

The Business Crisis: From Traditional Economy to Digital Economy

Eleonora Leandri ¹, Caterina Aura ², Francesco Scalera*³

Abstract:

Companies, as dynamic organizations, are continuously affected by the influences (positive and/or negative) of the external environment. The economic-financial context has been characterized over the decades by the occurrence of multiple crisis situations that have inevitably led business systems to develop new strategies and equip themselves with innovative tools to deal with them.

In chronological order, the recent health emergency caused by the global spread of Covid-19 has generated an unprecedented economic crisis. A crisis that has inevitably also affected Italy with heavy repercussions in various sectors and in particular in the industrial sector. Small and Medium Enterprises (SMEs), which characterize the economic-entrepreneurial fabric of the country, have thus found themselves having to deal with the economic and structural consequences of the pandemic starting from the need to review their business models, adapting them to the new needs that have emerged from the extraordinary nature of the moment. Through the analysis of the literature and a qualitative approach, the following paper traces the main phases that have led to the evolution of the economy, influenced by technological progress, and intends to contribute to strengthening the thesis according to which, in order to prevent possible corporate crises, it is necessary to increasingly orient the entrepreneur's attitude towards innovation, training and the development of more advanced governance and management models. The use of new technologies and digital tools is essential to guarantee the survival of business systems even in the most critical economic moments.

Keywords: Corporate crisis, Corporate strategies, Digital economy, Technological innovation, Management.

1. INTRODUCTION

The health emergency caused by the global spread of Covid-19 has generated an unprecedented economic crisis. A crisis that has inevitably also affected Italy with heavy repercussions in various sectors and in particular in the industrial sector. Small and Medium Enterprises (SMEs), which characterize the economic-entrepreneurial fabric of the country, have thus found themselves having to deal with the economic and structural consequences of the pandemic starting from the need to review their business models, adapting them to the new needs that have emerged from the extraordinary nature of the moment. "SMEs, in fact, have once again been severely affected by the economic crisis caused by the measures to contain the spread of the Coronavirus, which has already produced and is still producing damage greater than that of the 2008 crisis (which, it should be remembered, was of financial origin)" (Bruzzo, 2020, p. 333). The emergency has clearly marked a watershed between the previous models of economic development and those towards which we will have to lean in the immediate future, outlining the aspects that will have to be strengthened to prevent new phenomena of this type or, at least, to be able to address them and govern them with greater awareness. "Many sectors have recorded declines of unprecedented intensity and the particularly negative forecasts on world trade increase the risk that even the most dynamic part of the production system may not recover pre-crisis production levels" (Cresti, Lucchese & Pianta, 2020, p. 607). Companies, especially those most affected by the consequences of the pandemic, have no choice but to try to respond to the renewed needs of the external environment by attempting to promote and accelerate innovation processes within them in order to regenerate themselves and be able to provide more adequate responses to the new, current and future needs of society. In particular, companies will have to be able to implement a profound paradigm shift, accepting the challenge of digitalization and sustainability. The focus of this article is to highlight how the pandemic, especially in its initial phase, has shown that the business contexts that have best been able to deal with periods of forced lockdown, have been those that could count on advanced technological infrastructures. The latter were nothing more than the result of previous investments, made by those who had probably understood their importance. The emergency, therefore, has certainly contributed to underlining the need to speed up the technological transformation process that will have to concern not only the public sector but also the private sector. Like any change, digital transformation also requires efforts (in terms of costs and specialization of skills) but at the same time it can prove to be the only real tool for seizing new opportunities for the future.

¹ Research Fellow - Department of Political and Social Sciences - University of Calabria, Italy; Address: P. Bucci – 87036, Rende (CS), e-mail: eleonora.leandri@unical.it

² Research Fellow - Department of Business and Legal Sciences - University of Calabria, Italy; Address: P. Bucci – 87036, Rende (CS), e-mail: caterina.aura@unical.it

*³ Corresponding Author: Associate Professor in Business Economics - Department of Economics and Finance - University of Bari "Aldo Moro", Italy; Address: P. Amedeo Street 160 - 70122, Bari; e-mail: roby_sca@virgilio.it Mobile: +39 335-7817952.

