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Business Models Beyond Covid-19. A Paradoxes Approach

Carlo Bagnoli¹, Francesca Dal Mas², Helena Biancuzzi³, and Maurizio Massaro⁴

Abstract

The Covid-19 crisis has undermined and disrupted several business fields. Organizations are called to address the new challenges by rethinking their business models. Employing an EFTE (estimate, feedback, talk, estimate) approach, the paper highlights 50 paradoxes to be taken into consideration in the strategic transformation process.

Keywords: Paradoxes, Post-pandemic business models, Covid-19

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1 Full Professor of Business Policy and Strategy at the Department of Management, Ca' Foscari University of Venice.

2 Senior Lecturer in Strategy and Enterprise at the Lincoln International Business School of the University of Lincoln, UK.

3 independent researcher, Ipazia Observatory on Gender Research, Rome, Italy.

4 Associate Professor in Accounting, Digital Management, and Control, Department of Management of the Ca' Foscari University of Venice.

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Introduction

The Covid-19 pandemic and related healthcare emergency at the beginning of 2020 disrupted several businesses worldwide (WHO, 2020). Non-pharmaceutical interventions forced many enterprises to close their doors to clients and visitors. Half of the world's population was quarantined. However, paradoxically, pandemics and natural disasters, in general, have also proved capable of changing the course of history, triggering the innovation of religious, political, economical but also technological systems.

To explain this co-existence of harmful and propitious effects, the etymology of the term paradox comes to our aid, according to which something, which apparently contradicts common opinion (*παρά*-against and *δόξα*-opinion), proves to be valid instead. The fundamental characteristic of the paradox is, in fact, the co-existence of two opposing poles: one does not exclude the other.

The crisis triggered by the current pandemic is, therefore, paradoxically, a significant threat but, at the same time, also an excellent opportunity to innovate the whole society and, more specifically, individual companies. The real challenge is to use the paradoxical method to stimulate people to review their lifestyle, work and consumption habits and, companies, to rethink their existing business model (Bagnoli, Massaro, *et al.*, 2018; Nielsen *et al.*, 2018; Osterwalder and Pigneur, 2010), developing strategic innovation.

It is necessary to identify the strategic paradoxes that the current crisis has brought out and try to "manage" them, not solve them, by innovating the business model. The business strategies that lead to choosing one of the (apparently) opposing poles that characterize a paradox (e.g. work from the office or remotely) hide the competitive context's real complexity, resulting, therefore, not very useful for winning the competition. A paradox is characterized by only apparently opposing poles (Bagnoli *et al.*, 2021). It is "manageable" only by adopting an approach that leads to uniting, through a circular process, the two poles themselves, which end up acting as an attractor for the other, thus generating a balanced dynam-

ic and supporting the creative creation of new business models (Bagnoli *et al.*, 2021).

The paper adopts a scientific approach based on the management, not elimination, of paradoxical choices to deepen the strategic handling of a crisis. Following an EFTE (estimate, feedback, talk, estimate) approach, the article aims to provide organizations with a methodology to recognize and address the paradoxes that can impact the single building blocks of the business models, following the pandemic restrictions, legal constraints, and new consumer habits. The ambition is not to provide valid *erga omnes* answers, but to stimulate the individual company to ask itself the correct questions to be addressed, according to the situation. The acceptance of a paradoxical approach leads to rejecting the artificial simplification of the complexity that characterizes real contexts and, therefore, the use of a process for the management of the linear crisis that leads to dichotomous solutions of the "black or white" type or, however, to compromises of "grey." Instead, it leads to the use of a process for the management of the circular crisis to arrive at paradoxical solutions of the "black and white" type. Starting from these premises, it is essential to combine the activities to be carried out "during" and "after" the crisis with those to be carried out "before" and "beyond" the crisis itself.

Approach

An EFTE (estimate, feedback, talk, estimate) approach (Nelms and Porter, 1985) was employed. The methodology allowed to gather experts' opinion on a particularly complex situation, like the one on Covid-19 possible post-pandemic business models. Nine experts coming from academia and the business consulting sector were involved in the analysis. The experts were selected based on their specific expertise. More precisely, the aim was to gather people with a multidisciplinary background, coming from sociology, business strategy, innovation, engineering and business processes, sustainability, marketing and communication, and public policies. Experts were selected and invited within the network of the nine universities shaping the "SMACT competence center," one of the eight highly specialized Industry 4.0 Competence Centers born in Italy on the initia-

tive of the Ministry of Economic Development. The SMACT competence center stands as a public-private body that systematizes the skills in the industry 4.0 field of research, technology providers and early adopter companies (SMACT, 2021).

