfalica)
su1696@stw.de | www.steinbeis-bmi.de



“People are appreciated for what they are”

An interview with Professor Dr. Armin Trost, professor for HR management at Furtwangen University (HFU)

Diversity in HR management: Social diversity fuels variety in the world of work. How do HR managers deal with this, what challenges do they face, and what implications does diversity have for staff development? Professor Dr. Armin Trost, professor for HR management at Furtwangen University (HFU), answers these questions in an interview for TRANSFER Magazine.

Hello Professor Trost – societal, technological, and economic trends change the world we work in and bring new challenges for HR managers. What role does diversity play in this?

Diversity plays a major role, for several reasons. For a start, in times of digital solutions we face highly complex challenges and these require innovative, novel ideas. This is only possible in teams or networks, because these make it possible to take in different ways of looking at things. It's of little use if you pull together a group of people who are of the same ilk and they all think the same – they quickly agree to the same things. You need a setting which allows really different people to come together, maybe even “wackos,” unusual people, lateral thinkers – so they can break the rules and really look at things from different angles, simply because they're different and come from a different background or have a different social heritage. We know that diversity can also result in a broader variety of ideas, but that's exactly what we need these days in a world that's stopped being predictable. But on the other hand, companies are having real problems finding good people in certain professions. The whole issue of HR recruitment and talent acquisition is still a major problem. Look at what we're witnessing with companies in the automotive supply markets. They were always successful finding engineers or vehicle technicians in the past, but now they're looking for software developers and these firms often don't even have that kind of people on their radar. Looking for people with really tightly defined profiles and small differences in aptitudes is wrong, because they don't exist, at least not like we think they do. What this means for companies is that they have to be more open. They have to recruit people who maybe don't quite fit a certain profile but do

offer certain kinds of skills that lead you to assume they'll be able to learn other things. Skills shortages force us to attract people we might not have recruited in the past.

What does an effective diversity strategy have to offer in HR management, and what specific impact does diversity have on personnel development?

We need to move away from thinking in terms of neatly defined requirements. With diversity there are basically two options. One approach entails thinking in terms of numbers and the KPIs you're trying to achieve: “Diversity is doing pretty good for us, we've already got 23% of women in management positions” or “One third of our senior management are now non-Germans.” But people confuse diversity with statistical variations and standard deviation. Although that's also a strategy you can pursue. Another strategy is to not see diversity as statistical variety but as a way of appreciating individuality. With this approach, diversity is first and foremost a question of mindset – people's attitudes, a way of thinking. People are appreciated for what they are, irrespective of gender, age, or origin. And this raises a further point: Companies often have talent pools with selected fast-track employees and people with strong potential. These people pools actually often do score well in terms of diversity – for example they contain lots of women. But when you track who later goes on to reach senior positions, again it's often just the men. There's something wrong here. There are clearly lots of women who have what it takes – they're fired up, talented, and extremely well educated, but then they still don't make it into senior positions. There's a simple explanation for this: We've got this thing about



management positions that's somehow anti-family, and some would even go so far as to call it anti-social. Senior managers are expected to be always there and always reachable. They're the first hands on deck in the morning and the last ones to leave in the evening. And if we keep seeing managers in this way, fortunately there are still lots of people – and that includes lots of women – who will say, "That's not a price I'm willing to pay." So we can't avoid upsetting the apple cart when it comes to HR development, or talent management in particular, and that will also affect the overall setup and working arrangements. There are examples of this now in senior management, such as part-time management positions or job-sharing. But just imposing quotas isn't going far enough – you have to change the rules, the underlying structures, and the processes. It's the only way to change the values and culture of a company.

Modern personnel recruitment in times of digital solutions and diversity – where in your opinion do companies begin?

To attract good people, companies have to define their priorities. There will still be personnel requirements in the future when it'll be enough to write a wanted ad (simple hiring). But then there will be other jobs or functions when a recruitment ad will get you nowhere and it'll be difficult to find people (difficult mass hiring). One thing you always have to ask yourself at the beginning is what are your needs. Only when you know that can you decide what has to be done. Where should recruitment advertising go, do I need employer branding, do I need HR consultants? This is an approach I'm only seeing very few companies take at the moment. Most firms try a wanted ad and if that doesn't work, they get on the phone to a headhunter and then things really get expensive. The money spent on HR consulting fees is going sky-high for most companies at the moment. But HR people should know when they can afford to write a really detailed job profile and when not – but from what

I've experienced, that's usually not the case. Not only that, but with some requirements I have to bring in the manager and make it clear to them that without their help, it won't work. We have to work out where we want to look together and how we're going to approach people.

In the future, there will be bigger and bigger differences between people as individuals and their various idiosyncrasies. How can – or how should – the HR managers of the future deal with this?

According to one definition of HR management, "We ensure the right people are found at the right time in the right place." So the first thing we think about is who's the right person, when, and where, and then we go and look for or train someone for the position. I do things with the people so they can become what they need to become. That's exaggerating a bit, but it's the way people have always seen things in HR management. More and more HR managers are shifting toward making people responsible for their own development, what they learn, and their future at the company. If you think in that direction, you leave more room for individuality. For lots of companies, that's a way of thinking that's still unbelievably far off. The key concept here is empowering people. And then as an HR manager I have to ask myself, what can I do to support people and open doors for them? As a fundamental attitude, this is becoming more and more important in HR management. But you mustn't confuse individuality with being an egoist. It's just about individuals taking on more responsibility for their own future and their contribution to the company.

Image: © fotolia.com/ Mopic



Professor Dr. Armin Trost lectures and researches at the Business School at Furtwangen University (HFU). The focus of his work lies in talent management, HR recruitment, and the future of work. He was previously a professor at the University of Applied Sciences Würzburg-Schweinfurt. For a number of years he was responsible for worldwide recruiting at SAP. Since 2005, Trost has been successfully advising companies of a variety of sizes and industries on strategic HR issues.



Professor Dr. Armin Trost

Faculty of Economics at Furtwangen University HFU (Furtwangen)

tar@dhs-furtwangen.de | www.hs-furtwangen.de



Victory to Diversity

The advantages of setting up a company as a team

Driven by the increasingly networked nature of processes, tools, and product content across all kinds of sectors of industry and fields of competence, it is becoming essential to work in diversified teams. This can also offer a decisive competitive advantage to business founders. But it should not be underestimated how challenging it can be to succeed in such teams, which may consist of men and women from a variety of age groups with different backgrounds, goals, and experiences. How to make things work despite the challenges is something the Steinbeis Consultant Felicitas Steck can tell us about.

A key question is, what is the optimal composition of such a heterogeneous team? To help with this, there is a concept which is simple to implement and uses a unique approach to highlight the subtleties of interaction between different types of personalities. Understanding the unique characteristics and strengths of individual group members – and the best way to put these to use – acts as a motivation to keep commitment and energy levels high in the team. This team trend can also be found in startups. According to the German Startup Monitor, around 73 percent of German startups are founded

by teams. This compares to the general picture with startups, 80 percent of which are solo startups.

Founder teams have a variety of membership compositions: There are additive founder teams, which consist of people with the same interests, almost exactly the same know-how, and similar experiences. They also have almost identical resources. These compare to complementary founder teams, which are made up of people with different qualifications, experiences, and even goals and – significantly and importantly

Team startups – setting up a successful company

1. Share responsibilities

Allocating tasks and deciding who is responsible for what is the biggest challenge faced by startup teams. It's important to avoid misunderstandings and overlaps.

Tip: To avoid arguments, it's important to define areas of responsibility early and establish clear roles that match skills and abilities.

2. Keep an eye on goals

Set specific goals and review and reconsider them regularly. This is not just about deciding what the objectives are, but also keeping them on the radar and, if necessary, being prepared for contingencies.

Tip: Set SMART objectives and review them regularly. SMART stands for specific, measurable, achievable, realistic, and time-bound.

3. Compensate for gaps in competencies

Ideally, a startup comprises a number of people with different skills and expertise. This allows the team to strike the right balance between strengths and weaknesses. A lack of experience is less of a problem than a lack of know-how. As a result, homogeneous teams with similar specialties generally have more difficulties than heterogeneous teams with members from different disciplines.

Tip: If possible, pull together a heterogeneous team in order to offer more know-how.

4. Improve communication and coordination

The bigger the team, the more difficult it is to communicate openly and smoothly. Communication is crucial when it comes to dealing with the many different challenges a team faces in everyday business. This is a particularly important factor when it comes to coordination, so all tasks should be assigned to a specific person rather than people hopping between roles every week or so.

Tip: Establish clear communication channels.

5. Make decisions, then make things happen

Decision-making and ensuring that what has been decided actually happens has a huge impact on the success of startups.

Tip: Put clearly structured decision-making processes in place and capture things in writing.

6. Give people a stake in the business

Homogeneous teams are particularly likely to avoid conflict and own similar interests in a business. What they may not realize is that there are benefits in having unequal shares in a business and redistributing shares (e.g., based on performance).

Tip: Dare! Have different shares in the business.

– these complement each other. Four eyes see more than two, and founder teams – especially if they are complementary – tend to have more capital. Such founder teams offer a comprehensive variety of cultural and social know-how and with this, commercial, intellectual, cultural, and social capital. Especially with new business enterprises – during the initial period when a company is still being set up together – this know-how provides a foundation of immaterial resources that can be much more important for startups than material resources.

Whereas solo business founders can go about implementing their plans in a clear manner in a straight-line process, with a team of founders the strategy has to be agreed and coordinated. A team should therefore take a number of things into account beforehand, to play to the tangible advantages of working as a group of founders. The biggest stumbling block usually has something to do with areas of responsibility and objectives, then come the need to compensate for missing know-how and experience, the challenges of communication and coordination, and finally how to make decisions. The least important factors when it comes to business success are personal conflicts and the distribution of shares within the startup.

Contracts and documentation are a fundamental requirement when setting up a functioning business enterprise. Whereas a firm is shaped by enthusiasm and passion at the beginning, as things move forward conflicts can and will arise in the course of day-to-day business. Solving such conflicts is always easier and quicker if there are clear and detailed contractual arrangements, and documentation is in place. Aside from covering ownership structures, partnership agreements can and should address responsibilities and tasks.

Assuming all the bases have been covered and obstacles have been removed, a functioning complementary team of founders – with a high degree of specialization, appropriate task sharing arrangements, a strong idea, and a good product – has excellent chances of surviving in the market.

Image: © fotolia.de/Rawpixel.com



Felicitas Steck is a project engineer at the Karlsruhe office of Business Start-up, a Steinbeis Consulting Center, is a consultant in the innovation workshop, and runs Steinbeis Enterprise Competence Check projects. As well as providing consulting services, coaching, and training to startups, managers, and teams at small and medium-sized businesses, she also works for architect and engineering practices,

as well as ambitious craft businesses. Her role as an expert is to help teams of founders and other groups to identify the optimum setup.



Felicitas Steck

Steinbeis Consulting Center Business Start-up (Karlsruhe office)

Felicitas.steck@stw.de | www.steinbeis-exi.de



Touching Frogs

Dealing with and solving conflicts

Social diversity is becoming increasingly important but at the same time, so are the demands placed on people in terms of how to deal with the different nature of groups and individuals. As a result, society and people in the work environment face increasing challenges and the potential for conflicts to flare up is rising. The experts at Communication Culture.Conflict Control, the Steinbeis Consulting Center, outline constructive ways to deal with this.

Increasing complexity fueled by digital transformation, technical developments, and globalization, but also changes in demographic structures, are accelerating the rate of change in the world of work – and this holds a great deal of conflict potential. As a result, it is vital to find constructive ways of dealing with conflict. Over the past 25 years, there have been dramatic changes in the approach taken by companies to deal with conflict: Rather than make decisions behind closed doors, firms now seek consensus. The different parties involved in a conflict do not always achieve this without support, so it makes sense to turn to an external mediator. This way, the parties involved in a conflict can resolve their differences themselves and are supported by a neutral intermediary, or mediator. The job of the mediator is to guide and structure discussion. Each party to the discussion is given a chance to present his or her point of view and position, and perhaps most importantly their point of interest. The focus switches from what happened in the past to the future. Win-win solutions become possible, because every solved conflict strengthens not only individual workers, but also their sense of connection to the company.

Conflicts can be seen like frogs – they're not the sort of thing people want to come into contact with. But this is precisely what is increasingly necessary, since unresolved conflicts are a burden for organizations on a number of levels. If something isn't running smoothly, managers increasingly feel under pressure, not just in terms of time but also on a physical level, and this can leave them feeling overloaded. People also perform much worse in terms of concentrating on factual issues – output deteriorates sharply. Latent dissatisfaction among staff leads to high levels of staff fluctuation, which in turn lead to correspondingly high outlays on recruiting replacements. Conflicts also have a negative effect on customer relationships, and this sometimes causes contracts to be lost.

Often, quick intervention is needed to get people working again. And this means someone will have to "touch the frog." A key task of a ma-

nager is thus to act as an enabler of conflict management, and one attribute that bolsters this competence and is indispensable for a leader is to stand above things and remain calm.

Whether it would be good for a manager or a team to receive coaching on conflicts can be decided after analyzing the level of escalation and the number of people involved. The earlier a conflict is picked up on, the easier it usually is to solve it. This is why it makes sense to introduce conflict management processes at companies. Central to a systematic approach to dealing with conflicts are trained workers (the communicators), and these act as the first port of call at the company. It's important that several people are trained as communicators, not just in different departments but also on different levels of the hierarchy, so that people affected by a conflict can choose whom they wish to confide in. Communicators can be approached at any time and they work confidentially. This makes it possible to capture and solve conflicts before things escalate, even if someone is scared of speaking to the next up in line. The communicators simply solve conflicts themselves or point them in the right direction: conflict coaching or mediation.

Conflicts are unpleasant, but they release energy and create momentum and this can result in new ideas at a company. With the right conflict management system, this energy can be exploited and put to positive use. After all, it's not the conflict that is the problem, but how it's dealt with. And dealing with conflicts by focusing on solutions improves corporate culture and safeguards the future of a company.

Image: © istockphoto.com/AndreasReh



Christa G. Kober



Marion Wolf

Christa G. Kober, tax specialist, business mediator, and coach, and Marion Wolf, attorney and business mediator, are directors of Communication Culture.Conflict Control, a Steinbeis Consulting Center founded in 2014. The emphasis of their work at the consulting center lies in solving conflicts through coaching and mediation and the development of open communication. The Steinbeis experts also provide support with the introduction of conflict management systems and help companies with HR and organizational development.



Marion Wolf

Christa G. Kober

Steinbeis Consulting Center Communication Culture.Conflict Control (Stuttgart)
su1846@stw.de | www.kommunikationskultur-konfliktsteuerung.de



The Other View on Innovating

Tap into diversity with the Competence Explorer!

