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The impacts of Covid-19 on agri-food business models

An empirical analysis
of the fishing sector

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Introduction

In March 2020, the world has been hit by one of the hardest pandemics ever experienced. The novelty and rapid spread of the Sars-Cov-2 virus discovered in China had implications not only from a health and scientific point of view, but from an economic one as well. With the outbreak of Covid-19, almost the entire planet was pushed toward taking extreme measures to contain the rapid spread of the infection. Lockdown, restrictive measures, social distancing brought companies to face dramatic challenges to survive. This essay outlines the major impacts of the pandemic on agri-food companies, with a particular focus on Covid-19 impacts on business models in the fishing and aquaculture sector. In particular, it answers to the following research question: “How did Covid-19 impact business models in the fishing and aquaculture sector?”

In Chapter 1, the dissertation starts with a general overview of the concept of business model. After an historical outline on the evolution of the concept, I explain what business model is and I thoroughly describe the Business Model Canvas. The famous framework is used as the main reference point for the subsequent empirical analysis in this work. To conclude, I analyse the pandemic under the lens of useful metaphors: the Black Swan and the Gray Rhino. Despite their apparent little significance, these two concepts have strategical implications and are important to consider for future disruptions. The chapter closes with a first insight on the major short-term and long-term impacts of the pandemic on business models in general.

The second chapter offers a detailed analysis of the agri-food sector. After a precise sectoral analysis of both the European and Italian scenario, I describe some of the major trends that were affecting the sector even before the pandemic. Afterwards, I analyse the role of Covid-19 as an accelerator of these existing dynamics and how it impacted on these phenomena. Finally, the last section of the chapter offers an insight on the impacts of the current geopolitical events on agri-food business models. Specifically, I briefly describe how the Russia – Ukraine conflict is affecting the sector and business models.

In the third chapter, I start with an in-depth sectoral analysis of the fishing and aquaculture industry, followed by an analysis of the major challenges affecting the sector. After a brief dissertation on the main European legislation on the fishing and aquaculture sector, I provide a short focus on the role of aquatic food in the global food system. The Blue Economy and the Blue Transformation are growing phenomena that are likely to

revolutionise the global food systems and are particularly interesting strands of research that are gaining more and more relevance within scientific studies. Therefore, it is important to include them in the present work also considering the relative business opportunities that can arise.

The last chapter contains the empirical analysis upon which the major conclusions of this work are based. The qualitative research has been conducted with the support of the Agri-food Management and Innovation Lab of Ca' Foscari University. I gathered the data by interviewing companies working in the field and the transcriptions have been thoroughly analysed through the Gioia Method, that allows to extract information with scientific relevance and rigour from qualitative datasets. Starting from the empirical evidence collected and the direct experience of the interviewed entrepreneurs, I illustrate the fundamental business model modifications fishing and aquaculture companies underwent to face the challenges raised by the pandemic. To conclude, I comment on which are, in my opinion, the major weaknesses of existing business models in the sector. Finally, I suggest 3 strategic paths to face future disruptions and thrive during crisis.

1. Business Models in the Covid-19 Era

In this chapter, I will give a general overview of the concept of business model. The highly fragmented literature on the topic does not help in understanding what “business model” means. Therefore, I will try to clarify the concept through a brief historical overview arriving at more recent theoretical discussions. Finally, I will provide a first insight on the impacts of Covid-19 on business models.

1.1 From the origins to an agreed definition

1.1.1 *An historical overview of the concept*

The very first appearance of the term “business model” dates back to 1957 in an article by Bellman, Clark et al. called “On the Construction of a Multi-Stage, Multi-Person Business Game.” (Bellman, et al., 1957). After that, the term was used multiple times in literature referring to business modelling as the representation of the configuration of processes (Wirtz, et al., 2016). As we will see later, the first conception of the term was quite different from the modern meaning of business model. In fact, this instrument was conceived as a mere operational tool for system modelling, with a strong emphasis on functional aspects and the design of information systems.

Even though first traces of discussions on business models are found in the literature more than 50 years ago, the real growth in popularity began towards the late 1990s, with the technological advancements and the rise of electronic businesses, so with the advent of the Internet in the realm of entrepreneurial activities (Osterwalder, et al., 2005). The disruptive innovation brought by the Internet caused a strong shift from traditional businesses to internet-based activities (Burkhart, et al., 2011). The growth of modern information and communication technologies based on the Internet infrastructure exerted an influence not only on the internal organization and configuration of firms, but also altered economic and social conditions. The nature of competition was also affected. The term “business model” was used, then, to refer to companies embracing this new way of doing things, as a kind of label to distinguish them from traditional businesses. In other terms, in the late 1990’s, the concept became almost synonymous with e-business (Nielsen & Lund, 2014). At that time, the concept was no longer intended as a mere operational tool to create an information system, but it was rather seen as a complete representation of the company. The business model became, consequently, a tool to help managers in the decision-making process (Wirtz, et al., 2016). The enthusiasm for the dot-com phenomenon was so strong that any emerging company even without a well-

defined strategy or any promising revenue sources was considered profitable just for the fact of adopting the new Internet-based business model (Burkhart, et al., 2011). This false belief led to the outburst of the dot-com bubble which represents the starting point of a new strand of research on the topic. The crash of the new economy, in fact, caused an increased interest among scholars in the usage of the business model to understand why some companies failed when the bubble blew up and why some others survived and turned out to be successful. A first element to mention is the fact that the overconfidence on the Internet traffic turning into profits and the exclusion of an actual profit formula from the business model were blind approaches that later led researchers to put the profit formula at the core of the business model. It was, in fact, crucial to understand through the business model how companies were able to create value for their customers and to generate revenues. As the scientific discourse moved forward, scholars started to include considerations about the role of strategy within business models. Therefore, since the beginning of the new century, the scientific literature has been enlarged with numerous studies concerning the strategic perspective of business models (Wirtz, et al., 2016). As we can see, over decades scholars analysed business models under different perspectives, applying the notion referring to different aspects of the firm. Consequently, despite being very prolific, the literature on the topic is highly fragmented. In the next paragraph we try to outline the most cited definitions found in the literature in order to arrive at the one that today is usually adopted.

1.1.2 Converging around an agreed-upon definition

As already mentioned, the divergence of opinions, the fragmentation of the literature and the abuse of the term in the late 1990s created confusion around the core concept of business model. While there is a great consensus about the importance of business models, experts underline that the concept is still “fuzzy and vague”, without a commonly agreed-upon definition (Fielt, 2014). Consequently, more and more critic voices arose, the most famous being Porter’s:

“The definition of a business model is murky at best. Most often, it seems to refer to a loose conception of how a company does business and generates revenue. Yet simply having a business model is an exceedingly low bar set for building a company. [...] The business model approach to management becomes an invitation for faulty thinking and self-delusion” (Porter, 2001).

Hence, it is urgent to clarify what the term “business model” means.

One of the most cited definitions is given by Timmers in 1998. Timmers states that the business model is “*an architecture for the product, service and information flows, including a description of the various business actors and their roles; and a description of the potential benefits for the various business actors; and a description of the sources of revenues.*” (Timmers, 1998). As we can see, Timmers’ definition looks at the concept with a focus on the internal aspects determining how the company works, its architecture. However, by including the generic expression “business actors”, the author tries to include an external element signalling the interdependencies and the interactions of the firm with other entities of the ecosystem. The author defines business models in a very concrete way compared to more abstract definitions by other researchers. For instance, Magretta gives a much more generic and abstract definition talking about “*stories that explain how enterprises work*” (Magretta, 2002). If Timmers focused on the structural dimension and on the relationships with various business actors, other authors like Rappa put much more emphasis on the monetary aspects concerning the business model. In fact, Rappa defines the business model as the method of doing business through which a company generates revenue to sustain itself (Rappa, 2000). Therefore, the business model is seen as an instrument to understand how a company makes money by looking, among other things, at its positioning along the value chain. It is worth mentioning another contribution given by Chesbrough and Rosenbloom in 2002. The two authors emphasize the role of the business model as a “*framework that takes technological characteristics and potentials as inputs and converts them through customers and markets into economic inputs.*” (Chesbrough & Rosenbloom, 2002). Here, the business unit plays a central role in the definition.

Comparing the three major contributions outlined above, we can already make an important consideration. Timmers’ definition explicitly refers to the firm level and the network one. Even if implicitly, Chesbrough and Rosenbloom link the concept of business model to the transformation activity performed by business units within a company. Rappa’s definition, instead, does not include any explicit references neither to the firm level and the network one, nor to the business unit level. This misalignment regarding the organizational entity which the business model is referred to is one of the main reasons to explain the already mentioned confusion on the topic. Moreover, some definitions in the literature relate the business model to the specific context in which it is used. Consequently, some authors link it to e-business, some others consider it as the

framework that connects technological development and economic value creation. Similarly, some researchers apply the concept to the analysis of non-profit and socially oriented organizations, as well as governmental ones. Intuitively, this heterogeneity in the application of the model to different kinds of organizations further contributes to the challenge of creating a comprehensive definition.

In an attempt to formulate a broad enough definition to be applied in different circumstances and to different organizations, Osterwalder et al. (2005) pursued a semantic approach (Burkhart, et al., 2011). They first distinguished the two terms “business” and “model”, analysing their respective definitions. Model is defined as “a simplified description and representation of a complex entity or process”, whereas business is “the activity of providing goods and services involving financial, commercial and industrial aspects”. By putting together the two definitions, the authors define the business model as a set of objects, concepts and relationships that describe the business logic of a firm. It is, therefore, a simplified description and representation of how a company creates and delivers value to its customers, what this value is, and which are the financial implications of its creation (Osterwalder, et al., 2005). In a later book, the definition is further synthesized in what today is usually adopted as the agreed-upon definition of business model: “*A business model describes the rationale of how an organization creates, delivers, and captures value*” (Osterwalder & Pigneur, 2010).

This definition is broad enough to be applied to different fields and different firm’s level, thus providing a direct, clear and simple understanding of the concept. In contrast with the previous blurred contributions in the fragmented literature, Osterwalder and Pigneur’s work constitutes a solid starting point for the analysis of business models and will be used in the present dissertation as the main theoretical reference.

1.1.3 Business model vs business process and business model vs strategy

Before going deeper into the analysis of the business model and the famous framework provided by Osterwalder and Pigneur, it is important to clarify two major points of relevance. At the beginning of the chapter, I highlighted how, at early stages in the research, scholars used to refer to business model to indicate the configuration of business processes. Despite being similar, business model and business process model are quite different concepts that must be distinguished. On the one hand, business processes are groups of interconnected and interdependent tasks and activities constituted by actors (employees/workers), equipment and methods set in a pre-established order to design,

realize and deliver a final output to the customers (von Rosing, et al., 2015). Business process models are schematic representations of this flow of activities and resources. On the other hand, business models are a representation of what the company is doing to create and deliver value. In other terms, the business model is a “blueprint of how a company does business” (Osterwalder, et al., 2005). Therefore, business models describe *what* a company is doing, whereas business process models focus *how* this is done (Burkhart, et al., 2011).

The other crucial distinction is the one between business model and strategy. The delimitation between the two notions is blurred and there is no common consensus among scholars. In the literature, 3 main positions can be observed, as shown in Figure 1 below.

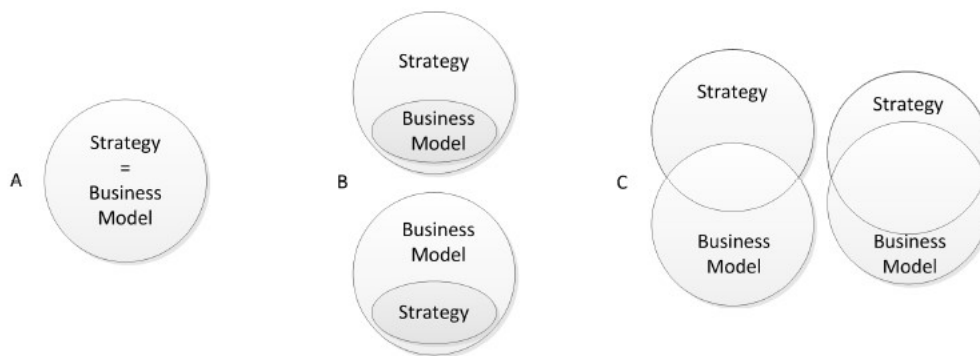


Figure 1. The 3 differentiations between business model and strategy. Source: Seddon et al. (2004)

As indicated by letter A, part of the literature considers the two terms as interchangeable. Hence, in this instance, there is no proper differentiation as business model and strategy are intended to be the same thing. The second distinction found in the literature is composed of two different nuances. On the one hand, the business model is considered as a part of the strategy. In particular, the former is an abstract representation of the latter, which is suitable to be applied to various companies. Consequently, two companies with different strategies can have the same business model (Burkhart, et al., 2011). On the other hand, strategy is part of the broad concept of business model, which includes also business processes and information systems. Letter C, finally, indicates business model and strategy as interconnected but still different and separate concepts. This suggests that the two elements have different focuses: strategy looks at competition, whereas business model looks at value creation internally. Thus, strategy shows how a company performs

better than competitors, while the business model shows how different “pieces” of the firm fit together in achieving results (Magretta, 2002). As stated by Dahan et al. (2010), the business model is a tool for a coherent implementation of a strategy. Figure 1 above show that the link between the two elements can be more or less broad, yet they are distinct. Given the definition of business model given above and today most widely accepted, this last differentiation is the best among the three. In fact, by considering business model and strategy as two distinct but interconnected concepts, it is possible to provide a comprehensive description of the elements and relationships that govern how a company creates and delivers value (Osterwalder, et al., 2005).

In conclusion, a business model describes the activity of the firm, and it is linked with strategy, a different but related concept which focuses on how the firm is positioned towards competitors. By looking at the two elements together, it is possible to get a comprehensive explanation of how the company creates and delivers value. Moreover, integrating the picture with business process models, we can outline a more precise profile including also how the company performs its activities on a more pragmatical level of analysis.