The protocol described by Nelms and Porter (1985) was employed during the investigation and observation, namely following these steps:

1. Experts were given background information to be used in making opinion judgments;
2. Experts gathered face-to-face in an e-conference room. Questions regarding the background information were resolved by an appointed Delphi manager, who also acted as the Principal Investigator of the study. Discussion among the participants was encouraged. Still, eventual problems of social interaction were avoided due to the different competencies of the participants. Dedicated translation tools (Bagnoli *et al.*, 2021; Dal Mas *et al.*, 2020; Secundo *et al.*, 2019) were employed to facilitate the dialogue, the sharing, and the creation of new knowledge.
3. A Delphi questionnaire was given to each expert, which later needed to be filled and returned to the Delphi leader.
4. The questionnaire results were summarized and shared within the group.
5. The feedback results were discussed freely in the group, still maintaining the anonymity of each individual's survey response.
6. The processes terminated once sufficient stability was found, and a report was created (Bagnoli *et al.*, 2020), to summarize the results.

Key insights

The strategic transformation of the business model

A strategic transformation or innovation takes the form of creating a new market by developing a unique value proposition and, therefore, of a new business model (Bagnoli *et al.*, 2019; Bagnoli, Bravin, *et al.*, 2018; Nielsen *et al.*, 2018; Osterwalder and

Pigneur, 2010). The latter can be achieved through the development of:

- innovative products (goods and/or services), presented or combined in a new way, to create a radically different experience in customers, involving them also on an emotional, intellectual and/or spiritual level;
- innovative processes for the production and/or distribution of existing or new products that may lead to the acquisition of new customer groups;
- innovative value chains, to create a new market space which, making the competition irrelevant, allows for an increase in the value for both the company and the customer (Klewitz and Hansen, 2014; Schneider and Spieth, 2013; Teece, 2010).

In general terms, one of the first challenges that companies need to overcome is the classic paradox between pursuing a competitive strategy of differentiation, increasing the value perceived by the customer and, therefore, the selling price of the product, or cost leadership, by lowering the cost of producing the product, leveraging a lower offer, in whole or in part, to that of competitors. Most of the companies resolve the paradox by trying to compromise the two opposing poles, meaning to invest in products that can be appreciated and valued by the target customers, still with an eye on cost reduction to keep a fair or moderate price.

The process for implementing a strategic transformation may consist of four steps.

Step 1. Mapping the current business model using the business model canvas.

The starting point is defined for the (re)design of the business model, considering the company's strengths and weaknesses. The organization should identify the essential elements that distinguish each of the building blocks (value proposition, suppliers and supply channels, resources, internal and external processes, products and distribution channels, customers, and society). Such an analysis should be conducted by filling in the single building blocks of