Steinbeis offers major opportunities to link up competences and provide even better, even more comprehensive services. The key focus of the “The Other View on Innovating” initiative is to draw attention to the expertise and competences of women in the Steinbeis Network and bring them together on an interdisciplinary level. This doesn’t just have to involve women. Naturally it can also involve everyone else in the Steinbeis Network – and beyond. Steinbeis offers major potential to leverage diversity and extend the initiative, even outside the organization.

Just like every target group on the axes of diversity, women working in technology transfer have inherent usage expectations and experiences, providing access to valuable, value-adding ways of working. Integrating this diversity more closely in the innovation process and by doing this, fueling a broader spectrum of innovations, is in all of our interests. This not only allows us to create new sources of ideas and options to collaborate, it also lines up the possibility of exchanging ideas in a targeted manner with the Network, in order to add new aspects to business activities, and overall, to galvanize our impact. This broader spectrum will allow us to be more focused in how we react to the market and the increasingly diverse nature of customer requirements. The current technology shift requires multiple ways of collaborating, which also offer major opportunities to access new customer groups and acquire projects in new areas.

To do this, we want to organize ourselves step by step as a networked group – a group which allows us to get to know each other even better and complement one another at the lectern, in workshops, and in projects. Especially when it comes to lateral creation – Querschöpfung® – it should be possible to draw on the diversity of experience and perspectives offered by the applied projects at Steinbeis, in order to introduce new concepts to the market. It’s this diversity that is the lifeblood of the initiative. The German publication on The Other View on Innovating [Die andere Sicht auf das Innovieren] contains 19 articles and was a successful start in 2017. We made the first tentative moves toward setting up the Competence Explorer at the 2017 Steinbeis Day. Women and men at the event presented their competences, the focus of their activities, and their expectations. We used personal attributes to form clusters and these were sent to everyone involved. This has allowed us to lay the first foundation stone for the Competence Explorer, and it has already resulted in the first shared business activities. The next workshop will take place on April 24, 2018, when we will keep working on the concept. The Explorer should not just be a network, it should also provide a compass for exploring Steinbeis diversity. Right now is a particularly good time for new people in the Network to come on board. We would like to keep expanding lateral creation as culture of collaboration and inject life into the Network.

Image: Innovating Differently – The Steinbeis Women’s Competence Explorer in Technology Transfer: the workshop at the 2017 Steinbeis Day



Dr. Petra Püchner



Beate Wittkopp

Dr. Petra Püchner is head of the Steinbeis-Europa-Zentrum (SEZ) and the Commissioner for Europe of the Baden-Wuerttemberg Minister of Economic Affairs, Labour, and Housing. The SEZ helps business enterprises, universities, and research institutions in Baden-Wuerttemberg with issues relating to European research and innovation programs, also providing support with technology collaboration.

Beate Wittkopp is director of TransferWorks BW, the Steinbeis Transfer Center. The services offered by the Steinbeis Enterprise range from transfer models in the field of digital transformation, to equal opportunity strategies during times of cultural change in business and society, talent scouting in the MINT industries, and projects and initiatives in technology-driven networks.

More information is available to people at Steinbeis through the DASI Group on the CAST communication platform: <https://cast.stw.de/intrexx-ext>.



Dr. Petra Püchner
Steinbeis-Europa-Zentrum (Stuttgart/Karlsruhe)
petra.puechner@stw.de | www.steinbeis-europa.de



Beate Wittkopp
Steinbeis Transfer Center TransferWorks BW (Schönaich)
beate.wittkopp@stw.de | www.transferwerk-bw.de



iENA: A Tradition of Innovating

Steinbeis experts now in their tenth year alongside exhibitors at the international trade show of ideas and inventions

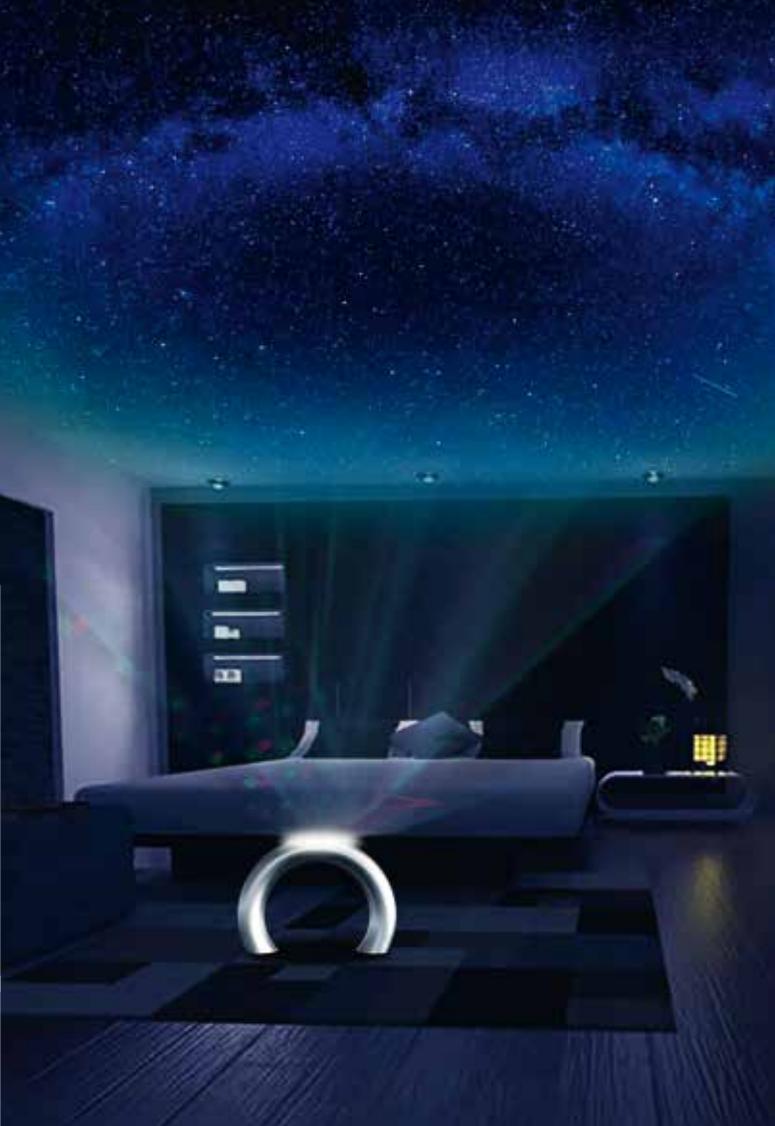
"We've got to take that one to iENA" – people working at the Infothek Steinbeis Transfer Center in Villingen-Schwenningen are used to hearing this from the director, Wolfgang Müller. The experts from the district of Black Forest-Baar have been traveling with their project partners (and their inventions) to the iENA trade show in Nuremberg for over a decade. The international event revolves around "Ideas, Inventions, New Products" and its aim is to promote the marketing of novel products. Every year the Steinbeis experts evaluate products and their projects with partners to see if there is potential to invite an inventor to accompany them at the Steinbeis booth.

Wolfgang Müller believes there are a number of reasons why it is important to go to iENA: "Aside from presenting the products with and on behalf of our partners, it can also be a good chance to showcase our own competences. We only put inventions on display if we've actually worked on them, and only if we believe in their potential." Müller also values trade shows as a key source of knowledge. "As we're actively involved in innovation management, we're always on the lookout for information on technology trends and innovative commercialization concepts, so iENA has always been a regular event on the agenda for us."

Aside from these aspects, the trade show is more than anything a key platform for exchanging ideas and networking, and this is reflected in the feedback from exhibitors who joined the Steinbeis experts in making the journey to Nuremberg in 2017. One example is Jochen Heusel, the inventor of a mobile projection system called ANDROMEDAR, who is confident he did the right thing: "There were lots of visitors at the trade booth and the interesting conversations confirmed to us that our product concept is really good and has huge market potential." Heusel's invention is based on a patented white-light laser technology of the future. Controlled by an app, it projects a realistic night sky of bright stars with sensational Northern Lights, shooting stars, and distant galaxies, which can be displayed on walls and ceilings in a bedroom and

other areas. The feedback he received at iENA, the first time Heusel showcased ANDROMEDAR to a public audience, strengthened his resolve and the engineer from the Swabian city of Reutlingen now feels even more optimistic about taking the next steps. He is currently seeking investors, producers, and suitable business partners to scale up to serial production and answer demand, which is expected to be high. He has already notched up his first successes, confirming that the innovation has major potential. ANDROMEDAR has also already been fitted and tested in a number of buildings, such as the spa in Beuren (district of Esslingen).

Christof Kaiser, from Geisingen in Tuttlingen county, feels similarly optimistic about the future. His innovation, a revolutionary compressed air system called KAISAIR, was also showcased at iENA. The invention significantly simplifies the distribution of compressed air, especially in mechanical engineering and machine construction. KAISAIR is a uniquely flexible, entirely aluminum system with a variable diameter of 25-100 mm. Installation is child's play. "Compared to other products in the market, this invention delivers superior air throughput with the same tube diameter and it has a double O-ring sealing to prevent leakage and air loss," explains Kaiser. Adolf Jetter, who works at the Infothek Steinbeis Transfer Center (where he is responsible for patents and technology) and



attended the trade show on behalf of the inventor, explains enthusiastically just how useful the invention is: "All of the visitors who have to deal with compressed air at their place of work were amazed – even big companies and global players. KAISAIR delivers significant benefits in all places where compressed air is used commercially." Despite the digital nature of modern times, for the patenting experts a traditional trade show is the ideal way to set marketing activities in motion. "Compared to getting in touch for the first time through digital media, a face-to-face meeting establishes a much stronger basis of trust – I'm standing right there with the customer and getting a feel for preferences."

A key preference of many people – independence – is also the area of focus of another invention presented in Nuremberg, this time developed by Föhl from Remshalden in the county of Rems-Murr. The recent invention combines a wheelchair with a front wheel and a universal carrier. It's a unique and extremely useful aid for a variety of applications. It acts as a locomotion aid and it is highly adaptable, easy to handle, and can be precisely controlled. The universal carrier not only makes shopping easier, it also makes it possible to engage in numerous outdoor activities. The contraption is also targeted at families, as the managing director Walter Föhl explains: "There's been nothing on the market until now that acts as an aid and allows moms or dads sitting in a wheelchair to just simply go out by themselves with a baby, or do the shopping, visit a pediatrician, or do similar things without help or complications." A particularly important aspect for the team of inventors working with Föhl was that the universal attachment is easy to install, so it should require no specialist technical knowledge of tools: "The universal carrier can be attached with a couple of hand movements and added to the

attachment wheel, fixed in place, and it's ready to go. It has two sliding crank attachments so it's easy to adjust the setting to the width of the frame on the front wheel or wheelchair." Another feature of the carrier is that it is for universal use so it can be mounted onto different types of wheelchair models. Looking back, Föhl feels that taking part in a trade show is "a great opportunity to present a prototype of the universal carrier to a wider audience," and he reports having interesting conversations with people, which lead him to conclude that "the carrier will have good chances in the market."

His assessment is shared by Frank Saier, a member of the development team that worked on the Terra Booster and the Try-Hybrid Module. These two inventions make it possible to do away with boreholes, geothermal baskets, and probes in civil engineering, and open the door to a variety of new possibilities. "Our solutions can be used anywhere and they significantly reduce operational outlays and follow-up costs. They also require no official approvals. Both innovations are for universal use as a new heat source for all brine heat pumps on the market, or as an efficiency-enhancing regeneration module for creating energy." The team working with Saier also came to a positive conclusion after iENA and reported making lots of new contacts. They also decided to attend the international manual trade show in Munich (IHM 2018), adding: "When we're there we can apply for the Federal Innovation Prize and the Bavarian State Prize." There was something neither inventor, neither Saier nor Leßmann, could have known while they were exhibiting at iENA or when they were at IHM 2018: On March 11, 2018, their invention Terra Booster was awarded the Bavarian State Prize for outstanding technical achievements in the field of manual trades. The future will reveal how much actual potential there is for the product. But one thing the two inventors can already be sure of is that attending iENA was hugely important and indeed it still is.

"Looking back, iENA 2017 was extremely successful," says Wolfgang Müller, reflecting the opinions of all exhibitors. "It's always interesting when views on innovation processes are exchanged between the exhibitors and the visitors, or just between the exhibitors themselves, even if it's about totally different products. The context allows people at the show to learn from one another; iENA is like a stepping stone that provides impetus on a journey, whereby the goal is to take the invention to market." Müller considers one particular insight to be particularly pertinent in the follow-up to iENA 2017: "Innovation is not a straight-line process, it's circular – sometimes it unveils opportunities, but sometimes the information you have is so elementary that it feels like you have no other option but to completely revisit the overall strategy just before market introduction – and if necessary, make changes." Once again, the iENA trade show works like a relay switch between three Steinbeis success factors: technology, transfer, and application.

Image: New products on display at the shared Steinbeis booth at iENA 2017



Marcel Reiner

Steinbeis Transfer Center Infothek (Villingen-Schwenningen)

su0252@stw.de | www.steinbeis-infothek.de

Xavin: A Platform for Local and Emotion-Based Investments

The Steinbeis consultant Mario Buric helps a team of business founders on the journey to self-employment

Tobias Ungerer has been a passionate member of local clubs since his childhood. Whether it was soccer, skiing, or tennis – everything he's done for years has been with other sports enthusiasts in a club. But it's not just sports that make being the member of a club so special for Ungerer, it's also about sharing experiences and friendships with fellow players. You sit there exhausted after soccer practice and enjoy a beer with others in the changing rooms. On the weekend, raring to go and determined to win, you pull together for the next match. This is the sort of thing you can only enjoy in a club. But at the same time, he did keep on noticing how much help clubs needed with renovations and their infrastructure. Lousy pitches, badly working showers, dilapidated club houses. This was the motivation for Ungerer and his team mates to set up Xavin, a platform for local and "emotion-based" investments. They were supported in their venture by the Steinbeis Consultant Mario Buric.

Clubs clearly have huge investment backlogs, currently estimated at 40 billion euros. This is mainly because they don't have much to go on when they approach banks and it's hard for them to apply for loans. They simply can't offer the required security and capital reserves. Because of this, Ungerer and his colleagues summoned up all their courage and set up Xavin, also thanks to the support of the Baden-Wuerttemberg State Bank (LBBW) and Pioniergeist GmbH.

Aside from the invaluable help provided by LBBW, they also received support from Steinbeiser Mario Buric, who has been working in the crowd-funding area for many years. Not only does he help founders fine-tune their business models, he also helps forge networks in the startup scene and line up client contacts. Buric also has experience in setting platforms and thanks to this experience, he was able to offer practical input as an expert on a variety of fronts, starting with the strategy to hunting down investors and important technical and regulatory issues. The point is, it's no longer enough to just set up a website when you're launching a crowd-funding platform. There are a number of legal requirements you have to adhere to, such as the legislation introduced in Germany to protect small investors. Buric also provides help with sales issues, especially by tapping into his network of multipliers and potential clients.

