Upskilling as an Internationally Recognized System of a Resilient Education Society

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Abstract
The objective of the research project is a comprehensive look at the international requirements of further education and its pain points in the age of digitalization. The Prior work of the upskilling survey serves the aspect that society is becoming more individualistic and less predictable in terms of educational opportunities. It is the biggest challenge in the organization of continuing education for adults to achieve their interest and benefits for larger target groups by taking into account their individual situations. The approach of the panel study series, which has been published annually since 2019, is based in its 2021 edition on a partially standardized questionnaire of 2000 participants, in which 10 countries were represented. Each European, African, Asian, or South American country participated with 200 respondents each. The results show that digitization is playing an increasing role in the acceptance of continuing education because nowadays teaching with flexible teaching via online teaching is the clear preference. The implications of this upskilling study are that a large proportion of respondents are looking for personal fulfillment as a basis for professional change. Not the primary perspective on job openings is relevant in education because skills and individualistic preferences lead to a change of sectors or a higher position being achieved. The value of the paper lies in the proof of the connection that remote-controlled and flexible continuing education courses are an opportunity to integrate personal and professional development into the everyday life of modern and individual society.

Keywords: Digitalization, Panel Study, Upskilling, Skills, Learning Preferences

Introduction

For digital educational offers to have an effect as a contribution to current social changes, generational shifts must be understood. Changed self-understandings in dealing with the participation of the majority, self-determination of the individual but also technological entry into everyday life leads to new information acquisition and processing. Meta-shifts in today's world of work can be determined with the so-called "Society 5.0", which the Japanese government defines as follows: "A human-centered society that reconciles economic progress with the solution of social problems through a system that highly integrates cyberspace and physical space" (Cabinet Office, Government of Japan 2021).

The focus of social reform since the 2010s has been on innovation, so learning opportunities must be established "on demand" that support the increasingly demanded dynamic behavior towards new complex challenges in a practical way.

Methodologically, therefore, courses must be designed that focus on "domain-specific usable learning outcomes" through interactive design of learning progress. In this way, learning processes must be considered that are committed to the recognition of a shared responsibility of teaching-learning relationships. Partial achievements and learning successes or progress must be visually experienced for each learning objective and designed to be evaluated by learning analytics software. The in-service continuing education market is becoming more attractive from digital teaching through the points of flexibility and individualization of the learning and teaching offer (see Handtke, 2015).

Main Perspective

In the higher education of many democratic states, the goal of social added value can be found in research and teaching (see Berthold et al., 2009). This so-called "Third Mission" means that research and teaching should take place with socially relevant questions and, if possible, their inclusion at events. Another level of the interweaving of higher education and vocational training is the conception of innovative in-house continuing education as part of the survey and optimization of work processes.

Conceptual Basis

To support society's mission using technology with added value, it is like the task of local authorities to build digital infrastructures, to make data usage concepts and applications tangible with citizen participation. An educational mission can also be derived here by introducing the topic of intelligent data analysis and automated data preparation for improved decision-making. This concept of the "Smart City/Smart Region" in the municipal sector can be discussed to adapt it to the higher education sector due to the comparable intention. This assumed starting point of a "smart university" is to interpret the public mandate in such a way as to create added value of services via online services (see Schachtner, 2020).

The project priorities to be identified within the framework of public opinion formation on a municipal "digital agenda" offer the possibility of acquiring skills within the framework of an informal learning and participation format with different target groups.

