

BUSINESS DIGITALIZATION DURING THE COVID-19 PERIOD IN THE FRAMEWORK OF COMPANIES IN ROMANIA

CIBOTARIU IRINA-ȘTEFANA

ASSOCIATE PROFESSOR PHD , STEFAN CEL MARE UNIVERSITY OF SUCEAVA,
720229, ROMANIA

e-mail: irina.cibotariu@usm.ro

CHELBA ANCUȚA-ANISIA

PHD STUDENT , STEFAN CEL MARE UNIVERSITY OF SUCEAVA, 720229, ROMANIA

e-mail: ancutza_anisia@yahoo.com

Abstract

Business digitalization is the premise for ensuring the continuity of companies nowadays. The purpose of this research work is to survey the representatives of 120 companies in Romania in order to present the degree of digitalization of businesses in the context of crises, especially the Covid-19 crisis, but also to capture the forecasts for the next 3 years made by economic agents against the backdrop of existing crises. The first objective considers the review of the specialized literature on digitalization, and the second objective is focused on the analysis of the companies in the research sample. The results consist in providing an overview of the companies in Romania in the situation of "forced" digitalization caused by the Covid-19 crisis, but also on the forecasts made by the representatives of these companies. The companies included in the sample were analyzed between January 2023 and October 2023.

Key words: digitalization; forecasts; Covid-19; companies

JEL classification: M10, M21

1.Introduction

By implementing digital technologies, companies can optimize their internal processes, reduce human error and improve the overall efficiency of teams. Access to digital training and professional development platforms can contribute to increasing employees' skills, thus strengthening individual and collective performance.

The topic of digitalization in contemporary society is particularly important and current from several points of view, namely: political, economic and social [5].

Table no. 1. General characteristics of digitalization

No.	General characteristics of digitalization	Description
1.	Speed	Unlike previous industrial revolutions, this one is evolving at an exponential rather than linear pace. This is the result of the world we live in and the fact that new technologies produce newer and more capable technology.
2.	Width and depth	It is based on the digital revolution and combines several technologies that lead to unprecedented paradigm shifts in the economy, in business, in society and individually. It's not just the "what" and "how" of doing things that changes, but also "who" we are.
3.	Impact of systems	It involves the transformation of the whole system, across the country (and within the country), of companies, industry and society as a whole.

Source: adaptation after [16]

The reasons why the new technological revolution will cause more upheaval than previous industrial revolutions are those mentioned in table no. 1, namely: speed (everything is happening at a much faster pace than ever before), width and depth (so many radical changes are produced simultaneously), and the complete transformation of entire systems.

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2.Literature review

The past few years have ushered in a new era in technology that has reshaped everyday life as we know it, eliminating outdated processes and creating entirely new sectors. The definition of technological tools includes a wide range of digital devices, such as computers, tablets, multi-touch screens, interactive whiteboards, mobile devices, cameras, DVD and music players, games, electronic books [12]. "Business digitalization or digital transformation occurs when a firm integrates digital or information technologies into various aspects of its operations, business processes and strategies. Such digitization allows a company to increase its efficiency in different fields"[1]. Under these conditions, "digitalization greatly increases management efficiency and strategic decision-making capabilities. Integrating digital tools with traditional management techniques results in more informed, efficient and strategic business decisions" [20].

In Romania, the use of the concept of digitalization to characterize digital transformations in society and the economy prevails [2]. "Covid-19 is a crisis and an uncertain situation that has brought new survival challenges for the business world" [13]. Although the Covid-19 crisis has brought a multitude of trials regarding Romanian companies, we can also identify the advantages of the pandemic; thus, we can list as advantages the digitalization and adaptation of agile concepts within organizations [15]. Thus, the digitalization of business is becoming an increasingly debated topic, essentially because the Covid-19 pandemic appeared in 2020. Most companies could not operate within normal limits during this period. Some companies had to suspend their activity, others to specialize in online sales, others to introduce work from home. For large companies or for multinationals, adapting to these conditions was not so difficult, but small and medium-sized enterprises mainly turned to the digitalization of systems or part of them as a quick solution [6]. Thus, "the Covid-19 pandemic has proven to be an accelerator both in terms of consumer habits and the innovation and digital transformation of organizations, leading to new business models for sustainable growth" [4].