The Xavin team now helps clubs to take out loans through its members and supporters. Unlike the process with traditional donations, this now makes it possible to quickly fund large projects. In return, investors feel good about supporting a meaningful project in the local area and they receive attractive interest.

"To make loans worth it for investors, more than anything you need one thing – confidence in the club. This is because the loans qualify as a 'subordinated debt,' so there's no collateral and they're not allowed to cause a club to go bankrupt – before it gets to that point, a loan is canceled," explains Ungerer. As a result, it's important that the club has been managed carefully for years and projects are well planned and easy to implement. For the clubs, there is the obvious advantage that funding is uncomplicated and quick, based on a modern financing model that also offers other significant advantages thanks to Xavin. In

accounting terms, banks place Xavin loans given to a club into their equity ratio. As a result, it's less expensive for them to raise debt capital. In addition there is the possibility of obtaining funding quickly and easily from the sports federation or the public sector if money can be paid out gradually over several years.

It has been proven that this form of financing is not just a good idea in theoretical terms. Xavin has already completed three successful financing initiatives and lined up loans worth just under € 200,000 from 60 investors. In fact the projects were over-subscribed and collecting the money only took an average of 20 days. The term of the loans is usually five years and the interest rates agreed with the investors are between 1.5 and 2.2 percent. Thanks to Xavin, the TCW tennis club in Straubenhartd now has brand-new tennis courts, MTV in Stuttgart is now planning its own children's playground, and TuS Bilingen is building a new seminar room for adolescents – all thanks to the crowd.

"In the future, crowd funding will become increasingly important for clubs since banking is becoming more and more tightly regulated," predicts Ungerer. At the same time, there is growing interest among investors in meaningful investments, or so-called impact investing. People want to be sure that their money is going toward a good cause. Xavin offers the possibility to add a new category within the funding mix of clubs, also providing reassurance to investors that they are supporting a meaningful project in the local area.

Xavin is on the lookout for more clubs to help in 2018. If you are interested in finding out more, contact tobias@xavin.eu.



Mario Buric
Steinbeis Consulting Center Business Start-up (Stuttgart)
mario.buric@stw.de | www.steinbeis-exi.de



Tobias Ungerer
Xavin
tobias@xavin.eu | www.xavin.eu



PG
PETER GRESS

Leaping into a Digital Future

A business owner from Esslingen shows how digital transformation can be made to work in manual trades

Craftsmen involved in the manual trades will have to fast-track digital transformation in the coming years – something the chambers of craft industries in the state are convinced about. How this can actually work in practice, is something the hair salon owner Peter Gress proved convincingly at the award ceremony for the Seifriz Award. This award honors successful collaboration between companies involved in the manual trades and academics or scientists, rewarding them for coming up with innovative solutions and developing solutions until they are ready for the market. Steinbeis bestows the award with the Baden-Wuerttemberg Crafts Congress and other partners.

Peter Gress has looked intensively into digital technology in recent months. "When you're striving for excellence, it's important to merge manual skills at the right time with cutting-edge technology," says the owner-manager of the hairdressers Gress Friseure in Esslingen. He believes this is essential for craftsmen in order to safeguard their jobs in the future and offer exciting work with attractive opportunities. "Digital transformation is a huge door to opportunity for the manual trades. The focus has to shift more and more to add-on benefits and added value – for everyone involved."

As part of its carefully thought-through digital strategy, the Esslingen firm shows how to implement and make the best use of renewal in the manual trades. It is even doing this with an unconventional and innovative application based on augmented reality. Clients who received the latest customer magazine were given the opportunity to try out this state-of-the-art digital development for themselves. On one page there are a variety of images of employees, which were taken with augmented reality software. The first thing Gress's clients have to do is download an app to their smartphone. They then scan the page showing his employees, hold the smartphone over an individual image, and wait for the surprise.

The term augmented reality (AR) is used to refer to technology that takes something real and adds something to it. What Gress's clients suddenly see is augmented, giving them computer-aided information delivered in a video or as audio. Until now, other types of technology based on virtual reality could only be used or perceived with special data glasses. With AR, all that's needed for it to work is a smartphone. The object that is scanned with the app provides the extra information. Museums all around the world are using this technique to provide extra information on paintings, photos, and sculptures. You can even scan buildings, which suddenly reveal their secrets in a video or audio file. And what does this have to do with hairdressing? "AR offers us an op-

portunity to really add value for our customers. Whether it's additional information on products, a tutorial, things worth knowing about promotions or events – we exploit the new possibilities offered by digital technology and use this to keep people up to date," explains Gress.

In this case, the idea of getting into augmented reality did not actually come from the businessman himself, but from one of his clients. Gress: "This proves once again that amazing things can happen when people communicate with one another and exchange ideas. And now we're taking off together – into the future." Gress Hairdressers is a pioneer in the implementation of digital solutions in the salon sector. Its main emphasis always lies in adding value for the customer. Gress strongly believes that as an industry based on service delivery, hairdressers will have to jump on the train as quickly as possible: "The era of information paves the way for completely new things – just as much for companies as their business partners and their customers."

Indeed, 83% of Germans search for things and look for information online. Whether it's opening hours, contact details, instructions on going places, or arranging an appointment – as markets merge and technical changes sweep through everyday life, digital solutions are opening the door to new opportunities – for the manual trades, the economy in general, and society. Gress: "There are lots of step-ups in technology and these release major creative energy with the potential to add value. What this means for businesses is that they not only have to react to change, they also have to actively shape it."



Peter Gress
Gress Hairdressers (Esslingen)
info@gress.de | www.gress.de



“For me, there’s nothing more exciting than being at the forefront and witnessing the very latest technology”

An interview with Dr. Christian May, manager of Transfer Platform Industry 4.0, the Steinbeis Innovation Center

Dr. Christian May of the Transfer Platform Industry 4.0 Steinbeis Innovation Center talks about the issues SMEs face due to digital transformation and how they deal with these thanks to the support of the Steinbeis experts at Transfer Platform Industry 4.0. Work at the center transcends a variety of fields and universities and revolves around transferring knowledge and technology between science and academia on the one hand, and SMEs on the other.

Hello Dr. May – you’ve been managing Transfer Platform Industry 4.0 since November 2017. What motivated you to become involved in the project?

You feel the effects of digital transformation everywhere at the moment. The term Industry 4.0 is so omnipresent, it’s almost wearing a bit thin, but on the one hand lots of people are still not sure what it’s supposed to mean and on the other, it’s still surrounded by a lot of insecurity and skepticism. My perception of this atmosphere of change is that it’s a challenge but also an opportunity to be an active part of the process. For me there’s nothing more exciting than being at the forefront and witnessing the very latest technology happening, and at the same time being able to make a contribution toward safeguarding the competitiveness of our economy or even boosting it. I’m convinced that Germany can only defend its role as the global leader in industrial production and automation technology in the long term if the topic of Industry 4.0 is tackled actively and sustainably.

The aim of the transfer platform is to make it easier for SMEs in Baden-Wuerttemberg to exploit the opportunities presented by digital networking and intelligent manufacturing. Where do you feel these firms have the biggest deficits, and what services does the platform provide in this respect?

The economy is thankfully doing very well at the moment but in a way, that almost makes things worse: The companies’ order books are full so they don’t have the spare capacity to free up people from everyday tasks and put them to work on planning the future of the digital economy. Of course for SMEs there are also financial hurdles, which aren’t such a difficult issue for bigger companies. For these reasons, an innovation and digital technology gap has been opening up between the SMEs and large companies for some time now, and in the long term the danger is that the SMEs will get left behind by the competition.

This is where I'd like the transfer platform to provide a starting point by lowering the threshold for getting into Industry 4.0 technology. The idea is to offer low-threshold ways to raise awareness among companies in terms of where it would already be possible to use Industry 4.0 solutions right now, and point to the different things being researched at the moment at the individual universities. What we also want to do is find out what specific needs the companies have so we can react to these and if possible, start individual projects. To do this, we're setting up a shop window function at some of the individual universities for the SMEs to gaze into at a local level, and this should result in certain projects and even alliance projects with several partners with interest in the same or similar areas. At the same time, focusing on the actual problems faced in business benefits universities teaching in the field of applied science – their remit is to make graduates with the right education available to the SMEs.

Your Steinbeis Innovation Center provides the underlying organization for a joint project at universities of applied science in Aalen, Esslingen, and Reutlingen, as well as the Steinbeis Foundation. What are the advantages of this mixture of different parties and what implications does it have for your role as a platform manager?

There are three universities involved in the initiative in four locations and each contributes with its own research expertise in each of the different fields. That enables us to act as a platform in quickly bringing together any interested SMEs by putting them into direct contact with experts in a variety of areas. The wide spectrum of research activities covered by the universities also enables us to offer a holistic view of any problems faced, for example if people need to understand the details of certain technical aspects or if business management aspects need opening up. We also always have the Steinbeis Foundation in the background so we can draw on the wealth of experience offered by the Steinbeis Network and tap into those resources. What this setup means for my tasks as a platform manager is that we can work on an integrated level and allow various aspects relating to the different partners to be conveyed to the outside world in a uniform manner. This starts with sharing booths at trade shows and a common website, but it can also include projects in which we all pull in the same direction.

There is already a pilot project underway, initially focusing on the automotive industry. What direction do you think future projects will take you in?

It's not exactly surprising that the automotive sector plays such an important role in an area where the leading suppliers to the carmakers industry and their suppliers are based. But there are also a host of global market leaders here in a variety of market niches – the so-called hidden champions – in industries such as mechanical engineering and medical technology, and it's precisely at SMEs in these sectors of industry that I still see major potential.

The Transfer Platform Industry 4.0 Steinbeis Innovation Center

Supported by the Baden-Wuerttemberg Ministry of Economic Affairs, Labour, and Housing, the universities of Aalen, Reutlingen, and Esslingen have been working in collaboration with the Steinbeis Foundation to set up a transfer platform called Baden-Wuerttemberg Industry 4.0. The aim is to highlight the potential offered by Industry 4.0 (smart production/connected manufacturing) to SMEs in Baden-Wuerttemberg and the technologies this covers in order to pave the way for embarking on implementable projects.

What this entails specifically is using digital solutions to network machines and technical equipment with edge computing or cloud technology. This makes it possible for production to organize itself "smartly" and independently. By pooling the different specialist knowledge offered by the three universities and combining this with the transfer expertise of the Steinbeis Network, the aim is to identify solutions with a bearing on business practice that will benefit the competitiveness of SMEs in the area.

Services

- Research, development, and innovation
- Consulting and expertise
- Training and continuing professional development in the field of Industry 4.0

Key areas of main projects:

- Sensory analysis/actuating elements
- Smart factory data and simulation
- Systems skills in Industry 4.0
- Human-machine interface
- Big data, data mining, and data security
- Digital business: digital business models and potential benefits offered by Industry 4.0

The universities of Esslingen, Aalen, and Reutlingen will be appearing with Steinbeis at Hannover Messe from April 23 to 27, 2018. The universities will be taking part in the world's most important industrial trade show as part of an alliance research project called Transferplattform BW Industry 4.0 and they will appear on a shared booth with the State of Baden-Wuerttemberg, Hall 2, Booth A 18.

Image: Dr. Christian May



Dr. Christian May
Steinbeis Innovation Center Transfer Platform Industry 4.0 (Göppingen)
su1980@stw.de | www.tpbw-i40.de

Advice for Startups over Breakfast

A networking event at the gym

A networking event of a different kind took place in Stuttgart late last year: a breakfast for business founders in a gym. The startup breakfast is a grass-roots format initiated several years ago by Daniel Nagel, himself a businessman and attorney, alongside Mario Buric, a Steinbeis consultant and manager.

One thing that's also different about the event is that it's invitation-only. The event also only focuses on a small number of topics and emphasis is placed on networking on a narrower basis. This latest event was attended by a number of sports startups based on a variety of business models, as well as sports experts and investors, who all engaged in lively conversation. The contacts that such made-to-measure events have resulted in for participants in the past have already led to business alliances and successful contracts. Although the atmosphere is relaxed, there's a clear focus on the underlying goal.

As in the past, the experts from the Business Start-up Steinbeis Consulting Center were also at the event. Ralf Lauterwasser, Markus Riehl, and Mario Buric were involved in the face-to-face conversation, sharing many handy tips when it comes to starting a business. Judging by the feedback from the startups who attended the event, which was entirely positive, the event forum is a roaring success.



Helping startups with more than their muesli: the startup breakfast in Stuttgart.

The events have now been taking place for several years under the patronage of Startup Stuttgart, and it is also backed by ifex, the business startup and succession initiative funded by the Baden-Wuerttemberg Ministry of Economic Affairs, Labour, and Housing.



Ralf Lauterwasser, Mario Buric

Steinbeis Consulting Center Business Start-up (Stuttgart)

su1635@stw.de | www.steinbeis-exi.de

Life Phase-Oriented Staff Training Bears Fruit

The First Competence Services Advisors (SHB) complete their training

The Steinbeis Transfer Institute competence institute unisono (kiu) has joined forces with SteginkGroup-Akademie to offer older staff members certified training to become a Competence Services Advisor (SHB). The focus lies in reducing the physical stress placed on workers and at the same time offering a broader variety of alternative and challenging duties. The first course participants have now received their certificates.



Awarding the first university certificates as a Competence Services Advisor (SHB), left to right: Jackie Reichert (Trumpf), Stephan Bundschu (Trumpf), Gerd Duffke (Trumpf), Andreas Schwall (Trumpf), Marcus Haug (Trumpf), Marcus Fernandez Carballo (Trumpf), Henriett Stegink (SteginkGroup-Akademie), Gudrun Jürß (Steinbeis), Peter Schust (Steinbeis)

The training program is part of a life phase-oriented staff development model offered by Trumpf GmbH + Co. KG from Ditzingen. The German Education Award was bestowed on the laser specialist for its staff training in 2017.

Training was given to five service specialists, who now not only meet technical requirements of professionalism, but can also point to competence in terms of communication with customers and responding to client wishes and expectations. Importantly, they can now "manage"

their progressing age in their own field of work. Their rich experience allows them to act as fully trained and "acknowledged" role models, but also providers of ideas for their younger co-workers.



Gudrun Jürß

Steinbeis Transfer Institute competence institute unisono (Ulm)

su1534@stw.de | www.sti-kiu.com

The 7th Bestowal of the Dr. Ivo Holzinger Award The School of Management and Technology at SHB honors the top bachelor graduates

The School of Management and Technology at Steinbeis University Berlin (SHB) bestowed the Dr. Ivo Holzinger Award to the top graduates on its bachelor degree program for the seventh time in January. Dr. Ivo Holzinger was the long-standing mayor of Memmingen and he played a pivotal role in establishing a place of study in that city through the School of Management and Technology.

