2019

13th International Conference on Industrial Engineering and Industrial Management

XXIII Congreso de Ingeniería de Organización

Organizational Engineering in Industry 4.0

BOOK OF ABSTRACTS

Gijón, 11th-12th July 2019

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I.S.B.N.: 978-84-17445-38-6
DL AS 1875-2019

Imprime: Servicio de Publicaciones. Universidad de Oviedo

13th International Conference on Industrial Engineering and Industrial Management
XXIII Congreso de Ingeniería de Organización
Gijón, Spain, July 11-12, 2019

Investigating the Impact of Internet of Things on the Educational Business Process

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Keywords: Technology, Internet of Things (IoT), Higher Education (HE)

1 Introduction

Technology has strongly influenced the educational process. The amount of data, knowledge and technological devices are changing the educational processes; especially in the HE. The IoT refers to connecting objects and devices to the internet to retrieve real-time information at any time and from anywhere (Louis and Dunston, 2018). The interaction of students with real-world objects may promote and improve the learning process (Kamal et al., 2018). However, the integration of objects in the educational process is an issue that must be further investigated; as previous researches have mainly focused on aspects such as: network communications; protocols, security, etc. (Kulshrestha and Bose, 2019).

2 Objectives

The objective of this research is to explore the current performance of the educational process and its variations, investigate the university's readiness to use and apply the suitable IoT strategy to enhance their educational process, examine the impact of IoT on the efficiency of the educational process, and discuss the system's potential benefits and challenges.

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3 Methods

The research is mainly exploratory; as it explores the current HE situation, with room for being explanatory to examine the impact of utilising IoT. A Case study, namely College of Management and Technology, AASTMT, is selected (Vasilescu et al., 2019), where HE students, administrators, and faculty members are the main participant groups.

A mixed methods approach is used, where both quantitative and qualitative data collection techniques (Flick, 2018) are utilized. Then, statistical and interpretive analysis are conducted to investigate the HE situation and to measure the IoT readiness. Interviews are administered with key decision makers. Focus groups are conducted with key administrators and academics, and HE students will be surveyed using structured questionnaires, as well as observations of activities regarding the educational process effectiveness (Bell et al., 2018).

4 Results

The result of this study should be a complete stakeholder analysis which comprehensively investigates the impact of utilizing IoT on the educational business process. The study should also explore the opportunities and challenges facing IoT adoption in the educational business process at HEI.

5 Conclusion

This research would provide decision makers with a roadmap to efficiently manage university resources, and thus improve the educational process. IoT would not only allow communication between devices and resources, but rather offer intelligence to the resources being connected making data readily available to other network systems to be utilized efficiently.

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