

# Chapter 10

## Digital Transformation in Higher Education Institutions

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### ABSTRACT

*This chapter aims to explore the digital transformation in higher education institutions, especially in regards to the increased use of e-learning in recent years by identifying the parties who are affected by the transformation and the challenges people may face in implementing the use of e-learning. By using the CATWOE analysis technique, it identified that the main parties that are affected by this transformation into e-learning are the students and teachers of higher education institutions and to an extent the institutions themselves. Furthermore, through the construction of the fishbone diagram, it identified the main issues of implementing e-learning: cost, internet connectivity, lack of interaction, suitability of e-learning, and lack of knowledge. As the parties affected and challenges have been identified, this study can be used to improve e-learning processes in the future.*

### INTRODUCTION

It was clear that the sudden outbreak of the COVID-19 pandemic posed a giant obstacle to education systems globally. This is particularly due to the restrictions that were imposed to limit face-to-face activities, including the conduction of physical classes in educational institutions causing the immediate shift to e-learning. Blended learning has always been inherent in education systems, which is when traditional learning methodologies incorporate some e-learning methodologies and tools into the system. For example, LMS platforms such as Canvas by Instructure

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and Blackboard have been utilised in higher education institutions to let students access their course materials online as well as to receive announcements from their instructors even prior to the pandemic (Hamdan et al., 2020a). However, the outbreak of the virus did accelerate the progression of digital transformation of e-learning, and students and teachers were both forced to undergo a full transformation abruptly causing them to adapt to the “new normal” (Hasmawati et al., 2020). This led to more e-learning initiatives and tools being utilised in all institutions, especially the use of video conferencing platforms such as Zoom and Microsoft Teams and the use of e-assessments as a form of measuring the students’ knowledge in place of traditional tests that they would normally sit for pre-pandemic. However, because of the abrupt transition from traditional and/or blended learning to a full e-learning system, it is significant to study the parties who are affected by this transformation and the challenges faced with the implementation of e-learning.

## **RESEARCH QUESTIONS**

1. Who are affected by the digital transformation of e-learning in higher education institutions?
2. What are the challenges faced when implementing e-learning in higher education institutions?

## **LITERATURE REVIEW**

### **Digital Transformation in Higher Education Institutions**

Digital transformation dates back to the 1970s and is the use of the latest digital technology to enable improvements and changes in all aspects of society, including boosting customer experiences and implementing new business models (Stolterman et al, 2004; Fitzgerald et al, 2014). With the development of IT skills, digital transformation has become so relevant in the modern world where digitisation has been one of the top priorities in various sectors, to ensure relevance and success (Bond et al, 2018; Jackson, 2019; Anshari et al., 2021). Digital technology has always been a helping hand in higher education programming (Jackson, 2019). However, digital transformation in higher education institutions are apparent and the technology is disruptive in its purpose, thus allowing higher education institutions to prioritise and make use of the digital technologies that are made available to them to their full potential (Jackson, 2019; Benavides, 2020; Anshari et al., 2017).

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