The current mayor of Memmingen, Manfred Schilder, who is also a lecturer in business administration and economics at Steinbeis University, welcomed the graduates and their families at Memmingen Town Hall: "It was a good decision to study in Memmingen. You are shaping the future. You will use innovations to create competitive advantage for Germany." He also called on the graduates to be leaders with spiritual ideas. Learning is imperative due to the tremendous pace of scientific development.

This year the school's Dr. Ivo Holzinger Award for the bachelor of arts program went to Sabrina Guggemos, whose degree project for the Huhtamaki Group looked at production optimization, and Heike Hofmiller for her project looking at logistics improvements at KVT-Fastening GmbH. Joachim Wohllaib and Mario Schmid received the award for the bachelor of science degree: Schmid developed a mobile app at Daimler TSS GmbH for his degree program and Wohllaib received the award for database optimizations at Liebherr Hydraulikbagger GmbH.

Representing the School of Management and Technology, Professor Dr. Axel Lamprecht extended a big thank you to the representatives of

The 2017 German Raw Material Efficiency Award Goes to REProMag

Steinbeis 2i acted as partner to the EU project

The Federal Ministry for Economic Affairs and Energy awards the German Raw Material Efficiency Award for outstanding examples of products, processes, and services that make efficient use of materials. It also recognizes research findings with a strong bearing on business application. As project coordinator and representative of the REProMag consortium, in January OBE Ohnmacht & Baumgärtner GmbH & Co. KG from Ispringen was given the award for the EU-sponsored project (REProMag, H2020 GA, #636881). The consortium of 14 European research and industrial partners – including Steinbeis 2i – developed an innovative and resource-saving technique for producing permanent magnets out of recycled rare earths, also demonstrating the suitability of the method to important industrial applications.

Rare-earth permanent magnets are considered the strongest type of magnets and are used in electric motors in engines, elevator sensors, actuators found in medical devices, grippers mounted on machines, and in the hard disks of computers. Rare-earth materials are difficult to source, however, so extraction in large quantities is correspondingly expensive. Furthermore, until now these materials have almost exclusively been sourced in Asia. They will be an extremely important part of future technological



The proud prizewinners at the awards ceremony (left to right): Dr. Ivo Holzinger, Prof. Dr. Axel Lamprecht, Sabrina Guggemos, Heike Hofmiller, Joachim Wohllaib, Mario Schmid and Manfred Schilder

Memmingen city: "Our shared commitment at Memmingen Study Center has forged a close relationship with the city." The former Business School Memmingen (now SMT Study Center Memmingen) has been receiving strong support from the city since 2006 in setting up a vocationally integrated school. But also the companies that provide the projects have been crucial, and their commitment has been tremendously important. Lamprecht also gave them a big thank you, since at a dual-education university "company supervisors are particularly important for translating theory into practice."



Nadine Riffel

School of Management and Technology Steinbeis University Berlin (SHB)
(Filderstadt)

su1859@stw.de | www.steinbeis.de/su/1859

developments, for example in electric cars and renewable energy. Thanks to a production method developed by the consortium called shaping, debinding, sintering (SDS), it is now possible to produce complex shapes and customer-specific parts cost-effectively offering a significantly higher level of material efficiency.



The process used by REProMag makes it possible to recycle the materials used in rare-earth magnets. This provides an important boost to the recycling of this technologically highly important raw material. Steinbeis 2i was responsible for managing the administrative side of the project, for facilitating exchange within the consortium, for managing the exploitation of results, and for sharing, communicating, and supporting insights gained by the alliance members in terms of intellectual property rights.



Sabine Müller

Steinbeis 2i GmbH (Stuttgart/Karlsruhe)

Sabine.Mueller@stw.de | www.steinbeis-europa.de/repromag |
www.repromag-project.eu



Mission Germany

Steinbeis experts develop export training concept for Estonian companies

Estonia is one of the most recent new members of the European Union and its economic performance is good. The Baltic nation has one of the most modern government administrations in Europe and it enjoys excellent business ties to the east of Europe, especially in Russia and the Scandinavian countries. Exports to Germany, considered a key market in the European Union, are surprisingly low. As a result, in 2016 the Estonian economic development body Enterprise Estonia (EAS) announced an initiative called Mission Germany. Its aim is to make it easier for Estonian firms to enter what is from an Estonian standpoint the most important state in the European Union. Steinbeis is coordinating and implementing the project in Germany.

The six-month initiative provides a combination of high-level international training and business consulting. The target group for the support program is business enterprises in the food, furniture, IT, electronics, and construction industries who attained export revenues of at least €100,000 in 2015 and who employ an export manager with at least three years' experience in the industry. Up to five companies were chosen from each sector of industry. The Estonian project partner, Marketingi Instituut, was made responsible for acquisition, overall coordination, and first and foremost, attracting Estonian companies. Steinbeis assumed responsibility for recruiting suitable specialists and consultants and coordinating the program in Germany.

The project got underway with two-day training sessions in Tallinn, the Estonian capital. Four German university professors shared insights into export topics with the companies on the course. The training was arranged in blocks of two days and covered the key topics of business methods, strategic marketing, digital marketing, and sales management in Germany.

Once the theoretical fundamentals had been established, the participants were given business consulting. The consultants analyzed the

market opportunities and accompanied the Estonian companies on business trips in Germany, most of which lasted several days. The Estonian firms were organized into groups and assigned a consultant who is familiar with their industry to act as a primary contact. Based on the current business model of each firm, the consultant discussed the next steps in business development. The main focus for the business trip was to enter into discussions with potential leads and partners in the market, as well as existing business partners. Time was also invested in researching the market and a benchmarking exercise.

It quickly became apparent that the biggest problem faced by firms was the small number of contacts, who were not looked after or managed properly. Without further work, it would be difficult to put the companies' brands to effective use – if at all. The products offered were also insufficiently matched to the German market and there was no clear definition of the sales concept or the target group. As a result, demand was low and although the companies understood this, they had done nothing to rectify the situation. The Steinbeis experts gave the firms practical support in this regard by lining up specific business contacts



Image: The Steinbeis experts at the closing ceremony in November 2017 in Tallinn (left to right): Wilfried Ludwigs, Michael Sperber, Patrick Brauckmann, Jan E. Bandera, Rolf Sost, Roland Lock

and helping the firms get in touch with people themselves. They were also given help with formulating the business models properly and making them more precise for the German market, with a variety of practical pointers on brand development and selecting the right products or services to enter the market and build business. This proved to be tremendously important for the companies.

So what happens next for the project partners? The Estonian firms involved in the initiative have already been contacted since returning from Germany and have submitted a number of business proposals, some of which have resulted in contracts. There is also work to be done on adapting internal processes. And last but not least, each company has the possibility to participate in a follow-up project. After the current initiative ended in late 2017 with a high-profile closing ceremony, the project partner EAS has decided to extend the program for another year.



Jan Eric Bandera

Steinbeis Transfer Center Economic and Technology-Policy Dialogue
(Stuttgart)

su1473@stw.de | www.steinbeis.de/su/1473



Wilfried Ludwigs

Steinbeis Transfer Center Consulting of Medium-sized Businesses (Bischweier)

su0556@stw.de | www.unternehmerprojekte.de/

Experts involved in this project:

Patrick Brauckmann (Steinbeis Consulting Center Sales.Training.Strategy.), Roland Schloss, Rolf Sost, Michael Sperber (business consultants)

Prof. Dr. Sonja Salmen (Steinbeis Consulting Center for Social Media Management), Prof. Dr. Uwe Sponholz, Prof. Dr. Waldemar Pfortsch, Prof. Dr. Manfred Manthey (lecturers and coaches)

Consulting X.0 – Networking. Digital transformation. Convergence.

The 2018 Steinbeis Consulting Day

There is nothing permanent except change, as Heraclitus already knew in 500 AD. 2,500 years later, change is still ever-present. Current societal, technological, and economic developments are changing companies and thus also changing business consulting. The 2018 Steinbeis Consulting Day will revolve around the topic of Consulting X.0 – Networking. Digital transformation. Convergence. This year it will take place on June 27, 2018 in Stuttgart. The main issue it will examine is the significance of developments for technology and management consulting.

Business enterprises, the economy, and society in general are witnessing a prolonged phase of sweeping change driven by digital transformation and penetrating networks, exacerbated by converging structures, systems, and technologies. Not only is this affecting core areas of industry and key sectors within manufacturing, it is also having an impact on the public sector and services. As a result, areas such as technology services, especially technology and management consulting, are also facing new and fundamental challenges. So what are the challenges of Technology and Management Consulting X.0?

Experts working in consulting, businesses, and science and academia will use the fourth Steinbeis Consulting Day to examine this question

and discuss the latest trends and developments. The day will be broken down into a variety of interactive events to allow the participants to exchange ideas and establish areas of overlap.

The event is free. To register online and access further information go to www.steinbeis-consulting-tag.de.



Marina Tyurmina

Steinbeis Headquarters (Stuttgart)

marina.tyurmina@stw.de | www.steinbeis-consulting-tag.de



LEADERSHIP.EDUCATION.PERSONALITY.



Leadership.Education.Personality.

A review of the 2017 Steinbeis Competence Day

More than 200 people attended the Steinbeis Competence Day in the Stuttgart Haus der Wirtschaft (House of Commerce) on December 6, 2017. The question they came to examine was how important leadership is in a world of increasing complexity and dynamism. They also looked at challenges currently faced by managers.

In his welcome speech, Prof. Dr. Dr. h.c. Werner G. Faix, Managing Director and founder of the School of International Business and Entrepreneurship (SIBE) at Steinbeis University Berlin and vice-president of Steinbeis University Berlin, highlighted the significant interaction between three closely connected factors: leadership, education, and personality. He also described how managers are educated and how this has changed over time, as well as changes in how companies recruit the next generation of managers.

In a speech revolving around current megatrends, Dr. Andrej Heinke, director of Future Research and Technology Strategy (CR/FUR) at Bosch, discussed how these trends are currently shaping the modern world of work and will continue to do so in the future. He also highlighted how indispensable competent managers are with their individual personalities and education. Developments in new technologies, such as robots,

automation, and artificial intelligence (AI), are trends that need a particular focus in company research, said Heinke. Pointing to the topic of "machines replacing people," he called for solidarity and collaboration between humans and machines in the future. Replacing the human workforce with machines would perhaps make sense with repetitive tasks, but if work involves improvisation, creativity, and interaction between humans, machines could not possibly push people into the sidelines, said Heinke.

His presentation was followed by a panel discussion on the focal topic of the day, which was moderated by Prof. Dr. Jürgen Abendschein, managing director of Steinbeis University Berlin. The main focus of the discussion lay in the interaction between leadership, education, and personality. A number of controversial arguments made by experts on education and business were examined, particularly with respect to the



personality of managers. The panel members focused on a comparison between an autocratic manager and a manager who acts as a kind of coach. The speakers were of the consensus that a coach who allows co-workers to work independently based on goals is a more future-compatible manager than the autocrat. Despite this, autocrats were not deemed entirely a bad thing, since autocratic managers can bring certain benefits to a company, especially if they are innovative.

The talks in the afternoon looked at two topics: Synergetics and Self-Organization; Elite Universities: Quo Vadis. Prof. em. Dr. rer. nat. Dr. h.c. mult. Hermann Haken presented a concept he developed on synergetics and explained laser experiments and the physical theory of synergetics, a topic he has written about extensively in past decades, producing both theoretical works and applications. In the final talk of the day, Prof. Dr. Giorgi Khubua looked at the differences between an elite university and all other kinds of universities. He made a clear distinction between an elite university and a mass university. According to Khubua, the strongest factor in this respect is the approach to differentiation taken by elite universities. They focus on the quality of students, whereas mass

universities place emphasis on the quantity. Khubua described the future of elite universities as so-called network universities, which forge relationships with non-university institutions such as politics, companies, or the arts in order to safeguard quality and economic viability.

The Steinbeis Competence Day 2017 drew to a close with a second panel discussion looking at the main findings of research into education. Moderated by Prof. Dr. Dr. h.c. Werner G. Faix, experts from SIBE discussed the results of doctoral theses written as part of a special research project looking at leadership education. The project was conducted over the last couple of years in collaboration with the Ludwig Maximilian University of Munich. One finding that was highlighted in particular was the connection between different types of definitions used in business for "leadership" and the educational methods that underlie the term. Dr. Jens Mergenthaler has examined the term "leadership." In connection with this, he has also looked in greater detail at how managers are trained. A key emphasis made in Mergenthaler's contributions to the discussion lay in considering those who are managed – not just those who manage. Dr. Stefanie Kisgen has been looking into future developments of management training and provided a prediction for leadership education developments by 2030. In his research, Dr. Ardin Djalali has examined the MBA training given to managers throughout the world and changes in programs as a result of the financial crisis in 2008 and 2009. In a study conducted by Silke Keim, an analysis was made of the skills people need in management roles. Her study involved examining several thousand competence assessment sheets of up-and-coming managers.

The Steinbeis Competence Day 2017 marked the beginning of a series of international scientific symposia, starting in 2018. The organizers of the events will be the Steinbeis School of International Business and Entrepreneurship and the Steinbeis Foundation. To coincide with the symposia, SIBE will be working with Springer Publishing to produce a scientific journal on fundamental and inspirational ideas, new scientific insights, and reports on the practicalities of providing education in this area. The initiators of the journal are Prof. Dr. Dr. h.c. Werner G. Faix and Prof. Dr. Rudolf Tippelt.

Image: © shutterstock.com/mypokci

Subject to approval, video excerpts of the talks at the Steinbeis Competence Day can be viewed online (in German) by going to the Steinbeis media library at www.steinbeis.de/en/media-library



Nick Lange
Steinbeis School of International Business and Entrepreneurship
Steinbeis University Berlin (Herrenberg)
nick.lange@stw.de | www.steinbeis-sibe.de



BRAND CODE

This reflects how we get things done. The brand code is like a compass for us to challenge what we are doing so that we are perceived in a uniform way by our target group.



SYSTEM OF VALUES

This captures how we behave toward one another within the company. It functions like an internal maxim, like a heartbeat that drives us as a team.



IDENTITY MATRIX

This is an operational tool for our company, defining the DNA. Our identity matrix describes how we see ourselves, plus our aims and aspirations in the things we do every day.