The results of this transformation in business models that approach digital and hi-tech tools show that greater digitalization can easily translate into greater operational efficiency (hybrid work models) and greater commercial reach (new sales channels in line with new consumer spending habits). “Companies that focus on digital have better resisted the impact of the crisis, are more resilient and, according to data processed by the Mexedia Digitalization Observatory, starting from company balance sheets over the last five years, show significantly better business performance than those who have not invested in digital technologies: +30% profits, +19% added value”⁴. In the current scenario, focusing on innovation is a necessary strategic choice to obtain a competitive advantage and pursue the goal of long-term solidity. In the past, it was believed that the traditional economy and the digital economy were two separate entities. In reality, this is not the case as digital technologies, today more than ever before, are the undisputed protagonists of business processes and market dynamics. The environmental context in which companies operate therefore appears to be completely changing and companies, if they want to operate, must be able to adapt quickly to external stimuli. This is why, to prevent possible corporate crises, it is necessary to increasingly orient the entrepreneur's attitude towards innovation, training and the development of more advanced governance and management models. These are the essential elements through which one can try to avoid corporate crises. For small and medium-sized enterprises, a segment that has been hit hard by the emergency and in some respects less prepared to face the resulting crisis (due to the degree of digitalization, the small size, the limited accessibility to qualified skills, etc.), it is therefore essential to understand the new context that is emerging and prepare to face the future, developing the most suitable path. This means rethinking your way of operating, outlining new organizational and operating logics and imagining new corporate strategies for growth and business development, compatible with the international competitive framework and the modern needs to be satisfied. The corporate digitalization process will pervasively concern the different areas of intervention: from smart-working for employees to the digitalization of processes and channels of interaction with customers and suppliers to investments in the technological evolution of products. Smart working can be a winning measure to make cities more sustainable and in harmony with the environment, reconcile life and work needs, protect workers' health and safety, to survive global crises (Lorè & Frey, 2020). The digital economy, understood as a production and exchange system based on information technologies (internet, cloud systems, Internet of Things, Big Data, social networks, etc.), is a constantly growing phenomenon and involves an important and ever-increasing integration between digital and traditional economies. It is about implementing traditional production processes in an innovative way, transforming and improving them through the support of digital tools. The fourth industrial revolution, based on the use of the internet and the use of artificial intelligence, is the current revolution, which manifests itself through a rapid diffusion of technological innovations, which find space in very wide areas of application, favoring the transfer of knowledge, the dynamism of interactions and the creation of new products and services. Organizational innovation and process optimization, through digitalization, therefore represent the priority objective for companies that intend to overcome any unexpected difficult situations by ensuring their continuity of action over time. Starting from these premises, the objective of the following work is to contribute to strengthening the thesis according to which companies capable of innovating, through the use of new digital technologies, are able to equip themselves with organizational structures and operating models that will allow them to better deal with the extraordinary nature of events generated by external shocks. For companies with a greater propensity to adapt their internal dynamics to the changes induced by the environment in which they are inserted, it should be easier to deal with the critical issues arising from exogenous phenomena, avoiding corporate crises or managing to overcome them more easily. With the following paper we will try to retrace the main phases that have led to the evolution of the economy which, influenced by technological progress, has been able to review its development logics. A process of gradual renewal that has undergone a strong acceleration over the last decade also driven by climate change and the most recent pandemic phenomenon. Through a careful analysis of the literature and a qualitative approach, the way in which business tools have been adapted to the needs of society to ensure the survival of companies and their ability to create value over time will also be explored. Companies can contribute to the growth of countries only if they are able to ensure the continuity of their activities over time, guarantee employment and stimulate economic growth in an innovative and sustainable way. This is what is required of business systems today and digital transformation can only help strengthen their strategic role in the progress of society. The benefits of digital transformation take on a fundamental role for most companies, which will have to be ready and able to integrate the various digital initiatives throughout the company organization chart, with a clear medium and long-term vision, in order to translate digital experiences into improved economic and financial performance.