1.2 Business Model Frameworks: the Canvas

1.2.1 From basic frameworks to the Business Model Canvas

Despite the different definitions of business model provided by the literature and partially reviewed above, there seems to be uniform consensus around the statement that a business model must show a simplified and aggregated representation of the activities and relationships of a company. Consequently, well-known diagrams depicting how a company works, the processes that govern production and that shows the organizational structure are not enough for the task. The first attempt to integrate diagrams by showing how different elements within a firm interact with each other is represented by the introduction of organigraphs. These diagrams are defined by Mintzberg and Van der Hayden (1999) as instruments that clearly show “*how a place works, depicting critical interactions among people, products, and information*”. Figure 2 below graphically shows the basic components of organigraphs: the set, the hub, the web and the chain. While the first one simply represents a group of separate elements (portfolio), the other three include some kind of connection and relational element. The chain is a sequential connection where each element follows the previous one in a schematic order. The hub signals a flow from and toward a central point. This type of bilateral communication is

not always enough to explain more complex relationship that could occur among firm's actors and activities. Therefore, the web layout has been developed to embrace all the instances where more articulated interconnections exist.

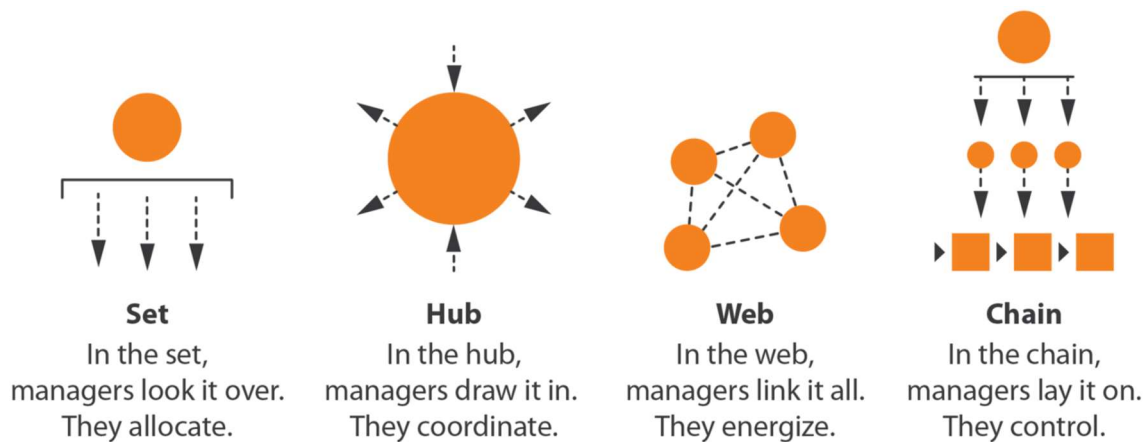


Figure 2. The 4 organigraphs. Source: Mintzberg & Van der Heyden (1999)

The above scheme represented a first step toward the development of business model frameworks, since it included the interconnection existing within different activities and actors which were excluded from previous diagrams. However, organigraphs are closer to the first conception of business model as business process model, a significant difference which I already discussed in Paragraph 1.1.3. Furthermore, organigraphs did not include any understanding of the strategy of the company, nor the logic behind the creation of value. In order to create business model frameworks, it was crucial to first list all the elements to be included as part of the models themselves. Multiple researchers suggested sets of elements, the so-called building blocks (Osterwalder & Pigneur, 2010), that contributed to the creation of multiple frameworks: the technology-market mediation model by Chesbrough and Rosenbloom (2002), the Entrepreneur's Business Model by Morris et al. (2005), the Four-Box Business Model by Johnson (2010) among others. Today's most well-known and wide-adopted framework is the Business Model Canvas. Using authors' own words, the canvas constitutes a "*shared language for describing, visualizing, assessing, and changing business models*" (Osterwalder & Pigneur, 2010). The innovative approach offered by the canvas uses visual thinking mechanisms to stimulate a holistic approach and storytelling (Fielt, 2014). The origins of this framework are found in a previous work by Osterwalder called "The Business Model Ontology" (2004), where the different constitutive elements (building blocks) were grouped into four pillars:

- 1) Customer interface: segments, relationships, channels.
- 2) Product/offer: value proposition.
- 3) Infrastructure: activities, resources, partners.
- 4) Financial viability: revenues and costs.

Figure 3 below shows a complete Business Model Canvas, where all the building blocks are located as pieces of a puzzle. This overall picture further helps in conveying the importance of the connection among the different elements to understand the logic of how a company creates and delivers value. In the next section, I will briefly analyse each building block singularly.

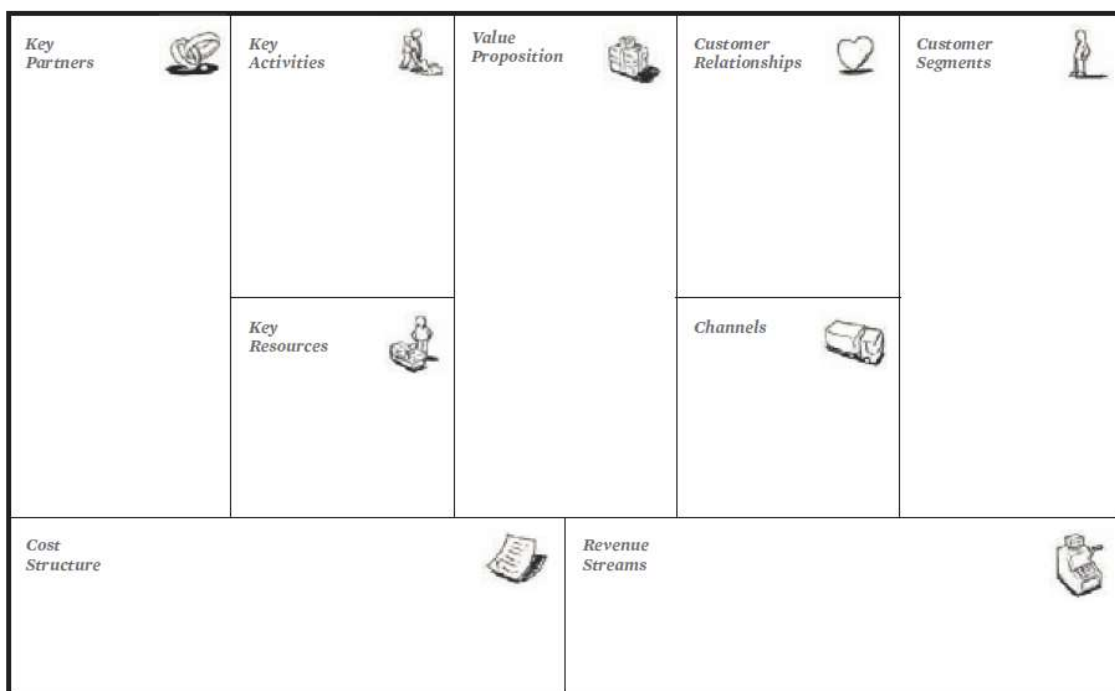


Figure 3. The Business Model Canvas. Source: Osterwalder & Pigneur (2010)

1.2.2 Building blocks

In the description of the different building blocks, I will follow the 4 pillars structure outlined above taken from The Business Model Ontology (Osterwalder, 2004). The contents of each block are taken, instead, from Osterwalder and Pigneur (2010).

Customers segments

This building block refers to the group or different groups of people and/or organizations that constitute the target of the company's offer. To better satisfy customers, it is a common and effective practice to divide them into segments according to criteria like common needs, behaviours, preferences, and other attributes. Once this classification is

made, the company should decide whether to target one or more segments and which ones to address. It might seem obvious, but the choice constitutes a first crucial point. In fact, the decision about which segments to target automatically means to choose also which segments to ignore. Thus, managers must carefully evaluate the relative opportunity costs of the alternatives before deciding upon one or more segments. The fundamental decision about this building block determines how the entire business model will be structured. For instance, a business model based on a niche market will be structured in a totally different manner compared to a diversified customer business model which serve two or more unrelated customer segments. This latter, in turn, will be deeply different compared to business model aimed at serving a mass market, where there is no distinction between groups of customers. To conclude, choosing which customer segments to target is a highly relevant task, since a strong understanding of customers' needs is a major prerequisite of a successful business activity.

Customer Relationships

The name is quite self-explanatory and indicates the types of relationships a company established with the customer segments chosen according to the previous building block. The relationship can range from personal to automated and may be driven by different motivations. For instance, customer acquisition signals a relationship aimed at acquiring as many clients as possible, usually with aggressive market strategies. Once clients are acquired, companies often switch to a relationship aimed at retaining them. It is important to carefully choose how the company wants to relate itself with its clients, since different relationships and relative strategies affect the overall customer experience. Examples of relationships range from personal assistance/dedicated personal assistance, where human interaction plays a central role, to self-service and automated services where there is no direct relationship with customers. Other types of communication, which are nowadays popular, are communities of users, where members can communicate with each other and exchange knowledge and ideas, and co-creation approaches, where companies try to include clients in the value creation process.

Channels

This building block describes how a company delivers value to its customers. In other terms, through communication, distribution, and sales channels the company reaches the customers and deliver its Value Proposition (see below). In general, channels perform

different functions that contribute to the customer experience: firstly, they create awareness among clients about the company's offer and allow for an evaluation of the Value Proposition. Secondly, they allow customers to physically access the products or services of the company, so they are the actual tool for a company to deliver value. Finally, channels allow the company to provide post-purchase customer support. Essentially, we can distinguish two broad categories: owned channels, which are further distinguished into direct and indirect channels, and partner channels, which are indirect. The choice between the two is relevant and has consequences on the financial blocks of the business model. In fact, an owned channels guarantees higher margins, yet it implies greater operating costs. Conversely, a partner channels implies lower margins, yet it allows to expand firm's reach and to benefit from the partner's strength. The key stratagem is to find a balance between the two types such that both the firm's revenue and the customer experience are maximized.

Value Proposition

Both conceptually and graphically, this building block is at the heart of the business model. Generally speaking, the Value Proposition is the reason why customers chose a company *in lieu* of another one. It describes the offer of the company, meant as the bundle of products and/or services that represents the solution to a customer problem and satisfies a customer need. The bundle generates value for a specific customer segment. Consequently, the Value Proposition can be intended as an aggregation of different bundles that satisfy the needs of the different customer segments chosen as the company's target. There are different levers to create and increase the value delivered to customers: offering something that satisfy totally new needs (newness), improving product or services performances, customizing the offer to satisfy specific needs of individual customers or particular customer segments. Offering the same value at lower prices, working on the design of products, investing in the brand identity, creating convenient and easy-to-use products are other possible levers to create value and enrich the Value Proposition.

Key Activities

The correct functioning of the business model depends on the most important activities performed by a company. Hence, this building block is of crucial importance in the model, since key activities are required to create and offer the Value Proposition, as well as

deliver it to the market to reach the customer segments. Moreover, activities related to the maintenance of customer relationships, revenue generation, distribution are all included in this building block as fundamental activities that allow a company to operate successfully. We can identify 3 major categories of key activities:

- 1) Production: activities related to designing, making and delivering products in significant quantities or of greater quality.
- 2) Problem solving: activities concerning the development of new ideas to better satisfy customers. Activities belonging to this category may be knowledge management and training, for instance.
- 3) Platform/Network: some business models are designed with a platform, included in the key resources. Consequently, the company must perform a specific set of operations related to the maintenance, management and promotion of such platforms (networks, matchmaking platforms, software, brands).

Key Resources

Key resources are the critical assets required for an effective functioning of the business model. This building block is strictly connected to the previous one, since in order to use a set of resources you need specific activities. Conversely, to perform key activities you need the relative resources to work on and with. Multiple differentiations exist concerning resources and their classification depends upon the type of business model the company is adopting. Firstly, resources can be owned by the company or leased or acquired from key partners. Secondly, resources can be physical (facilities, machines, buildings...), intellectual (brands, copyrights, patents, knowledge...), human, financial (cash, lines of credit, bonds, stocks...). Among the others, intellectual resources, despite being difficult to develop, if successfully created are a major source of competitive advantage and value creation.

Key Partners

Business models usually involve the construction of a network of partnerships with other actors at different stages of the value chain. Different reasons can govern the decision to create alliances: business model optimization, exploitation of economies of scale, risk and uncertainty reduction, acquisition of resources/activities which are not possessed by the company. Moreover, we can point out 4 types of partnerships: strategic alliances between

non-competitors, cooptation (strategic partnership between competitors), joint ventures, buyer-supplier relationships to guarantee the reliability of the supplies.

Revenue Streams

This building block shows the revenues earned by a company through its activity. To analyse this building block, it is important to consider customer segments. In fact, a correct understanding of the value each customer segment is willing to pay explains the generation of one or more revenue streams. Essentially, there are 2 broad kinds of revenue streams: those deriving from transactions made by one-time customer payments and those which are recurrent. These latter derive from ongoing payments either to deliver products/services to customers or to provide post-purchase assistance. Specifically, revenues can be generated through asset sale, usage fees, subscription fees, lending, renting, leasing, licensing, brokerage fees and advertising. Another important aspect to consider is the pricing mechanism used to determine the revenues, since different mechanisms have substantial influence on the result. There are two different pricing mechanism: fixed and dynamic pricing. The former consists of a set of predefined prices based on static variables: prices for individual products/services, prices related to specific features of the Value Proposition or of the customer segment, prices related to the quantity purchased. The latter, instead, involves a change in the price related to market conditions. Dynamic pricing includes negotiation between two or more parties, yield management, where price is based on inventory and time of purchase, real-time market, where price is based on supply and demand, and auctions.

Cost structure

All the activities performed by the company generate costs. Once key resources, activities and partners are defined, it is already possible to have an approximation of the amount of costs implied in the activity. However, it is important to carefully analyse the structure of costs and their behaviour. Therefore, the distinction between fixed costs and variable costs, together with the existence of economies of scale and/or scope becomes relevant. We can identify 2 main cost structures that group many existing business models: cost-driven and value-driven. The former focuses on minimizing expenses through low-cost Value Propositions and heavy reliance on outsourcing. The latter focuses more on value creation, with a consequent smaller concern about cost reduction. Value-driven business

models are usually denoted by Premium Value Propositions with highly customized offers.