Cultural Transformation in a Traditional Company

Steinbeis experts provide support to a long-term change management initiative at K+S Kali GmbH

What's the best way to boost the competitiveness of a business division, make it more powerful through redeveloped business processes, and at the same time promote fundamental organizational change, and even a management culture based on taking more leadership? This was the complex question tackled by senior management at K+S KALI GmbH in the summer of 2014, when it embarked on a journey with the support of Human Resources & Organisations, the Steinbeis Transfer Center based in Baunatal. The consultants working with Prof. Dr. Arnd Gottschalk, Prof. Dr. Olaf-Axel Burow, and Prof. Dr. Michael Freiboth adhered closely to the techniques of change management process consulting, with a clear focus throughout the project on the Steinbeis philosophy of transferring visions into business.

April 2015: As the first managers entered the room, there was a look of bewilderment on their faces. The chairs were arranged in semicircles. No tables, and no speaker's desk. This was not how they'd pictured the Management Dialog event, which senior management had invited all 180 managers at K+S KALI to attend. The change initiative at K+S KALI originally kicked off in late 2014, when around 40 managers embarked on a process with senior management alongside internal and external change consultants to develop a vision that would involve moving away from thinking in silos and strictly defined department borders toward a process-based organization that is more agile and adaptable and lays greater focus on customers. The new organization came into effect on the Kassel site in early 2015.

An intensive round of work on the culture and values of senior management, who are seen as a role model for the overall change process and predefined values of "trust, transparency, and responsibility," allowed the new format to evolve resulting in a new approach to dialog among managers. One important tool of sustainable change involves the roughly 180 managers at K+S KALI coming together twice a year to take part in an open, participative meeting to look at the strategy, culture, values, and leadership. It also involves "co-worker consulting" and "speed dating" with the head, heart, and hands. The management dialog sessions are planned and moderated by Steinbeis consultants and an internal change team following a detailed sign-off process.

To accompany the change process, support was also given to the factories. The factory managers worked with the management teams on clear, common change messages and communication elements for each specific location to share information with workers and allow them to become involved. A poster called the Communication Canvas proved to be an extremely helpful instrument. It was used for communicating on a uniform basis across all sites, outlining communication goals and the specific road ahead for managers.

Managers on all levels of the company present their key people for each change process. Their job is to become a change agent and they need made-to-measure tools for implementing change in everyday work processes. To facilitate this, the Steinbeis consultants developed a training method for K+S KALI managers called After-Work Training. Training spans seven 3-hour modules to bring managers up to speed with the theory and practical aspects of change management. A number of aspects are covered by training:

- Support during the initial stages through specific instruments
- Support for people in operational roles so they can find their bearings during the process
- Ideas for realigning the culture of leadership
- Networking between managers; establishment of a common foundation for change

Management workshops and coaching sessions were also offered as part of the After-Work Training to discuss different scenarios and challenging management situations.

Change management has developed into a tool of strategic management that is now part of everyday business for companies. As a result, the Steinbeis experts worked together with senior management and the change team to develop a roadmap for the project. The aim was to use this to plan the optimal strategic and operative measures, which should be implemented and evaluated in terms of their effectiveness as part of an "after-action review." Given the success of change interventions and a number of requests for long-term support with the company's change processes, in the spring of 2016 senior management decided to set up two staff departments for organizational development and change management. They also clearly defined their roles: "To act as a system supplier for the (co-)management of change in organizational development and change management." The role of the departments is to shape, support, and evaluate change processes on an organizational, cultural, and

personal level and to advise senior management, factory management, and other managers on change issues. The departments are supported by change multipliers, who have direct contact to managers and workers in each location and are familiar with their processes. The Steinbeis consultants also helped set up the change teams and the multiplier network.

After initial skepticism regarding whether the consultation approach would actually work, senior management, the internal change advisers, and other managers were delighted with the process consulting approach suggested by the three Steinbeis consultants. "Working with the Steinbeis experts was extremely helpful to us. They had an extremely congenial manner and steered us through this difficult change process with the required steadfastness, and ultimately this also enabled us to provide professional in-house support for further planned change processes ourselves. That's what consulting should be like," says managing director Alexa Hergenröther. Her conclusion: To get change processes to work in the long term, intervention is required on a number of fronts, such as management dialog, communication processes matched to each target group, management development, cultural development, and a focus on the future, based on innovation and digital transformation in all areas. If the entire initiative is steered by process management and change management "from a single source," this paves the way for a successful journey based on a future-ready organization and company culture. And while this was all happening, the Steinbeis consultants even achieved what they predicted they would do at the beginning: "We make ourselves superfluous as consultants and empower the organization to manage things off its own steam."

Image: The vision and strategy of K+S Kali GmbH



Prof. Dr. Arnd Gottschalk
Steinbeis Transfer Center Human Resources & Organisations (Baunatal)
su0787@stw.de | www.steinbeis-kassel.de/



Carola Becker
K+S Kali GmbH (Kassel)
www.kali-gmbh.com



Tanja Daume
Tanja Daume Consulting (Kassel)
www.daume-consulting.de

Welcome to the Steinbeis Network

Steinbeis know-how: There are currently more than 6,000 experts actively involved in knowledge and technology transfer at around 1,000 Steinbeis Enterprises. The portfolio of services offered by the Steinbeis Network ranges from research and development to consulting, expert reports, training, and continuing professional development in all fields of technology and management. And this network continues to expand. For an overview of our most recently founded centers, go to www.steinbeis.de/en/news. Welcome to the Steinbeis Network!



More on recently founded enterprises in the network can be found at www.steinbeis.de/en/news



More on recently founded enterprises in the network can be found at <https://twitter.com/SteinbeisGlobal>



“Germany stands in its own way because of its incomparable jungle of rules and regulations”

TRANSFER magazine talks to Dominik Fehringer, director of the Economic Region of Ortenau (WRO)

The concept is in place – but will it translate into a business enterprise? This is just one of the many questions the Economic Region of Ortenau (WRO) looks at every day under the leadership of Dominik Fehringer. TRANSFER talked to Fehringer about the requirements of the young generation of business founders and the challenges of regional economic development.

Hello Mr Fehringer – according to a recent study by McKinsey, the German economy could be growing 0.3 percent faster if small and medium-sized enterprises in Germany systematically exploited the opportunities presented by digital transformation. But only one in two SMEs is actually exploiting opportunity properly. To move things forward, the WRO is now increasingly involved in forging networks between the core economy and the startup scene. This is good – but why did things take so long?

Starting at the beginning, I believe in the power of small and medium-sized business in Baden. Maybe McKinsey also has to ask the right people. Every day I get to see the energy that Ortenau companies invest in digital transformation. We actually organized the first Industry 4.0 events several years ago, when the term hadn't even gone international. A large proportion of our roughly 70 annual events now deal with digital topics.

The voluntary help given to people setting up a business has shifted to the fast lane in recent years. As a result, our members, the firms that form our advisory committee, and the regional Volksbank and Sparkasse institutions have decided to establish a professional framework. Since last year, the WRO has been responsible for business startups in the region. I can think of no other model anywhere in Germany offering such a fast-track package of options to both parties – companies and startups.

You now have a central port of call for young business founders – startUp.connect Ortenau, headed up by Florian Appel. What's the concept behind this and what are your expectations?

WRO being given responsibility for supervising the startup scene was not something anyone could bank on. But the option came along to use this strong network to do it. Everybody in the region who had already been involved in promoting business startups said it was the right way to go. That included the district authorities, the cities and municipalities, but also the banks, the chambers of commerce, the universities, transfer organizations, and other key players. There was an intensive one-year set-up process before things got underway. Everyone invested a lot of energy and know-how. For those involved, the results are something they can be proud of. Once again, the region has shown that people don't compete against one another here in terms of know-how, they all pull in the same direction. This puts us a long way ahead of other regions. Now that the new startUp.connect brand is in place, we expect more awareness of the startup scene, the best possible supervision, different ways for startups to network with established medium-sized businesses, and thus also the transfer of innovations.

What's been achieved so far? Are there any promising startups working with you – about to get out of the starting blocks?

A lot's happened! startUp.connect is actively involved in three regional startup centers: the technology park in Offenburg (TPO), the innovation and technology center in Bühl (BITZ), and the center for trade and industry in Hornberg (ZIG). We're also receiving support from private initiatives. Florian Appel is going full steam ahead establishing a startup scene. At the TPO, a co-working space has been set up and the first tenants have already moved in. We've set up the first part-time accelerator in the whole of Germany. This is a place for schoolchildren, stu-

dents, and people in employment to work in their spare time on good ideas. They also have access to the network established by the WRO, which consists of experienced mentors. We call this network the Black Forest Accelerator and it got underway last November. It's being moderated by Uwe Baumann. On top of this, we've also set up a series of events to offer plenty of variety for startups and different ways to get to know each other and exchange ideas. These include a series of start-Up.connect nights. On every last Wednesday of the month, the startup scene meets up at Brauwerk in Baden, which is also a member of the WRO. The startups introduce themselves to the others and get to hear about all the new ideas. Over and above this series of events, there are also things like the hackathon, where programmers research and work together on special topics. The important partners who helped us with this were Offenburg University, the Volksbank in Ortenau, sevenit, the AOK, and the city of Offenburg.

Most companies are set up in big cities. As a result, lots of medium-sized businesses find it difficult bringing experts in digitalization or IT on board to work on new digital technology projects on site. What can the Ortenau region offer from its repertoire that cities like Hamburg, Munich, Cologne, or Berlin can't?

It wouldn't be wrong to say that there's been a strong tendency for startups to uproot and leave. People who have grown up in Ortenau can set up a business in lots of countries in the world or European cities after school or university. We know a number of business founders who've left the area. The urban areas appeal to them with their hip culture of business startups. And a lot of exceptional things have happened there. But a lot of it is just hot air. If you're setting up a business and you've got a great idea for a digital innovation in manufacturing, you're not going to bump into your customers in a hipster coffee lounge in a trendy suburb of Berlin. That might be the place you feel most comfortable in at first with all its app developers, but at the end of the day you're going to have to get on a plane and fly to Baden-Wuerttemberg to have a meeting with manufacturing companies. From the very first day, we offer a direct line to world-leading industries in the powerful home of medium-sized businesses in Ortenau. This is a USP. It's how we plan to keep smart people in the area, but also attract founders from other places to Ortenau.

When people first think of startups, most associate it with Silicon Valley – where even teenagers earn millions on tech. It's much more difficult being innovative and successful in Germany. What are the differences between the startup scenes in Germany and the United States?

It's no more difficult being innovative in Germany. It's just more difficult translating ideas into products. I'll illustrate this with two examples. The travel services offered by Uber could never have been invented or gotten off the ground in Germany. The legal framework in the taxi industry wouldn't have allowed it to. The next example: Imagine you've got a good idea in an area like digital networking, something like social media, and then you apply your idea under German data protection rules; in all likelihood there'll be nothing left of your business concept, not even a business model. Germany stands in its own way in this regard because of its incomparable jungle of rules and regulations. What else are you sup-

posed to do if you're in doubt as a business founder? Turn your back on the country, maybe even be received with open arms in Silicon Valley?

In the past, the most successful German "serial founders" focused first and foremost on making a good copy of existing concepts. Are we simply not creative enough?

There's nothing disgraceful about tweaking things. China has built a successful economy based on that principle over the past decades. But we do need to get more creativity and introduce more digital know-how, especially in schools. We have a Regional Education Association in Ortenau, which we use to work up suitable concepts that go beyond rigid curricula. But I want to expressly thank our members of the regional parliament who are working in Stuttgart to establish a framework for future-oriented education. I specifically refer to the state secretary Volker Schebesta, who listened to our appeals from the business community. A couple of weeks ago, the state made a big leap forward in terms of digital education. Any idea that promotes creative digital education and action is good for our future.

What in your opinion can we learn from the international startup scene?

Two things in particular: The environment has to be right. This includes all of the activities we cover with startUp.connect. It also includes removing some of the red tape for business founders. That's a job for the politicians. Eliminating bureaucracy, swiping the tightly interwoven cobweb of legal clauses off the table and giving credit to the young digital generation. That would do a lot to help. But the other thing that's also missing in Germany is the range of possibilities to attract startup funding. We've got to stop pointing the finger at the banks the whole time. Banks aren't venture capitalists. It would be helpful if we could change the mindset in society. Even in the international startup scene they have this rule of thumb that only one in ten new companies scales up successfully. But that shouldn't be a deterrence to investors. In the United States, failure is culturally acceptable. And ultimately, the investors and private equity companies there are still successful.

The Economic Region of Ortenau (WRO)

Ortenau is the strongest industrial area in the region of the Upper Rhine and home to a large number of leading international manufacturing companies. The WRO network spans 53 cities and municipalities, the county of Ortenau itself, banks belonging to the Sparkasse and Volksbank groups, the chambers of commerce, and 160 of the biggest and most innovative companies. Together, they offer a variety of services to the region. The WRO works as a think tank in leveraging synergies at the interface between industry and politics.

Image: Dominik Fehringer



Dominik Fehringer
WRO GmbH (Offenburg)
dominik.fehringer@wro.de | www.wro.de



Innovations Promote Sustainability in Forestry

The Steinbeis-Europa-Zentrum (SEZ) acts as partner in the project Forwarder2020

Biomass from forestry makes a valuable contribution to renewable resources needed for the transition to alternative energy sources. At the same time, managing forests innovatively can help preserve soil in the long term and maintain the productivity of woodland. The Forwarder2020 project, which is funded by the EU as part of the Horizon 2020 program, aims to develop innovative technologies for use in smart, efficient, and sustainable forestry – simultaneously resulting in quality timber. The main emphasis of the project is to enhance the sustainability of timber production and deliveries, and improve forestry practices and planning. The project is being coordinated by HSM, a machine construction specialist from Neu-Kupfer in the Hohenlohe area of Baden-Wuerttemberg. The Steinbeis-Europa-Zentrum has been providing the medium-sized businesses with help in submitting applications and supporting the company as a project partner in research, development, and knowledge-sharing.

Forwarders are a crucial vehicle used to carry felled logs and transport timber to the delivery chain. For the three-year project, 14 partners, including three forest contractors, five component manufacturers, and four universities from six countries, are developing a crane forwarder with five innovative modules. The aim is to improve energy efficiency and do more to protect the forest floor. The five modules will be integrated into two prototypes, which will be tested under real conditions in four countries. The first prototype, which contains three of the five modules, has been available for preliminary internal testing since March and will go off for first operational testing in Scotland in May.

Forwarders are of particular interest to sustainable forestry work because they have the highest wheel load of all forestry machinery and thus have the greatest impact on unfortified soil. These machines also have to cover long distances between the wood-felling points deep in

the forest and the sites where timber is deposited next to roads. It will therefore be extremely important to see how the innovative Forwarder2020 modules help reduce fuel consumption and the impact of operating machinery on the forest floor, as well as any reductions they might bring about in the impact of machinery on forestry workers' health. This will be crucial not only for the sustainability of logging, but also for the competitiveness of forestry companies.