⁴ See . <https://www.businesscommunity.it/m/20220608/idee/la-digital-transformation-ha-un-impact-positivo-sulle-performance-di-impresa.php>

2. LITERATURE ANALYSIS: FRAMING THE CORPORATE CRISIS IN THE CURRENT SCIENTIFIC AND REGULATORY CONTEXT.

In the field of business studies, there are countless authors who have addressed the issue of business crisis and its various manifestations. Guatri (1996) framed the problem by focusing on the phases that characterize the evolution of the phenomenon (incubation, maturation, insolvency, bankruptcy)⁵. The evolutionary path of business difficulties was also addressed by Buttignon (2015), who tried to summarize it in three different stages: the potential crisis, the governable crisis and the irreversible crisis⁶. There are also numerous scientific contributions that have observed business crisis by investigating its origin and delving into the nature of the triggering causes. Some scholars, when analyzing the causes of the crisis, emphasize factors such as inadequate and inexperienced management, or high levels of debt, inappropriate investments and errors in planning (Argenti, 1976; Burgelman, 1991; Fichman & Levintahl, 1991; Richardson et al., 1994; Kale & Arditi, 1998; Thornhill & Amit, 2003; Ooghe & De Prijcker, 2006).

If it is true that each business path differs from the others, because its morphology may be different (for the type of activity carried out, the size, the nature of the investments, etc.), it follows that the factors capable of generating the emergence of critical issues in business continuity may also be disparate. In the wake of current phenomena linked to technological innovation, which push companies to innovate their governance, the rethinking of the company's knowledge heritage at the service of managing and overcoming the stages of the crisis opens up an essential union between the heritage and the Digital Transformation in progress. The modification of company processes, internally and externally, seems to be moving towards the creation of a new "digital knowledge", deriving from the interaction between pre-existing invisible assets (e.g. experience, skills, image, procedures and best practices) and the adoption of digital tools and smart technologies (e.g. blockchain, big data, smart working, digitalized company procedures, internet of things), (Lombardi, 2021). It is necessary to know the company information system starting from the definition of the information needs which is the first necessary phase for its implementation and which must be understood as identification and analysis of all the information necessary for the good functioning of the company itself (D'Angiolo, 2010). Therefore, recognizing both the multiple variety of company configurations and the unfavorable situations that can arise, the scientific studies conducted over the decades have allowed us to outline a general framework on the main causes that could put entrepreneurial capabilities in difficulty, forcing them into crisis. Therefore, destabilized by the crises of the modern world, both financial and health-related, social and by the Internet cyclone, traditional companies need a decisive repositioning on the markets and on the entire economic fabric. The issue of the company crisis is not new but, just as in the past recessions were followed by moments of recovery, even today the crisis, if well managed, could regenerate the potential of the same. In times of difficulty, there is a need for digital tools, which ensure both elusive companies, which still do not accept the digital transition, and companies dedicated to innovation, values capable of facing the future.

Zappian conception, the company is defined as an economic institution intended to last over time; one of the fundamental characteristics of this institution is constituted by economic autonomy. Without balance there would be no economic autonomy and without this there would be no company. Secondly, the conception of the company as a lasting phenomenon implies that balance is also lasting. On the basis of this ancient pillar of business economics, the legislator seeks to remedy crisis situations and introduces the new "Corporate Crisis and Insolvency Code", published in the Official Journal no. 152 of 1 July 2022. Specifically, it is introduced by Legislative Decree 17 June 2022, no. 83 and definitively enters into force on 15 July 2022. After almost 5 years from the delegation law of 19 October 2017, no. 155, the bankruptcy law in the Italian insolvency system expires. Legislative Decree no. 83 of 17 June 2022, in the Official Journal no. 152 of 1 July 2022, therefore starts the reform. The legislator provides for the shelving of the alert system and makes even more central the new suitable measures and the structures that allow for the timely detection of the presence of a state of crisis and intervention by resorting to the new institute of negotiated composition. In particular, it defines the concept of crisis as the state of "economic financial imbalance" that makes the debtor's insolvency probable, which for companies manifests itself as the inadequacy of prospective cash flows to regularly meet planned obligations"⁷.

