

# DISCOVERING EDIH | pro-digital Germany



## SIMPLICITY INSTEAD OF COMPLEXITY

an interview with **Markus VOSSEL**

*Hands-on workshops for upskilling the workforce, networking events in particular, innovation boot camps, startup community building and cutting-edge demonstrator and AI-related technology roadshows: Markus Vossel, coordinator of the Consortium “pro\_digital”, introduces and provides an overview of the features and goals of the European Digital Innovation Hub of the state of Brandenburg. Additionally, he examines strengths and weaknesses of Germany’s digitalization process within the production system*



**What are the priority objectives of “pro\_digital” and what are the main characteristics of your EDIH?**

The main goal of pro\_digital is to contribute significantly to the digitalization of SMEs, mid-caps as well as Governmental Organizations – GOs of the state of Brandenburg by becoming a one-stop shop for passing on information, fostering the regional innovation ecosystem and boosting the digital as well as the green transformation of the region. Brandenburg is scarcely populated, with large rural areas and companies being most often ‘small’ rather than ‘medium-sized’. Brandenburg belongs to the Eastern states of Germany that are currently going through a profound transformation phase because of the decision to end lignite-based power generation in the near future.

Pro\_digital offers a portfolio of services for the aforementioned target groups: Access to upskilling and reskilling services for the regional workforce; Access to test before investing in services, facilities and expertise; Access to information on public and private funding for digital transformation.

Our consortium consists of two public, not-for-profit, universities with a strong set of complementary skills in research, technology development and transfer in the region of Brandenburg: University of Applied Sciences Wildau (Technische Hochschule Wildau) and Brandenburg Technical University Cottbus-Senftenberg (Brandenburgische Technische Universität

Cottbus-Senftenberg). Both universities have had long-lasting collaborations with actors in the regional industry and public administration.

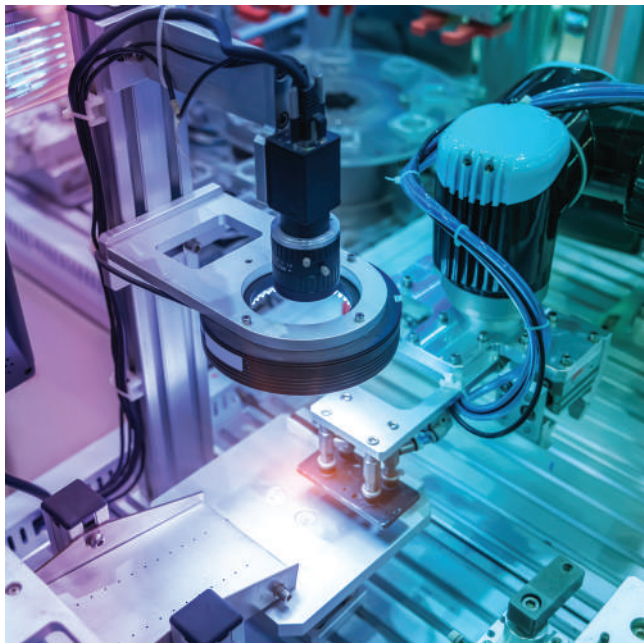
**What is the level of digital maturity of businesses in Brandenburg?**

The level of digital maturity of businesses in Brandenburg varies across sectors and company sizes. While some have already embraced digital technologies and processes, others are still in the early stages of adoption of digital technologies, in particular the many smaller businesses that are characteristic of the region of Brandenburg SMEs. Due to a significant labor shortage, numerous SMEs view digitization increasingly as a driving force for their long-term operation and sustainable market presence. pro\_digital aims to accelerate this trend by offering specific support through training programs, use of testing facilities and demonstrators and via collaborations between businesses and universities.

**In your opinion, what are the most effective tools to promote the adoption of digital tools among SMEs?**

In our experience, a combination of training programs, matchmaking events and personalized one-to-one consultation are the most effective tools for the adoption of digital tools among SMEs. Our EDIH offers hands-on workshops for upskilling the workforce, networking events in particular, innovation boot camps,

Tech-Station ‘SMErobotics’ is a robot application for the assembly of hydraulic valves. It serves to illustrate planning-relevant aspects and related design fields of automation with low-code application platforms in human robotic interfaces. This demonstrator can be visited in ‘Modell\_Fabrik’ at the University of Applied Sciences Cottbus-Senftenberg campus.



startup community building and cutting-edge demonstrator and AI-related technology roadshows.

**Which priority technologies should be invested in to increase the competitiveness of businesses?**

Well, we think this totally depends on the company. For example, a manufacturing plant with a lot of manual work, an office space or a logistics company each need their own solution for their digital pathway. In many cases, retrofitting is a great way to upgrade the current set-up. In other cases, it is adopting and implementing digital technologies such as image-recognition-based technologies. In particular, AI, advanced data analytics, automation processes, human-machine-interaction and smarter cybersecurity set-ups are able to improve production processes, make efficient use of the available resources and hence, gain expertise. Pro\_digital aims to provide guidance, helping businesses to adopt the right digital solutions and technologies specific to each SME.