1.2.3 From a static view to a dynamic perspective

Looking at the whole canvas, a detailed graphical representation of the company is available. Through the different building blocks, it is possible to infer how a company works and how it is structured, following the general definition of business model according to which the model should emphasize the architecture and the processes of an organization. An interesting point arises here: it could seem that the business model is a sort of snapshot that depicts the company at a specific point in time (Osterwalder, et al., 2005). In fact, the canvas, together with other conventional business model representations, basically lists and organizes the main elements (building blocks) to show how an organization operates. Such static view prevents entrepreneurs from framing the complexity, uncertainty and unpredictability of the business environment and limits the possibility to see alternative competitive solutions starting from the existing architecture. Since the rise in popularity of the business model topic from the 90s, more and more scholars tried to add a dynamic view to the analysis, not only by emphasizing the importance of the interconnections between building blocks, but also how those relationships can be altered over time. Companies continuously modify, change, refine their business models, even experimenting alternative solutions (Baden-Fuller & Morgan, 2010). Endogenous and/or exogenous events can alter the linkages between different building blocks and can influence processes, activities, partners. In other terms, such events can alter both the contents of the building blocks themselves and the relationships among them. As a result, business models can be either modified, for example by revising them or extending them to include new activities, or they can be totally reinvented following disruptive events and innovation (Wirtz, et al., 2016). The literature identifies two major classes of business model modifications: Business Model Adaptation (BMA), concerned with adapting strategic settings to external phenomena in order to guarantee economic sustainability of the firm on the medium-long term, and Business Model Innovation (BMI). This latter involves a radical reconfiguration of the firm's architecture to respond to the external events (Peñarroya-Farell & Miralles, 2021).

Covid-19 and the consequent deep crisis represent strong forces that pushed many firms to modify even substantially their business model in order to survive. In an uncertain and unpredictable environment like the one created by the pandemic, arising opportunities

may be exploited by implementing emergent strategies through business model modifications. In other terms, business models must be seen as agile tools that can be rapidly shaped to take advantage of opportunities (Cosenz & Noto, 2018). It is worth raising a warning: the static view of business model must not be discarded in favour of a dynamic perspective. The two points of view are not mutually exclusive and should be rather integrated and balanced. On the one hand, in fact, the static view allows us to understand how a company is currently working and study the relationship between existing architecture and performance; on the other hand, the dynamic view deals with the matter of how to change the actual configuration to better exploit opportunities and to better compete in rapidly evolving environments (Demil & Lecocq, 2010).

In the next paragraph, I will outline the essential phases of the Covid outbreak introducing some of the impacts on business models highlighted by experts.

1.3 How Covid-19 impacted business models: a first insight

In March 2020, the world has been hit by one of the hardest pandemics ever experienced. With the outbreak of Covid-19, almost the entire planet was pushed toward taking extreme measures to contain the rapid spread of the infection. China was the starting point of the pandemic where a completely new virus called Sars-Cov2 was discovered, and the first cases of pneumonia were detected. March 11, 2020, represents a cornerstone for world's history: in this date, in fact, Covid-19 was announced by the World Health Organization (WHO) as a worldwide pandemic. The global diffusion of the virus is considered the largest health emergency of the post-war era. Its novelty and rapid spread had implications not only from a health and scientific point of view. In fact, in addition to the tragic losses in terms of human lives, the pandemic caused unprecedented challenges and dramatic economic issues whose consequences are still ongoing (Deloitte Private, 2020).

1.3.1 Covid-19: a Black Swan?

Before going deeper into the economic implications and impacts on business models brought by the pandemic, it is worth analysing the event itself through the lens of useful metaphors introduced in the modern literature on uncertainty and risks. When the first lockdowns were implemented, with the consequent closures of shops and firms, workers around the globe experienced months of uncertainty about the future. A totally unexpected event had totally blocked the global economy creating significant economic effects, affecting social and professional lives of people. Right after the lockdowns,

scholars started to publish articles and essays analysing the phenomenon and classifying the pandemic as a Black Swan. The term was introduced by philosopher and mathematician Nassim Nicholas Taleb in his book “The Black Swan” (2007). The name was given after an ancient saying according to which black swans did not exist. The discovery of the first example of such bird in Australia in 1697 gave the input to the idea that something perceived as impossible might prove to be true in an unknown future. Taleb defines a Black Swan event as a phenomenon that satisfies the following 3 conditions:

- 1) It is totally unexpected. Hence, there is no past recall of anything similar or nothing points to its possible existence.
- 2) It brings heavy consequences and cause extreme effects.
- 3) We tend to rationalise such event ex-post in what Taleb calls “retrospective predictability”. In other terms, after the fact, we tend to identify elements that, if detected before, could have suggested their existence.

The major challenge of Black Swans is how we cope with them. In fact, as Taleb highlights, humans tend to act as if such events do not exist. Moreover, scientists acted for decades under the false belief that they had all instruments to measure uncertainty and to predict the unexpected (Taleb, 2007). The pandemic, though, clearly showed the fallacy of those beliefs. However, numerous experts and Taleb himself, do not classify the pandemic as a Black Swan. They rather label Covid-19 crisis as a Gray Rhino. This metaphor was created by risk expert Michele Wucker and published in the book “The Gray Rhino” (2016). It refers to events that bring extreme impacts, but which are “highly obvious, highly probable, but still neglected” (Wucker, 2016). Comparing the two definitions, the difference is quite deep: on the one hand, Black Swans are totally unpredictable. On the other hand, Gray Rhinos are totally predictable, yet conveniently ignored. If we look at how governments dealt with the spread of the virus, starting from the Chinese one, the Gray Rhino metaphor seems to be more fitting to describe the pandemic. The New York Times (2020) effectively synthetises the escalation of events. When the first dozens of cases were detected in the province of Wuhan in December 2019, the virus was still unknown, and doctors were not aware of the magnitude of the infection yet. By the end of December cases were growing rapidly, but the Chinese government avoided to publicly alert the international community until the 31st of December. Furthermore, the government diminished the gravity of the problem by

defining the disease as “preventable and controllable”. By that time, thousands of people were travelling from and to China contributing to the rapid spread worldwide. Also, when China started to apply restrictive measures, international trips were still going on everywhere else. The consideration of the Covid-19 infection as a “Chinese problem” that could never reach European boundaries lead to late responses from governments of different countries. This shows how the threat was clearly visible, yet conveniently ignored not to penalise the economy of countries. A further example shows how the risk of a pandemic could have been predicted or at least considered to contain the consequences. Singapore, in fact, already in 2014 created a document called “Moh pandemic readiness and response plan for influenza and other acute respiratory diseases” where all national prevention strategies were outlined in readiness for a potential future pandemic (Ministry of Health Singapore, 2014). The existence of this document further reinforces the idea of the pandemic as a Gray Rhino. The distinction between Black Swans and Gray Rhinos is not a pure philosophical exercise, it matters for its practical implications. Drawing from Wucker, too many crises are labelled as Black Swans. If we start to view risks as Gray Rhinos, it means that we can see them in front of us and we can act consequently. This has fundamental implication for business activities: companies must act with full awareness of the existence of Black Swans that could suddenly alter economic conditions and working activities. In addition, companies must prepare detailed crisis management plans where structured and predefined sets of guidelines and procedures are described with the goal of effectively respond to crisis and harmful events. Such plans are requisites to go through the different phases of crisis management, from responding to events to recovering and thriving again (Deloitte Private, 2020). It is not a matter of planning every small detail, but to be both operationally and, above all, mentally prepared to react (Bagnoli, 2020).

1.3.2 Short term impacts and long-term structural changes

In the past two years, scholars and experts published numerous studies about expected and actual impacts of the pandemic on business models. By reading the articles available, 3 major impacts seem to be the most relevant, being the most cited and discussed: supply chain disruption, digitalization and the steep rise of e-commerce, revenue losses. Here below, I briefly expose and analyse each one of them.

Supply chain disruption

As previously stated, the rapid spread of Covid-19 caused serious consequences health-wise by infecting millions of people and filling hospitals that could not face the demand for intensive care anymore. Moreover, the global economy has been damaged due to restrictive measures implemented by local governments to contain the spread of the infection. Even if different policies have been followed all over the world, there are some common actions undertaken in various countries that had similar effects on economies and business models. Above all, lockdowns had dramatic impacts, since firms closed, and people were forced to stay home with an immediate consequence on multiple levels of supply chains. Intuitively, the magnitude of the effects on supply chains is different from sector to sector, making it difficult to generalise without simplifying certain aspects. Some sectors such as the agricultural one suffered from labour shortage during lockdowns and, once this drastic measure was over, the difficulties related to social distancing caused significant issues in crop management (Barman, et al., 2021). Other industrial sectors like the clothing and fashion one paid the consequences of a high concentration of suppliers. Reliance on few actors for the supply of raw materials constitute major risks in periods of uncertainty, as proved by the current pandemic (Sumarliah, et al., 2021). Similarly, strategies to cut costs like outsourcing the majority of production activities and settling production plants in countries with low-cost labour (offshoring) revealed to be failures. Other disruptions affected everyday operational activities, with companies struggling to guarantee the respect of safety measures to their workers in production sites. For most commercial activities, lockdowns represented a further challenge due to the impossibility to deliver products or significant delays in the transport system (Mussell, et al., 2020).

An interesting example that offers different views on various aspects of supply chain disruption after Covid-19 is the automotive sector. Companies working in the automotive sector faced significant supply chain disruptions: lower volumes of sales, changings in customer purchasing habits, increased costs and supply issues. As already mentioned, such disruptions touch different stages of the supply chain, from upstream to downstream activities. Looking at the upstream direction of the chain, one of the biggest problems companies had to face was the shortage of components. In fact, Covid fostered a worrying lack of stocks of raw materials. Due to the extreme reduction of consumption that followed the closure of non-essential activities, many firms in different sectors started to purchase raw materials and components to be stocked for future needs. Consequently,

after some months, producers tried to get rid of those stocks before buying new materials from suppliers and started to slow down production processes. When demand suddenly came back to normal rates many sectors like the automotive one faced a lack of stocks (Minenna, 2021). In addition, the auto industry was particularly penalised by a shortage of semiconductors, which forced carmakers to cut or even stop production at some of their production plants. The chip shortage was a direct consequence of the steep rise in demand for personal computers and other electronic devices, since both students and workers had to stay at home during Covid lockdowns and those were the only tools to ensure a continuity in their respective activities. For example, among others, Nissan suspended its production in the UK because of supply chain disruption and reduction in the demand for cars. Daimler cut European production because of supplies shortage. Similarly, government restrictions, supply chain disruptions, and falling sales forced Toyota to momentarily stop its European production (Denniston, et al., 2020).

The chip industry is a particularly interesting case also to describe a critic phenomenon that invested supply chains in the last decades. As already stated, modern global supply chains often rely on offshoring with a high concentration on few countries. In the last 20 years, global exports of semiconductors grew by 305% since such components are used in numerous production processes. Some of the countries that previously were leaders in this trade, such as the USA, started to decrease their share as a consequence of the rise of countries like Hong Kong, China, Taiwan and Korea. These latter shifted from a market share of 20% in 2001 to a share of 61% in 2020 (Minenna, 2021). Hence, the issue of geographical and economic concentration becomes crystal clear. When the Sars-Cov-2 crisis started in China and spread in Asia, the closure of producers of semiconductors caused several challenges to multiple sectors, among which lies the car industry. The automotive sector's supply chain has been disrupted by the pandemic especially in the upstream direction. It is worth underlying, though, that the issues related to the supply of materials that block the very first stages of production have repercussions on the entire chain with a multiplier effect. On average, reductions in downstream activities due to bottlenecks in the upstream activities were 3 to 5 times bigger than the initial impact (Minenna, 2021).

Depending on the field of activity the magnitude of the impacts of the pandemic on supply chains was different. In addition, when pandemics develop in non-simultaneous manner and countries adopt different measures at different point in times, supply chains suffer accordingly (Sumarliah, et al., 2021). In modern times, supply chains are more and more

global. During Covid-19, various markets and governments responded in different ways and times to the crisis. Companies relying on global supply chains had to adapt continuously to new uncertain conditions of markets (Accenture, 2020).

Digitalization and e-commerce

Covid-19 decisively accelerated the digitalization processes of many firms. According to McKinsey Global Survey, companies accelerated their digital transition in terms of customer and supply chain interactions, as well as internal operations, by three to four years (McKinsey Global Survey, 2020). One of the most significant shifts brought about by the pandemic is remote working. In a quite short time, almost all companies, both from the public and private sector, implemented remote working for all employees whose job allowed to do so. In this realm, digital technologies are not just seen as a mere cost-cutting tool. Rather, the shift represents a strategic step to remain competitive in the business environment created by the pandemic. Digital technologies allow for experimentation, innovation and better response to changed customer expectations. Moreover, in many cases, remote working boosted productivity compared to pre-pandemic levels, and is consequently likely to be a long-term structural change (McKinsey & Company, 2021). Accelerations in digitization pervaded not only pure administrative activities, yet also major core internal operations such as back-office, production, and R&D processes (McKinsey Global Survey, 2020). The pandemic deeply affected customer needs and habits; our experience as consumers, workers, citizens, our behaviours changed permanently. Due to the social distancing measures, customer started to prefer e-commerce platforms to purchase goods. As a consequence, companies had to rapidly work on their IT systems, brand, marketing policies and strategies to adapt to these new trends. It was fundamental, in fact, to maintain and even improve the quality of services provided to satisfy customer needs and maximise their experience.

According to a survey conducted by GoDaddy Inc. on a sample of British companies working in various fields, a fifth of the interviewed micro-businesses developed an online platform for the first time during the lockdown. In addition, more than half of the interviewed businesses who already had a website integrated it with additional content, increased their social media interaction and developed an online store. In general, 48% of the sample improved in the usage of digital platforms and technologies, while 45% improved their knowledge of social media tools (Costello, 2020).

The online activity can either represent a support to brick-and-mortar shops or, sometimes, can even become a substitute of the former selling facilities. For the first scenario, let us look at the case of Knoop's. Knoop's is a family-run chocolate factory based in Rye, England. The passion and dedication put into the research of the perfect flavours and percentages of cocoa in the products, bolstered the activity that opened several shops over the years. Covid-19 and the consequent lockdown forced the entrepreneurs to innovate practically overnight to stay competitive in a totally new business environment. Hence, they decided to launch a range of products dedicated to online purchases and started to commercialise "Knoopifer", a hot chocolate machine that allows customers to enjoy their favourite chocolate-based drinks comfortably at home. In other terms, they developed a formula such that customers can enjoy an experience at home that is similar to the one they would have in the shop, by having the possibility to choose different flavours and types of products from the online catalogue.

For the second scenario, the case of Express, one of the biggest fashion retail stores, represents a fitting example. A CNBC report reveals that the company will close 100 shops all over the USA by 2022 due to cost-cutting necessities. The closure of brick-and-mortar facilities goes in favour of an increase in e-commerce. Similarly, Forever 21, another famous American fashion retailer, closed its retail stores in favour of e-commerce. These two businesses responded to the pandemic by changing their business model from being essentially based on retail stores, to being completely online based. Other companies that followed similar paths, besides using already existing channels like Amazon, often developed their own websites.