The envisaged innovations include an efficient hydrostatic-mechanical power-split transmission, hydropneumatic suspension, a new hydraulic system that allows for energy recovery on the crane, a rear axle assembly with three driven wheels for loading wood, and a new monitoring system for the logging process data. The combined benefit of the different modules will be a reduction in fuel consumption of 30% and a reduction in the impact on the forest floor of a further 30%. The modules



will also make it possible to plan transportation routes more accurately and document loads that have already been transported. Overall, this will help reduce the ecological impact of forestry and timber-felling activities. At the same time, it will cut operating costs and lower the occupational health hazards faced by forestry workers. Ultimately, HSM and the project consortium are striving to launch a unique, module-based system offering competitive high-end solutions. This would allow customers to choose a made-to-measure setup that fits their needs – without having to worry about higher expenditures.

The budget for the project is € million. The consortium consists of partners in Germany, Italy, Lithuania, Romania, Switzerland, and the United Kingdom. The expertise they offer spans the entire value chain, from component development to the operational use of forestry plant. Involving six partners from industry and allowing them to work together closely with consulting firms and research institutions underscores the objectives of the consortium in not only developing sustainable solutions for use in forestry, but also putting solutions to use in industry and delivering market-ready products.

The Forwarder2020 consortium

Six partners from industry:

- Hohenloher Spezial Maschinenbau GmbH & Co. KG
- Roteca SRL
- Dana Rexroth Transmission systems SRL
- Forstware Informationssysteme GmbH
- Hydac System GmbH
- Bosch-Rexroth Ltd

Researchers from the field of forestry.

- Bern University of Applied Sciences
- Aleksandras Stulginskis University, Kaunas
- Transylvania University of Brasov

From the field of mobile mechanical engineering:

- Karlsruhe Institute of Technology (KIT)

Specialists in innovation management:

- Steinbeis-Europa-Zentrum

Three forestry companies:

- Forstdienstleistungen Hegenbarth
- Treforex SRL
- CSP Forestry Ltd

The Steinbeis-Europa-Zentrum

The Steinbeis-Europa-Zentrum (SEZ) was founded in 1990 on the initiative of the Commissioner for Europe of the Minister of Economic Affairs in Baden-Wuerttemberg with the goal of supporting small and medium-sized enterprises in attracting EU research funding.

As part of the Steinbeis Network and a partner in the Enterprise Europe Network, its role is to build bridges across Europe for business enterprises, research institutions, universities, governmental bodies, and politics. The SEZ supports business enterprises, universities, and research institutions with the submission of applications and the fulfilment of cross-border projects, providing help on European funding and innovation programs, internationalization issues, and entering European markets.

The SEZ advises politicians and administration bodies on regional strategies for the future, innovation policy, and economic cluster policy, also helping to network Baden-Wuerttemberg with experts across Europe. The SEZ also offers expertise in the organization of European events and the publication of brochures. It works with regional development bodies, state ministries, and federal ministries.

Image: A timber forwarder in action. © Hohenloher Spezial Maschinenbau GmbH & Co. KG (HSM)



Dr. Anthony Salingre

Steinbeis-Europa-Zentrum (Stuttgart)

Anthony.Salingre@stsw.de | www.steinbeis-europa.de |

www.forwarder2020-project.eu



What's That on the Roof?

Steinbeis introduces a solar panel inventory to analyze the energy potential of universities in Hesse

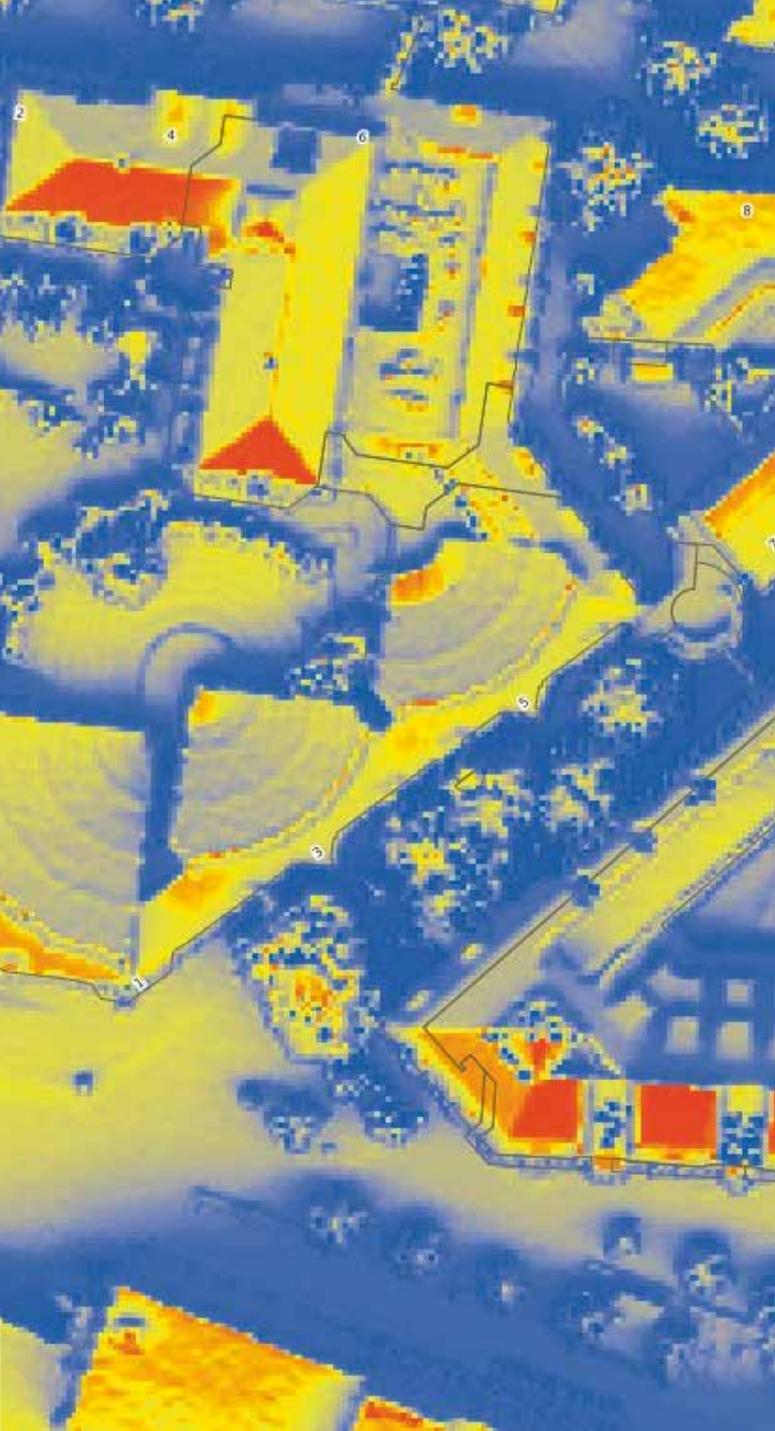
The experts at the Steinbeis Transfer Center for Geoinformation and Land Management have been dedicated to the potential of solar energy for years. The center in Weikersheim has been assessing the solar energy potential offered by roofs on behalf of local authorities, district authorities, and entire states in Germany. It is now using data to draft a rooftop solar panel inventory. The Steinbeis experts started pulling together the inventory for universities in Hesse in 2017, on behalf of the Hessian Ministry for Science and the Arts. The aim was to show how the techniques of geoinformatics can be used to highlight the potential to reduce the carbon emissions of governmental buildings.

As part of a neutral carbon footprint initiative launched by the Hessian state government, the Steinbeis experts first conducted a pilot project, looking at the roofs of ten university buildings to examine their potential to generate solar electricity. Information on the photovoltaic potential of university buildings and thus the potential to reduce carbon emissions is based on a solar energy inventory for Hesse, which was pulled together by the Hessian Ministry of Economics, Energy, Transport, and Regional Development. The inventory was put online in September 2016, and the Steinbeis Transfer Center in Weikersheim has regularly updated the list ever since.

"The Hessian solar inventory is based on extremely high-resolution data, which is available for the whole state." Explaining the sources of the inventory, Prof. Dr. Martina Klärle, director of the Steinbeis Transfer Center

and professor at the Frankfurt University of Applied Sciences, says: "The information was derived from the official land survey register, 5,600 aerial digital images, and a comprehensive laser scan of Hesse based on at least four readings per square meter, which were obtained through an airborne survey." By combining a 3D cloud of points provided by a surface model with the land survey data and a simulation of exposure to sunshine, not just on individual days but also for the whole year, the anticipated solar energy or electricity yield can be calculated precisely for any given area.

The information takes the solar inventory into account in combination with the intensity of solar radiation in Hesse. Even more importantly, it considers partial sections, making it possible to assess even the smallest structures on roofs, such as chimneys, dormers, or skylights. It even



works out how these objects result in shade or how shadows are cast by neighboring trees or even distant mountains (close/distant shadow effects), and all this information is included in the calculations.

Aside from making it possible to calculate the potential to save energy and reduce carbon footprints, the solar inventory allows users to gauge the individual economic efficiency of a photovoltaic or thermal energy unit. Individual parameters can be adjusted such as power consumption, consumption profiles, the different orientation or angle of modules (on flat roofs), the different levels of efficiency of units, when units come into operation, system outlays, ongoing costs, available capital, the size and terms of loans, interest rates, electricity storage, current electricity prices, and developments in electricity rates.

So what does a calculation provided by the inventory actually look like in terms of understanding potential savings? To show how the system works, the Steinbeis experts use a university building in Kassel as an example. The building has a flat roof, which is broadly suitable for use by mounting elevated solar panel units. By setting the equipment at the

optimum angle of 30° facing to the south and leaving the right spaces between each row, a system could achieve an output of 60 kWp.

To calculate commercial viability, the Steinbeis experts selected the entire suitable roof area, excluding an area covered by a variety of roof mountings. Out of the potential overall area of 1,054 square meters, units inclined at 30° and spaced in rows could be mounted on a south-facing area measuring 471 square meters. Using this total potential roof area would thus offer a carbon dioxide saving of 36,187 kg per year. Applying the experts' calculation to the building, the optimum level of domestic consumption would be 48% of the generated electricity; this would be enough to cover 59% of the required electricity for the building. The other 52% of the electricity could be forwarded to the electricity grid and generate income under German renewable energy laws. Extrapolated to a 20-year period, the amount of electricity used in the building would cut bills by € 155,267 with a further € 72,800 on top for electricity added to the grid. Based on an initial outlay for the equipment of € 66,341, the units would pay for themselves after just five years. After 20 years, the panels would generate revenues of € 128,559. The Steinbeis experts have every confidence that these are the sort of numbers many people would enjoy reading.

The Steinbeis Transfer Center for Geoinformation and Land Management

Services

- Consulting
- Market research
- Software development
- Strategy and service developments
- Documentation

Key areas

- Land management
- Environmental monitoring
- Resource management
- Geographic information systems
- Computer-aided facility management (CAFM)
- Urban land-use planning
- Grassland area management
- Countryside planning
- Environmental reports
- Strategic environmental auditing
- The use of laser scanning data
- GIS-aided site analysis, for areas like industrial zones, public parks, wind farms, solar power plants, and biogas installations

Image: Global radiation falling on buildings and their environment, from blue (low) to yellow and red (high radiation)



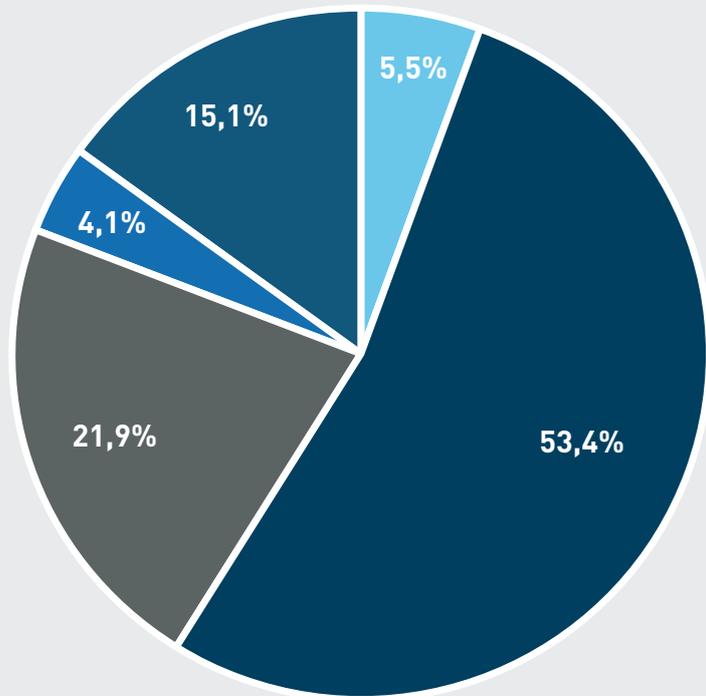
Prof. Dr. Martina Klärle

Steinbeis Transfer Center Geoinformation and Land Management
(Weikersheim)

su1072@stw.de | www.steinbeis.de/su/1072 | www.solarkataster.hessen.de

Perceived changes resulting from digital technology in firms' own industry

- not changed at all
- changed a bit
- changed a lot
- changed completely
- don't know/no answer



Still a Long Way to Go: Digital Transformation in Sales and Marketing

Steinbeis experts and the specialist magazine Acquisa unveil the 2017 Digital Transformation Index

How digital are German companies in their marketing and sales departments? Is there a benchmark for digital transformation? Or perhaps one could ask: How far have digital champions come? Is there such a thing as a digital ideal, and how long does the journey take getting there? Who leads and who follows? These are the issues looked at for the 2017 Digital Transformation Index, a study carried out by the specialist magazine Acquisa with the Göppingen-based Sales and Marketing Institute (VMI, a Steinbeis Consulting Center). The index was based on the responses of 114 marketing and sales managers.

"We'd like to use this instrument as a stock-taking exercise," explains Prof. Dr. Rainer Elste, director of the VMI Steinbeis Consulting Center. "We can then return to it in the years to come to gauge where the digital journey is taking us." Elste is pleased that the respondents were so scathing about their own performance. Germany's decision-makers in marketing and sales have recognized that they still have lots of homework to do if they don't want to fall behind in digital terms.

And the results send out a clear message: Over 40% of the respondents could not say if they were trailing behind the competition in digital solutions or whether they were perhaps the digital champions in the industry themselves. 46% believed they are a long way behind the competition when it comes to digital transformation in marketing and sales. Only 14% of respondents see themselves as digital pioneers. It's difficult to say what is more worrying – being a follower when it comes to a crucial topic like digital transformation, or not even knowing how you're faring. There is a lot of catching up to do.

