Chapter 13

# The Impact of Organizational Learning Culture and Digital Transformation on Egyptian Hospitals' Resilience and Strategic Performance:
## Digital Transformation in Egyptian Private Hospitals

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## ABSTRACT

*The COVID-19 outbreak has made digital transformation (DT) in the healthcare sector extremely vital. Hence, this study tested the effect of organizational learning culture (OLC) on strategic performance (SP) through the serial mediation of DT and organizational resilience (OR). The structural model was tested via the partial least squares structural equation modelling (PLS-SEM) using a sample of 264 Egyptian private hospitals. The findings revealed that OLC significantly affected DT, OR, and SP. However, the study's proposed model was not proved to be significant because DT and OR did not significantly affect SP. The findings contribute to DT and OR literature, first by introducing a new model of DT that includes OLC as an antecedent and OR as a consequence of DT, second by empirically proving that OR and SP as long-term strategic concepts should be used alternatively, and no one of them can act as an antecedent of the other.*

## INTRODUCTION

Global businesses in various industries have recently seen their business models evolve due to DT. DT represents "a process that aims to improve an entity by triggering significant changes to its properties through combinations of information, computing, communication, and connectivity technologies" (Vial, 2019, p. 118). The COVID-19 outbreak has made DT in the healthcare sector, and more specifically in hospitals, extremely vital (Tortorella, Fogliatto, Saurin, Tonetto, & McFarlane, 2021; Raimo, De Turi, Albergo, & Vitolla, 2022). In this regard, a Deloitte report (2020) discovered that, in response to the pandemic's spread, almost 65% of healthcare organisations increased their deployment of digital technology to aid patients and improve working procedures. Digital healthcare technology reduces healthcare disparities, enhances the standard of medical treatment provided, and promotes citizen well-being if embraced and implemented in a cost-effective way (Raimo et al., 2022).

The necessity for DT in healthcare is attracting the attention of academics as well. However, there is currently a substantial gap in the academic literature as a result of the paucity of research that have sought to investigate what factors are impacting the adoption and implementation of DT and what the results would be for healthcare organisations (Raimo et al., 2022). Therefore, this chapter aims to fill this gap by analyzing the factors affecting the DT in Egyptian private hospitals along with its consequences including its effect on their OR and SP.

Most studies have concentrated on the operational, managerial, technological, and policy factors that influence an organization's DT (Guan, Tienan, & Tang, 2022). For example, Machado, Secinaro, Calandra, & Lanzalonga (2022) noted that technologies such as big data, cloud computing, and the internet of Things were all influential factors in business's DT. Others have also taken into account how external factors and governmental restrictions, as well as the environment, may affect DT (Aboelmaged, 2014; Tao, Qi, Liu, & Kusiak, 2018). However, this literature ignores the impact of OLC on DT. In this regard, the author believes that an OLC makes it easier for hospitals to integrate digital technology resources and provide them with the digital technologies that are most appropriate for their current environment.

The health sector is among the most knowledge-intensive sectors due to the need to follow patient data, compliance, and care standards (Kitsios & Kapetaneas, 2022). Additionally, data are essential for driving the DT (Chen, Chiang, & Storey, 2012). Due to the continually expanding volume of data and the requirement to successfully use it, the healthcare sector is increasingly in need of an OLC (Kitsios & Kapetaneas, 2022). For example, Marsick & Watkins (2003) asserted that employees should be actively involved in the learning culture. For managing healthcare organisations, building a learning culture and conducting information processing are essential (Marsick & Watkins, 2003). Therefore, the mode and culture of care delivery in organisations have changed fundamentally due to the DT (EXPH, 2019). Building on the studies of Chen et al., (2012); Kitsios & Kapetaneas (2022); Marsick & Watkins, (2003), the author claims that OLC can positively affect hospitals' DT. In hospitals with a learning culture, information is generated, processed, and transmitted, and staff members are motivated to act in ways that show they learned new things. To promote DT and eventually boost performance, hospitals' administrators should foster an OLC that supports a repository of intelligence for strategic decisions (Kitsios & Kapetaneas, 2022). Accordingly, this chapter will investigate OLC as an influencing factor of DT.

Hospitals needed to strengthen their resilience to deal with challenges and complete their operations as they confronted COVID-19. There may not be much time for individuals, systems, and decision-makers to adapt as hospitals adopt DT (EXPH, 2019). Therefore, in the age of digital technologies, hospitals that functioned effectively throughout the pandemic will always have OR (Guan et al., 2022). According

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