In order to prevent corporate crises and facilitate their timely identification, the warning system introduced in previous versions of the reform has been replaced by a set of rules included in the "Corporate Crisis and Insolvency Code" (art. 3) and in the Civil Code (art. 2086), focused on corporate responsibilities, relating to the preparation of adequate organizational, administrative and accounting measures based on the nature and size of the business, with different levels of compliance for individual entrepreneurs and for companies⁸. Budget planning and industrial planning play a leading role in this new scenario and, if adequately structured, help the entrepreneur to perceive those signs of crisis that allow it to be prevented. 147/2021. In essence, the

⁵ Guatri, L. (1996). *Turnaround. Decline, crisis and return to value*, Egea.

⁶ Buttignon, F. (2008). *The governance of companies in crisis*, Chartered accountants' magazine, 2008.

⁷ Cfr. Ipsos. Code of the business crisis and insolvency: What changes with the entry into force. July 15, 2022.

⁸ <https://www.dirittobancario.it/art/entra-in-vigore-il-nuovo-codice-della-crisi-una-rivoluzione-annunciata/>

entrepreneur, individual and collective, must: detect any imbalances of a patrimonial or economic-financial nature, verify the unsustainability of debts and the absence of prospects of business continuity. Furthermore, by adopting a preventive approach to the management of the business crisis, the role of programming and planning tools, such as the industrial plan and the budget, becomes even more central. The rationale of the rule falls within the scope of safeguarding the business continuity of the company, ensuring compliance with supplies deriving from agreements prior to access to the negotiated settlement.

3. THE GREAT ECONOMIC CRISES: SOME OF THE CAUSES OF BUSINESS CRISES

Words like “austerity” and “recovery” spread significantly in those moments in which, due to extraordinary events, contractions occur in the economy. In fact, it is the shock situations that generate consequences on the levels of consumption of people and on those of productivity for companies. Terms that began to spread during the first major crises, becoming common use during the difficult years that characterize each phase of economic recession.

The study of crises in historical perspective is fundamental to clarify the interpretation of the mechanisms that have led to today's crises and current vicissitudes. It embodies, therefore, the starting point for analyzing and interpreting the evolutionary mechanisms that have interfered, and in part still interfere, in the life of companies. For example, since the beginning of the twentieth century there have been several major crises that, albeit in different ways, have marked the international economy, each time underlining the limits of the capitalist economic development model.

First of all, it is worth remembering the great crisis of '29. In particular, the collapse of the New York Stock Exchange had profound repercussions on the banking system, which, through the granting of loans at low interest rates, had favored financial speculation. The American crisis contributed to the growth of bank failures, generating a series of chain consequences such as the considerable reduction of industrial production, the lowering of wages and agricultural prices. Furthermore, the need for liquidity pushed the countries of America to demand their credits, creating serious difficulties for the economy of those countries that, after the great war, had turned to them to obtain capital and sustenance. In general, all this led to a drastic reduction in the demand for goods, putting the resilience of companies and workers to the test.

The second major crisis, in chronological order, is certainly that of the seventies. A crisis that hit a strategic sector of the economy, that of energy and oil. In those years, Western countries were damaged by a severe shortage of oil which resulted in a consequent increase in energy prices. The lack of oil and its derivatives caused a general reduction in production and transport activities, a sharp drop in corporate profits as well as an increase in the price of all goods.

Another crisis of global significance that cannot be left out is the 2008 financial crisis. The American real estate bubble and the subsequent bankruptcy of Lehman Brothers had economic repercussions worldwide. The general economy felt the full effects of the financial crisis in the United States, which worsened in the latter part of 2008. The contraction in economic activity was particularly significant in all major countries in the world. The general crisis caused a dramatic increase in unemployment, which in turn resulted in a lower spending capacity of families, weakening aggregate demand and encouraging the propensity to save. In Europe, the recession had profoundly negative effects with strong reductions in GDP in many countries of the Eurozone.

