

COVID-19, Digitalization and Sustainability – Insights from a Literature Review

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Abstract. The COVID-19 pandemic has accelerated the digital transformation worldwide and is challenging many companies across a wide range of industries. As a result, companies are subject to digital transformation and must improve their sustainability in the long term to remain competitive in the future. In this context, countries are at different stages of development. Therefore, the impact of COVID-19 on digital business models in different countries (Germany, Japan and Georgia) with a focus on sustainability has been investigated. A qualitative model was developed based on a structured literature review.

Keywords: COVID-19-Pandemic, Digital Business Models, Sustainability, SLR

1 Introduction

The world has been in constant upheaval since the beginning of the industrial revolution [1]. The terms "digital business models" and "sustainability" have been shaping events for some years now. While everyone involved has recognized that digitalization offers huge opportunities and that the climate catastrophe ahead will bring huge upheavals, people have still taken a sluggish approach to these issues [2].

Today there is a similar development, the new and highly dangerous COVID-19 virus, which has taken us by surprise and demands the complete attention. Since the Corona pandemic, the pressure to change has grown massively on all fronts. Business models without physical contacts are booming and all companies must invest billions in the development of digital solutions in the shortest possible time [4]. But this is the only way to avoid being squeezed out of the market. At the same time, COVID-19 was a huge, global wake-up call to actively tackle the future and still avert the looming climate catastrophe [5]. A new era has dawned and the world has turned its focus to the future. The global battle for sustainability has gained momentum and the fight for tomorrow's customers will be fought on the digital front [6]. A qualitative research approach will be used to investigate the impact of COVID-19 on digital business models with a focus on sustainability [7].

2 Research Method and Data Collection

The following section explains the research method and applied methodology for collecting and analyzing the data to identify the influences of COVID-19 on digital business models. The term "digital business model" not only refers to business models which operate purely digitally, it also includes business processes which are optimized and accelerated by digitalization. It has been used the scientific approach, a Structured Literature Review (SLR).

2.1 Literature Review focusing on Georgia

The Georgian government implemented a stringent lockdown strategy from the start of the epidemic, which reduced infection rates until the second wave. The impact of rigorous lockdown policies and regulations on Georgian company is severe. Supply chain and transportation challenges caused stock shortages and increasing expenses harmed Georgian businesses. As a result, numerous businesses, particularly in travel and hospitality, failed. Quarantine closures and transit constraints were also mentioned as major challenges. 66 percent of Georgian businesses lost money, and many enterprises have seen a decrease in recent months [8].

Remote employment has forced organizations to adjust their IT systems and manage employees in new ways. Some security levels required to be changed or eliminated to allow remote access to business apps [9].

After COVID-19, it is expected that companies' perceptions of cybersecurity would alter significantly. While understanding on the subject will inevitably develop, the increased heterogeneity of networked devices will raise these risks. Many of these threats may be managed only by extensive human training, as many cyber threats stem from careless human behavior. Informed and concerned consumers will want technologically advanced solutions that do not threaten their personal data's protection [10]. in Japan even with the recent drop in infections, new cases still outweigh virus-related diseases. Rural areas, with less infrastructure, worry about the health care system becoming overwhelmed [11].

Beyond COVID-19, technology should help develop economically and socially excluded areas, reducing socioeconomic inequalities, which is one of the benefits of digitalization. Particularly during the pandemic's first two months of lockdown, the IT infrastructure was compelled to expand rapidly when it became clear that IT resources were insufficient to allow employees to operate remotely [12].

2.2 Literature Review focusing on Japan

In Japan, COVID-19 has accelerated these movements for digitalization. The Cabinet established the National Centre of Incident Readiness and Strategy for Cybersecurity and IT Strategic Headquarters in 2020 [13].

Employee retention and payroll, together with personnel development and training, have been major challenges in Georgia throughout the COVID-19 crisis. According to the report, no training was provided during the pandemic. Most organizations canceled or decreased formal training to 1-2 hours per week. This shows Georgia's lack of digitalization experience [14].

