

# Internationalization in the Digital Transformation: The Case of Germany

*Eva Maria Vögtle, Giorgio Marinoni and Luzia Ferreira Santos*

How are German universities coping with internationalization in the course of digital transformation? This article highlights increasing roles for IT staff and collaboration between administrative and academic personnel to enhance online delivery and partnerships. Digitalization offers potential but requires strategic integration; organizational support; digital literacy; and a holistic approach that promotes access, inclusion, diversity, and sustainable outcomes.

The internationalization of higher education institutions (HEIs) has evolved into a central tenet of institutional strategy in a globalized and interconnected world. Internationalization encompasses a spectrum of activities, including student and staff mobility, collaborative research initiatives, curriculum development, and the establishment of partnerships with institutions across borders. Digitalization—encompassing the adoption of digital tools, platforms, and processes—is transforming how education is delivered, research is conducted, and administrative operations are managed. The integration of technology into education holds the promise of increased accessibility, enhanced engagement, personalized learning experiences, and more efficient institutional processes.

The imperative to address this intersection has been heightened by the unprecedented circumstances of the COVID-19 pandemic. The pandemic served as a catalyst, forcing HEIs to rapidly adopt digital solutions to maintain continuity of operations and sustain international engagement when physical mobility was severely restricted. This enforced experimentation has prompted a reevaluation of traditional internationalization models and a growing recognition of the potential for digital technologies to enhance and expand the scope of internationalization activities. This article analyzes how German universities have been adapting their internationalization efforts to cope with the challenges and opportunities created by digital transformation. It is based on selected findings from a [comparative analysis](#) by the INDISTRA project, funded by the German Federal Foreign Office, and data from the 6<sup>th</sup> Global Survey on Internationalization of Higher Education of the International Association of Universities (IAU).

In the literature, opinions regarding the systematic integration of digital solutions in internationalization processes vary. Some scholars argue that German HEIs have not fully capitalized on the digital structures and process changes brought about by the COVID-19 pandemic and question whether this will lead to the systematic integration of educational technologies by HEIs. Conversely, a 2023 global pilot study by IAU found that, despite a partial decline in the use of information and communications

technology following the pandemic, HEIs continue to benefit from the digital transformation and enhanced digital competences developed during the emergency response. Reinforcing this perspective, our study highlights the changing roles and increasingly strategic importance of IT staff and collaboration between administrative and academic personnel to enhance online delivery and partnerships. Taken together, our findings suggest that digitalization has great potential to promote the internationalization of teaching and learning, collaboration, and administrative processes.

Despite observations of a pushback in the use of digital tools following the pandemic, the inherent flexibility of digital formats is gradually intertwining the processes of digitalization and internationalization. This interplay has made the internationalization of HEIs more accessible, inclusive, environmentally sustainable, and culturally diverse. Even though international experiences are generally regarded as more meaningful through traditional physical mobility, blended intensive programs are gaining traction among HEIs as a middle-ground alternative that breaks away from the “virtual versus physical” divide.

However, such optimistic narratives need closer inspection. While digital and blended formats can arguably facilitate access to international learning opportunities for more diverse student and staff profiles, various barriers continue to limit participation, and oversimplified “inclusion claims” may hinder addressing underlying challenges. Concerns have also been voiced regarding the reduction of funding for personnel, traced to high expectations associated with digital technologies, coupled with a tendency to underestimate the resource-intensive nature of digitalization. This overreliance on the perceived potential of digitalization alone can lead to the neglect of financial and human resource needs. For further advances on the teaching side, measures must be paired with organizational support and incentives for academics to engage with digital teaching. For students, it does not suffice to be a “digital native”; they need to be equipped with the knowledge, skills, and attitudes to navigate the complexities of global learning. In this context, digital literacy plays a central role, allowing students to

conduct research on international challenges, participate in virtual exchange programs, and engage with peer networks from around the world. It also enables them to critically assess information sources and distinguish credible data from misinformation, which is crucial when addressing global issues that are often subject to debate and controversy.

The synergy between global learning and digital literacy is essential for higher education students, as it prepares them for an interconnected world where digital tools are indispensable for understanding and tackling global issues. It should thus become an integral part of the higher education curriculum. This can be connected to the current discussions about AI in higher education. Most studies on the topic concentrate on undergraduate students, with a predominant focus on language learning and applications, including assessment, prediction, AI assistants, intelligent tutoring systems, and student learning management. The rapid evolution of AI technologies, such as ChatGPT, highlights the need for continuous exploration of their implications within the educational landscape, emphasizing that certain geographic areas remain

underrepresented and warrant further investigation to fully realize potential benefits.

Overall, the strategic orientation of digitalization as a comprehensive institutional project has a positive impact. At various HEIs, digitalization is pursued as a broad initiative, influencing all aspects of teaching, administration and, to some extent, scientific communication. This is evident in reference to resource availability and allocation, the potential for internal collaboration and synergies, and a unified framework with coordinated use of tools and platforms.

In line with the concept of comprehensive internationalization, comprehensive digitalization is a sustainable approach for digitalizing higher education. However, digitalization should be a means to an end. Challenging the notion of digital technodeterminism and the status of technology as a “virtually autonomous agent of change,” digitalization should not be seen as a panacea. Virtual internationalization must deliver added value by catering to specific needs and translating into improved human experiences.

---

Eva Maria [Vögtle](#) is a EUROSTUDENT team member at the German Centre for Research on Higher Education and Science Studies (DZHW) and was research director of the INDISTRA project. E-mail: [voegtle@dzhw.eu](mailto:voegtle@dzhw.eu)

Giorgio Marinoni is manager of higher education and internationalization at the International Association of Universities (IAU). E-mail: [g.marinoni@iau.global](mailto:g.marinoni@iau.global)

Luzia Ferreira Santos is research associate at the University of Hamburg (Germany) and was a researcher and doctoral student at the INDISTRA project. E-mail: [luzia.ferreira.santos@uni-hamburg.de](mailto:luzia.ferreira.santos@uni-hamburg.de)

*This article is based on Vögtle, E. M., G. Marinoni, L. Ferreira Santos, J. Berg, and K. Nekvatska. [Internationalisation in the Digital Transformation: A Study on the Strategies, Drivers, Priorities, and Challenges of Virtual Internationalisation at German Higher Education Institutions](#). DAAD Studies. Bonn: DAAD, 2025.*