As for the economic crisis due to the global spread of Covid-19, it can be considered an unprecedented crisis. A crisis that differs from those that preceded it in that it is the first crisis since the Second World War not to have been generated by a financial shock. In fact, it is an economic crisis generated by the global spread of a virus that has put the health systems of various countries in the world in serious difficulty. A health crisis first and a consequent economic crisis after, unique both for the scale of victims it has caused and for the speed with which it has involved all the countries of the globe and their economies. The containment measures as the virus spread and the succession of various lockdowns have generated strong repercussions in both the economic and social spheres. The closure, for more or less long periods, on the one hand of collective sharing spaces (schools, universities, cinemas, theatres, etc.) and on the other of commercial activities (bars, restaurants, shops, etc.) with the sole exception of activities related to the satisfaction of essential needs, has strongly affected both consumer choices and production activities. In this sense, it can be argued that the pandemic crisis has certainly generated a shock on both the supply and demand sides. An unexpected contraction in supply can be traced back to the restrictive measures adopted to contain the virus which have caused the interruption of production chains deemed non-essential. There has been a shock in demand in turn determined both by the restrictive measures on individual mobility and by the new agile working methods (so-called smart working) with an inevitable reduction in consumption (in particular for sectors such as tourism, retail trade, transport, mass entertainment). The slowdown and temporary closure of some businesses have generated a drop in family income due in the most serious cases also to job losses. The uncertainty about the duration of the pandemic and its consequences on employment and health has

contributed to making consumers much more cautious about their purchases, generating a paralysis of demand.

The description of the characteristics of economic crises (table 1) discussed above allows us to highlight how critical situations for company systems are very often attributable to the occurrence of events external to their organizations.

Table 1. Characteristics of the main economic crises from the 20th century to today

Crisis of 1929 (global crisis)	Crisis of 1970 (sectoral crisis)	Crisis of 2008 (financial crisis)	Crisis of 2020 (global crisis)
<ul style="list-style-type: none"> - Increase in bank failures - Reduction of industrial production - Lowering of wages - Reduction of bank liquidity 	<ul style="list-style-type: none"> - Rising oil prices - Increase in production costs - Price increase; - Increase in public debt - Reduction of energy consumption (where possible) 	<ul style="list-style-type: none"> - Financial speculation - Reduction of liquidity - sharp drop in production - Sharp increase in unemployment; - Reduction in GDP of many countries 	<ul style="list-style-type: none"> - Health emergency due to Covid-19 - Supply contraction due to production block - Sharp drop in consumption - Reduction in family income

(Source: our own elaboration)

Falini (2017), with an interesting analysis conducted in relation to large companies, intended to draw up a classification of the main causes of business crises (Table 2), distinguishing between those of an endogenous nature and those of an exogenous nature.

Table 2: Causes of business crises.

ENDOGENOUS CAUSES	
Macro- variable	Factor specific
Ownership/Top Management Team	Excessive centralization/ownership management Weakness of internal controls Abnormal/prejudicial behaviors Disengagement of property and/or top management
Strategic planning and management	Wrong expansion policies Marketing Mistakes Wrong economic financial strategy Extraordinary financial operations Inadequacy of planning and programming activity
Operational Management	Inadequate cost structure Inefficiency of production and organizational processes
EXOGENOUS CAUSES	
Macro- variable	Factor specific
Macroeconomic factors and extraordinary events	Unfavorable evolution of macro-variables Regulatory changes Traumatic events and extraordinary events
Sectoral factors	Unfavorable evolution of global demand Maturity/decline stage of the industry life cycle Technological discontinuity Competitive context

(Source: The causes of the business crisis in Falini A., *The causes of the business crisis. Analysis of the crisis factors of large companies in Extraordinary Administration*, Sinergie, Italian Journal of Management, Vol. 35, N. 103, 2017, p. 328, adapted by the authors)

In the table, it is highlighted how the causes of an exogenous nature can be traced back to macroeconomic factors and extraordinary events or to sectoral factors. In relation to the following research work, the attention easily falls on the extraordinary events and on the unfavorable evolution of global demand that have affected the normal balances of companies every time significant contractions of the economy have occurred. It can in fact be assumed that all the main economic crises, which have been briefly mentioned and which have generated periods of recession, have originated from shocks, which can be considered real exogenous causes for companies and for their consequent situations of difficulty. This was the case for the Great Depression of 1929, for the end of the "Golden Age" in the seventies, culminating in the oil shock of 1973, for

the Financial Crisis of 2008, and it was also the case for the most recent economic crisis of 2020, due to the global spread of Covid-19, and the consequent health emergency.