Digital technologies are major strategic tools to guarantee business continuity even in periods of crisis and uncertainty. Hence, once the threat of the current pandemic is finally over, companies will have to maintain the infrastructure aware that such changes in customers' needs and experiences will remain. Drawing again from the above-mentioned survey on British firms, three quarters of the respondents say they will continue using their new online channels and will keep the changes made to products and services (Costello, 2020). Companies will have to take them into considerations in their Value Proposition from now on (Accenture, 2020).

Revenue losses

The literature quite unanimously points out how a straightforward effect of the pandemic has been the revenue losses. The pandemic and the relative restrictive measures caused a

sort of vicious cycle: due to lockdowns people were no longer working. Lots of workers lost their job, with a consequent dramatic reduction of available money. Governmental subsidies were not always enough to guarantee a satisfying compensation. Drawing from macroeconomics basics, we know that if consumers have less earnings, they will purchase less. This will result in lower income for activities, which, in turn, will reduce their investment activities¹. Intuitively, this chain effect has been worsened by the fact that lockdowns forced people to stay at home, thus reducing even more the chances to purchase other goods than essential necessities. In brief, companies had to face sales and revenues loss, together with cost increases. Those elements, in turn, caused challenges in terms of liquidity in the short term to face necessary investments to survive (Accenture, 2020). Intuitively, the mechanism that governs the chain effect described above is one of the major reasons behind the strong push toward digitalisation and e-commerce. In fact, creating online platforms to offer alternative purchasing solutions to clients in order to allow them to enjoy the products anyways is a way to offset the huge losses deriving from the closure of physical stores. To give an idea of the losses registered in the various sectors, a set of examples at the European level follows. The car industry registered a loss in units sold of -23.7% in 2020 (ACEA, 2021). Looking at the European aviation, airlines lost 22.2 billion € and airports lost 33.6 billion € in 2020 (Eurocontrol, 2021). For what concerns the construction sector, during the first wave of Covid-19 construction sites were operating 25% to 30% below their normal capacity in Europe. The situation was very diverse from country to country, though (de Vet, et al., 2021). The food and beverage industry proved to be quite resilient as I will explain in the Chapter 2. Overall, the reduction in the food and drink industry was much lower compared to the total manufacturing production, together with a smaller reduction in terms of employment rates compared to other sectors (de Vet, et al., 2021). Reports on the textile and clothing industry reveal an overall estimated loss of 50 billion € of turnover (Euratex, 2020). Finally, the European cultural and creative industry suffered a lot since, especially during the first wave, most cultural activities were forced to close. Available sectoral data show a net decrease in revenues by 31%, equivalent to 199 billion €, in 2020. One could argue that the sector saw some profitable alternative revenue streams in online platforms. Even though this is for sure an element to consider in the analysis, it is also important to note

¹ I am referring to the second part of the equation of the aggregate demand for goods: $Y = C + I + G$

that the gains generated by the new wave of digital consumption trends are far from compensating the losses generated by the absence of live events (de Vet, et al., 2021). From this first insight on the major impacts of Covid-19 on firms, it is evident that almost all the building blocks of the canvas have been touched. Supply chain disruption affected key partners, key activities, key resources, distribution channels, revenues, and costs. Changes in customer needs and digitalization affected customer segments, customer relationships, key partners and key activities, value proposition. Another impact of digitalization is remote working, which intuitively altered key activities and key resources of the company, introducing the need for investments in data security and cloud data storage. Hence, the pandemic forced companies to radically renovate and innovate their business models. Short term responses to the immediate impacts of the crisis translated into deep changes in business models. Therefore, most of such modifications are likely to be long term structural changes. All the above observations must be carefully interpreted. A detailed and precise analysis must necessarily be conducted case by case since every sector (and every company) can be impacted with different magnitudes and can react in different ways. For example, if on the one hand, commercial companies suffered from restrictive measures, online service providers and video-call platforms benefitted from the situation. In addition, it is important to distinguish and analyse case by case since the success of a company depends on its flexibility, on the management's ability to foresee, anticipate, and promptly react to external changes. For instance, many companies had the promptness and ability to quickly convert some already in-house machineries to produce hand sanitizer. Such operations are made possible by the coexistence of a multitude of factors: availability of equipment, flexibility, reactive management. The absence of these elements in a company could determine its failure even compared to other companies working in the same field that had the rapidity and capability to exploit the contingencies. An over generalisation could cause misinterpretation about the real impacts of Covid-19 on business models, with consequent imprecise or even wrong analysis based on erroneous inferences.

2. The agri-food sector in Italy

2.1 Panoramic view of the industry

In this chapter, I will describe the agri-food sector in Italy starting from a general definition and showing some relevant data to frame the Italian scenario. I will then analyse the major trends, highlighting the performances during and after Covid-19. A final section briefly addresses how the current war between Russia and Ukraine is affecting the sector.

2.1.1 *From the origins to modern times*

Before looking at numerical data, let us define what we mean by agri-food sector. Following the general distinction offered by economic theory between sectors, agri-food activities mainly constitute the primary sector. Oftentimes, it is confused or associated with agriculture. However, this association generates a reductive definition of the sector, since it ignores relevant components which contribute to the overall performances of the industry. In fact, agri-food industry includes agriculture, forestry, fishery, and all industrial activities related to processing and distributing food products. On a broader spectrum, we define agri-food system as the part of the economic system that satisfies the food needs of a country (Sodano, 2004). Ideally, we can divide the agri-food supply chain in two big portions: the production side and the distribution one. The former includes all companies concerned with agricultural products procurement and elaboration. Hence, both agricultural activities and companies working in the food industry are part of this first portion. The latter collects all the actors involved in the distribution of final products. Therefore, retailers and large-scale retailing companies are part of this portion of the supply chain. Nowadays, agri-food is characterized by relatively long supply chains with multiple intermediaries (Mussell, et al., 2020).

It is worth briefly looking at the historical evolution of the agri-food system to better understand the peculiarities of the sector and the current structure of the system. We can identify 7 phases (Sodano, 2004):

- 1) Native phase → at the beginning, production and consumption were only focused on a local basis and consumption was very dependent upon the productive capacity of the fields. There were not real trade flows, besides primitive forms of exchange and/or gifts.
- 2) First commercial flows → around 15th and 16th century, while maintaining exchange relationships, first commercial trade flows started to develop on a

territorial basis. Thanks to the development of maritime trade in the 16th century, people started to trade mainly spices internationally.

- 3) Pre-industrial phase (16th/17th century) → increasing specialisation of local productions strictly related to the urban development and gradual improvement of production processes thanks to the first signs of the industrial revolution. Primitive developments of the infrastructures and transport systems allow for the birth of the first distribution activities.
- 4) Industrialisation (17th/18th/19th century) → the industrial revolution of the 18th century pushed many people to leave the countryside in favour of cities and urban areas. This caused significant modifications in the configuration of the agri-food system. The demand radically changed, and trade flows increased within and beyond regional boundaries.
- 5) Modernisation (first half of 20th century) → in this phase, new techniques to preserve and transform agricultural products were developed and started to become widespread. Increased mechanisation and industrialisation of agriculture, with the introduction of chemical fertilizers, together with a strong reinforcement of international trade, characterise this phase. Moreover, consumption trends tend toward mass consumption.
- 6) Internationalisation (80s/90s) → this title could cause some misunderstandings. In this instance, it is not referred only to commercial flows. Instead, in this phase, a strong standardisation of preferences and consumption trends internationally deeply modified the sector. Distribution underwent profound changes with the development of foodservice. In addition, the steep rise of big multinational companies both on the production side and the distribution one enlarged the boundaries of the agri-food markets. Consequently, an economic environment marked out by high concentration of market shares in few multinational companies emerged.
- 7) Globalisation (from late 90s and on) → contradictory phenomena characterise this phase. If on the one hand we experience heavy globalisation in consumption, on the other hand we strive to defend typical local products. Similarly, large reliance on chemical products and biotechnology in agriculture seems in contrast with the development of biological agriculture. Finally, differentiation, which implies higher costs and, in turn, higher prices, coexists with low-cost preferences in consumers.

New trends, changes in consumer preferences and habits, technological advancement, stronger push toward globalisation continuously modify supply chains and the structure of the sector in general. Covid-19 also affected the industry, introducing opportunities and threats never experienced before. The resulting scenarios are of particular interest and require the ability to be resilient not only in turbulent times, but in an ever-changing sector where political, social, technological and environmental factors can significantly alter the layout of the economic scenario.

2.1.2 Statistics and values

To better frame the agri-food sector, let us look at some relevant data both on a European level and on an Italian level. For the sake of clarity, I will refer to data from 2019 first, in order to draw a profile on the pre-pandemic scenario and quantify the values isolating the impacts of the pandemic. Moreover, looking at data from 2019 allows for the isolation of the effects of Brexit, which further brought significant changes in the international economic environment. I will present some post-pandemic data in the second part of the paragraph.

Pre-pandemic scenario

In 2019, the European production value at current prices was 450 billion €, whereas the added value reached 192 billion € (EUROSTAT). In 2019, the export value of agri-food products reached a total of 151.2 billion €, registering an increase of 10% compared to the same data of 2018. Imports' value has been equal to 119.3 billion €, which corresponds to an increase of 2.5% compared to 2018. Hence, the overall value of EU agri-food trade in 2019 was 270.5 billion €. The major destinations of the European food trade were USA, China, Switzerland, Japan and Russia. These destinations accounted for over 40% of total EU agri-food exports (European Commission, 2020).

Italy is synonym of excellence in the agri-food industry and is among the world's top player. According to CREA based on ISTAT estimations, agri-food market represents approximately 15% of the Italian GDP, with more than 8% achieved by food industry alone and 4% of added value in agriculture (CREA, 2021). National food industry has significantly grown over the last decade, reaching 58 billion € of production value and registering a growth of more than 12% in terms of added value, reaching a value of more than 31 billion € in 2019 (Ismea Mercati, 2020). This last data allowed Italy to rank first in the European ranking for agricultural added value, surpassing France which previously

detained the position. Of the estimated EU total of 192 billion € of added value, Italy contributed 16.8%, France 16.6%, Spain 14.1%, and Germany 11.2%. Agri-food is, therefore, one of the most important driving sectors of the Italian economy, covering the second place in the ranking after the engineering sector. Looking at the production value composition more in depth, 4 main areas can be identified: crops production, farming, secondary activities, and support activities. In Figure 4 below, the graph shows how much each component weighted in the composition of agri-food production in 2019. In particular, crops accounted for 50% of the total, whereas farming for 28%. Support activities, which include maintenance of fields, first processing of harvest and support to farming among others, accounted for 12%, while secondary activities (transformation of agricultural and dairy products) contributed for the 10% of the total.

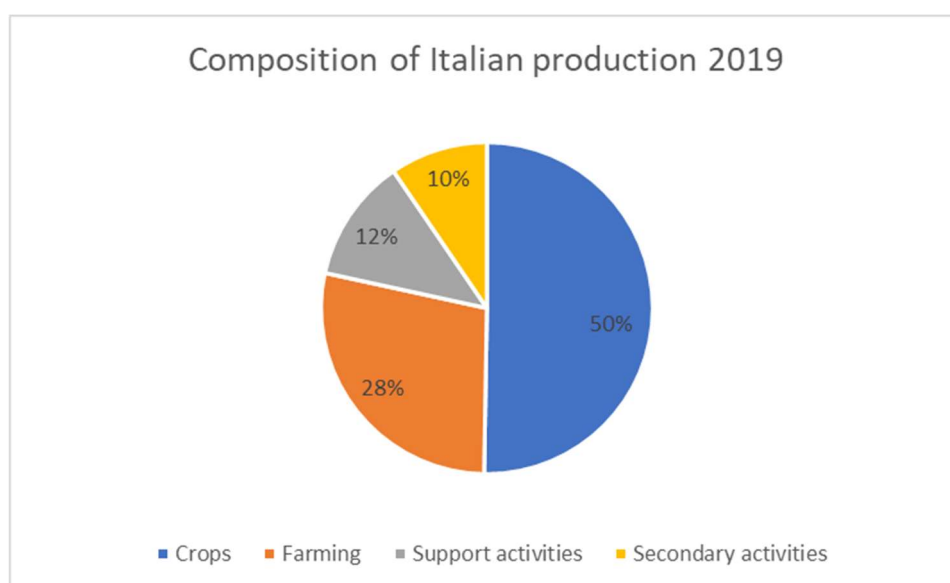


Figure 4. Composition of Italian production in 2019. Source: personal elaboration from Ismea Mercati

As shown by the Table 1 below, in 2019 the revenues have been equal to 145 billion €, which corresponds to an increase of 3% compared to 2018. This further confirms the leading role of the sector in the composition of the national GDP. The overall industry purchases and elaborates 72% of national raw agricultural products, with 56,000 companies operating in the sector (6,850 with more than 9 employees) and a total number of 385.000 employees.

Besides being among the most important sectors for the domestic economy, agri-food is one of the major drivers of Italian economy abroad. In fact, with an export value of 35.4 billion € in 2019, and a positive trade balance of 13.5 billion €, Italy positions itself as the

“Made in Italy” world ambassador, also considering that 80% of the agri-food export is composed of prestigious Italian industrial brands (InfoMercatiEsteri, 2020).