Other socially relevant topics outside of digital aspects can also be accommodated in these formats, e.g., topics of sustainability or social change. In turn, research can also benefit from

this, as new target groups for empirical surveys are created. At the same time, a new strategic level of maturity of colleges and universities can be achieved, which is why the four core areas of the "Smart University" concept are presented below:

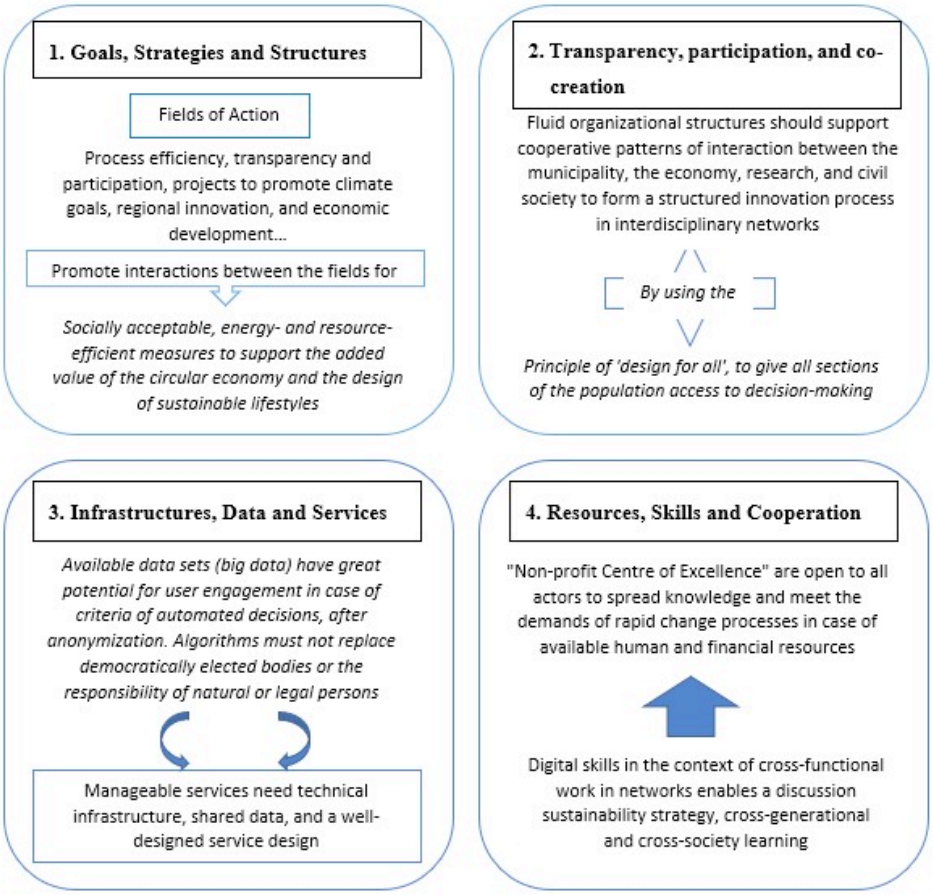

Figure 1: The Concept of the Smart University

In addition to application-oriented questions of the content orientation of the seminar concept based on the digital transformation, planning and decision-making processes about dealing with the neoliberal paradigm of the "human capital of the actors" (Stewart, 1999) can also be combined in a basic scientific orientation. In this respect, economic concepts can also be discussed for the internal control of public institutions such as lateral leadership or open innovation management and the learning needs of specialists and managers in public administration.

Research design

Based on the previous remarks, empirical consideration is based on a full-standardized, anonymous Online-Survey in the closed-question metric procedure. In this context the Chances in adult education should get identified with a comprehensive look for international requirements of future education and its pain post in the age of digitalisation.

The aim of the study is to show, what conditions of learning the business professionals are expecting of modern education. In this context, there may be several factors that are addressing the referencing of learning topics, learning formats, synchronous or asynchronous teaching, classroom- or online-teaching and so on. The focus of this work therefore is that the

participation in the main demanded courses is subject to restrictions under the given conditions. The period of collecting data for the survey was from 3rd June.2021 to 7th June 2021. The conclusion was published on the 14th of December 2021.

Data Sources

The Focus group of the survey was n=2.000. The study was internationally designed, so that different education systems were intended. Ten countries were included, each with at least 200 respondents. These were: Spain, Italy, France, Poland, India, Pakistan, Nigeria, South Africa, Brazil, and Mexico.