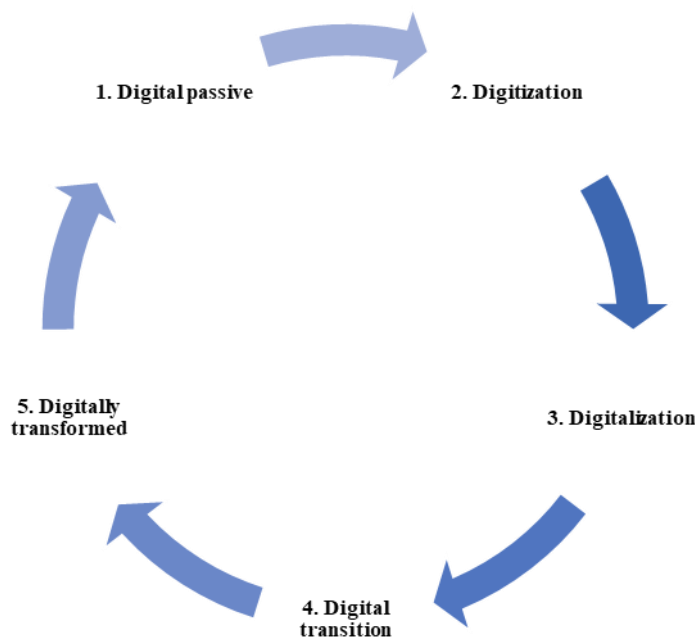
"Business process digitalization has a positive effect on firm innovation performance." [18]. Also, online retail businesses help increase market share through much better located e-commerce IT platforms [4]. In order to "achieve profitability, eliminate losses and start-up costs, as well as improve competitiveness, enterprises implement digitization in various company processes" [19]. "From Artificial Intelligence (AI) to E-commerce, digitalization has created possibilities in the business world for companies, entrepreneurs and freelancers, for new opportunities and innovation. Digitalization has enabled companies to bring seamless products and services, reaching larger and more distant markets, making customers happy by improving their daily lives. It enabled remote working, which made free-lancing popular and preferred, and made both internal and external communication instantaneous, making action and reaction to opportunities and problems much faster" [7].

The health crisis that started in 2020 exponentially accelerated the digitalization trend of most businesses. Also this year, numerous scientific publications on the subject of digitalization

due to Covid-19 have been published and indexed, "most of them being focused on job losses, business model changes, the economic impact and the government stimulus effect in various industries" [9]. "Digitalization has a substantial influence on industry and is based on the establishment of smart factories, smart products and smart services embedded in an internet of things and services called the industrial internet" [10]. Thus, "the rapid development of technology, as well as many changes in today's global market, have led to the emergence of a new trend - digital transformation" [14].

In the specialized literature, 3 stages of digital transformation were initially defined: digitization, digitalization and digital transformation [17]. Later, other authors identified 5 stages of digital business transformation, as can be seen in figure no. 1.

Figure no. 1. Five stages of digital business transformation



Source: adaptation after [11]

We live in a digital society in the sense that we are in an era where our lives, our relationships, our culture and our society are digitized and influenced throughout whole digital processes [8].

3. Research methodology

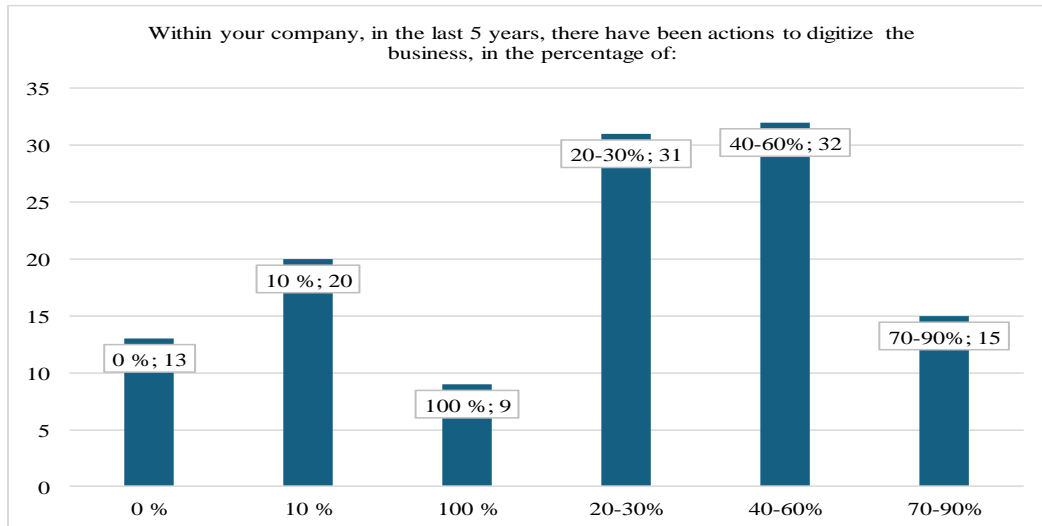
Regarding the research methodology, in this paper the quantitative research method was used by developing a questionnaire applied to 120 companies in Romania for the period January - October 2023. The enterprises fields of activities are as follows: services, trade and production. The firms in this sample are micro, small, medium and large enterprises. The questionnaire was created with the help of the Google Forms program, and the data were centralized with the help of the Microsoft Excel program.

4. Results and discussion

According to the results of the questionnaire, 32 out of 120 economic entities analyzed in this study had business digitization actions in the last 5 years in a percentage of 40-60%, as can be seen in figure no. 2. In the same vein, 31 companies had business digitization actions within them at a percentage of 20-30%, 20 of the entities at a percentage of 10%, 15 entities at a percentage of

70-90% and 9 entities at a percentage of 100%. Only 13 of the companies had no digitization actions at all within them. Therefore, 107 out of 120 analyzed economic entities were subjected to digitization actions in the last 5 years, including during the Covid-19 period. This result demonstrates that digitization is the path to innovation and is essential for adaptability and success in the business market.