THE BASIC FIGURES OF THE ITALIAN FOOD INDUSTRY						
<i>(values in euro and % changes on the previous year)</i>						
	2014	2015	2016	2017	2018	2019
REVENUE	132 billion € (+ 0.0%)	132 billion € (+ 0.0%)	132 billion € (+ 0.0%)	137 billion € (+ 3.8%)	140 billion € (+ 2.2%)	145 billion € (+ 3.6%)
PRODUCTION (*) (quantity)	+ 0.6%	- 0.6%	+ 1.1%	+ 1.7%	+ 1.1%	+ 3.0%
NUMBER OF INDUSTRIAL ENTERPRISES	6,850 (with over 9 employees)	6,850 (with over 9 employees)	6,850 (with over 9 employees)	6,850 (with over 9 employees)	6,850 (with over 9 employees)	6,850 (with over 9 employees)
NUMBER OF EMPLOYEES	385,000	385,000	385,000	385,000	385,000	385,000
EXPORTS	€ 27.1 billion (+ 3.5%)	€ 29.0 billion (+ 6.7%)	€ 30.0 billion (+ 3.6%)	€ 32.1 billion (+ 7.0%)	€ 33.6 billion (+ 4.7%)	€ 35.4 billion (+ 5.2%)
IMPORTS	€ 20.4 billion (+ 4.8%)	€ 20.8 billion (+ 2.0%)	€ 20.7 billion (-0.3%)	€ 22.2 billion (+ 6.0%)	€ 21.9 billion (-1.1%)	€ 21.9 billion (-0.3%)
BALANCE	€ 6.8 billion (+ 0.0%)	€ 8.2 billion (+ 20.6%)	€ 9.3 billion (+ 13.4%)	€ 9.9 billion (+ 7.0%)	€ 11.7 billion (+ 18.2%)	€ 13.5 billion (+ 15.4%)
TOTAL FOOD CONSUMPTION	227 billion	232 billion	236 billion	243 billion	246 billion	249 billion
LOCATION WITHIN THE ITALIAN MANUFACTURING INDUSTRY	2nd place (13%) after the engineering sector	2nd place (13%) after the engineering sector	2nd place (13%) after the engineering sector	2nd place (13%) after the engineering sector	2nd place (13%) after the engineering sector	2nd place (13%) after the engineering sector

Table 1. Italian pre-pandemic performances in the agri-food sector. Source: www.infomercatiesteri.it (Federalimentare on Istat data)

Post-pandemic scenario

Covid-19 dramatically changed the world and had a great magnitude on economies worldwide. Another event that had great influence on international markets is Brexit. The decision of Great Britain to exit from the EU was taken through a referendum in 2016 and was officially announced in March 2017. After the general elections of 2019, the British government formalised the provision which became effective on 31st January 2020. This date represents the starting point of a long period of transition, where EU and Great Britain discussed their future relationships both politics-wise and economic-wise. The unfortunate coincidence of the effectiveness of Brexit and the outbreak of the pandemic posed severe challenges to European international markets. Despite Covid-19 and Brexit, though, the agri-food sector on a European level proved to be significantly

resilient, at least for what concerns import and export flows. In this first semester, the value of EU27 agri-food exports totalled 90.2 billion € (almost +3% compared to the first half of 2019). Imports' value, instead, increased by 2.5%, reaching a value of 62.7 billion € (European Commission, 2020). Overall, over the course of 2020, EU agri-food trade (import plus export) reached a level of 306.5 billion € (European Commission, 2020). Looking at the production value and the gross added value in Table 2, the gap between 2019 and 2020 becomes clear: production value shifted from 450 billion € to 414 billion € and gross added value shifted from 192 billion € to 178 billion € (EUROSTAT). Firstly, this is due to the fact that, after Brexit, Great Britain's values are no longer included in the overall results. In fact, as the table below shows, from 2020 values refer to EU-27 instead of EU-28. Secondly, the numbers below in Table 2 reflect also the contractions caused by the restrictive measures, because if on the one hand it is true that lockdowns did not directly affect agricultural activities, on the other hand the impossibility for foreign workers to travel and the closure of firms implied in secondary and/or support activities caused severe challenges. In 2021, the signs of recovery are visible on both values as a reflection of the development of vaccines and a slow come back to normal life.

Description	Countries	2019	2020	2021
Output of the agricultural industry	EU - 27 countries (from 2020)	418.949,59	414.366,93	443.896,36
	EU - 28 countries (2013-2020)	449.774,71	/	/
Gross value added	European Union - 27 countries (from 2020)	180.658,24	177.996,65	184.284,87
	European Union - 28 countries (2013-2020)	192.216,57	/	/

Table 2. Production Value and Gross Value Added of EU. Source: personal elaboration on EUROSTAT

At the outbreak of the pandemic, the Italian government announced the closure of all economic activities and the start of a strict lockdown. Only few industries were allowed to continue their activity and, intuitively, part of the agri-food actors was not directly affected by the restrictive measures being considered as essential. However, companies had to face challenges related to distribution channels, outsourcing and international supplies. For the first time after 2016, the sector lost 1.2% of added value with significant contractions in different sub-sectors such as olive oil production which lost 14.5% (Istat, 2020). Nevertheless, in 2020, Italy confirmed to be the top-ranking European country for added value in agriculture and the third one for production value, with a value of 30 billion

€ and 56 billion € respectively (Italia in Dati, 2021; Istat, 2020). In Figure 5 below, the graph shows the composition of production in 2020. Intuitively, most impacts were registered on secondary activities which shifted from 10% in pre-pandemic period to 8% of the total. Conversely, crops production increased shifting from 50% to 52% of the total production value since, as already mentioned, lockdowns and restrictive measures affected in a less significant manner such activities.

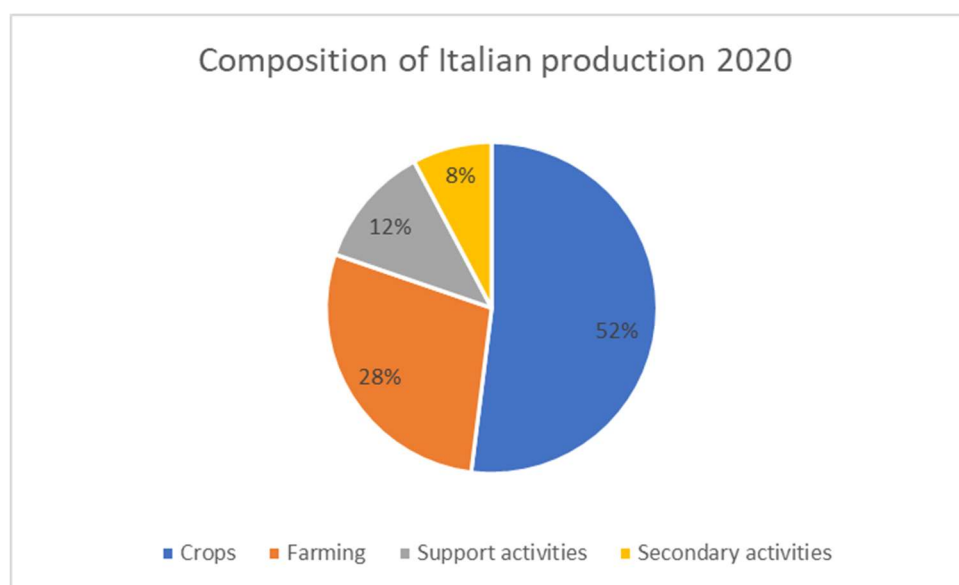


Figure 5. The composition of Italian production in 2020. Source: personal elaboration from Ismea Mercati

According to IsmeaMercati, food and beverages export in 2020 exceeded 46 billion €, mainly toward European countries. In particular, export toward Germany, Belgium and Poland registered positive trends, with +7.2%, + 3.8%, and +5.4% respectively (Business Intelligence Group, 2021). Overall, the Italian agri-food sector proved to be particularly resilient compared to the general average of the economy, despite being hardly hit by the pandemic. According to ISTAT, in fact, the reduction in terms of added value in the agri-food sector is estimated at approximately -8.6% in 2020, compared to an average loss of over -10% in the other economic sectors (CREA, 2021).

2.1.3 Certified quality of Made in Italy agri-food products

According to the office “*Direzione Generale per la Promozione del Sistema Paese*” of the Italian Ministry of Foreign Affairs and International Cooperation (2021), Italy is “the most sustainable country in the agricultural field and the first one in the world for food quality certification”. As a matter of fact, the key elements of the Italian success are the

good quality of products, the strong bond between agriculture and industry, transparency and quality labelling, and the worldwide storytelling about Italian excellence. The superior quality of Italian products is certified through the 3 classes of labels provided by the Geographical Indication System of EU:

- 1) Protected Designation of Origin (PDO) → the quality and characteristics of the products are strictly connected to a very precise and defined production area. Instances of products labelled with PDO are Aceto Balsamico di Modena or Parmigiano Reggiano. This category includes the Italian labels Denominazione di Origine Controllata e Garantita (DOCG) and Denominazione di Origine Controllata (DOC) used for alcohol-based beverages and wines.
- 2) Protected Geographical Indication (PGI) → the products' characteristics are linked to a defined area, but certain production phases can take place in different locations always respecting strict regulations about production processes and procedures. Mortadella di Bologna is an example of a PGI product. This category includes the Italian label Indicazione Geografica Tipica (IGT) used for alcohol-based beverages and wines.
- 3) Traditional Specialities Guaranteed (TSG) → such products do not have any relation with a specific production area (despite originating from particular cities or regions), but their characteristics allow to distinguish such products from similar ones. For example, Amatriciana and pizza napoletana are TSG, since Amatriciana indicates a particular pasta recipe, and pizza napoletana has specific requirements in terms of dough and ingredients that distinguish it from other types of pizza.

In 2015, Italy had 278 quality-certified products, 266 of which were active. This number grew over a period of ten years, starting from 2005. In fact, between 2005 and 2015, PDO, PGI and TSG products shifted from 154 to 278 officially EU certified specialities (Istat, 2016). Almost a third of PDO certified products in the world, namely 822 out of approximately 3,000, belongs to Italy. The resulting value is equal to 15 billion € in production and 8.8 billion € in exports. In 2021, Italy covers the top position in the European ranking for agri-food products (both food and wine) recognized by EU as PDO and PGI, followed by France (Direzione Generale per la Promozione del Sistema Paese. Ministero degli Affari Esteri, 2021).

2.2 Trends and dynamics in the agri-food sector in the pre-pandemic era

In the previous paragraphs, I have already mentioned how Covid-19 had heavy impacts on the global economy, affecting all sectors and, among them, the agri-food one experienced severe challenges. The agri-food industry, however, even before the pandemic was already experiencing numerous trends and phenomena that were impacting the economic environment and were forcing companies to modify and adapt their business models. In this paragraph, I will briefly address some of them, showing how those already existing changes represented challenges well before Covid-19.

2.2.1 New consumer preferences

Over the last decades, sensitivity toward environmental issues has grown exponentially. The problem of greenhouse gas emissions in production processes, the overconsumption of soil and natural resources and the waste of side-products and other resources are concrete themes that also actors working in the agri-food sector must carefully address. It is not only a matter of corporate social responsibility, but it is a matter of business success as well. In fact, consumers are more and more aware of, as well as sensitive to, environmental protection and climate change. This increased cognizance translates into new preferences also regarding food consumption and dietary habits. Animal-based food production is among the activities with high environmental and climate impact, also due to the massive water consumption employed in crop production used for livestock farming. According to some studies, animal food production, especially the intensive one, is more polluting in terms of greenhouse gas emission and soil and water consumption than even the most inefficient agricultural production of fruit, vegetables, legumes, and other plant-based crops (Aschemann-Witzel, et al., 2020). Consequently, demand for plant-based food is rapidly increasing with a correspondent decrement of meat consumption. Generally speaking, “plant-based” is the term used to describe a recent consumer trend of reducing or even eliminating animal-based products in favour of plant-based alternatives. As the definition indicates, there are different conceptions and degrees of “strictness” as far as meat consumption. In general, the term is usually used to refer to veganism or similar diets. Substituting animal protein with plant proteins derived from vegetables, cereals, soy and legumes, seeds, grass, seaweed, and other sources is not only a choice based on environmental issues, but also health-related reasons can govern the decision. Despite the motivation, it is important for companies to be aware of these trends

and to adapt to them in order to diversify their revenue streams and remain competitive. As a matter of fact, data from a research conducted by Coop and published in the report “*Rapporto Coop 2021. Consumi e stili di vita degli italiani di oggi e di domani*” shows that such diets are no longer a niche phenomenon or the result of momentary trends; on the contrary, they are becoming widespread among the population. In 2020, Italy registered an +24.5% in the purchase of plant-based meat substitutes, and a +44% in the sales of ready meals (burgers, plant-based meatballs, etc.) in the first semester of 2021 compared to 2019. Dried fruit and seeds registered a growth of +11.9% and +11.4% respectively. Overall, in the first semester of 2021, sales of vegan and plant-based food reached a level of 312 ml. € in Italy, which compared to the 272 ml. € of the previous year represents an increment of +15%. Together with an orientation toward the reduction of meat in favour of plant-based substitutes, Italian consumers are willing to purchase more Italian local zero miles products, with a particular attention to sustainability (Coop, 2021).

2.2.2 Price volatility and value chains

Value chains in the agri-food sector have different peculiarities that are worth analysing. Looking at the downstream segment of the value chain, it is important to mention some issues related to the maritime transport of products, which constitutes almost 90% of all international trade flows (SRM, 2021). Almost two thirds of the international commercial transport via the sea are controlled by 3 big companies: Maersk, Mediterranean Shipping Company (MSC) and Cosco. Recently, the cited companies and other maritime carriers merged into an oligopoly that controls almost the entire market to optimise their operations and share costs and risks. The direct result is a steep rise of the sea freights' prices, the cost that companies bear to ship their goods abroad. In fact, export and import flows have a cost for companies represented by, among other elements, the rent of containers for abroad shipping. Sea freights increased by 600% compared to 2 years ago and, together with delays in the shipping and congestion of harbours, they represent a severe threat to Italian and international trade (Alpi, 2021). For sure, the pandemic heavily influenced the current situation, but even though in the pre-pandemic era the situation was quite stable, it is worth underlying some facts that signal how this side of the supply chain is very vulnerable to (geo)politics events. First of all, in 2019, Trump threatened to apply very high duties on Chinese imports, with a consequent sudden increase in the demand for goods to be stocked. This translated into a first rise of sea freights' prices and

blocked the majority of the available containers in detriment of European trade flows. Another important fact to mention is Brexit, that forced carriers to ship containers to other European ports, where they are transferred to smaller ships and only then arrive to the UK. The increase of sea freights' prices signals a well-known criticisms of supply chains even in the agri-food industry: the length of the chain itself. Shortening the supply chain by investing in closer countries or even reducing dependence upon a few actors allows to be more resilient to disruptions. In the case of the increase for transport prices via sea, it is urgent for companies to find alternative solutions, perhaps in the form of strategic alliances and logistic networks. Similarly to sea freights' prices, agri-food supply chain has always been characterized by high price volatility, that is unpredictable and unanticipated price changes. The major issue is that those sudden changes have repercussions along the supply chain, from the upstream actors to downstream ones either in an even or uneven proportion. Looking at the former, price volatility represents higher risks for example to farmers who may react by selling lower volumes of output at higher prices and by reducing investments in productive inputs. The latter must diversify their supply strategies to offset the effects that price volatility had on suppliers. Lastly, an increase in the price in the upstream stages usually translates into higher prices for the consumers (Assefa, et al., 2015). In conclusion, changes that occur along the supply chain must be considered by companies in order to develop flexible business models to face the challenges and be resilient. As shown, Covid-19 is only one of many already existing phenomena that affect supply-chains and, in turn, business models in the agri-food sector.