The research data collection group consists of scientifically educated adult professionals and is heterogeneous in terms of teaching experience, gender, and age. The sample was assembled of half of the participants in each country were male and half female. Their ages are evenly distributed over the range of 26 to 55 years. The target groups qualifications are varying in degrees and years of professional experience. Most respondents are in employment. There are also several self-employed people among the respondents (17.8%). The detailed group characteristic could be detected form the following chart:

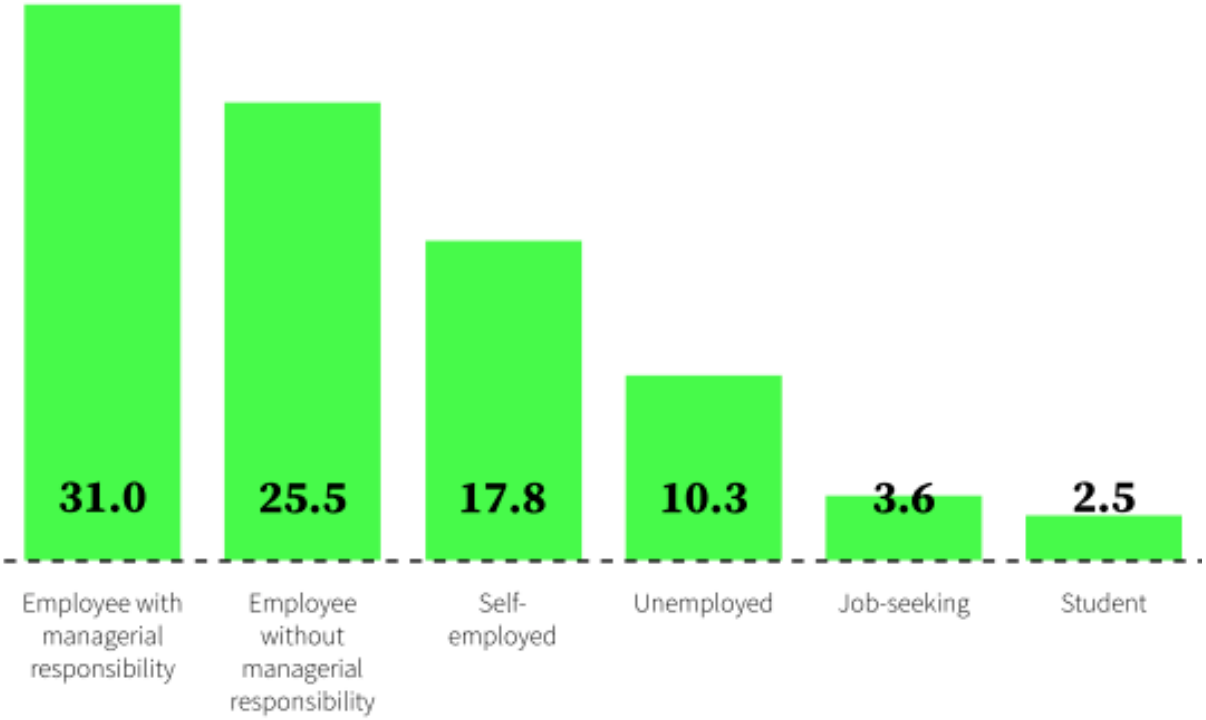

Figure 2: Professional Position of Participants in %

Results

Internationally, business & management as well as marketing & communication are the cases besides digitalization for further education. The question of the panel study related all to skills, that are securing the ability to stay competitive in the business field the participants are into. So private and personal skills are not in focus in this context.

