

Sagatavošanās projekta izpildei

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The tomorrow's world of work drives with digitalization, which creates new possibilities for people-to-people and people-to-machines collaboration; globalization, which significantly intensifies cross-border connectivity; demographic changes, that determines who, and with what skills, can participate in value creation; and the ongoing, boosted with the new opportunities and challenges, cultural transformations.

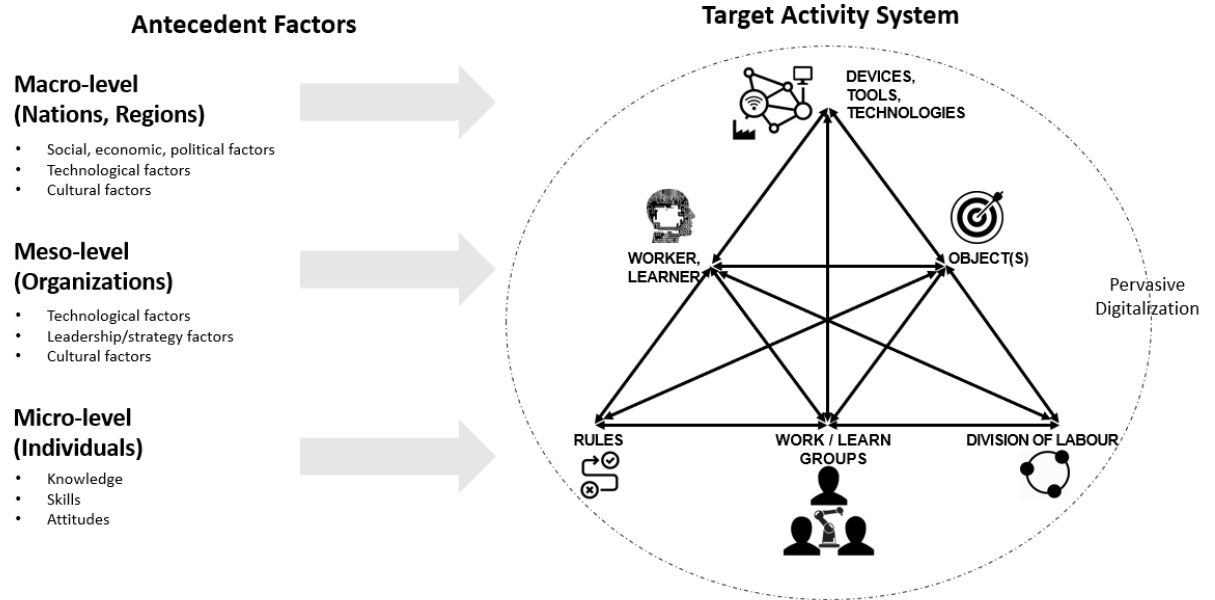
Our earlier program of collaborative digital-learning and technology-competencies research suggested that it is not enough just to transfer “progressive” teaching and learning models and practices to other countries and schools (Blayone, Mykhailenko, vanOostveen, & Barber, 2018; Blayone, Mykhailenko, et al., 2017; Blayone, vanOostveen, Barber, DiGiuseppe, & Childs, 2017). Achieving readiness to Education 4.0 challenges the fundamental complex of objects, skills, rules, instruments, communities, responsibilities, division of labor, values and professional identities.

Collecting data on digital competency, attitudes toward information technology, cultural values and personality, and analyzing it using the Activity System (Engeström, 2000), Digital Competencies Profiler (DCP) (Blayone, 2018), Community of Inquiry (COI) (Akyol & Garrison, 2014), Cultural Dimensions model (CVSchale (Yoo, Donthu, & Lenartowicz, 2011) and statistical methods, we are aiming to assess the dimensions of the readiness. Based on that, we'll develop a set of recommendations for transforming the educational programs and environment for achieving the better readiness.

Simultaneously with our research activities (data collection and analysis), we are going to create a functioning community of inquiry and practice from the project team and students, to develop the readiness 4.0 on the fly. We'll have monthly collaborative-constructivist online meetings and asynchronized activity in the FB group on the questions of our project.

We see readiness 4.0 as a complex Activity system, which can be explored on different levels: micro, meso, macro. We focus on micro- (individual) and meso- (institution) levels. We'll explore how the elements of Activity system (objects, communities, rules, division of labor, tools and the object (in our case a student or a teacher) should be changed, and where the tensions between “old” and “new” elements occur, preventing developing readiness.

General Readiness for Digitalized Work&Learn Activity towards Industry 4.0



We hypothesize, the key elements of readiness lie in the areas:

- digital competency
- attitudes toward information technology
- cultural values
- personality

We should decide, how we are going to operationalize the readiness elements: methodology and instruments for data collection, e.g.

- digital competency – DCP
- attitudes toward information technology –ATIT
- cultural values - SVScale
- personality - Big Five (?).

and how we will process data in order to answer the research questions:

1. Which elements from the above-mentioned areas are significant for defining readiness?
2. What are the educational transformation directions for facilitating better readiness?
3. What are the targeting working (4.0) and learning (4.0) activities?
4. Are there gender differences in readiness?

To be continued and clarified....

After defining research questions, we can plan **sub-projects (and potential publications) and research sub-groups**

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To answer the research questions, the first task is to **collect a quality data.**

For that, we need:

1. To define a statistically representative sample.
 2. To translate instruments into Latvian, and validate the translation with two other bilingual team-members.
 3. To prepare online facilities for surveying, collecting and storing data
 4. To transfer the translated surveys on the online basis (and double check how it works with two separate people).
 5. To plan motivation for the participants (students, professors), they to provide a good quality data.
 6. Train the data collectors, they to be able to help the participants to give full, responsible and comprehensive answers.
 7. To plan and organize the process of data collection.
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