2.2.3 Digitalisation

An extremely relevant topic with significant consequences on agri-food business models is digitalisation. Nowadays, technology constitutes a pervasive element in our everyday life and is rapidly changing our habits and, most importantly, the entire business world. Besides the most obvious steps of the digitalisation process within agri-food companies such as the creation of websites, some more radical innovations are of particular interest due to their impacts on the reconfiguration of business models. The first deep change is the rise of e-commerce. Even before the pandemic, the food sector was experiencing the diffusion of food delivery and the growth of e-commerce platforms where clients could purchase products through the web instead of the physical shop. Therefore, companies started to invest in the creation of such platforms either directly controlling them or relying on already existing platforms managed and offered by third companies (e.g.,

Amazon). In 2018, well before the pandemic, agri-food e-commerce in its various forms (groceries, food delivery and online food service from restaurants, wine sales) registered a noteworthy increase of +34% compared to the previous year, surpassing 1 billion € of value (Geppa, 2018).

Other important effects of digitalisation are observed on agri-food supply chains. Digital technologies are deeply transforming agri-food supply chains and the sector toward the so-called Agrifood 4.0. In short, 3 major technologies are modifying how the industry works through their disruptive potential: Internet of Things (IoT), Artificial Intelligence (AI), and Blockchain. IoT systems allow to collect huge quantities of data, i.e., Big Data, in real time through different sensors placed along the production process. Such data can be information about specific production phases or about the whole production process, about the quality of the output, about the condition of the machineries and the maintenance needs (Deloitte, 2021). Lastly, IoT can be used to monitor goods in the logistic phases of the chain, guaranteeing a better visibility about the entire process to consumers, who can access information about the whole transformation from raw products to the final goods they purchase and eat. A further important contribution of this technology is the fact that, by continuously monitoring the process, adjustments can be made in a predictive perspective. In other terms, IoT allows producers, for example, to implement predictive maintenance to their machineries, significantly cutting costs and being able to organise all necessary actions on time. Strictly related to IoT is AI. In fact, if on the one hand it is fundamental to gather huge amounts of data, on the other hand it is perhaps even more important to be able to use those data. Artificial Intelligence works in this direction allowing to transform the Big Data into a resource and a sort of “asset”. By elaborating data through very complex algorithms, AI enables a high degree of automation and fully exploits the benefits of predictive logics that can be used to increase the efficiency of production processes, improve the quality of products and quickly identify potentially dangerous situations that could compromise food quality (Deloitte, 2021). Finally, Blockchain allows for better transparency along the different phases of the supply-chain. The agri-food sector, as I already mentioned multiple times, is characterized by very long supply-chains where, in between farmers and retailers, many actors and intermediaries intervene, making it hard to trace each phase reliably. Blockchain, instead, allows to generate and store a tamper-proof record of agri-food commodities with the guarantee of the authenticity of the data recorded (Mezquita, et al., 2020). This record, which is accessible through RFID tags, QR codes or bar codes on the

products, permits to trace back the origin of the good and its state along the supply chain. This technology enables greater security and transparency about the provenance of agri-food products, thus reducing the information asymmetry existing between producers and consumers and allowing players in the sector to take more informed decisions (Deloitte, 2021). The potential of blockchain is evident also in light of the customers' sensitivity toward environmentally friendly practices, processes and products that can be now certified through this technology and made accessible to clients, improving company's reputation, brand image and loyalty.

The application of such technologies within industrial companies and in agriculture (Agriculture 4.0) is increasing. This latter reached a value of 540 ml € in 2020, which corresponds to a growth of 20% compared to the previous year (Osservatorio Smart Agrifood , 2021). In general, Italy is registering a positive trend in terms of investments in Industry 4.0 technologies in the agri-food sector. Intuitively, such investments require deep reconfigurations of firms' business models, but represent an important opportunity to satisfy the ever-changing customers' preferences and to be competitive in the sector.

2.2.4 Food waste and circular economy

For decades, the business world operated following what is known as the linear model. The concept refers to the approach of extracting raw materials, elaborating them to arrive at the final product, which is then sold and consumed, ending up with waste. Once the process is over, it starts again following this linearity. In more recent times, society, governments and firms are becoming aware of how dangerous this approach is for the environment. In fact, pollution, climate change and environmental issues are a daily occurrence in newspapers, TV news and talk shows. As an alternative to the linear model, scholars suggested the idea of "closing the loop" by transforming the linear consumption model into a circular one. The underlying intuition is to avoid as much as possible any waste during and at the end of the process, reintroducing by-products and other scraps into the circle to fully exploit their productive potential. The major ambassador of circular economy is the EllenMcArthur Foundation, who defines circular economy as a "*systems solution framework that tackles global challenges like climate change, biodiversity loss, waste, and pollution*" by reducing extraction of finite resources through the re-utilization of waste (Ellen MacArthur Foundation, 2009). Food supply chains and the agri-food sector are a major source of waste production: 1.3 billion tons of food are wasted every year, with a correspondent carbon footprint of 3.3 billion tons of CO₂. In monetary terms,

the global amount of thrown away food corresponds to a value of 750 billion \$ (Sadhukhan, et al., 2020). Food waste happens at different stages of the supply chain. If on the one hand lots of final products are wasted and thrown away, on the other hand also the by-products of the transformation processes are discarded instead of being reintroduced as secondary resources. One could erroneously suppose that such wastefulness is mainly produced in developing countries, while developed countries have lower rates of discards. Actually, the two have similar overall quantities of food waste, the only difference being the stage of the chain where they are produced (Sadhukhan, et al., 2020). In fact, developing countries mainly produce food waste upstream, due to poor post-harvest storage conditions. In developed countries, instead, most of the food waste comes from the post-consumer stage or, in general, in the final stages of the chain concerning distribution and consumption. To improve the efficiency and the environmental impact of agri-food business models it is crucial to put reduction or elimination of food waste at the core of how the business is structured. For what concerns the unavoidable waste of production, this can be either reused to feed livestock or valorised by transforming it into new resources through specific eco-innovative systems and technologies such as biorefinery. In particular, modern green technologies such as pressurised fluid extraction and ultrasound assisted extraction are powerful tools to obtain valuable chemical resources from unavoidable food waste (Sadhukhan, et al., 2020). Just to give an idea of the disruptive potential of such practices, let us look at organic food waste, which is rich in natural polymers and can thus serve to substitute fossil-based bio-surfactants with natural resources. By comparing, for instance, the possible paths of orange peels, we observe two alternatives: they can be discarded, contributing to environmental pollution, or they can be re-inserted into the process to extract essential oils and pectin through biorefinery. In this way we reduce waste by transforming scraps into essences for food preparations, natural pesticides, anti-microbial agents and degreasers. Hence, by using waste as a secondary resource it is possible to obtain useful substances for different uses, from the food industry to the pharmaceutical industry and the healthcare one (Sadhukhan, et al., 2020).

Strong pressures push companies toward circular economy: in 2015, in fact, the UN issued 17 Sustainable Development Goals (SDGs) that member countries should achieve by 2030. Among these goals, the UN indicates a responsible consumption and production (n. 12) and the fight against climate change (climate action, n.13). Therefore, companies must adapt and modify their business models to embrace the change. For this purpose,

scholars developed the concept of Sustainable Business Model (SBM), which not only illustrates how a company creates and captures value, but also how it contributes to improve the society both socially and environment- and pollution-wise (Ulvenblad, et al., 2019). A noteworthy framework to mention is the Circular Business Model developed by the research team from Ca' Foscari University of Venice led by prof. Carlo Bagnoli and presented at the Strategy Innovation Workshop (SIW) in 2019. In brief, the common canvas has been modified by including different strategies that could lead the company toward a circular model.

The transition is, of course, demanding: lots of investments in technologies, the reconfiguration of the entire value proposition and, therefore, of the business model, the disruption of the production process are changes with high-magnitude impacts. However, the exploitation of the synergies in agroecological productions reducing waste and the need for extraction of new resources are key factors to improve business' efficiency (FAO, 2018) and pursue profitable alternatives that meet customers' increased sensitivity toward environmental protection.

The analysed trends were pushing toward business model innovation and reconfiguration in the agri-food sector before the pandemic hit the world. It is important to note that all phenomena are somehow linked together: consumer preferences toward plant-based food suggests an attention and sensitivity toward the environmental cause. Therefore, consumers want to be sure about the provenance of the food they eat and want to be aware of how the transformation process takes place. Digital technologies allow companies to improve their processes efficiency and to guarantee the quality of their products, together with the respect of environmental standards and the transition toward circular economy. Moreover, they allow for the development of e-commerce platforms to face the rise in food delivery requests. In order to be competitive in the agri-food sector, international trade is crucial. Improvements on the downstream side of the supply chain are required and creative innovations are needed to offset transport systems' disruption, inflation and volatility. In conclusion, embracing these trends implies deep modifications of business models that involve almost all building blocks. Investment in key resources, processes and partners are linked with modifications of the value proposition, the customer relationships and the distribution channels. Intuitively, all the changes significantly alter the existing cost and revenue structures. The key to be successful is to be creative and

flexible enough to profit from emerging trends, questioning the current layout of the business model and innovating it.

2.3 Covid-19 as an accelerator of existing dynamics

The pandemic deeply changed various aspects of how firms operate and how consumers behave. Since its magnitude and the rapidity of the changes, we tend to think that such modifications are totally new phenomena that abruptly invaded our lives. As the previous paragraph shows, though, significant trends were already shaping the agri-food sector, pushing companies toward innovation, digitalisation, and modification of their business models. Hence, rather than a disruptive event that introduced totally new impacts, Covid-19 can be seen more as an accelerator of already existing dynamics.

2.3.1 Covid-19 and consumer preferences

I have already explained how the agri-food scenario was changing due to new trends in terms of diets and food preferences among consumers. Environmental sensitivity and climate change were the main drivers before the pandemic. With Covid-19, a change in the underlying motivation for adopting such diets occurred: health-related issues. According to statistics, almost 23 million Italians are suffering from weight increases due to the pandemic, with consequent risks in terms of cardiovascular problems, cancers, diabetes. One adult out of ten even suffers from obesity because the pandemic negatively altered our lifestyles (D'Aria, 2022). Therefore, attention toward wellness is of major importance and the first step to taking care of own health is food. Consumers want to eat healthy food since a profound awareness about the role of food in the wellbeing arose. According to Coop (2021), 4 Italians out of 10 stated their intention to change their consumption habits toward healthier diets. If the percentage of Italian people following vegan or vegetarian diets was around 7% in 2019, it increased to 8.9% and 8.2% in 2020 and in 2021 respectively (Eurispes, 2021). These data, together with the information provided in Paragraph 2.2.1, well frame how the theme of new consumer preferences and the adoption of new diets is of strong relevance. Ignoring it is a short-sighted choice since companies risk losing important opportunities. To satisfy consumers that want to reduce meat and embrace plant-based diets means to target a profitable customer segment (Aschemann-Witzel, et al., 2020). Companies must consider such trends in the definition of their value proposition and alter their business models accordingly.

2.3.2 Covid-19 and supply chains

Different stages of the agri-food supply chain have been touched by the pandemic. Starting from the demand, especially in the first wave of Covid-19, consumers started to panic-buying especially non-perishable products in order to stock food for future necessities. This caused three major issues: a shortage of conservable products, a disruption of perishable fresh food supply, and inflation (Coluccia, et al., 2021). This latter is reflected in the increase in the Consumer Food Price Index which shifted from +1.1% to +2.7% (ISTAT, 2020). Other disruptions involved the upstream activities of the chain: the impossibility of travelling for foreign seasonal workers in the countryside due to restrictive measures and the workplace absenteeism due to either illness or refusal to work in “dangerous conditions” (OECD, 2020). Looking at the downstream side of the chain, the major disruptions occurred in the distribution activities. As already mentioned, lockdowns measures forced restaurants, bars and pubs to close. Even if it is true that e-commerce and food delivery partially compensated the losses, the performances must be analysed for each sub-sector individually. For instance, the wine sector registered positive trends in terms of e-commerce, yet, overall, the sector lost 6% of sales in 2020 compared to the previous year (Euromonitor, 2021). The large retail system was partially affected by the measures due to the closure of shopping centres which caused a decrease in supermarkets sales. Other activities such as local supermarkets suffered slightly less and proved to be more resilient since people were more inclined to purchase from stores located near house to respect the restrictive measures in place (Coluccia, et al., 2021).

As far as transport systems are concerned, the major effect of Covid-19 has been the already discussed sea freights’ increase. Even during the acute phase of the spread of the virus, the transport and logistics companies working by road or railroad continued to guarantee full service (Coluccia, et al., 2021). Hence, no particular effects of the pandemic have been registered besides physiological delays. What the Sars-Cov-2 spread caused in the maritime traffic is worth analysing, instead. Due to restrictive measures, containers in Europe and USA have been emptied slower than usual and were blocked in the harbours, making them unavailable for other shippings. Around the end of summer 2020, in China, there was a steep increase in export demand, so the need for containers was urgent. However, many of the containers needed were still blocked in European and American harbours. This caused a dramatic increase in the prices for the few containers still available for international trade (Confindustria, 2021). According to Coldiretti

(2021), sea freights' increase due to the pandemic caused serious challenges to Made in Italy agri-food export. To conclude, upstream and downstream activities of the agri-food supply chain have been affected by the pandemic. The impacts reflect on business models since companies must rethink their supply system, distribution channels, revenues, and cost structures in a more resilient perspective to offset future instability in a sector characterised by long supply chains and high volatility.