Crises of an economic, social and even democratic nature, if we refer for example to the 2008 crisis and the way in which it subsequently affected the balances and political scenarios of Western countries. Extraordinary situations that for the business system represented phenomena of an external nature, capable of determining critical situations, strongly influencing levels of productivity and profitability (in the most serious cases even leading to the definitive cessation of activity).

Here then, again, the theories on the need for companies to be dynamic systems, capable of adapting to changes and external stimuli in the environment, re-emerge. The ability to react to new and unpredictable external conditions through a review of their strategic choices.

Strategy, a concept that according to Viganò (2012) has evolved in step with the evolution of the company, adapting to the transformation of the business system over time and the increase in the complexity of its management, cannot but be considered the only real element on which to leverage to address business criticalities, especially when the latter are generated by external factors.

Moreover, if it is a shared opinion that the company must aim for durability, it is then necessary for it to seek advantageous or survival conditions in its environment (Coda, 1995). Another important factor that must exist, so that the company can be resilient to the dynamics that cause shocks, is its continuous persistence over time, by virtue of one of the cardinal principles of companies so dear to the Master and Founding Father of the "School of Business Economics" Gino Zappa, namely the principle of business continuity. In fact, the company is a phenomenon of time and business continuity is a function of its ability to maintain, over time, adequate conditions of economic equilibrium (Di Lazzaro F, 2021). Therefore, the success over time of any business system cannot ignore the needs of the context in which it is inserted, especially when they translate into requests for changes necessary to deal with situations characterized by the character of the extraordinary.

4. THE USE OF DIGITAL IN THE PANDEMIC: A FORCED CHOICE FOR ITALIAN COMPANIES.

Digital innovation can represent a strong driving force for the productivity and performance of companies, especially small and medium-sized ones, helping them to compete in a market that is and will be increasingly interconnected and linked to digital logics.

While this statement may appear more or less obvious in theoretical reasoning, there are numerous quantitative surveys that confirm the need for companies to avail themselves of the support of new technologies not only to improve management and make their internal processes more efficient but also to be better able to react to the extraordinary nature of events.

In recent years, the phenomenon of digitalization has come to affect all sectors of the economy, and in particular in its gradual and now increasingly faster and progressive expansion, it seems to have modernized those classic business models that have always represented the reference standards in the most varied sectors. Even if digitalization appears to be a phenomenon of current importance, it is actually not a new phenomenon. What has been discussed in recent times is the phenomenon of digital transition. In fact, in the last ten years, the development and large-scale implementation of information and communication technologies (ICT) have radically changed economic models, the economy in general and society, causing a new industrial revolution. This revolution has caused a sudden transformation in every business sector (Berman & Bell, 2011; Porter & Hep-pelmann, 2015; Linz et al., 2017; Verhoef et al., 2019). We therefore tend to talk about the fourth industrial revolution (Oesterreich & Teuteberg, 2016; Ustundag & Ce- vikcan, 2018). We have therefore also come to speak of industry 4.0, "a synthetic expression used to identify the fourth industrial revolution, that is, the profound and irreversible digital transformation underway in the production system, but also in the socio-economic system, which will lead to the acceleration of exponential growth phenomena. To grasp the scope of this revolution, it is useful to recall the previous ones, highlighting the technological innovations that have characterized them, but also their impact on the business models of companies. It is important for the survival of companies and to avoid crises, "to pay greater attention to the aspects connected to some key elements of the strategy, that is, customers, competition, data management and analysis, innovation and value creation. proposition" (Rubino, Vitolla, Raimo, 2020).

