



Innovation diffusion model in higher education: case study of e-learning diffusion



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Introduction

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

Diffusion of Innovations (DOI) - the process by which an innovation is communicated through certain channels over time among the participants in a social system (Rogers, 2003)

Innovation - idea, practice, or object that is perceived as new by an individual or other unit of adoption (Rogers, 2003)

Research question: How does DOI model translate to higher education context and especially for implementation of e-learning?

Diffusion of innovation in higher education

E-learning - application of all educational technology in teaching and learning, starting with technology supported learning and blended learning and ending up with massive open online courses (MOOCs) and personalized online learning - major innovation in education (Bates, 2011)

The innovation process consists of **two main groups of activities** (Rogers, 2003):

(1) **Initiation** - information gathering, then conceptualization and planning for the adoption of innovation

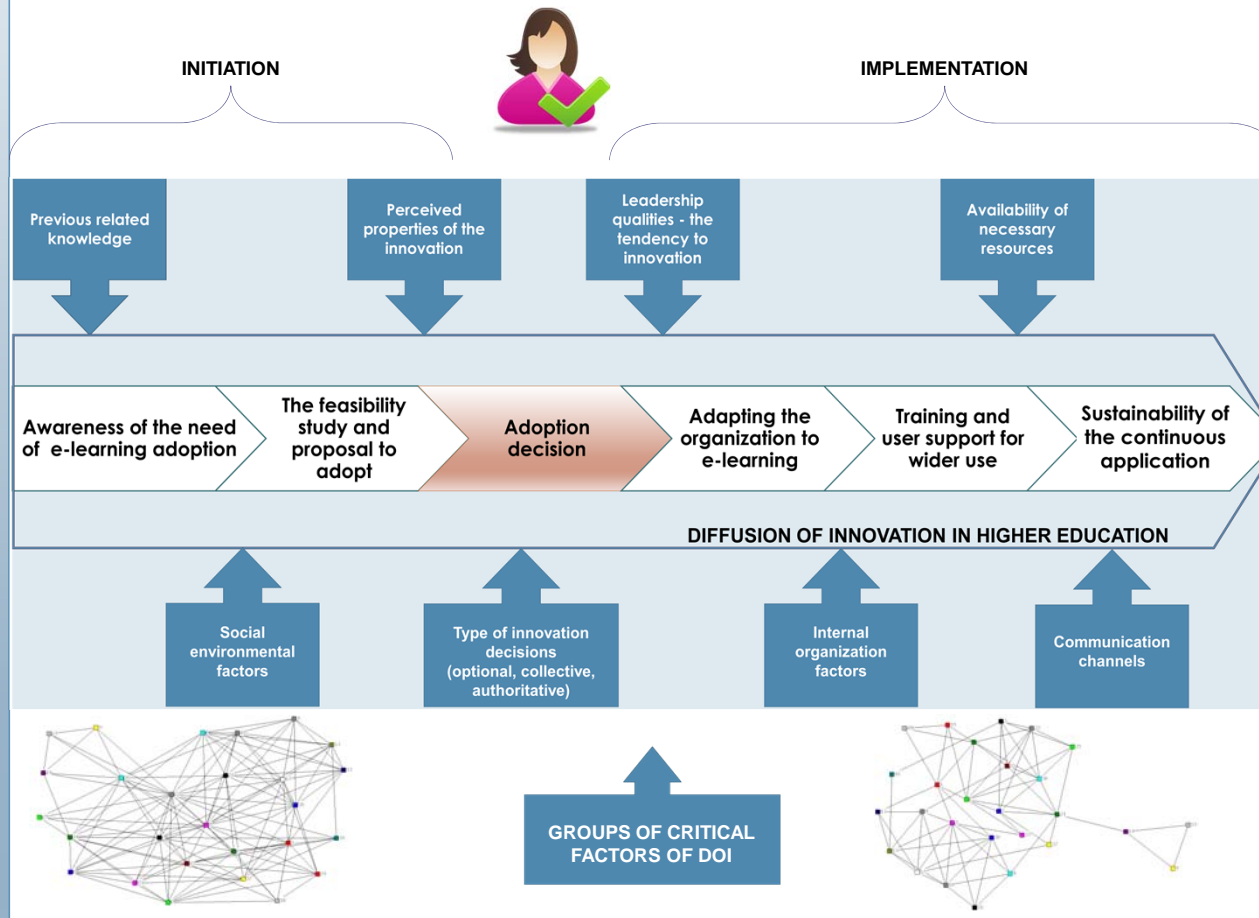
(2) **Implementation** - events, actions and decisions involved in putting the innovation into use.

Literature cited

Bates, T. and Sangrà, A. (2011) *Managing Technology in Higher Education: Strategies for Transforming Teaching and Learning* San Francisco: Jossey-Bass/John Wiley & Co

Begičević N., Divjak B. and Hunjak T. (2007). Prioritization of e-learning form: a multicriteria methodology. *Central European Journal of Operations Research*, Vol 15 (4) 405-419

Conceptual model of DIFFUSION OF INNOVATION in HIGHER EDUCATION



Conclusions and further research

DOI model can be adapted to HE institutions (HEI) with general prerequisites:

- properly translated into specific environment
- interpreted meaningfully
- possible connections should be established.

Important: recognition of **communication agents and channels** that enhance diffusion of e-learning

Further research:

- to define critical factors of DOI for each phase** of the innovation process
- to find the most influential success indicators for e-learning diffusion** into HEI 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)
- to upgrade the model** by means of social network analysis (SNA) in order to find key communication factors in DOI.

The majority of the existing research focused only on factors that influence an innovation adoption (Vishwanath & Barnett, 2011).

Described research will **contribute to the DOI** theory because it takes a broader view and upgrades the model.

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Further information

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