2.3.3 Covid-19 and digitalisation

As stated in Paragraph 2.2.3, Italian companies were already investing in technology innovation before the pandemic. Thanks also to “Piano Nazionale Industria 4.0” issued by the Italian government in 2016, which had the aim of facilitating and encouraging firms to invest in the digital transition, companies were starting to understand the potential and importance of technology for their competitiveness. In fact, between 2015 and 2018, Italian manufacture became extremely competitive and innovative. The pandemic acted as an accelerator pushing companies toward the adoption of digital technologies. In fact, adoption registered a +8% only in 2020, the darkest year (Osservatorio Transizione Industria 4.0, 2021) . Differently from agricultural activities, the industrial part of the agri-food sector suffered from lockdowns and restrictive measures, as already mentioned. During the pandemic, therefore, digitalisation became essential to keep on producing and working also in the agri-food industry and is now considered a strategic asset to maintain the competitive advantage and embrace the environmental cause (Istat, 2021). The following data give a concrete idea of how the pandemic boosted investments in digitalisation within the agri-food sector. As previously indicated, in 2020 the value of Agriculture 4.0 reached 540 million €. In 2021 the value skyrocketed reaching 1.6 billion €, which represents an increase of 23% compared to the previous year. More than 60% of firms involved in agriculture adopted at least one digital technology, the most common being connected machineries (IoT), monitoring systems (IoT and AI), traceability of food (Blockchain) (Osservatorio Smart Agrifood , 2022). This latter is the current major trend in the realm of digitalisation in the food sector. In fact, since the consumers' need for transparency and traceability on what they eat, firms are investing more and more in the related technologies. The technology does not represent only an operational tool to guarantee visibility along the supply chain yet becomes a strategic marketing and communication asset toward the targeted customer segments.

Intuitively, the pandemic had dramatic impacts on food delivery. The impossibility to go to restaurants and pubs during lockdowns led to a steep rise in platforms. In 2021, the food delivery market reached 1.5 billion €, registering a growth of 59% compared to 2020. For instance, Just Eat, one of the most popular apps for food delivery which arrived in Italy 10 years ago, saw a rise of 50% of restaurants that registered to the platform (Manuelli, 2021). Another notable example is the wine sector. The interruption in tourism and the forced closure of bars, restaurants and pubs had adverse impacts on wine sales, but at the same time encouraged producers to invest on digitalisation to develop platforms for home delivery and takeaway services (Euromonitor, 2021). In this way, the impacts on total sales have been softened by offsetting the on-site trade with e-commerce through apps like Winelivery. Overall, in Italy, online purchases of wine in 2021 accounted for almost 200 million € of the total retail sales value of 986 million € (Euromonitor, 2021). Even if the increase in food delivery demand brought some relevant social issues such as workers exploitation and cash in hand work back up, the phenomenon is expected to grow and stay. Therefore, the structure of the sector will permanently be altered with the opportunity to develop innovative business models that take advantage of the food e-commerce trend.

2.3.4 Covid-19 and circular economy

The impacts of Covid-19 on circular economy and sustainability are of indirect nature. In fact, the pandemic brought about discussions on the agri-food system in general, highlighting criticism on how supply chains are structured and how the sector works. The emerging idea is the need for a reconfiguration of the entire food system to make it robust, resilient, and sustainable. The European Committee of Regions stated that the devastating situation created by the pandemic must orient policy-making choices toward a new economic model that places social well-being and environmental sustainability at the core. Circular economy could represent a fundamental path to achieving such results (Giudice, et al., 2020). Hence, Covid-19 acted as a wake-up call and pushed policymakers and economic actors to profit from the “reset” situation created by the pandemic in order to create a sustainable food system. The EU Commission suggests 3 stages where circular strategies could be implemented: production, consumption, and waste (Jurgilevich, et al., 2016). As far as production, favouring localised production allows to shorten the supply chains reducing the need for storage and transportation, guarantees better transparency and traceability and reduces waste. Moreover, efforts toward the reduction of plastic in

packaging and its substitution with more durable and less polluting materials are important component of the circular approach in food production (Giudice, et al., 2020). Looking at the consumption side, I have already discussed how the pandemic made consumers more aware of the environmental impacts of certain food production processes and intensified the need for healthier food. Further advancements can be made by encouraging more producers and consumers to adhere to such trends by using taxation, fees, public procurement (Giudice, et al., 2020). Finally, the reduction of waste is the more evident effect of circular economy practices. The re-use of edible food waste and the transformation of non-edible food waste by transforming it into new resources are decisive measures to reduce the environmental impacts of the agri-food industry. Osservatorio Food Sustainability of Politecnico di Milano conducted a research about new sustainable agri-food start-ups born between 2016 and 2020 internationally. The census' results show the creation of 1,808 start-ups in 2020, corresponding to a +56% compared to 2019. Italy ranks 12th with a total of 22 sustainable agri-food start-ups out of 76 new agri-food companies (29%), a noteworthy increase compared to 2019, when only 7 sustainable start-ups were founded (13% of the total). Moreover, investments toward sustainability in 2020 substantially increased: a total of 23 million \$ has been invested against the 300.000 of 2019 (Osservatorio Food Sustainability , 2021). Hence, Covid-19 favoured the growth of sustainable agri-food companies that embrace circular economy principles and are oriented toward the achievement of the SDGs.

It is important to make a final observation: as the data described show, investments in digitalisation and sustainability go hand in hand. Both are increasing thanks to the strong bond that links the two. The elaboration of data gathered along the production processes and the accessibility of the information guaranteed by digital technologies are crucial elements to develop more sustainable business models. As a matter of fact, by exploiting digitalisation, entrepreneurs can conveniently invest resources toward Agri-food 4.0 solutions that satisfy consumers' needs while respecting the environment.

2.4 Geopolitics effects on agri-food business models

2.4.1 The Russia – Ukraine conflict

The 24th of February 2022 stands out as a pivot point in the international geopolitical context. On this date, the Russian president Vladimir Putin publicly declared a military operation in Donbas, starting the Russian invasion of Ukraine. The current war represents only the tip of the iceberg of pre-existing tensions between the two countries which date

back to the end of the Soviet Union. In fact, after the fall of the U.S.S.R in 1991, Ukraine declared its independence, while Russia continuously stated that those territories were part of the country. Vladimir Putin even states that Russians and Ukrainians are “one people, a single whole” and defines Ukraine as the invention of Polish and Austrian ideologists to create an “anti-Moscow Russia” (Putin, 2021). The bones of contention are the two regions of Crimea and Donbas. Russia re-annexed the former in 2014 through a referendum and started a violent occupation of the latter, afterwards. In the following eight years a sort of truce between Russia and the West was in place, and numerous attempts to transform the truce into a stable peace were made (Kortunov, 2022). Unfortunately, none of the attempts succeeded and on the 22nd of February 2022, with the public recognition of Donec’k and Luhans’k, the two separatist regions of Donbas, the scenario radically changed. The following day the Duma authorised Putin to use weapons and the invasion started (Pachlovska, 2022). The pre-existing tensions between the two countries have been further fostered by the intention of Ukraine to be part of the EU and to join NATO, the international political and military entity through which different countries cooperate and collaborate in the field of public defence and international security. The expansion of NATO toward East Europe represented a threat to the Russian interests, and it would be erroneous to consider the current conflict just as a war between two countries. It is rather a conflict between Russia and the West, the latter including Europe and the US. Moreover, the conflict rapidly transformed into an economic war between the two factions (Luk’janov, 2022). On the one hand, we observe the heavy sanctions inflicted by the West on Russia. On the other hand, the threat to stop the gas supplies and the military threat are the major replies of the Kremlin.

In Paragraph 2.1.2, I have highlighted how, despite being impacted by the Covid-19 pandemic, the agri-food sector proved to be quite resilient compared to the general performance of the economy. Despite a slight decrease in the added value of the primary sector compared to 2020, 2021 has been a favourable year for the agri-food sector, with a record export value of 52 billion €. Nevertheless, companies were facing relevant challenges while recovering from the losses caused by lockdowns and other restrictive measures. In addition, the cost increase of raw materials and energy, together with the issues related to the transport system and logistics, contributed to the drawing of a fragile scenario (Ismea, 2022). The conflict between Russia and Ukraine exacerbated this already complex situation, posing severe challenges not only to single firms, yet to the general national and even international economy. Raw materials shortage, energy provision, steep

price increase and the stop of the maritime traffic are only some of the issues that are seriously affecting the agri-food sector and could cause dramatic consequences in the coming years. The UN's Secretary-General António Guterres warned the international community about the risk of a "hurricane of hunger and a meltdown of the global food system". Michael Fakhri reinforced the warning underlying the global increase in malnutrition and famine. After several months from the beginning of the war, the geopolitical situation is not favourable and no signs of a resolution in the short run are observed. Hence, a strong change in the economic settings is needed at different levels: at the firm's one, on a national level and even on the international/European one. In the next paragraphs, I will highlight which are the main challenges caused by the war on the agri-food sector and I will discuss the major implications on business models.

2.4.2 Rising costs and delivery delays

The first direct impact of the war on the agri-food sector is the rise in the cost of cereals. As I have already mentioned, after the pandemic there has been a rapid growth in the global demand. This caused organisational issues in the logistic system, with delays and skyrocketing transport prices and sea freights. This scenario deeply affected the cereal sector, further impacted by the dramatic reduction of Canada's, Turkey's, Algeria's and US' crops. The tensions between Russia and Ukraine that brought to the war triggered a further increase in agri-food raw materials for two main reasons. First, the two countries involved are the major global suppliers of wheat and maize. Second, the price increase represents the market reaction to political uncertainty and instability deriving from the conflict and from the heavy sanctions that the international community inflicted on Russia. This uncertain context constitutes a fertile ground for speculation, which further fuels price inflation (Ismea , 2022). It is important to distinguish which kind of cereal is directly affected by the conflict though. For instance, it would generate erroneous interpretations to consider the rise in durum wheat's price as a direct consequence of the war. In fact, such an increase is mainly due to the dramatic reduction of Canadian crops (approximately -60%) due to exceptional drought. Moreover, Russia and Ukraine are not the main actors in the trade of such type of wheat, despite the heavy Italian dependence upon Ukraine's harvest to produce pasta.

The global wheat market is mainly constituted by soft wheat, which accounts for about 95% of the total. In this realm, both Russia and Ukraine play an important role in the international scenario by providing 16% of the global production (Ismea , 2022). Ukraine,

which is commonly referred to as the “breadbasket of Europe”, is at major risk: the impossibility of sowing in spring concerns the global market and the public opinion. According to The Guardian (2022), at least one-third of the land normally used for spring crops is unplanted. In addition, approximately one-third of the normal wheat harvest from the crop planted last autumn could be lost. This represents a dramatic situation for the Italian production of biscuits and bread since we import 64% of the soft wheat from Ukraine (Consorti Agrari d'Italia (CAI), 2022). It must be said that Ukraine is also one of the major producers and exporters of barley, sunflower and maize. For what concerns this latter, Italy imports 20% of the maize from Ukraine. Therefore, the increase in its price and the reduction of export flows is particularly concerning (Ismea , 2022). Only after one week from the beginning of the war soft wheat’s price increased by 12%, shifting from 274 €/ton to 310 €/ton. Maize’s price, instead, increased by 29%, shifting from 247 €/ton to 320 €/ton (Consorti Agrari d'Italia (CAI), 2022).

The second impact of the war on the sector is registered in the farming activities. Maize is particularly important for farming since it is used to feed animals. The increasing cost of maize and the reduction of import flows are severely challenging the production of swine meat and poultry (Capasso, 2022). A further significant side effect of the reduction in the availability of maize and soy for the production of animal feed is the decrease in the production of milk, cheese and eggs (Boscolo, 2022).

As stated by Coldiretti, these two impacts are of dramatic magnitude, especially for Italy. Our country is, in fact, heavily dependent on the countries involved in the war, especially Ukraine. Italy imports 64% of its wheat requirements and 53% of maize destined for animal feed (Consorti Agrari d'Italia (CAI), 2022). The data confirm a concerning scenario that could compromise the stability of the sector in the long run unless alternative solutions toward greater independence are set.

An indirect, yet still serious, consequence of the war is the shortage of fertilizers. With an export value of 6.1 billion € in 2020 (13% of the global export total), Russia is one of the major producers and exporters of such products, which are fundamental for crops and farming activities. Intuitively, a shortage of any material automatically translates into a steep price increase in the available stocks. Some fertilizers, in fact, more than doubled their price. Potash, for example, skyrocketed, passing from 210\$ per metric ton to 565\$ (CNBC, 2022). Urea passed from 350€/ton to 850€/ton, corresponding to a variation of +143%, while Diammonium phosphate doubled, shifting from 350€/ton to 700€/ton (The Huffington Post, 2022). The consequence is not just an increase in the cost of production,

which is likely to be reflected on consumers, yet also the fact that farmers are obliged to economise their land by rotating crops and find alternative solutions to offset the consequences of the shortage, thus reducing the total volume of production.

As stated above, Ukraine is one of the major sources of soft wheat in Europe and of durum wheat for Italy. Moreover, Europe imports from the country soy and maize, extremely important to feed animals and to produce the related goods. The main cause of the shortage Europe is suffering relies upon the fact that ports are blocked. The Russian invasion aims at conquering the regions around the Black Sea, the most important commercial route through which wheat is traded and shipped toward the different destination countries. The impossibility to ship by sea blocks around 25 tons of wheat, causing severe supply issues to various countries (Coldiretti, 2022). Therefore, what was previously exported by sea must arrive at the final destination through other routes: rail transport, road transport and river. However, all the three cited methods do not have the capacity to transport the same quantity of wheat at the same speed as maritime transport. Consequently, long queues on roads and stuck trains delay the export flows by 2 to 4 weeks (AdnKronos, 2022). In addition, in Ukraine, there are concerns about the damages to the different infrastructures including transport, storage and processing facilities that may be caused by the war and bombings.

All the mentioned adverse effects of the conflict are connected to a last serious concern: the energy cost. Russia is a key player in the field of energy production and is a major supplier globally. The war is causing dramatic energy price increases: on the 28th of February, Amsterdam's Stock Market registered a rise of more than 35%, arriving at €126 per MWh (Scozzari, 2022). Agriculture and the agri-food sector are intensive users of energy both directly, through the use of gas, fuel and electricity, and indirectly, through the use of fertilizers, pesticides and lubricants. Therefore, the sharp price increase of energy has a decisive influence on the agri-food sector in two aspects. Firstly, the price increase puts a chain effect into motion: an input price increase translates into higher production costs which, in turn, reflect in higher prices for the consumers. Secondly, higher prices mean lower volumes of input purchased, thus lowering yield and outputs, compromising global food security in the forthcoming years (FAO, 2022). A further difficulty connected to the rise in energy costs is the cost of oil. Right after the beginning of the conflict, oil prices skyrocketed, as shown in Figure 6 below.