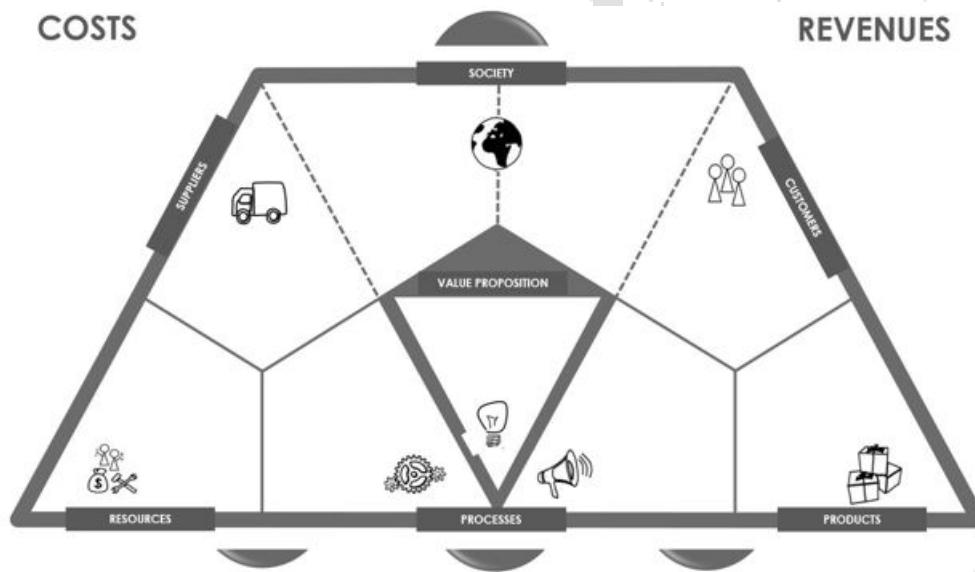


Figure 1. The business model canvas framework (Adapted from Biloslavo et al. (2018))

the business model canvas. While the more traditional and well-known approach by Osterwalder and Pigneur (2010, 2012) would for sure fit the purpose, we would recommend using the revised version by Biloslavo and colleagues (2018), as it includes the social dimension as a central element of today's most successful organizations, allowing to consider sustainability into the picture and develop sustainable business models (Buser and Carlsson, 2020; Cosenz et al., 2020; Glinik et al., 2020; Lozano, 2018; Lüdeke-Freund et al., 2020). The business model canvas allows imagining what the characteristics of the future and desired business model will be, in this case, once the pandemic caused by Covid-19 has passed or come to a "new normal" (Cobianchi et al., 2020). The following Figure 1 shows a possible framework for the analysis.

Step 2. Identifying the uncertainties arising from the crisis by developing a scenario-planning process

A scenario planning process allows identifying and connecting the socio-economic and technological variables that will drive the change and determine the new post-crisis reference context. More precisely, this step describes a specific collection of uncertainties, varying "realities" of what might happen in the future. The areas of reflection must cover all the aspects of the uncertainty: e.g. economic, political, social, legal, environmental. Examples of the

uncertainties developed during the study and the pandemic era have been:

- Political: e.g., the role of the European Union (e.g. disintegration of the EU Market and Schengen area) and the Brexit effect;
- Economic: e.g., economic recession following the pandemic and mandatory closure of businesses (Carnevale and Hatak, 2020);
- Social: e.g., the duration of the social distancing enforced measures and the consequent change in consumers' and people's habits (Carnevale and Hatak, 2020);
- Technological: e.g., use of devices like the Internet of Things - IoT for people tracing (Wang et al., 2020) and of social media networks to communicate with the population (Massaro et al., 2021);
- Environmental: e.g., "green waves" and new consumer habits;
- Legal: e.g., protectionism to support and boost local productions.

Step 3. Evaluating the possible impacts of the identified uncertainties on the individual building blocks

Once the existing business model has been mapped and once the sector scenarios have been defined, it will be possible to identify the impacts on the single

building blocks, namely, which processes or actors may be more affected by the pandemic, the environmental changes, the enforced measures, and the new consumer habits. The building blocks which end up more impacted by the new scenarios should lead to new strategic choices, considering how to compromise among opposing options or interests.

Step 4. Redesigning the business model to exploit the opportunity of the crisis

Last but not least, it is necessary to reflect on how to move from a diagnosis phase to a response phase

to identify the projects that can guide the change in the business model. Before deciding on any significant changes in the business model, it is essential to think about how the crisis will affect the existing performance metrics.

The following Table 1 illustrates the paradoxes, as identified by the expert panel, that companies should take into consideration in their analysis before the strategic choices are made.

Some examples can be reported (Bagnoli et al., 2020).

Table 1			
#		Phases and building blocks	Paradoxes
1	Paradoxes for all the phases of the crisis	All the phases	Practical experience vs theoretical knowledge
2		Phase "before": before the crisis	Scenario planning vs antifragility
3			Prevention vs assurance
4		Phase "throughout": during the crisis	Keeping what is existing vs experimenting new solutions
5		Phase "after": to a new normal	Temporary vs permanent
6			Continuous vs intermittent
7		Phase "beyond": strategic transformation once the crisis is over	Coming back to a "new normal" vs strategic transformation
8			Waiting vs acting
9			Contingent vs structural