It's also astounding to see how much digital transformation has changed different sectors of industry. 59% of managers believe things have changed a bit or not at all and only 4% feel it has changed completely. This makes the future position occupied by different sales and marketing topics all the more important. When marketing and sales managers are asked to gaze into a crystal ball, they see significant rises in the importance of digital solutions for securing sales leads (69%), advertising

(64%), customer acquisition (64%), complaints and warranty management (61%), and client information and training (58%). They do not expect negotiating terms or contract delivery to become more automated.

Over half of the respondents (58%) gave themselves 2 or 3 out of 5 stars when asked to judge how far they have come toward achieving their own goals. 20% gave themselves no more than 1 star. Only 9% believe they are just about to reach optimum levels – so in the overall picture, there's still a long way to go for people to achieve their own goals.

One ostensibly important measure of digital progress has to be the level of sales achieved online. For 69% of respondents, digital sales are below 10%. This is believed to be 12 percentage points behind the competition, who managers believe are much more active in the internet: Respondents believed that 21% of their competitors are already doing more than 50% of their sales online. Only 6% of respondents stated that they have achieved such high online sales themselves.

But more is not necessarily better. Accordingly, the respondents were challenged to say what they felt was the optimum degree of digital technology use. A quarter of respondents said the optimum level of online sales is over 50%. Just under a quarter of the others see the 10% barrier as desirable. For Elste, this can be interpreted in two ways: The respondents do not think becoming strongly dependent on online revenues is a goal worth aiming for. But also, it's important to catch up with the competition, which is doing more business online.

- 1st lesson learned** – The perceived impact of digital transformation is surprisingly low.
- 2nd lesson learned** – Most companies see themselves as digital followers.
- 3rd lesson learned** – Even the self-defined optimum level of digitalization has not yet been achieved.
- 4th lesson learned** – Sales organizations do not yet have a sufficient understanding of the opportunities presented by digital selling.
- 5th lesson learned** – Digitalization initially leads to more complexity.
- 6th lesson learned** – Old methods (such as cost-plus pricing) are still surprisingly common.

Good old CRM, perhaps the great-grandfather of digital transformation, is highly important (81%) for supporting marketing and sales, despite all the criticism regarding the function and meaningfulness of CRM systems – although incidentally this is on a par with company-wide ERP systems. And internal processes? When it comes to marketing, sales and after sales, product development, and supply chain management, companies are still a long way from a world of purely digital processes. Only 13% of respondents said that their marketing and sales systems revolve around digital processes; all they require is manual controls. 38% stated that their processes are mainly carried out manually and are only supported by systems like email communication. It will be fascinating to see how this develops in the coming years.

Data flows can also bring digital advantage. Companies currently find it important to exchange data with clients when it comes to online invoicing and EDI standards, with 58% and 54% of respondents respectively seeing this as at least very important. In comparative terms, digital contract tracking (to make things more convenient for customers) was described by the respondents as less important. This is interesting, because even if a company only wants to engage in online business, under certain conditions, their clients still want to be proactively informed about the status of their orders or delays. Digital technology is currently educating customers to see such levels of convenience as a matter of course.

So are digital solutions making personal communication obsolete? Will machines soon be the only ones talking to one another or will personal interaction be a decentralized point of differentiation for a good sales department? The answer lies in the numbers: Emails – which 76% of respondents see as a highly relevant communication channel – are leaving others behind as an important means of communicating, with the telephone on 69%, face-to-face sales meetings in general on 64% and, particularly significantly, field sales visits on 51%. It should not be overlooked that emails are a delayed form of communication. They offer no immediate option to interact directly. Becoming accustomed to this could be the next step toward alienation. So is this the beginning of the end for direct personal communication with the customer? Surely, this can't yet be the case. Other forms of digital communication are still of secondary importance: 69% of respondents described online chat as unimportant and 60% said this about blogs, communities, and forums.

Steinbeis VMI recommendations

1. Conduct an impact assessment: Will digital solutions only change processes in marketing and sales, or products, too? What threats are posed by disruptive players?
2. Create digital awareness: It's high time that company cultures went digital. This works top-down or through digital champions within the business, who take colleagues with them on the journey.
3. Develop digital know-how: It's important to use staff development to build and expand on a minimum level of competence in digital technology.
4. Adopt a clearer profile: It's not about proclaiming that the "more digital things are, the better." It's more important that marketing and sales work out what specifically would be their optimum digital profile.
5. Anticipate the digital developments of customers and prepare the sales organization for the challenges of the future – this is about roles and responsibilities.
6. Look urgently into networking digital and analog information to help with decision-making.

When it comes to pricing, the respondents tended to be extremely traditional – to put it mildly. 59% still actually use cost-based pricing. It is therefore hardly surprising that 80% of them still used printed price lists. 50% of the respondents said that they do not set different prices according to the anticipated value of a product. Also, most respondents do not base pricing on demand, time factors, or the product user (rejected by 80%, 77%, and 58% respectively). The opportunities to make use of the digital support offered by pay-per-use, freemium models, coupons, or auctioning are not appreciated by 80%, 85%, 67%, and 91% of respondents respectively. 50% of respondents also said that they believed their end prices are not transparent for the market. 36% believed that their pricing is transparent. Given the use of digital searches, the way people exchange opinions, and how prices can now be compared, this finding is particularly interesting. If pricing becomes transparent, price or other differentiation strategies have to be found to avoid sliding into purely competing on price.

As a sales expert, Elste comes to a clear conclusion regarding the Digital Transformation Index: The perceived impact of digital solutions on marketing and sales is surprisingly low. Most respondents saw themselves as digital followers and they felt that they are not actively steering digital developments. A surprising number of old methods are still part of everyday business and because of this, not enough is being done to leverage digital opportunity – digital transformation will remain a key challenge for companies in 2018.



Prof. Dr. Rainer Elste
Steinbeis Consulting Center Sales and Marketing Institute (VMI)
(Göppingen)
rainer.elste@stw.de | www.steinbeis-vmi.de



Securing the Future: Comprehensive Integrated Management

Steinbeis experts provide support with ISO-compatible risk and opportunity management

ProTec, based in Würselen west of Cologne, is not just one of those standard, medium-sized B2B traders of industrial supplies – it's an innovative developer and producer of customized, one-off solutions. The firm supplies markets such as machinery, plant, and vehicle construction and its long-term plan is to enter processing and business systems based on the concept of Industry 4.0 value creation, across a variety of sectors of industry. ProTec has had a certified, integrated quality and environmental management system in place for years, based on the requirements of both ISO standard 9001 and standard 14001. These standards were overhauled in 2015, so now they also have to cover risks and opportunities. To help with this challenging requirement, the firm turned to the support of the Steinbeis Transfer Center for Risk Management.

To make ISO-compatible risk and opportunity management more transparent for ProTec's big clients, the Steinbeis experts worked with the company to categorize risks and opportunities relating to two ISO topics: quality and the environment. To do this, they focused on a categorization method used by the Institute of Public Auditors in Germany (the IDW), based on its auditing standard PS 981. This IDW standard is well established in stock-holding companies for managing risk across entire corporations. Because of ProTec's legal form, it is not required to test its risk and opportunity management according to IDW standards and certification is only carried out according to ISO standards in any areas affected by standards. Apart from looking at the classic areas of quality and environmental factors, integrated management also involves addressing the big topic of safety, covering aspects such as health and safety at work, product safety, information and data security, and data protection. This does not necessarily have to be carried out according to

ISO standards. Instead, a firm can introduce binding national and international statutory systems and rulebooks, which also include the European CE label.

The Steinbeis experts introduced a system to classify the values adhered to at ProTec, based on the categories used for the IDW auditing standard for risk management. These categories apply to any topics or fields that are managed systematically and they make many of the topics much easier to manage.

- The "cultural" category details risks stemming from any rules used to assign responsibility for company values, delegation, and how responsibilities are monitored. Risks are managed by systematically implementing a code of conduct, which reflects the simplified management of governance.
- In the "regulatory" category, any risks are captured that could result from insufficient compliance to external legal systems or in-house rulebooks. These risks are managed by systematically managing compliance. The main focus here lies in unconditionally adhering to contracts with clients and thus quality and legal stipulations relating to environmental protection, data protection, and workforce protection.
- The "strategic" category covers risks stemming from defects and breakdowns in the processes used to manage all kinds of values.
- In the "operative" category, risks are captured such as classic mistakes in quality management, typically reflected in products failing to conform to customer requirements, but also circumstances that may have a negative impact on the company's environmental performance.
- The "financial" category covers all risks that could have a negative financial impact on budgets and the cost of quality, environmental, and safety management. These are thus part of company-wide financial risks.

These five categories address factors that are already implicitly covered by most ISO standards when it comes to the requirements of management systems. ProTec uses innovation management for both its products and its processes, as well as the systems it uses in management, with a particular focus on the quality of systems. The transparency that ProTec has now achieved in terms of integrated management means that it now adheres to current and future requirements regarding its management of governance and compliance. Furthermore, the firm is making good progress toward managing 4.0 solutions, with the aim of adding new value. And last but not least, the classic product- and process-related disciplines pertinent to quality, the environment, and safety remain a central feature of the firm's management system and the five new categories have made them more innovative and entrepreneurial.

Image: The integrated management system used by ProTec GmbH



Dr. Peter Meier
Steinbeis Transfer Center Risk Management (Langen)
su0657@stw.de | www.steinbeis.de/su/657



Jörg Jansen
ProTec Industriebedarf GmbH (Würselen)
www.protec.info

What Really Matters for German Companies: Lifting the Veil of Mystery Surrounding Silicon Valley

Georg Bauser to visit Steinbeis GeschäftsImpulse

Georg Bauser visited GeschäftsImpulse at the Steinbeis Center of Management and Technology on April 19, 2018. Formerly the long-standing director of business operations at Airbnb, the online marketplace for lodging, Bauser revealed his experiences in Silicon Valley in a talk entitled "A two-way ticket to San Francisco – what a Swabian gadgeteer learned in five years at Airbnb."

What do American startups do differently from German startups? What are the technologies, concepts, and company cultures that make a difference? These are just some of the questions Bauser promises to look at. The entrepreneur now advises American startups and supports them with their international expansion plans and market entry into Europe. He previously worked at Airbnb headquarters in San Francisco and was responsible for processes, systems, and the tracking of global projects and new business units. Bauser played a pivotal role in the international roll-out of the portal and in setting up different offices and teams across the globe.

Keep Up the Good Collaboration!

The steel specialist Dillinger intensifies its strategic partnership with material researchers in Saarland

The Saarland steel company AG of Dillinger Hüttenwerke (Dillinger) plans to intensify its strategic collaboration with the departments of material science and materials technology at the University of Saarland and the Material Engineering Center Saarland (MECS, the Steinbeis Research Center). The steel specialist has funded joint steel research projects worth almost € 1 million since 2014 and it plans to provide similar levels of finance for the next three years. This has enabled three professors and their teams at Saarland University to focus clearly on this versatile material.

Offshore wind farms are subject to major levels of material stress, and the same applies to pipelines lying on the seabed. Steel made by the steel producer Dillinger is used to provide heavy plate protection to such installations worldwide. "These have to be strong enough to survive hurricane-force winds and colossal sea currents, and they have to be safe to use after decades of extremely adverse conditions," explains Dr. Bernd Münnich, the board member responsible for engineering at Dillinger. Manufacturing special steel is therefore extremely demanding and is dictated by a large number of factors. "Our aim with the joint research projects with the material scientists at Saarland University is to gain a better understanding of the techniques used to conduct 3D analysis of the innermost structures of steel. We also want to use simulations to improve our ability to predict the desired properties of steel and save ourselves the protracted and expensive process of carrying out operational testing," continues Münnich.

He was still studying at WHU – Otto Beisheim School of Management in Vallendar when he set up the online accommodation marketplace Accoleo with fellow students. Accoleo was subsequently acquired by Airbnb in 2011. Bauser also studied for a Master of Business Engineering at Steinbeis University Berlin and did a business information systems degree at the Mosbach campus of the Baden-Wuerttemberg Cooperative State University. During this time, he gained valuable practical experience, especially in international project management. As a board member and advisor to two startups – Fleet, Inc. and GuestReady – he has daily dealings with business founders, new business models, and digital transformation in Germany.



Sarina Gehrung

Steinbeis Center of Management and Technology (Filderstadt)

su1274@stsw.de | www.scmr.com

Three years ago, Prof. Dr.-Ing. Frank Mücklich, who is professor for functional materials at Saarland University, brought Prof. Dr.-Ing. Stefan Diebels and Prof. Dr. Christian Motz on board for the project. All three professors have brought in some of their working groups to work on the topic of steel. They have also attracted further research funding to kick-start further projects to go on top of doctoral theses already being financed by Dillinger. "This has allowed us to establish the foundations for a long-term strategic partnership with the Saarland steel company," explains Mücklich, who not only manages Material Engineering Center Saarland (MECS), the Steinbeis Research Center on the campus, but also coordinates collaboration. The center is also drawing on pure research at the University of Saarland as a basis for developing solutions for Dillinger to use in its operations.

Fred Metzken, spokesperson of the executive board of Dillinger, is impressed by the collaborative research activities that have been carried out during the three-year test phase and wants to keep the strategic partnership going in the long term. "We don't just benefit from the high standard of pure research into material science and materials technology at Saarland University and MECS. The projects have a strong bearing on business application and they dovetail closely with our own research, so they're a continual help in improving our heavy steel plate – which also improves our competitive advantage in the global market for heavy plate, which is hotly contended," says Metzken.



Prof. Dr.-Ing. Frank Mücklich

Steinbeis Research Center Material Engineering Center Saarland (MECS)
(Saarbrücken)

su1294@stsw.de | www.mec-s.de

A Passionate European Passes the Baton

Change of leadership at the Steinbeis-Europa-Zentrum and the office of the Baden-Wuerttemberg Commissioner for Europe

After 15 successful years as the Commissioner for Europe for the Baden-Wuerttemberg Minister of Economic Affairs and as the director of the Steinbeis-Europa-Zentrum (SEZ), Prof. Dr.-Ing. Dr. h. c. Norbert Höptner passed the baton at the end of 2017 to Dr. Petra Püchner, who has been inputting with her expertise in European issues as director of the Steinbeis-Europa-Zentrum in Stuttgart since 2001. Püchner has also been Managing Director of Steinbeis 2i GmbH since last year. At an official ceremony held on January 31, 2018 in the Hospitalhof training center, the Baden-Wuerttemberg Minister of Economic Affairs Dr. Nicole Hoffmeister-Kraut bade farewell to her outgoing Commissioner for Europe.