Figure no. 2. The degree of digitalization of the business in the last 5 years for the Romanian companies included in the sample

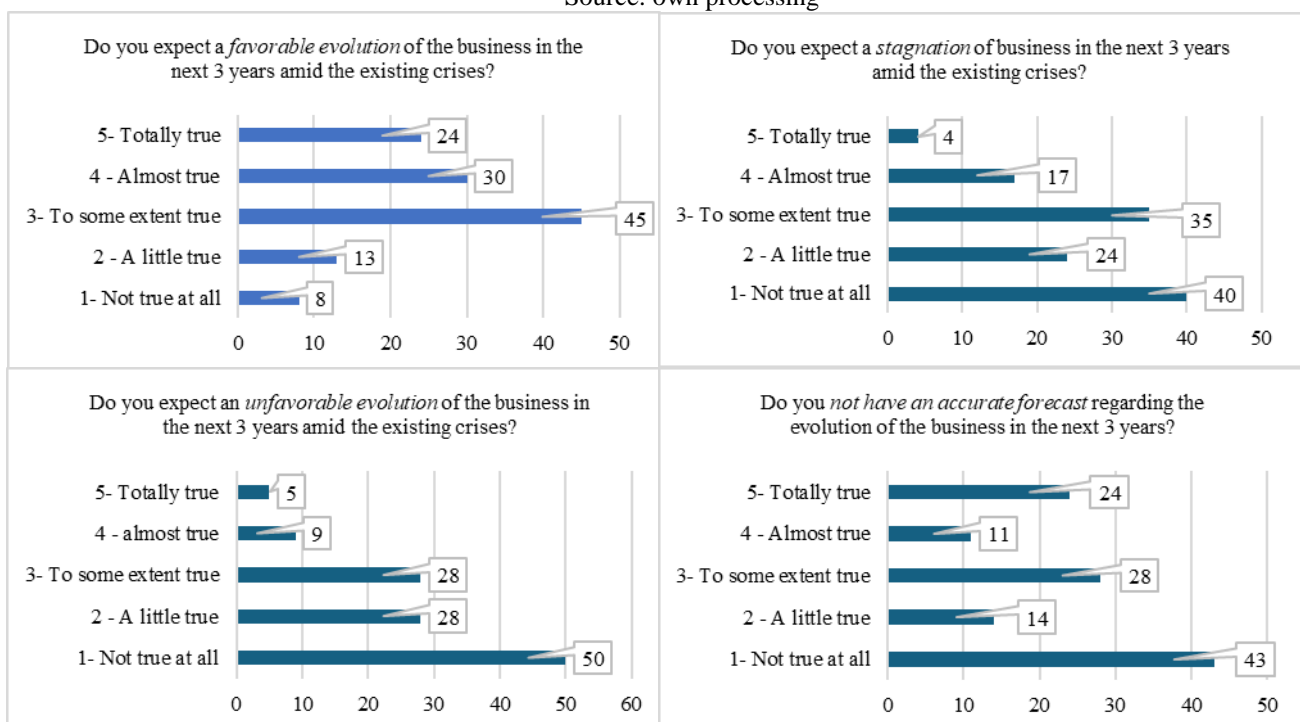


Source: own processing

Overlapping crises can bring trouble within Romanian companies. However, regarding the forecasts of the companies analyzed in this paper, it can be noted in figure no. 3 that 45 companies (the most in this case) claim that, to some extent, they expect a favorable evolution of business in the next 3 years amid the existing crises. Also, most (40 companies, 50 and 43 companies, respectively) do not consider it true at all that they will have a stagnation of the business, an unfavorable evolution of the business and an inaccurate forecast regarding the next 3 years of the companies' activity amid the existing crises.

Figure no. 3. Forecasts of Romanian companies included in the sample

Source: own processing



The results in figure no. 3 show the fact that the vast majority of the companies analyzed in Romania have developed survival strategies regardless of the context, and not only that, they even expect good results in the next 3 years due to the applied digitization and innovation policies.

5. Conclusions

In a capitalist market economy and in the context of overlapping crises, the Romanian business environment seems to be one in continuous experimentation and, at the same time, in an increasingly large gap compared to developed economies. However, the present study shows us the opposite, namely the fact that the companies in Romania in the sample under analysis have innovation through digitization as a long-term strategy, proof of the fact that 107 out of the 120 analyzed economic entities had shares of digitization in the last 5 years, including during the Covid-19 period. We emphasize that the health crisis that started in 2020 has exponentially accelerated the digitalization trend of most businesses. Also, a particularly important result is that the forecasts of these companies show a favorable situation in the next 3 years, and not a stagnant or unfavorable or uncertain situation.

In conclusion, the vast majority of the companies analyzed in Romania have put in place survival strategies regardless of the context, and not only that, they even expect good results in the next 3 years due to the digitization and innovation policies applied.

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