Table 1. 50+ paradoxes to rethink post-pandemic business models

Table 1				
#		Phases and building blocks	Paradoxes	
10	Paradoxes for all the building blocks	Society	Open vs closed	
11			Linear economy vs circular economy	
12			Global vs local	
13			Private vs public	
14			Shareholders vs stakeholders	
15			Sharing vs exclusivity	
16			Digital transformation vs human touch	
17			Leadership through gurus vs through sergeants	
18			Suppliers	Short supply chains vs long supply chains
19				Concentrated supply chains vs extensive supply chains
20	Partnerships vs markets			
21	Resources	Just in time vs safety stocks		
22		Human resources vs cyber-physical systems		
23		Workers vs IT technicians		

Table 1. 50+ paradoxes to rethink post-pandemic business models (Continued)

Table 1			
#		Phases and building blocks	Paradoxes
24	Paradoxes for all the building blocks	Resources	Physical offices vs virtual offices
25			Local staff vs worldwide talents
26			Cash or guarantees
27		Internal processes	Offshoring vs reshoring
28			Office work vs remote work
29			Isolated productive cells vs humanless production systems
30			Production systems oriented to efficient flexibility vs redundant flexibility
31		External processes	Advertising image vs reassuring truth
32			Offline vs streaming events
33			Physical stores vs e-stores
34			Sanitized "hand" deliveries vs automated deliveries
35			Offline vs online services
36		Products	Shared products vs personal ones
37			Good looking vs safe packaging

Table 1. 50+ paradoxes to rethink post-pandemic business models (Continued)

Table 1			
#		Phases and building blocks	Paradoxes
38			Self-sanitizing materials vs materials easy to sanitize
39			Safety through innovation vs regulation
40			Quality assurance vs safety assurance
41			Low-cost goods vs sustainable goods
42			Traditional vs smart appliances
43			Products to support physical and virtual interaction with people vs robots
44		Clients and markets	"Made-in" push markets vs Covid-19-pull ones
45			Global vs local markets
46			Traditional market segments vs new consumer tribes
47			Traditional market vs e-marketplace
48			Essential needs vs transcendental aspirations
49			New necessities vs new habits
50		Value proposition	Strengthening the culture and corporate identity vs changing to adapt to the new context

Table 1. 50+ paradoxes to rethink post-pandemic business models (Continued)

The mandatory closure of several non-essential factories and offices has had the effect of interrupting many enterprises' production, causing the interruption of the supply by the global suppliers, especially the big ones located in China. Such a disruption, referring to the "Suppliers" building block, imposes companies to question whether short supply chains should replace long ones (paradox #18 of table 1). Organizations will need to compromise between the need to stock up on global procurement markets and use local suppliers, even supporting the national economy's recovery. While the first option seems more convenient from a purely economic perspective, it highlights the risk to suffer one more supply interruption for health or political reasons. Therefore, the pandemic has underlined the vulnerability of global supply chains, starting from the Chinese one.

Again, the enforced closure of many factories and offices has had the effect of interrupting the production even of many western and local companies. Therefore, they stopped the supplies to their customers, impacting the "Resources" building block. To prevent disruptions in the availability of resources and goods, companies should then think of the best strategy to compromise the "just in time" stock management versus having enough safety stocks (paradox #21 of table 1). While, on the one hand, there is the need to encourage production philosophies that aim to optimize the entire production process, inventories may be essential to maintain the business. New "just in case" stock strategies may support to compromise between the two competing needs.

Still considering the "Resources" building block, new frontiers emerge about human resource management. Therefore, the opportunities and tools provided by the smart and remote work allow the company to think about whether to invest in local people or to open up to worldwide talents, who would not need to reside in the proximity of the firm's plants or offices (paradox #25 of table 1). Pre Covid-19, the location of the corporate headquarters in a large and preferably world metropolis appeared as a decisive factor in attracting the best talents, thanks to the possibility of quickly reaching the workplace by train or subway. This might not be more true if companies moved their offices in the countryside, in healthier and cheaper contexts, allow-

ing their employees to work remotely, enhancing the wellbeing and supporting the work-life balance.

