

Presenting the digital university model in Payam Noor universities

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ABSTRACT

Digital University is an educational system that is in line with the fundamental goal of Payam Noor University, which is to provide the possibility of standard and uniform education, regardless of where students live and work, based on new information technology methods and resources. This study aims to present and validate the digital university model in Payam Noor University. The present study is an applied-developmental research in terms of its purpose and descriptive-survey in terms of data collection method. In order to achieve the goal, an exploratory mixed research design was used. The community of participants of the qualitative part includes managers and academic staff members of Payam Noor University, 13 of whom were selected by purposive sampling method. The statistical population in the quantitative part also includes managers and experts of information technology and academic staff members, specifically professors of information technology of Payam Noor universities, 126 people were selected by simple random method. The data collection tools are semi-structured interviews and researcher-made questionnaires. Thematic analysis and MAXQDA software were used to analyze the expert interviews, and the partial least squares method and Smart PLS software were used in the quantitative part. The findings of the research showed that based on this model, management factors, digital innovation and digital technology affect digital accessibility and digital ecosystem, and these two factors also affect the digital university strategy; The digital university strategy affects individual, university and global digital learning and ultimately leads to the digitization of the university. Therefore, the managers of Payam Noor universities of the country can move towards the digitization of the university system using the provided model, and as a center for cultivating human resources and the future generation of the country, it plays a central role in keeping up with digital developments. Thematic analysis and MAXQDA software were used to analyze the expert interviews, and the partial least squares method and Smart PLS software were used in the quantitative part. The findings of the research showed that based on this model, management factors, digital innovation and digital technology affect digital accessibility and digital ecosystem, and these two factors also affect the digital university strategy; The digital university strategy affects individual, university and global digital learning and ultimately leads to the digitization of the university. Therefore, the managers of Payam Noor universities of the country can move towards the digitization of the university system using the provided model, and as a center for cultivating human resources and the future generation of the country, it plays a central role in keeping up with digital developments.

Keywords: digital university, digital transformation, Payam Noor universities.

Introduction

The present age is the age of knowledge and the cyberspace is synonymous with the knowledge space. In such an environment, the digital revolution has a very wide impact on higher education. These effects are not only limited to changes such as the facilitation and expansion of communication in the academic environment with the help of electronic mail, the Internet system, and the use of information technology in education and research. Digital developments have fundamentally transformed the concept of knowledge and the way of approaching university education and research from an epistemological and philosophical perspective and created a new paradigm (Johnston, 2019).

Accordingly, the concept of digital university has been raised as a key issue in the discourse of higher education development in recent years. With these developments, (Lilian, 2022) Universities can survive in the digital age if they have the ability to go digital. Attracting students, professors, staff and sufficient funding depends on the digitization of universities. A digital university is an organization that needs to be taken into account in order to take advantage of digital capabilities and achieve principled and planned compatibility (Nooh Ebrahim et al., 2018).

In the meantime, it is expected that Payam Noor University due to its nature and existential philosophy which is famous for distance and comprehensive education to excel in becoming a digital university.. But the basic problem is that the digital transformation in universities can only be realized with the help of a comprehensive and practical model. The lack of a comprehensive model in the digital field that is based on scientific research methods and designed with a practical approach is a major issue in this regard. The present study answers the key question, what is the model of digital university in Payam Noor universities?

Methodology

The purpose of this research is an applied-developmental research that aims to design a digital university model. Based on the method of data collection, it is a non-experimental (descriptive) research that is done with a cross-sectional survey method. The community of participants in the qualitative section includes the senior managers of Payam Noor universities, sampling was done with a targeted method and theoretical saturation was achieved with 13 interviews. The statistical population of the quantitative part includes managers and experts of information technology and academic staff members, specifically professors of information technology of Payam Noor universities. The sample size was estimated to be 288 people. The main tool for collecting research data is a semi-structured interview and a researcher-made questionnaire. Data analysis was done in two parts, qualitative and quantitative. First, experts were interviewed in the qualitative section. which was coded by thematic analysis method. In the second part, partial least squares method was used to validate the model.

Findings

The results of the interviews were analyzed by thematic analysis method. In the open coding stage, 315 codes were identified. Finally, 3 overarching themes, 10 organizing themes and 65 basic themes were counted through axial coding. The comprehensive factors of the digital university model include driving factors, learning factors and structural factors. The driving factors include 3 organizing categories, which are: "management factors"; "Digital innovation" and "digital technology"; learning factors including "university digital learning"; "Individual digital learning"; "Global Learning"; and structural factors including "digital ecosystem"; "Digital University Strategy"; "digital accessibility"; "Digitalization of the university".

Based on this model, management factors, digital innovation and digital technology affect digital accessibility and digital ecosystem and influence digital university strategy. The digital university strategy affects individual, university and global digital learning and ultimately leads to the digitization of the university.

Conclusion

Discussion and conclusion Payam Noor University to transform the current situation into an electronic and virtual remote university compatible with the digitization of universities in the world, according to the driving factors identified by investing in the field of digital transformation, focusing on the support of Payam Noor University managers from Digital transformation and its features with the development of digital culture through digital leadership, the identification of digital talents and the strengthening of digital skills with an experience-oriented approach to realize the development of the level of digital literacy, parallel to it with the approach of creating a healthy ecosystem and Sustainable, digital innovation (creative approaches based on the digital paradigm in the field of research, teaching and organizational activities...) should be strengthened.

The goal of Payam Noor University should be to develop a culture in which by strengthening and empowering people, it is possible to make fundamental changes in the digital environment. In this context, a digital approach should be embedded in university processes, teaching and learning, research and organizational activities. Based on the results of the research, the use of digital technologies and resources in the design, development and presentation of the curriculum, supporting all people with appropriate and effective tools of information technology, digital media and virtual space, providing a digital experience for students and staff, as well as developing culture. Sharing and adopting digital methods throughout the Payam Noor organization is one of the measures that should be taken here so that Payam Noor University can realize its vision in which Payam Noor University is a comprehensive and comprehensive university capable of producing, disseminating and preserving knowledge and research. relying on semi-attendance, open and distance education and capable in order to solve comprehensive global challenges in the territorial and extra-territorial scope in accordance with global standards.

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