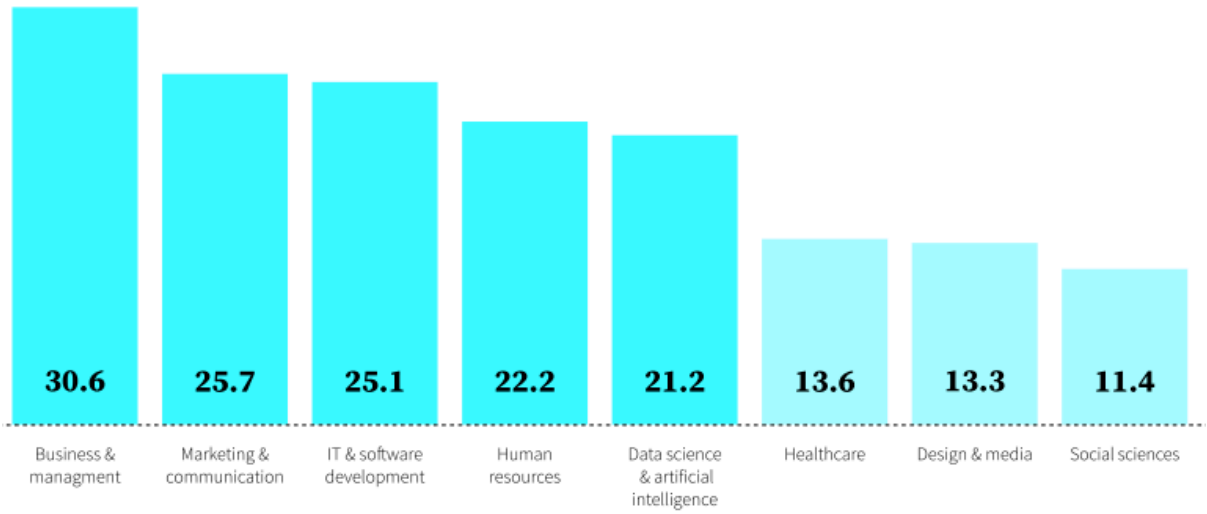

Figure 3: Needs of Business & Management Skills in Upskilling in %

For many people, lifelong learning is the be-all and end-all, where personal development is on focus. The main goal for educational institutions is to develop programs, which fit professionally to people's needs and keep up with technological advancements. Topics of the future must be identified. Although there are a lot of insecurity, interesting is to see, that two thirds already know exactly what knowledge they want to acquire.

Figure 4: Needs of Business & Management Skills in Upskilling in %

60 % of those surveyed consider it important that further education content is taught live. Both flexible online teaching and events at fixed times are popular. Very important is also flexibility of training session times regarding learning ability. 69,3 % of participants see this aspect "very important", while nearly the rest (25,8 %) see at least slightly importance. These aspects show that there is a strong desire for flexible online teaching internationally. Only very few participants prefer a face-to-face teaching. For respondents in countries such as South Africa (51.8%), Nigeria (50.7%) and Pakistan (46.5%) in particular, online teaching with flexible time scheduling plays the most important role.

Figure 5: The Importance of Training in real time in %

Additionally, above 30 % of the participants either prefer flexible online teaching with or without fixed time schedules. Even the combination of classroom and online teaching is not very popular because of not even every 7th participant would choose that model. Fixed times at classroom teaching is even behind it on the last position.

Conclusion

Based on the deductively developed hypotheses of success chances for the concept of "Smart University" were mainly confirmed with the survey's statements on commutated level:

FURTHER EDUCATION. A PERSONAL MATTER. Further education is important, there's no doubt about that. Even though one in two people would like to continue their education for professional reasons, there is one thing that is most important to most respondents, and that is personal further education – regardless of their profession. Simply because they are interested in a particular subject.

POSITIVE EXPERIENCES. More than two thirds of those surveyed have already had very good experiences with further education. For more than half, the curriculum perfectly matched their own personal goals. The quality of the learning content and the professional approach of the specialist staff also ranked highly among 46.9% of respondents.

INFORMATION IS EVERYTHING. Well over half of those surveyed internationally have already found suitable further education courses. The rest are still looking. Those who have already investigated it but have not yet found anything are primarily concerned about the lack of flexible courses with suitable content.

MORE FLEXIBILITY - WITH ONLINE LEARNING. Even further education is influenced by current trends: online teaching is generally preferred internationally. Best of all with

flexible, self-deter-mined scheduling or in a virtual classroom online at fixed times. In contrast, only very few people want face-to-face teaching.

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