IoT" (Internet of Things) technology has become significantly widespread. The term IoT ("Internet of Things", or literally "internet of things") was used for the first time by Kevin Ashton in 1999 (a system in which the physical world is connected to the internet through sensors); we must first ask ourselves, what it is specifically and where the "internet of things" could and can already find application. There are several technologies used in the field of digital transformation: "e-commerce, social media, big data, cloud computing, the internet of things (IoT), advanced automation, artificial intelligence and machine learning (OECD, 2016; Ahmed et al, 2016; Bhatt et al, 2017; Kotarba, 2017; Rachinger et al., 2019; Ulas, 2019). There are various fields or sectors in which these tools can find application. From private production to public administration services, from utilities to healthcare, albeit with different levels of maturity.

In the past, small and medium-sized companies made decisions and made their choices based mostly on entrepreneurial intuition, with little data and information available. Today, more than ever before, and especially in the era of pandemics, digital technologies represent a great resource for responding to current challenges (such as precautions to be taken to prevent contagion in the workplace), but also for moving in a work context that will be characterized by uncertainty and continuous changes. Numerous innovations are available that allow us to respond to these problems (wearable sensors for distancing, collaborative robotics and automation solutions to reduce the need for physical presence), but it is important that companies approach digitalization with a strategic vision that allows them to choose not the latest technology, but rather the best, most innovative and most competitive technologies⁹. The use of new technologies today represents a necessary strategy on which to base the overcoming of economic criticalities by those companies that intend to increase their productivity and competitiveness. Companies are called to innovate their management models, orienting themselves to new business dynamics, projected towards digital innovation, computerization and the use of "Big Data" in the management of internal and external processes. Technological innovation and "digital disruption" are establishing themselves as powerful drivers of change for all companies, imposing a sudden rethinking of the way of being on the market even for small and medium-sized enterprises active in traditional sectors of the economy.

It is clear that the dynamics that have been triggered by the evolution of the pandemic have also led companies that are less inclined to digital tools to resort to them, as the only possibility of survival in the face of the criticality of the situation.

Numbers, which can be more exhaustive than words, leave no room for subjective interpretations and unequivocally underline the new trends on the part of entrepreneurs.

The need for companies to increase their investments in digital tools and platforms is validly demonstrated by the results of numerous surveys and statistical reports conducted with reference to the last decade and in particular to the period of the health emergency.

As can be seen from the data reported in the following table (Table 3), extrapolated from the ISTAT report¹⁰, with reference to the year 2021, the percentage of Italian small and medium-sized enterprises (SMEs) that have reached at least a basic level of digital intensity is around 60%, exceeding the European average of 56%. The European objective for 2030 is 90%.

Among companies with at least 10 employees, 42% purchased medium-high level cloud computing services and 52% intermediate and sophisticated level (35% the EU27 average, 75% the European 2030 target).

Companies that use at least two social media have increased compared to 2019 and are now at 27%. As for online sales, there has been an improvement compared to previous years, although at a rather slow pace.

Table 3: Indicators of the European and Italian digital transition monitored by DESI¹¹. Years 2011-2021, percentage values

EUROPEAN AND ITALIAN DIGITAL TRANSITION INDICATORS MONITORED													
FROM DESI, Years 2011-2021, percentage values													
		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2030 Goals
SMEs with at least a basic level of digital intensity (1)	EU27	:	:	:	:	57	56	57	52;47	60	60	56	90
	IT	:	:	:	:	49	46	44	45;38	58	69	60	
Companies purchasing medium-high or intermediate-sophisticated cloud services (2)	EU27	:	:	:	10	:	12	:	15	:	25	nd (35)	75
	IT	:	:	:	20	:	11	:	14	:	38	42 (52)	
Companies that have ERP	EU27	:	24	29	34	38	:	36	:	36	:	39	
	IT	:	21	27	37	36	:	37	:	35	:	32	
10+ Businesses Using Two or More Social Media	EU27	:	:	:	14	15	17	18	:	23	:	30	
	IT	:	:	:	12	14	16	17	:	22	:	27	
SMEs with e-commerce sales of at least 1% of turnover	EU27	12	13	13	14	16	17	17	16	17	17	18	
	IT	4	4	5	5	7	7	8	10	10	11	13	
Total SME turnover from e-commerce sales	EU27	8	8	8	9	10	9	10	10	11	12	12	
	IT	3	4	5	5	8	6	6	8	8	9	9	
SMEs with e-commerce sales in other EU countries	EU27	6	:	6	:	7	:	8	:	8	:	9	
	IT	3	:	4	:	5	:	6	:	6	:	7	

1) In 2018, two digital intensity indices (DII) were produced. The index is composed of 12 indicators that vary from year to year and therefore it is not possible to compare the indicator in historical series. 2) The value reported in 2021 in brackets refers to the intermediate-sophisticated cloud while the others refer to the medium-high level cloud (see Glossary).