Changing mindset helps digitalization. Digitalization not only alters the way people work, but also speeds up the pace of change. Both implications lead to three key challenges: new skills and competencies, new leadership styles, and new organizational capacities. Companies transform their culture towards a 'digital mentality' based on how well they meet these standards [15].

Employee interaction improves when working remotely. Reserving a conference room is no longer essential, and scheduling a meeting is considerably simpler. Less efficient and time-consuming determination processes Maybe it's due to a lack of developed cooperation structures, leadership abilities, and flexibility in project implementation [12].

Zoom connections are rapidly replacing meaningful human relationships in Japan. Employees can casually listen in virtual meetings while doing other work. Sales presentations for several prospects can be done through webinar, eliminating the need for sales calls and meals [16].

According to the National Statistics Office, Georgia's unemployment rate grew 0.9 percentage points from the same period previous year to 12.3 percent in the second quarter of 2020. The unemployment rate fell to 55.9%. The share of employees in the total employment rate fell by 1.6 percentage points to 48.6% in the second quarter [14]. Since the COVID-19 epidemic began, nearly 80,000 people in Japan have been fired or had their contracts ended because of the pandemic [11]. Fast digitalization process caused challenges in recruitment and retention of the employees.

Organizations are inexorably undergoing digital change. But the question is whether they are ready for it. Not all businesses and people are equipped to handle the digital shift. The degree of dematerialization of tasks and services varies by economic activity. Smaller businesses, notably micro-businesses, and industries heavily impacted by COVID-19 (e.g., restaurants and tourism) stand to be hit the most. Food, clothing, and footwear will be unaffected [17]. The current issue of the emerging coronavirus epidemic triggered global transformations.

3 Literature Review Results

During the SLR, certain important factors were discovered. Nine major criteria linked to COVID-19 impact on digitalization (focus sustainability) conceptualization were identified and displayed in Figure 1. However, qualitative study was conducted subsequently to determine the influence of COVID 19 on digital business models focused on sustainability.

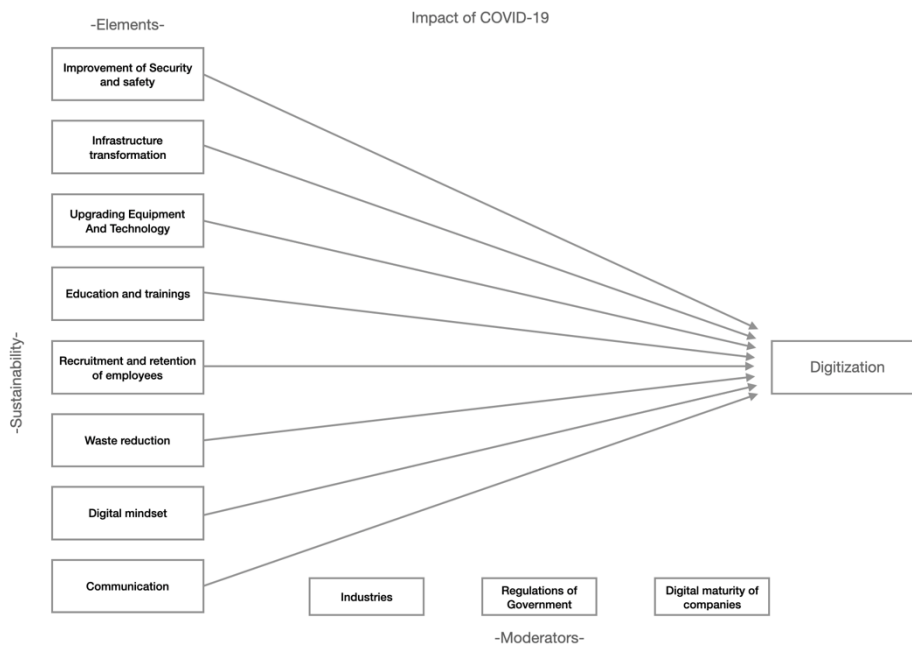


Figure 1. Empirical model based on SLR

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