"Professor Höptner was a builder of bridges for small and medium-sized companies in Baden-Wuerttemberg to get to Brussels. His success record is impressive – whether it was attracting funding from the EU or initiating partnerships between Baden-Wuerttemberg companies and their European and international partners," said the minister, praising his commitment. She added that he is a passionate and enthusiastic European and his work has made a considerable contribution to Baden-Wuerttemberg's benefiting from European funding for innovation and research. Thanks to his commitment, Höptner made an important contribution to Baden-Wuerttemberg as a whole as a region of innovation. He also helped promote transnational technology and knowledge-sharing into and out of Baden-Wuerttemberg, continued Hoffmeister-Kraut. For example, this applied to research collaboration as part of the Four Motors for Europe partnership, as part of the Vanguard Initiative, as well as work in the Danube Region and the Districts of Creativity.

Prof. Dr. Michael Auer, Chairman of the Steinbeis Foundation Board, thanked Norbert Höptner on behalf of the Steinbeis Board of Trustees and on behalf of the entire Steinbeis Network, highlighting his tremendous commitment, competence, and enthusiasm for Europe. It was thanks to Höptner and his colleagues at the Steinbeis-Europa-Zentrum that a deep conviction – that the potential of European research excellence, teaching, and innovative enterprise can only be exploited together and across borders – is now being translated into business practice. "Anyone who invests 15 years of their heart and soul into the concept of Europe, and repeatedly and decisively opposes social and political contention fueled by national leaning, is bound to leave their mark. In the case of Norbert Höptner, there were numerous successful projects and, in particular, robust partnerships based on trust between a whole host of regions in Europe, especially along the Danube," said Auer. As a sign of gratitude for the many years of loyal collaboration and his outstanding commitment, Höptner received a Steinbeis Award at the farewell ceremony.

Norbert Höptner was a professor at Pforzheim University and was appointed Commissioner for Europe in August 2002. For over 15 years, he worked alongside each presiding Minister of Economic Affairs in Baden-Wuerttemberg. In this function he was also director of the Steinbeis-Europa-Zentrum, which was founded in 1990 with the aim of paving the way for small and medium-sized enterprises to gain EU research funding and of providing support to initiatives involving transnational technolo-



Handing on the baton at the Steinbeis-Europa-Zentrum: A farewell for Prof. Dr.-Ing. Dr. h. c. Norbert Höptner (second from left alongside his wife) given by minister Dr. Nicole Hoffmeister-Kraut (third from left) and Steinbeis executive board chairman Prof. Dr. Michael Auer (right) ...



... and Minister Hoffmeister-Kraut appointing Dr. Petra Püchner (right) as the new Commissioner for Europe.

gy transfer. As part of the Steinbeis Network and a partner in the Enterprise Europe Network, its role is to build bridges across Europe for business enterprises, research institutions, universities, politics, and governmental bodies.

Following the appointment of Petra Püchner as the new Commissioner for Europe, she will continue to head up the SEZ in addition to her other duties as the Commissioner for Europe. As the minister Hoffmeister-Kraut emphasized: "Appointing Dr. Püchner as my new Commissioner for Europe brings on board a fervent European with a profound understanding of European institutions, who has already worked closely with industry in Baden-Wuerttemberg and has worked especially closely with our medium-sized businesses. I am also particularly pleased that Petra Püchner is the first woman to take on the role of Commissioner for Europe, for which she is highly qualified." As a result of her appointment, Püchner is stepping down from the management of Steinbeis 2i. To safeguard continuity, Dr. Jonathan Loeffler will continue in his role at the hitherto jointly managed Steinbeis subsidiary, drawing on his many years of experience in the Steinbeis Network as managing director.



Anette Mack
Steinbeis-Europa-Zentrum (Stuttgart/Karlsruhe)
su2016@stzw.de | www.steinbeis-europa.de

A Steinbeis Partner of Conviction

Prof. Dr. Karl-Heinz Meisel honored with Steinbeis Award

Special thanks for the level of commitment you do not witness every day: In December, Steinbeis bestowed the Steinbeis Award to Prof. Dr. Karl-Heinz Meisel, the retired rector of Karlsruhe University of Applied Sciences and member of the Steinbeis Board of Trustees.

Steinbeis honored Karl-Heinz Meisel with the award for outstanding contributions during many years of collaboration, particularly in establishing the first joint transfer company between a university and Steinbeis. In his position as rector of Karlsruhe University of Applied Sciences, Meisel played a central role in the foundation of Steinbeis Transferzentren GmbH, also based at the university. The collaborative enterprise now forms an umbrella over more than 30 Steinbeis Enterprises, which are actively involved in concrete research and consulting projects.

Aside from the shared activities of technology transfer at the university, Meisel has been a member of the Steinbeis Board of Trustees since 2006 and has provided reliable and professional support with ongoing development of the Steinbeis Network.



Recognition for exemplary contributions: Dr.-Ing. Leonhard Vilser (right) bestowing the Steinbeis Award upon Prof. Dr. Karl-Heinz Meisel



Anja Reinhardt
Steinbeis Foundation (Stuttgart)
anja.reinhardt@stw.de | www.steinbeis.de



kup. Ravensburg: A Creative and Interactive Working Environment for Companies

The Network opens the door to its innovative building in Ravensburg

Steinbeis is a member of a network called Start (k)up. Ravensburg, which provides support to business founders and spinoffs in the economies of Lake Constance, Upper Swabia, Allgäu, and Vorarlberg. The kup. Ravensburg building acts as a platform for innovative, technology-centric, and creative enterprises by offering offices and commercial units to rent in a new kind of inspirational working environment. A state-of-the-art business location, the premises also include support facilities for people with disabilities. The official opening of the building will be on June 14.

It starts with an informal rendezvous at 5 p.m. followed by the unveiling of a multimedia arena at 6 p.m. At the Arena, representatives of companies and universities will discuss issues surrounding entrepreneurship, innovation, the challenges of setting up a business, and successful inclusion in business. After the arena event, there will be a get-together organized by kup.

Ravensburg, with snacks and an opportunity to network while collaboration partners say more about their offering in the inner courtyard.

Start (k)up. is a joint initiative between the PRISMA group of companies, the Liebenau Foundation, Steinbeis, the department of economic development at Ravensburg district council, Ravensburg-Weingarten University of Applied Sciences, the city of Ravensburg, and bwcon. The network's aim is to establish a startup-friendly environment in the economic region by providing ideas and inspiration, special activities, and support.

Image: © iStockphoto.de/phototechno

The event is free, but we would ask participants to register beforehand. For further information and online registration go to www.prisma-zentrum.com/events/start-kup-ravensburg-arena.



Anja Holzinger
PRISMA GmbH (Center for the Development of Business Locations and Regional Development) (Friedrichshafen)
Anja.Holzinger@prisma-zentrum.com | www.prisma-zentrum.com

Experts.Knowledge.Sharing.

New releases from Steinbeis-Edition

Sharing our know-how with you.

Steinbeis-Edition, the publishing arm of the Steinbeis Foundation, regularly publishes works reflecting the scope of the Steinbeis Network's expertise. Spanning a broad spectrum of topics, these publications include individual papers, series, magazines, conference proceedings, and works linked to conventions and specialist events. All titles can conveniently be ordered via our online shop at: www.steinbeis-edition.de.



System Interdependencies and Risk Behavior

Daniela Simone Kappler

2018 | paperback, b&w | 374 pages, German
ISBN 978-3-95663-154-2

About the author

Daniela Simone Kappler studied Business Economics and Business Administration (B.A.) as well as Business Management (M.A.) at Heilbronn University and Dundalk Institute of Technology, Ireland. She earned a PhD at Steinbeis University Berlin in 2017.



The Importance of Social Capital in Attracting Third-Party Funding in Research and Transfer

Andreas Friesenhahn

2018 | paperback, b&w | 689 pages, German
ISBN 978-3-95663-165-8

About the author

Andreas Friesenhahn studied business administration with a focus on logistics and innovation management. He then worked as a personal assistant to the president of the University of Applied Sciences Ludwigs-hafen am Rhein. This was followed by a period as a scientific assistant at the Institute for Management and Innovation, where he oversaw research and transfer projects in the fields of innovation and sustainability management. During this time he also acted as the director of the institute. Friesenhahn earned a PhD at Steinbeis University Berlin in 2018. He is currently working as a consultant in the fields of innovation and digital transformation for BridgingIT GmbH.



Case Supervision in Law Courts

Gernot Barth, Heiner Krabbe (eds.)

2018 | Hardback, color | 141 pages, German
ISBN 978-3-95663-157-3



Focus on Mobility – Stop For a While

Gernot Barth, Bernhard Böhm (eds.)

2018 | stapled, color | 84 pages, German
Mediation | Quarter 1 / 2018
ISSN 2366-2336

About the Steinbeis Enterprise

The Steinbeis Consulting Center Mediation of Business was founded in 2004 and specializes in dealing with conflicts and mediation (primarily within companies), collaborative projects involving more than one company, and public bodies/government administration.

The Leipzig-based Steinbeis Enterprise has been publishing Mediation as a specialist magazine (formerly Mediation of Business) since 2012. The magazine is published four times a year with a focus on out-of-court conflict settlement, particularly through mediation. The publication is aimed at families, business, the arts, and government administration, offering a broad and practical entry point to the options offered by dealing with conflicts out of court.

A separate publication on Mediation and Conflict Management has been published since 2015. This publication is based on the magazine called Mediation – Specialist Magazine for Business, Families, the Arts and Government Administration and offers a variety of practical articles showing the options for dealing with conflicts.



Fundamentals of Aptitude Testing

Viktor Lau

2018 | paperback, b&w | 257 pages, German
 ISBN 978-3-95663-159-7
 2nd edited and expanded edition

About the author

Dr. Viktor Lau is considered one of the leading experts in the HR industry in Germany. Lau has written a variety of articles and books on the topic of HR, most recently Personnel Development: Fundamentals, Processes, Outsourcing. He has been working at Steinbeis since 2000. In 2016, Lau oversaw the setting up of the Steinbeis Consulting Center for Evidence-based Human Resources Management.



Managers in the Change Process

Beate Faust

2018 | paperback, b&w | 72 pages, German
 ISBN 978-3-95663-156-6

About the author

Beate Faust, B.A., is a business mediator and coach and graduated with a bachelor's degree at Steinbeis University Berlin with a focus on business management. She sees people's uniqueness combined with suitable HR leadership as the key to the long-term success of any company. She shares this outlook in speeches and specialist articles. Faust is currently working in neighborhood development, also a field in which she offers training and HR development. She leads team mediation and offers one-on-one mentoring and team coaching sessions. She is also a lecturer at the Baden-Wuerttemberg Cooperative State University in Villingen-Schwenningen.



The 13th Business Intelligence Symposium

Andreas Seufert, Peter Lehmann, Klaus Freyburger, Thomas Becker (eds.)

2018 | paperback, b&w | 152 pages, German/English
 ISBN 978-3-95663-161-0

About the editors

The editors work in a variety of roles for the Steinbeis Transfer Institute for Business Intelligence (IBI) at Steinbeis University Berlin. The Institute was founded in 2004 with the aim of gathering, developing, and sharing know-how between universities and business partners in the field of business intelligence. To this end, the IBI works with partners on a variety of application-based research projects, training courses, and events.



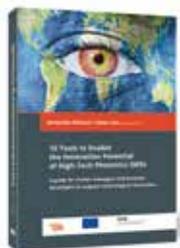
Sustainability in Real Estate Evaluation

Marco Wölfle

2017 | paperback, b&w | 411 pages, German
 ISBN 978-3-95663-158-0

About the author

Prof. Dr. Marco Wölfle studied at the University of Freiburg, where he also gained a PhD. He is a scientific director of the Center for Real Estate Studies (CRES, a Steinbeis Transfer Institute) and VWA Business School. In this role, he works as a junior professor for the financial and real estate industry. His current research projects revolve around the efficiency of energy renovations and the efficiency of a variety of market models in the real estate industry. Wölfle's lecturing involves quantitative and qualitative research methods, economics, the financial markets, and business accounting.



10 Tools to Enable the Innovation Potential of High-Tech Photonics SMEs

Samantha Michaux, Tabea Link et al.

2018 | paperback, color | 117 pages, English
 ISBN 978-3-95663-160-3 (print)
 ISBN 978-3-95663-168-9 (non-print)



Understanding the Chinese STI Landscape in the context of EU-China innovation cooperation

Franziska Bergmann, Eduardo Herrmann | Steinbeis 2i GmbH (eds.)

2018 | paperback, color | 89 pages, English
 ISBN 978-3-95663-163-4

About the project partners

These publications were the result of a working relationship between the Steinbeis-Europa-Zentrum (SEZ) and Steinbeis 2i GmbH (S2i). The SEZ builds bridges across Europe on behalf of companies, research institutions, universities, and regional economic development bodies. Steinbeis 2i is involved in projects relating to innovation and internationalization, drawing on more than 25 years of experience at the Steinbeis-Europa-Zentrum.

 [facebook.com/SteinbeisEdition](https://www.facebook.com/SteinbeisEdition)

 twitter.com/steinbeis_ste



Yvonne Hübner
 Steinbeis-Edition (Stuttgart)
edition@steinbeis.de | www.steinbeis-edition.de

Publication details

Transfer. The Steinbeis magazine

The magazine on tangible knowledge and technology transfer

Edition 1/2018

ISSN 1864-1768 (Print)

Steinbeis GmbH & Co. KG für Technologietransfer
Willi-Bleicher-Str. 19
70174 Stuttgart | Germany
Phone: +49 711 1839-622
Email: stw@steinbeis.de
Internet: transfermagazin.steinbeis.de | www.steinbeis.de

Editorial coordinators:

Anja Reinhardt, Marina Tyurmina
Email: 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. The publishers cannot guarantee that any of the websites or third-party platforms named in this magazine are either accurate, complete or available. The publishers have no influence whatsoever over the current or future design and content of any Internet pages that are linked to. The articles were written based on the content of the named websites at the time of publication of this edition of TRANSFER Magazine.

Cancellation:

If you would like to stop receiving Steinbeis Transfer magazine, simply cancel your subscription. Please contact us by writing an email to media@steinbeis.de or you can call us at +49 711 1839-5. Please note that the cancellation of your subscription may not come into affect until after the next edition.

Concept and design:

Steinbeis Foundation

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: © fotolia.de/cosmic_pony

Steinbeis is an international service provider in entrepreneurial knowledge and technology transfer. The Steinbeis Transfer Network is made up of about 1,000 enterprises. Specialized in chosen areas, Steinbeis Enterprises' portfolio of services covers research and development; consulting and expert reports as well as training and employee development for every sector of technology and management. Steinbeis Enterprises are frequently based at research institutions, especially universities, which are constituting the Network's primary sources of expertise. The Steinbeis Network comprises around 6,000 experts committed to practical transfer between academia and industry. Founded in 1971, the Steinbeis-Stiftung is the umbrella organization of the Steinbeis Transfer Network. It is headquartered in Stuttgart, Germany.