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Digital transformation in higher education in India: Qualities and Risks

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Abstract
Education system creates hope and it should never aim at creating mere hypes. Over a period of time many changes have occurred in different sectors of economy including the education system. Education sector unlike any other sector has seen many stages in its evolution. From Guru-Shishya system of conducting the class in open garden under the trees to closed class room lectures, presentation form of teaching with the aid of LCD touch-screen projector to online notes and now instant Whatsapp messages is the buzzword among the students.
Nowadays can be seen how the new technologies change the environment very fast. Many challenges are faced with higher education. Every day new technologies, software and hardware solutions are developed. Digital transformation refers to changes that digital technologies cause and that influence various aspects of human life. Previous researchers mainly focused on the impact of the digital transformation in the context of commercial organizations and business processes.

Keywords: Digital transformation, Higher education

1. Introduction
The only constant is change and mankind is in a period of rapid technologically driven change" The main reason for adopting many technologies is motivational, to take advantage of the Interest of learners. Twitter™ can be used for education but how much meaningful learning can be packed in 140 characters or less! What society and individuals need is hope, not hype!
Technology has become a fundamental part of our daily life. Today, IT artifacts can be discovered at home, work, education, transport, or leisure. Due to the drastically shift of technology, the whole society is changing in the way it communicates and collaborates. Prior research has started to focus on this phenomenon which is widely known as digital transformation (Henriette, Feki & Boughzala, 2015) [1]. Digital transformation does not only refer to a shift of technology. According to Stolterman and Fors (2004) [9] digital transformation can be understood as the "changes that the digital technology causes or influences in all aspects of human life". Hence, the authors claim the prevalent "one dimensional" understanding of information technology in Information Systems (IS). Digital transformation leads to an increasingly interconnected reality. In enterprise contexts, digital transformation encourages an organizational shift, where big data, analytics, cloud computing, mobile applications and even social media platforms have become omnipresent (Nwankpa & Roumani, 2016) [6].

Adoption Technology in Higher Education
Research shows that there exists an emerging trend of adopting different technologies in higher education besides conventional communication and collaboration systems. According to Kam and Katerattanakul (2010) [3], Web 2.0 collaboration tools could be useful to support

collaborative learning in a team-based environment as well as knowledge dissemination (Rollett, Lux, Strohmaier, Dosinger & Tochtermann, 2007) [8]. Especially, document management and the flexible usage regardless of time and user's location are beneficial functions (Kam & Katerattanakul, 2010) [3]. Furthermore, Truong and Dustdar (2011) [10] state that collaboration between various researchers and scientific groups could be improved by cloud computing. Literature also showed that the integration of collaboration features in a University Cloud Computing Service is highly requested (Meske, Stieglitz, Vogl, Rudolph & Oksuz, 2014; Stieglitz, Meske, Vogl & Rudolph, 2014) [4]. They also uncover a demand for features like sharing documents with other persons, real-time collaboration, version management of documents and commenting others' documents. The survey's results additionally prove that the requirement for collaboration features differs between students and employees.

Qualities of modern educational technologies

There is no doubt that digital education is more interesting for today's pupils than education in the classic form. This results, on the one hand, from the fascination with electronics and the Internet, which for young people is the favorite environment of existence. On the other hand, methods practiced at lessons with the use of multimedia are more involving for pupils and, as a consequence, they result in their greater commitment. The increase of the effectiveness of education and the equalization of educational opportunities are the most frequently enumerated advantages of digital education. Many studies confirm that education using multimedia is more effective. According to Dorota Budzoń, when using this type of education, its effectiveness increases by as much as 56%. It increases the pupil's activity by 40-80%. As a consequence, this leads to savings in time of approximately 38-70%.Teachers participating in the survey conducted by the Ministry of Education in 2012 most often enumerated 'creative use of available sources of knowledge, the change of the market of traditional educational publishers, the development of creativity and skills as well as equalization of educational opportunities among the effects of the introduction of e-course books. Similar responses were given also by the pupils'. The above data, although there is a need to verify them, constitute a very strong argument in favor of digital education and e-course books. The implementation of education objectives is, after all, the primary criterion for its evaluation. If the use of multimedia (which the digitization assumes) led to a considerable increase of its effectiveness, then the question concerning the legitimacy of its implementation should strongly be answered affirmatively. However, it turns out that not everyone shares such a view, as it will be presented below. Not without significance is also the fact that e-course books will make pupils' schoolbags much lighter. There will be no need to carry schoolbags that weigh several or even a dozen kilograms to school any more. They will be replaced with a laptop or a tablet with loaded lies. Economic efficiency is an equally important advantage of the digitization of education. According to the announcements made by the Ministry of Education, course books prepared by it will be available for free and will be issued under licenses allowing free use of them. It is evident that the remaining publishers will not make their course books available for free, but it may be expected that their prices will drop significantly.

