

INNOVATION DIFFUSION MODEL IN HIGHER EDUCATION: CASE STUDY OF E-LEARNING DIFFUSION

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ABSTRACT

The diffusion of innovation (DOI) is critical for any organization and especially nowadays for higher education institutions (HEIs) in the light of vast pressure of emerging educational technologies as well as of the demand of economy and society. DOI takes into account the initial and the implementation phase. The conceptual model of DOI in higher education (HE), where e-learning is considered as innovation, will be elaborated in the poster.

KEYWORDS

Diffusion of innovation; Higher education; E-learning; Strategic planning of e-learning implementation

1. INTRODUCTION

Europe 2020 Strategy (European Commission, 2010) puts a strong emphasis on smart, sustainable and inclusive growth based on innovation and creativity of both enterprises and institutions of higher education and science.

According to Rogers (Rogers, 2003) Diffusion of Innovations (DOI) is the process by which an innovation is communicated through certain channels over time among the participants in a social system and according to him an innovation is any "idea, practice, or object that is perceived as new by an individual or other unit of adoption" (Rogers, 2003). The relevant research question is how to model the DOI related to higher education and especially in the context of e-learning implementation.

2. DIFFUSION OF INNOVATION IN HIGHER EDUCATION

According to (Rogers, 2003) four main elements influence the spread of an innovation. They are the innovation itself, communication channels, time necessary for innovations to be adopted and a social system that combines internal and external influences. It also can be recognized that there is the essential influence of human capital i.e. there should be a critical mass of people that understand, adopt and spread the innovation. Otherwise the sustainability is not ensured.

The special case of diffusion of innovation in higher education is the implementation of e-learning. Under the term of e-learning we comprise all educational technologies starting with technology supported learning and blended learning and ending up with the massive open online courses (MOOCs) and personalized online learning. According to (Bates, 2011) it is a major innovation in education.

The innovation process in an organization consists of two main groups of activities (Rogers, 2003): (1) Initiation, consisting of information gathering, conceptualization and planning for the adoption of innovation, decision to adopt, and (2) implementation, consisting of all the events, actions and decisions involved in putting the innovation into use.

In further research of diffusion of e-learning as an innovation in HE according to the given conceptual model (Figure 1) we will define critical factors of DOI for each phase of the innovation process starting with the e-readiness assessment of a HE institution and social factors that influence decision making on levels of e-learning implementation.

After the decision has been made the most influential success indicators for e-learning diffusion into HE institution are going to be researched taking into account the following: leadership and strategic alignment, dedicated change agents among staff and students, e-learning usefulness recognized by staff and students, innovation in teaching, appropriate organization and support structure for staff and students, technical infrastructure, quality assurance of e-learning (Begičević et al, 2007; Bates, 2011; Gonçalves & Pedro, 2012). The developed model will be upgraded by means of social network analysis (SNA) in order to find key communication factors in DOI.

Finally, the described research will contribute to DOI theory because the majority of the existing research is focused on factors that influence an innovation adoption (Vishwanath & Barnett, 2011) and putting aside the focal problem of diffusion of innovation through information exchange through communication.

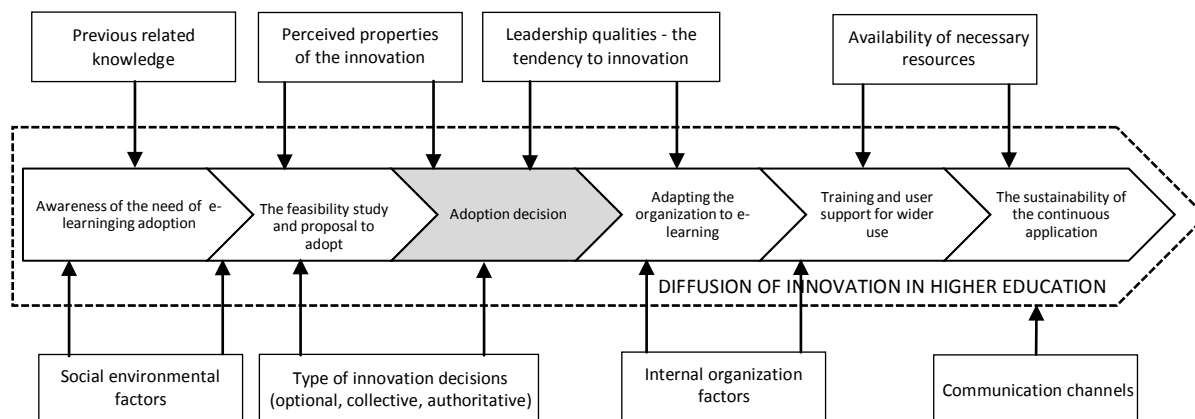


Figure 1. Conceptual model of DOI in higher education

Special issues that influence DOI in higher education are the type of HE institution (private or public); the level of autonomy of HE institution, the academic freedom of researchers/professors as well as the complexity of fulfilling the usual three-folded mission (education, research and outreach).

3. CONCLUSION

The conceptual model of DOI can be tailored for HE institutions but general factors need to be properly translated into specific environment, interpreted meaningful and possible connections should be established. The recognition of communication agents and channels that enhance the diffusion of e-learning will contribute to DOI management in HE system. We are going to present these specifics on the poster.

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