(Source: https://www.istat.it/files/2022/01/report-ict-nelle-imprese_2021.pdf)

⁹ <https://www.innovationpost.it/2021/03/18/come-superare-la-crisi-e-cogliere-le-opportunita-della-digitalizzazione-le-strategie-per-il-successo-secondo-federmecanica/>

¹⁰ https://www.istat.it/files/2022/01/report-ict-nelle-imprese_2021.pdf

¹¹ The Digital Economy and Society Index (DESI) is an index introduced by the Commission European in 2014 to measure the progress of the countries Europeans in terms of digitalisation of the economy and of the companies, in order to converge towards a single digital market.

Even if in a synthetic way, the data cited above help to define a clear picture of the relationship between small and medium-sized enterprises and digital in the Italian and European context, also in light of the recent Covid-19 crisis.

The table indeed shows an encouraging situation. However, it is clear that the slightly improving trend in recent years will have to be accompanied by a greater concentration of efforts towards the digital transition, increasing the impact of digital on the economic performance of Italian companies. It will also be necessary, to support business organizations, to amplify the dissemination of measures and incentives dedicated to digital innovation in SMEs, estimating their impact and identifying possible future developments. Equally essential will also be to improve the general state of digital culture in order to aim for higher levels of skills related to digital innovation (Big Data Analytics, Cloud Computing, Security, Smart Working, etc.) now considered of fundamental importance to foster competitive advantage.

In other words, the use of technological innovation, already considered one of the factors capable of having the greatest impact on management efficiency and economic growth levels (Valdani, 1995), and in particular digital innovation, must be at the center of the strategies of all those companies that want to be able not only to deal with unpredictable extraordinary situations such as the recent pandemic, but also to be able to conquer new market shares. It is important for companies that want to be competitive and innovative to rely completely and with confidence on the role played in this area by innovation experts (such as European Digital Innovation Hubs, Competent Centers spread throughout the country, but also Service Providers, System Integrators, etc.), who can adequately direct and support the renewal process.

5. CONCLUSIONS

At this point, it is clear that, since the purpose of the company is to increase the value of economic capital, situations of static or decreasing value can be interpreted as signs of potential imbalances. To aim for a positive trend in value, the only viable path is to try to improve business strategies by focusing on innovation, to try in this way to attract a greater number of consumers and achieve higher income or cash flows. As revealed by a Deloitte survey conducted in 2020 following the pandemic, for 62% of the entrepreneurs interviewed, the capacity for innovation is one of the main levers to guarantee the company's solidity in the long term. Although during the pandemic, digital and its various declinations represented a necessary condition for both large and small medium-sized enterprises to remain competitive and survive, today the same companies have accelerated some aspects of the digital transformation, aimed in particular at making resources more efficient, reducing costs and ensuring flexibility in work. The challenge for the future, however, will be to move from a reactive approach to the emergency to a strategic and long-term approach, extending digitalization to the various processes and reviewing business models. In Italy, also to improve the production capacity of the entire economic system and make it less fragile to exogenous shocks, it will therefore be necessary to raise the level of maturity of companies with respect to digital innovation issues, trying to promote more cutting-edge business models based on the use of digital technologies. Furthermore, the need to provide new tools to prevent and address crisis situations with the introduction of the "Corporate Crisis and Insolvency Code" has determined a good result. It will be possible to deal more effectively with the increase in companies in difficulty or insolvent without them entering the turmoil of the crisis. A stimulus to make companies more virtuous and solid, to allow continuity and development to the company while avoiding the risk of a crisis. With the new legislation, in fact, companies will be able to promptly receive the alarm signals and activate initiatives for crisis management in good time.

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