The closure of almost all public places like shops, theatres, cinemas, auditoriums, restaurants, gyms, and fitness centres, had that effect of replacing physical interactions with virtual ones, maximizing the use of e-stores and digital platforms and impacting the "External processes" building block. Companies should then think if the pandemic has led to the definitive affirmation of e-commerce and home delivery or if there is still room for customers to enjoy the physical experience of purchase and/or consumption (paradox #33 of table 1). In China, the clerks of many chain stores (ex: Red Dragonfly) have been transformed into online vendors and restaurant waiters in food-delivery porters (e.g. Ele.me, 7Fresh of JD.com and Meituan). New "ghost kitchens" were born; namely, restaurants aimed exclusively at delivery or takeaway, while Deliveroo has announced its intention to invest in home shopping.

Discushesions and Conclusions

The Covid-19 crisis impacts the individual business model's building blocks and the relationships among them and, therefore, on the entire business model of several organizations. The possible choices at the level of the various elements of the business model should be consistent with each other.

The main takeaway message of our study is the approach described in the paper, which should push organizations to identify the strategic paradoxes that the current crisis has brought out in their business model's building blocks. The big challenge is mapping and understanding the most affected building blocks, recognizing the potential paradoxes suggested by the crisis, and rethinking the strategic choices to compromise between the opposing poles, needs, and interests. Paradoxes can hardly be "fixed." Still, companies should try to "manage" them, not solve them, taking the chance to innovate their business model.

Innovating the strategy means, first of all, overcoming the paradox between increasing the value offered and lowering the cost of production, through a new

value proposition, within a new market space. The pandemic crisis will probably lead to the destruction of many established markets, in some cases by accelerating (e.g. digital transformation) and in others slowing down (e.g. globalization) developments that were already underway in the competitive context. The pandemic crisis, therefore, has stressed the need for all companies to redefine their business model. Some can limit themselves to polishing it. Still, most organizations, namely the smaller, more fragile, and less digital ones and those operating in the sectors most affected by the constraints and consequences of Covid-19 (like travels and tourism), are forced to change or rethink it radically.

These reflections suggest a final strategic paradox to be faced for a company but, perhaps, first in importance, as regards its deep essence, the starting point necessary to redefine the business model consistently.

The expert panel involved in the study identified the 51st paradox as the durability vs adaptation of cor-

porate identity. A possible way to manage this strategic paradox is to refer to the concept of continuity. In this perspective, the central aspects of the corporate identity remain nominally the same, assuming, however, substantially, over time and space, different meanings to allow the company to adapt to the changed reference context. Being an innovative company, for example, is an identity feature that can take on substantial and very different meanings over time and space, which require equally different action programs to be implemented. For example, today, developing products with self-sanitizing materials has become a central innovative element during the Covid-19 crisis, which can lead to competitive advantage. Before, this topic was yes present, still not central. Persistence in expressing the corporate identity is also functional to reassure the organization members regarding business continuity, a critical aspect not to lose the best human resources due to the crisis.

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About the Authors

Carlo Bagnoli MSc, PhD is a Full Professor of Business Policy and Strategy at the Department of Management, Ca' Foscari University of Venice. He received a PhD in Business Economics at Ca' Foscari University of Venice. He was visiting research fellow at the University of Florida. He is the proponent and the Scientific Coordinator of the Strategy Innovation Hub. He is also the Founder and Scientific Director of Strategy Innovation Srl: a Ca' Foscari University spin-off focused on action research. His research interests include knowledge management, competitive strategy, and business model innovation. He is a member of the Editorial Advisory Board of JOBIM.



Francesca Dal Mas MSc, JD, PhD is a Senior Lecturer in Strategy and Enterprise at the Lincoln International Business School of the University of Lincoln, UK. Her research interests include the impact of new technologies on sustainable business models, knowledge management, and knowledge translation. She is a member of the Editorial Advisory Board of JOBIM.



Helena Biancuzzi JD, is completing her Master Degree in business economics. In 2018-19, she was a research fellow at the Department of Economics and Statistics of the University of Udine, Italy. She is a Member of Ipazia, the Observatory on Gender Research. In 2019 and 2020, she was the winner of the European grant DigitaHealthEurope - in the context of Digital Single Market strategy. She authored several papers in the field of Public Management, particularly in the healthcare sector, co-production processes, and knowledge translation.



Maurizio Massaro MSc, PhD is an Associate Professor in Digital Management and Control at the Department of Management of the Ca' Foscari University of Venice. His research interests include the impact of new technologies on sustainable business models, innovation, and knowledge management. He is the Scientific Chief of the MIKE - Most Innovative Knowledge Enterprise Award for Italy.