**Collaboration between universities and businesses can often be challenging. What is your experience in this regard?**

To be honest, yes, collaboration between universities and businesses can be challenging, to say the least. Universities have, besides research and transfer projects, the task of training students. That means there is only a limited time available to collaborate with companies. Finding adequate staff has become increasingly difficult too. Nevertheless, our long-lasting

partnerships and years of experience in working with industry show that these collaborations can be highly rewarding and a win-win for both students who benefit from their first contact with industries and work experiences, while businesses get access to fresh ideas and exchange of the latest information/knowledge. The academic programs and courses offered at both of our universities involved in pro\_digital are strongly oriented towards applied education and research, where graduates can utilize and transfer their know-how for long-term collaboration with industry, setting up their own start-ups and SMEs.

*In Germany, we are good at incremental development. Step-by-step, we move forward, but we walk rather than run. Digitization means high speed. In general, we are quite hesitant, if not reluctant, to make big changes, and we often like to play by the rules.*

**Are there any best practices?  
Could you provide an example?**

Best practice examples are found daily in our collaborations with local manufacturing companies that lead to innovative solutions. For example, to increase technology awareness, simplicity is chosen rather than complexity. Thus, we aim to provide simple showcases in terms of AI, Augmented Reality and Robotics. This is followed by workshops or specific implementation projects to address company-specific issues, such as AI-enabled predictive maintenance systems that im-

prove operational efficiency and lead to higher productivity, lower costs and better quality control. We are also bringing together companies that are facing similar challenges but are not competing with each other.

**What is the current level of digitalization in the public administration, and how can you support innovation in public services?**

There is a growing recognition of the importance and demand, but the level of digitization in public administration is still very low in Brandenburg and, generally speaking, in Germany. In Germany, we sometimes have the tendency to focus more on likely problems rather than on the opportunities a technology offers. In other words, we have not found the right balance between chances and challenges. Data is gathered by different authorities, but there are no simplified and efficient means of exchange between them. The Covid Pandemic highlighted that clearly. Besides technical solutions, it is important to support a change in perspective.

Maybe, the collaboration of pro\_digital with other EDIHs in the Baltic Sea Region, where digitization is much more advanced in Public Administration, can help with good practices and external expertise via capacity-building programs and consultation. The public service would specifically benefit from automation and smart office technologies. Additionally, information security is a very important topic for public administration, as recent hacking and malware attacks have shown. Low-threshold programs in par-



## MARKUS VOSSEL

Markus Vossel holds Master degrees in History and Political Sciences from Bielefeld University and University of Edinburgh. He has some 15 years of experience of research funding and transfer activities at the University of Applied Sciences Wildau (TH Wildau). He coordinated the proposal process of the EDIH pro\_digital.

particular can help to raise awareness and quickly bring about noticeable improvements.

### **Germany ranks 13th out of 27 EU Member States in the 2022 Digital Economy and Society Index (DESI). What are your strengths and weaknesses?**

In Germany, we are good at incremental development. Step-by-step, we move forward, but we walk rather than run. Digitization means high speed. In general, we are quite hesitant, if not reluctant, to make big changes, and we often like to play by the rules.

Germany has a robust research and innovation ecosystem. On the other hand, Germany is yet to fully embrace digital infrastructure such as the high speed internet, digital skill development and integrating digital technologies, and the necessary reshaping of processes across sectors to make it more agile and competitive within the EU and internationally. This is why the expertise and the network of pro\_digital and the whole EDIH program is also important, as we can exchange knowledge from our more digitally savvy EU neighbors. For example, pro\_digital will collaborate with associated EDIHs in the Baltic Sea Region and offer stakeholders in Brandenburg knowledge and access to expertise and ecosystems in other European regions.

### **The Gigafactory Berlin-Brandenburg is Tesla's first production facility in Europe. What impacts can it have on the evolution and innovation of your region's industrial fabric?**

The presence of Tesla Gigafactory

Berlin-Brandenburg has a significant impact on the economy of the region, as it brings tremendous opportunities for jobs in the areas of manufacturing, investment and state-of-the-art engineering and operations. In the medium to long term, it can stimulate research and technological development that will have a lasting impact on digital innovation in our region in the fields of robotics, AI and the development of digital business models.

### **Technology is important, but human capital is also crucial. How do you support the upskilling of human resources and the creation of specialized roles?**

Pro\_digital recognizes the importance of human resources and therefore promotes upskilling workshops and Human Machine Interface, for example, on the practical use of Generative AI and Large Language Models (LLMs). As AI is developing fast, it is important to use it as a powerful tool and as an expert in many different fields to improve work efficiency and workplace. However, as recent public debate and the EU Artificial Intelligence (AI Act) pinpoints, the AI revolution needs ethical guidelines and operations to prevent negative side effects on our society. In the context of pro\_digital, we are conducting research and transfer activities on AI ethics with a specific emphasis on AI fairness, including identification and mitigation of potential unfairness and biases that may exist in the AI decision-making process. We also aim to develop practical training in this domain in the future.