Risks arising from digital education

Making this reflection objective, apart from the advantages of digital education presented above, one needs to indicate the threats which it carries (with its implementation). It should be mentioned that some people disagree with the disadvantages and treated as advantages of digital education. Computer reduces the teacher's workload and increases the level of education and that computers and the Internet are great tools for the equalization of educational opportunities for young people should be treated as a myth. Among the concerns on the quality of education it is noted that the only free e-course book which is being prepared by the government will lead to a state monopoly on educational contents. It is a real threat and it may lead to the fact that children and young people will be indoctrinated by the state, because one cannot delude oneself that any government can afford to be politically and therefore ideologically neutral. Of course, this risk is smaller in case of science subjects, but with relation to the humanities the risk seems very high. One may provide the interpretation of the events of recent history as an example. Some of the studies commissioned by the Ministry of Education, which seems interesting, also contradict the idea that electronics helps in more effective learning. On the contrary, one talks about the so-called 'book effect', which means that paper books allow for better reading comprehension. The fact that 90% of students choose a printed version of course books also supports this thesis. The same studies prove that too intensive use of multimedia leads to distractions and limits pupil's ability to concentrate (87%). What is more, experts point out that the use of e-course books substantially reduces the imagination of young people, making them 'a reproductive recipient of an extremely attractive low of information'. A very important, though expected, risk stemming from the use of electronic books is their negative influence on health. Quoting American experts, Professor Włodzimierz Gogołek indicates 'the growing risk of health loss caused by the use of electronic devices, especially by children'. This mainly concerns the eyesight and the risk of myopia, because the use of e-course books leads to the fact that children intensely stare at a computer screen for 'at least 9 hours of lessons' a week. The time spent in front of the computer at home, which is difficult to estimate, adds to the above problem. If Professor Gogołek is right, children will have 'a seven-hour eye contact with a computer screen a day. According to American studies, even 'over two hours a day is harmful for children. It increases the risk of psychological problems'. These can include anxiety, depression, insomnia, dizziness, memory loss, etc. The negative influence of the light emitted by computer screens on the ability to fall asleep has also been proven. This is due to the decrease in the level of melatonin, which regulates the biological rhythm of human life. Also spine defects arising from the faulty posture in front of the computer and from spending many hours in a sitting position are a serious condition stimulated by digital education. This problem already applies to 90% of young people today. Some experts examining the attempts to introduce e-course books to the education system in different countries demonstrate the failure of such kind of programmes. They also indicate that 'mere transfer from the traditional paper version into the

electronic one was the primary cause of failure of all course book digitization programmes. However, digitization of knowledge requires a separate original programme, and most of all long-term studies'.

Conclusion

Adopting high specialist in new technologies field, make the process of training young lecturers shorter and more effective. Therefore, it becomes necessary to analyze all its aspects, both advantages and disadvantages. On the basis of the secondary analysis of various recent studies as well as own research performed, it has been determined that the level of digitization of education is still not satisfactorily high. It is time to connect universities and business on new way. It is time to apply mentoring method in universities on new way. The big changes in new technologies and new science fields bring with them big changes in training lecturers approach. Many arguments in favor of teaching based on modern methods and techniques have been presented; however, at the same time, a number of risks which this technology carries have been identified. It is hard to clearly be 'in favor' or 'against' this type of proposals. However, it seems that digital education will become a common reality in the next several years. Therefore, it is necessary to develop it so that it could bring the most benefits with the minimum of side effects. Only practice will probably show whether such a solution is possible. We can point out that digitalization has helped transmit education faster, more efficiently and at a lower cost, but the challenges for its future delivery are unspecified and somewhat unpredicted.

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