CONTINUING DIGITAL TRANSFORMATION AND CROSS-CULTURAL ONLINE STUDIES IN INTERNATIONAL BUSINESS
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ABSTRACT
Digital systems, technologies and applications are ubiquitous in business, management, information technology, communications, networks, processes, security and compliance, engineering, automation as well as education and training. Specific framework factors must be considered in the field of education, nowadays, the general trends for digital transformation superimpose the common changes in education and training, the general key success factors for changes are leadership and culture, peoples and skills, organization and governance, process and methods, systems and tools as well as performance and management. The results of different types of regional, national and international projects in several fields of research and development as well as implementation and application can be used to predict which kinds of key developments will be essential in the next years.

Online programs require, above all, high flexibility, support intensity, target group orientation, digital maturity, modern forms of organization the latest technologies, content and methods. Since they are generally also offered on an international scale, it is necessary to orient the contents as well as the organization and the access accordingly globally.

KEYWORDS: Digital eco-systems, Digital education, Industry 4.0, Interdisciplinary cooperation, Internet of things

DIGITIZATION AND DIGITAL TRANSFORMATION AS STRATEGIC APPROACH
The digital transformation of education and training is a long-term strategy as well as continuing process. Leibnitz dealt with the commercial systems in the 17th and 18th century. He reflected the development of the dual systems for creating the binary arithmetics based on bits and turned the findings into practical applications. But, only the massive use of computers and of electronic communication paved the way for the comprehensive digitalisation of our world. Before we could understand what complex changes the binary approach will have, the digitization has already led to far-reaching transformations. Now it is important to network the individual island and partial solutions that have already existed for a long time in a meaningful way, and at the same time, we have to plan and implement new even more complex applications.

Digital transformations will continue to accompany us in the future (Diaz, 2015). They permeate all spheres of life and determine social changes. Digital systems, models, technologies and applications are ubiquitous in business and management, IT and communications, networks and processes, security and compliance, engineering and automation as well as education and training. Since insights are becoming increasingly accepted, that digital transformations will be part of our lives in the future, the chances of digitization are perceived much more consciously.
This makes complex applications more manageable and more efficient. Illustrative examples of this are the development of the Internet of Things, Industrial 4.0 and Digital Eco-Systems. The latter is of particular importance because they will ensure the connection of economic, ecological and social aspects with the processes of digital transformations.

**TRENDS AND MAINSTREAMS OF CONTINUING DIGITAL TRANSFORMATION**

The general key success factors for changes are leadership and culture, peoples and skills, organization and governance, process and methods, systems and tools as well as performance and management. These aspects must be taken into account by all organizations and balanced in order to successfully master transformations. Specific framework factors must be considered in the field of education, including such as global knowledge society, lifelong learning, competence outcome orientation, impact of the new millennium learners, challenges of the quality-driven approaches, and specific of learning environments. They cause activities by the learner in a proactive way, learning for knowledge and competence outcomes, integration of knowledge structures, balance of concepts, skills, and meta-cognitive competence, building complex knowledge structures objects bottom-up, explicit knowledge for organizing implicit knowledge in the mind, constrains of capacity limitations of the human information-processing abilities, dynamic interplay of emotions, motivation, and cognition, creation of transferable knowledge structures, and requirements by time, space, and efforts. Nowadays, the general trends for digital transformation superimpose the common changes in education and training. Important topics are among others the internet of things, the cloud infrastructures, the disintermediation and optimization by simplification of complex relations to web-based, direct relations between providers and customers, consumer and service orientation and social networking.

**TRENDS AND MAINSTREAMS OF CONTINUING DIGITAL EDUCATION**

This development has an impact on the changes in (digital) education and training for all: learning portals make the borders between institutional education and training on the job as well as between different educational degrees more open and interchangeable; the transfer of knowledge in work and life processes will be constantly strengthened the training-skills-performance continuum, the attention has to be focused to what the learners reflect and generate in social networks as feedback of the learning processes, the digitalization provides the openness and transparency of education and training by using all means of online facilities; the providers have to anticipate more than submit, in order to enable semi-automatic generated, individual learning paths through flexible, modular and digital systems; digital Learning will partly cannibalizes the face-to-face since the employees will developed a sufficient digital culture; education providers and training brokers have to really to found their places under the conditions of semi-virtual markets; and so on.

**PROJECT IMPACT ON DIGITAL EDUCATION AND TRAINING**

The results of different types of regional, national and international projects in several fields of research and development as well as implementation and application can be used to predict which kinds of key developments will be essential in the next years. The range of reflections extends from the early use of multimedia components up to the latest social network technology; time-wise, from short IT video sequences to the modular-design system of complex knowledge pools content-wise, from the highly specialized training program to the mass consumption in global study offers target-group-wise as well as the simple presentation program up to the semi-automated content creation and knowledge transfer technology-wise. The simplified structural consideration of selected dimensions underlines the complexity of the task. Disciplinary, multidisciplinary and interdisciplinary projects have provided the digital transformation in education for many years. The development of the digital learning can be roughly divided into several phases, which followed each other chronologically:

1. Multimedia applications and computer-based training
2. Learning platforms and portals, and web-based training
3. Online and mobile learning
4. Open learning and social networks

Important parts of each phase were always included in the subsequent phase, so that, on the one hand, the reservoir of methods, content and technologies was growing, but on the other hand the complexity also increased steadily.

Example projects for the four phases:

3. Livestream learning with RSS-functions for mobile and stationary learning in education and training for mechatronics (2010)

**CASE OF AN ONLINE STUDY PROGRAM IN INTERNATIONAL BUSINESS**

The interdisciplinary cooperation of economics, pedagogy, technology, ecology, ergonomics, computer science, engineering, etc. is a prerequisite for applying the diverse experiences and insights in a complex study program in the context of digital transformations. Online programs require, above all, high flexibility, support intensity, target group orientation, digital maturity, modern forms of organization the latest technologies, content and methods. Since they are
The new ideas, concepts, and implementations of digital education and training were involved into a study program for a special cross-cultural Online-MBA in International Business. In this way, the common view of digital transformation in education and training is used in the context of a specific cross-cultural application in the framework of an international study program involving universities from the Slovakian Republic, Saxony in Germany and Michigan in the United States.

The challenge was to offer a high-quality, further education in extra occupational manner for already academically qualified applicants with relevant pre-knowledge and professional experiences in the field of international business. Therefore, a modular block study with three main topics per semester was developed, among other things, on a combination of online, blended and mobile learning.

The content covers essential aspects of international business processes and functions. New forms of assessment were developed both for access to studies and for the examinations in the modules during the studies. The study program has a special methodological-didactic concept, including specific coaching support and knowledge transfer models. Latest achievements of digital transformation and education are used the complex approach. It is carried out in collaboration with two foreign universities. As a result of the curriculum development and the implementation of the course of study, a requested study program was established that serves both the continuation of the studies at the West Saxon University of Zwickau as well as a complementary master’s degree for graduates of other institutions.

**Future Chances, Challenges and Risks**

The study program of the MBA International Business, as well as the entire education sector, is subject to a permanent (digital) change process. Since the dynamic of science and technology are further enhanced by the digital transformations, the particular challenge will be, to keep the course of studies of the level of the latest methods and contents, always supported by latest IT and communication services as well as learning cultures. The risk exists primarily in bottlenecks in the supply of resources as well as in the increasing individualization and target group orientation, requiring at the same time high quality objectives and the management of a complex application in the area of digital education.
