Chapter 14

E-Commerce Capabilities and Organizational Agility: A Study of Tunisian Companies in the Context of the COVID-19 Pandemic

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ABSTRACT

This research aims to explore the relationship between e-commerce capabilities and organizational agility of Tunisian firms facing the COVID-19 crisis. A qualitative research methodology is adopted. Data were collected through interviews with respondents in three company cases based on an interview guide elaborated from previous literature. They were analyzed through content analysis method. The results show that the studied firms were able to ensure greater responsiveness to customers' needs, operational flexibility, and strategic flexibility thanks to the e-commerce capabilities they already possess and that they have mobilized during the crisis. Findings have also shown that e-commerce management capability was the most influential whereas the talent capability and technical capability have exerted less influence. This research contributes to a better understanding of the relation between e-commerce capabilities and organizational agility that is still unsufficiently clear in a context of unique and unprecedented environmental uncertainty resulting from the COVID-19 crisis.

INTRODUCTION

Firms are operating in an environment characterized by multiple unexpected events, increased turbulence and complexities. This environment requires that they improve their agility in order to cope with sudden events and survive. To develop their agility, firms deploy various resources and capabilities (Ravichan-

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dran, 2018; Tallon et al., 2019), which are called an infrastructure composed of "reconfigurable levers" (Charbonnier-Voirin, 2011). They include structure and organization, processes, human resources, and technologies as well as information and communication technologies (ICT) (Charbonnier-Voirin, 2011).

Among the aforementioned levers, ICT capabilities and their relationships with organizational agility have retained the attention of researchers in the information system field (Gao et al., 2020; Lin et al., 2020). However, several theoretical gaps were noted. In fact, prior literature is considered sparse and at an embryonic stage (Batainah et al., 2015; Ravichandran, 2018). It does not examine the relationships between specific ICTcapabilities (e.g., e-commerce capabilities) and organizational agility. Moreover, it does not focus on the impact of contingency factors such as environmental dynamism and complexity in specific contexts or industries (Lin et al., 2020). To deal with these theoretical gaps, researchers (Barlette, 2016; Lin et al., 2020) have called for more investigation of the relationships between ICT capabilities and organizational agility. Recent developments in the domain of digital technologies (e.g., connected objects, social networks, big data, and analytical tools) are also highlighted to be included.

More studies in this field may be required in the current context, characterized by the occurrence of successive and long-duration crises. In fact, since the end of 2019, a health crisis due to an infectious disease, namely the COVID-19, has occurred in Wuhan - China. This health crisis was declared by the World Health Organization as a pandemic on March 11, 2020. Like almost all countries around the world, Tunisia has been affected by the COVID-19 pandemic, which has been officially identified in the country on March 2, 2020. During this month, the Tunisian government has decided the lockdown. All activities except those of necessity were interrupted. From May 4 - 2020, the first of three phases of progressive de-confinement was decreed by the government. It aims to progressively restart the economic activities between May 4 - 2020 and June 14–2020. Depending on the evolution of the pandemic in the country, social distancing rules and sanitary protocols were decided. From the first case identified on 2 March 2020 to November 1, 2021, the sanitary crisis led to 25,241 deaths and it affected all 24 governorates. At a socioeconomic level, the pandemic and the successive confinement measures caused severe negative consequences. According to a report published jointly by the National Institute of Statistics (INS) and the International Finance Corporation (IFC), the health crisis has considerably increased the pressure on private companies. The number of companies that stopped their activities and the number of companies that made job adjustments have increased, whilst sales and demands have continuously decreased. In the same report, it is noted that to overcome difficulties more companies have benefited from government support measures. They have also relatively accelerated the use of digital platforms and ICT capabilities.

ICT capabilities seem to be a key pillar adopted by companies in various sectors over the world to fight the COVID-19 pandemic. As an example, various technologies (artificial intelligence, internet of things, etc.) were used in the health field during the different phases of patient care process (diagnosis, monitoring, and prevention) (Javaid et al., 2020). Also, e-commerce, teleworking and online sales were adopted by companies (small businesses; agribusiness companies) to deal with the interruption of activities, social distancing, and the disruptions resulting from containment (Lin et al., 2020; Li and Lin, 2020; Heitz-Spahn and Siadou-Martin, 2020).

This chapter focuses particularly on the contribution of e-commerce capabilities to the reinforcement of firms' organizational agility. Although several authors have studied the relationship between ICT capabilities and organizational agility, it seems that they have focused on general ICT (Sambamurthy and Zmud, 1997; Lu and Ramamurthy, 2011; Bataineh et al., 2015) and that e-commerce capability was less studied (Lin et al., 2020; Li and Lin, 2020). Based on an exploratory research conducted by multiple case studies, the authors propose to study the relationships between e-commerce capabilities

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