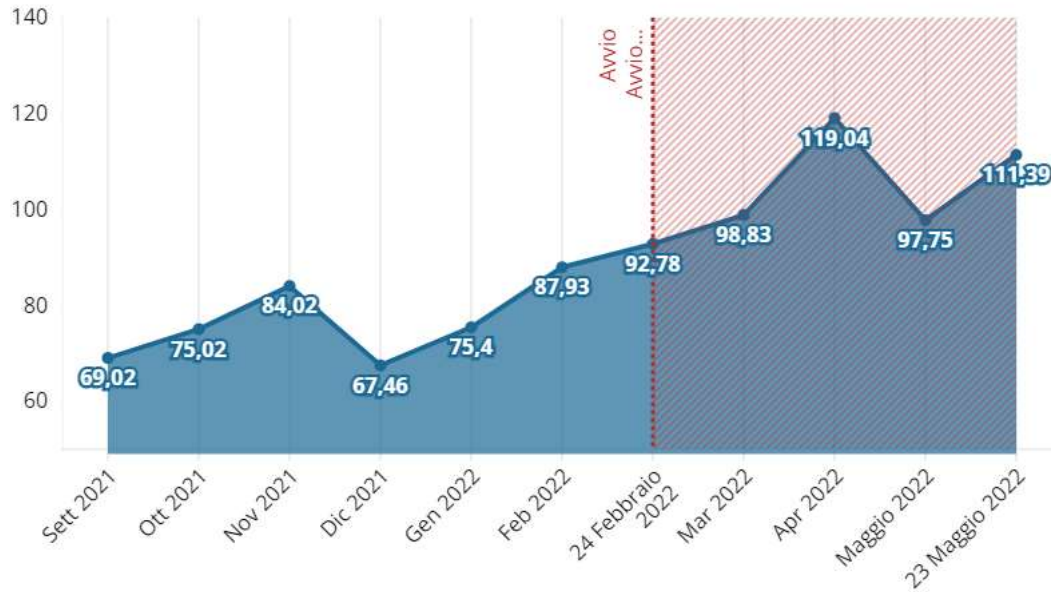


Figure 6. Oil prices evolution before and after the beginning of the conflict. Source: La Repubblica based on Forex Trading Italia

Prices are expressed in USD per barrel, where one barrel corresponds to approximately 159 litres. The red line represents the start of the war and, as evident in the red area of the graph, April and May registered a significant rise compared to February: +28% and +20% respectively, reaching the impressive price of more than 100 USD/Bbl. This increase has serious consequences on agriculture and the food industry for the heavy use of such resources for production activities. Moreover, the transport system is negatively affected, worsening the general situation. Transporters all over Europe protested against the price increase of oil, further delaying deliveries. It must be also underlined that the cost of energy affects the production of fertilizers. Producers of pesticides, fertilizers and lubricants use an enormous quantity of energy, in particular natural gas. Hence, the cost of energy is amplified by the cost of fertilizers, which is inevitably reflected in the already cited increases in the price of wheat, soy, and maize. However, the cost of energy has collateral side effects as well, in particular related to the packaging of products. Producers of labels, glass jars, pallets, cardboard boxes, bottle caps, etc. are heavy energy consumers. Therefore, the rising cost for agri-food operators is both on the agricultural raw materials' side and on the side of packaging items, always considering the mentioned logistic issues that contribute to drawing a challenging scenario for agri-food companies.

To conclude, the conflict is fostering an already critical situation for the agri-food sector with a series of interconnected phenomena. The heavy dependence of Europe upon the gas supply from Russia raised again the central theme of becoming more independent

gas- and energy-wise. Besides the recent threats to stop the supply toward European countries, the Russian dependence is becoming unsustainable from an economic point of view. In fact, gas price is continuously growing, also affecting oil prices and energy ones. The unaffordable costs, together with bottlenecks in supply chains due to ports closure, especially in the Black Sea, and the skyrocketing sea freights are severely compromising the sector all over Europe. As a matter of fact, pre-existing seasonal criticisms have been exacerbated by the shortage and the dramatic price increases of agricultural raw materials, together with packaging costs. The delicate situation compromises the national and the international economy. Therefore, systemic solutions must be undertaken, and a European emergency plan must be predisposed to ensure business continuity and to guarantee the necessary supplies, as stated by the president of Confagricoltura Massimiliano Giansanti.

2.4.3 The current geopolitical events through a business model's perspective

In Paragraph 2.3, I have highlighted how Covid-19 accelerated some phenomena that were already pushing companies to modify their business models. The conflict between Russia and Ukraine is now forcing companies to rethink how they operate, create and deliver value even more. The drastic supply chain disruption the agri-food sector is undergoing is, at the same time, a challenge, and an opportunity to reshape business models toward more domestic production and vertically integrated structures.

Economic growth, inflation and consumer sentiment were already impacted by the pandemic and are now further influenced by the war. Accenture (2022) drew 3 different scenarios in relation to the duration of the war, that may lead to different economic impacts and, thus, more or less profound business model implications:

- 1) Controlled scenario: since it considered the possibility of a truce, the withdrawal of sanctions and a price decrease back to normal, this scenario is just theoretical. In fact, the development of the geopolitical tensions erased the possibility of such a scenario to see the light.
- 2) Ongoing impact: supply disruption of key commodities continues throughout 2022. Some countries continue to face oil and gas embargos and price increases do not cease. Consumers cut their expenses and so do the companies, that focus on efficiency and cost reduction.

- 3) Protracted impact: oil and gas embargo cause structural disruptions in supply chains. Price increases continue also in 2023, causing a dramatic slowdown of the general economic growth.

In the 3 depicted scenarios, recovery times from logistic and materials supply disruption, and energy prices vary, as shown in Figure 7 below. In the worst-case scenario, recovery may take up to 24 months. Therefore, reinvention and new business model configurations are needed to offset the impacts of the war.



Figure 7. Recovery times for the different disruptions by scenario. Source: Accenture 2022

Looking at the current situation through the lens of the business model canvas described in Chapter 1, it is quite straightforward that the highest impacts caused by the war are affecting the cost structure of companies. It is important to remark how impacts on the cost structure reflect on the other building blocks. For instance, the high dependence of Europe and Italy on Russia and Ukraine for agricultural raw materials, energy, and gas signals the fragility of a sector characterised by long supply chains and, for the most part, cost-driven business models. In fact, if on the one hand some of the cited resources are not directly available in the national territory, on the other hand, some others such as wheat would be available. However, for the sake of efficiency, it is convenient to outsource them, since domestic production would cost much more. Similarly, at least part of the energy requirements could be satisfied through the implementation of alternative sources. The investments required to set the infrastructure and make it operative are still extremely high, though. Hence, once again, companies prefer to economise by outsourcing energy. Nevertheless, the critical situation caused by the war is now shedding a light on these themes and is giving a push toward modifications of business models in

this direction. Consequently, companies are likely to modify their key partners, especially suppliers, looking for alternative solutions that offset the dependence upon the countries involved in the conflict. The increasing costs of transport via the sea and port closures give the incentive to diversify the distribution channels. This reflects in a modification of other key partners in the business models, and in how the company delivers its value to customers. As stated above, the current scenario is pushing companies to consider the possibility to embrace more domestic production and vertical integration. In other terms, companies are trying to internalise certain phases of the chain to become more independent and to ensure business continuity. This process requires deep business model reconfiguration and has the potential to even redefine the value proposition, underlying the domestic provenance of the products. Moreover, to use domestic resources and to be vertically integrated means to deeply alter the building block of the key resources. An example of such reconfiguration is Plenty, a vertical-integrated start-up that works with Walmart among others. The company aims at growing vertically stacked produce on location in California. Similarly, Driscoll, the world's largest berry producer, has launched a new vertical strawberry farm on the East Coast in order to rely less on long complex supply chains and import flows, avoiding transportation costs and delays.

It is clear, then, how such disruptions in the agri-food supply chains require a global view of the business model as a set of interconnected building blocks. In fact, we observe how impacts on the cost structure reflect on key partners, key resources, customer relationships, value proposition, and distribution channels. Working on the different building blocks considering the relationships among them is crucial to offset the turmoil affecting the cost structure of agri-food companies and create alternative business models aiming at greater independence and resilience. This brings back the fundamental concept of a dynamic business model, where not only the structure of the single blocks is considered, yet also the interrelations among them are at the core.

3. The fishing and aquaculture sector

After the general overview on the agri-food sector and the major trends affecting the industry after the pandemic, the present essay will focus on the fishing and aquaculture industry. Since being a very dynamic and interesting sector, which has been deeply affected by Covid-19, it is worth introducing the topic by providing a sector analysis, together with an overlook of the major challenges and trends that characterise it.

3.1 A general overview of the fishing and aquaculture sector

3.1.1 Definition of the sector

Let us start by defining what the fishing industry is. The sector is composed of two main areas: fishing and aquaculture. Fishing is the capture of aquatic species in maritime, coastal and/or inland areas, whereas aquaculture is the farming of aquatic organisms in both coastal and inland areas. The rearing process, through which fish, molluscs, crustaceans, and aquatic plants are grown, requires human intervention to enhance production (FAO; EUMOFA, 2022). Aquaculture represents a continuously growing field in the agri-food sector and is particularly profitable for 3 main reasons: firstly, the demand for fish products is increasing and this type of rearing activity allows producing significant quantities of fish. Secondly, most of the natural stocks of fish available in the seas are overfished, as I will underline later in the chapter. Aquaculture, instead, allows softening the pressure on catches in favour of greater quantities of reared products on the market. Lastly, the costs to implement the production plants are well compensated by the revenues (BMTI, 2020). The two areas, fishing and aquaculture, are a source of food and income for around 820 million people all over the world involved in different stages of the supply chain (FAO). Moreover, it is a fundamental part of many cultures: Nordic countries have a long tradition of fishing activities, as well as the Mediterranean region. Italy, in particular, is an important player in the international scenario thanks to its fishing and aquaculture activities that have historical roots along the coasts of the country.

3.1.2 EU: statistics and values

Europe is a major player in the global fishing industry. Official sources like Eurostat are updated until 2019 for what concerns catches and aquaculture production. In 2019, the EU-28² was the 6th largest producer of fishery products worldwide and ranked 11th in

² Brexit, as specified in Chapter 2, became effective in 2020. Therefore, the UK is still counted here.

aquaculture production. More specifically, on a total of 93,519,000 tonnes of caught product, around 5,000,000 came from Europe, corresponding to 5.2% of the total and a value of around 6 billion €. In terms of aquaculture, instead, on a total of 120,104,000 tonnes worldwide, the EU produced 1,367,000 tonnes, which corresponds to 1.1% of the total quantity, for a value of approximately 5 billion €. The main species reared through aquaculture in the EU are mussels, trouts, salmons, oysters and seabreams. Finally, landings, which refer to “the unloading of any fisheries products from on board a fishing vessel in a given Member State” reached a volume of 4,100,000 tons for a correspondent value of 6.8 billion €. Herrings, sprats, mackerel, blue withing, and skipjack tuna are the main landed species in Europe. In 2019, approximately 73% of the total was destined for human consumption, while the rest was mainly destined for industrial uses (EUMOFA, 2022). In the same year, European consumption was estimated at 23.97 kg per capita, corresponding to a 2% decrease compared to 2018. In addition, consumption is mainly oriented toward tuna, cod, salmon, Alaska pollock, herring, hake and mussel (EUMOFA, 2022).

Looking at the import and export flows, data are more updated and are shown in Table 3 below. Intuitively, the EU faced a downward trend both in terms of imports and in terms of export in 2020 due to the pandemic and Brexit. Specifically, import flows lost - 9% of their value, shifting from 24,255,905,750 billion \$ to 22,091,157,508 billion \$. The downturn was mainly caused by the steep decrease in import flows of high-value species destined for the hotellerie-restaurant-catering (Ho.Re.Ca.) channel (EUMOFA, 2021). In 2021, the first signs of recovery are evident, with an increase of +4%, reaching a value of 25,228,471,019 billion \$. Hence, despite the reduction in import flows, Europe still ranks as the main global importer of fisheries and aquaculture products. A decreasing trend is observed in terms of export flows, also due to the difficulties related to the transportation system via the sea. Looking at the import flows, the main countries of origin are Norway, the UK, China and Morocco, which accounted for 26%, 7%, 6% and 5% respectively in 2020. The EU mainly exports to the USA (9%), China (8%), the UK (24%) and Norway (8%) (EUMOFA, 2022).

EU's fish Import/Export values		
Year	Import	Export
2019	\$24.255.905.750	\$5.277.136.941
2020	\$22.091.157.508	\$5.177.324.052
2021	\$25.228.471.019	\$5.172.160.893

Table 3. EU's import and export flows 2019-2021. Source: personal elaboration from UN Comtrade Database

3.1.3 Italy: statistics and values

For what concerns the Italian scenario, in 2019, Italy ranked 4th in terms of aquaculture production among EU-28 and 9th in terms of fishery production. 185,000,000 tons of the 4,824,000 produced in Europe have been caught in Italy, corresponding to 3.8% of the European production. As far as aquaculture, on a European total of 1,367,000 tons, Italy produced 154,000 tons, equivalent to 11.3% of the total production. Over the last 10 years, the number of aquaculture sites in Italy has substantially grown. In fact, the number shifted from 2,200 to 3,500 sites registering an incredible +50%, mainly concentrated in Emilia Romagna and Veneto. As far as landings, Italy reached a volume of 180,000 tons for a correspondent value of 865 million € in 2019. Approximately 97% of landings were destined for human consumption, with a residual of 3% for industrial uses (EUMOFA, 2022). In 2020, the major consumption trend was constituted by caught fresh fish products compared to products derived from aquaculture. In particular, almost 65% of the total consumption was made of fresh fish, followed by molluscs, crustaceans and other species, with a percentage of 21.2%, 5.7% and 9% respectively (BMTI, 2020). Apparent consumption in Italy in 2019 was estimated at 31.21 kg per capita, signing a slight increase (+1%) compared to the previous year (EUMOFA, 2022).

Table 4 below shows the import and export flows of Italy from 2019 to 2021. The impacts of Covid-19 are visible on both flows. In detail, a reduction of -14% shifted the import's value from 5.2 billion \$ to 4.5 billion \$. The decrease in exports, equal to -8% compared to 2019, brought the total value from 477 million \$ to 438 million \$. Signs of recovery are visible in 2021 both on import and export flows, with +32% and +24% respectively compared to 2020. Looking at the export column, an interesting observation arises: if we compare the European and the Italian performances between 2020 and 2021, we observe a decrease in the flow's value for Europe, whereas the Italian scenario registers a growing trend. A first explanation lies in the set of key partners of such flows. In fact, Italy mainly

exports to countries that are easily reachable by road or rail transport. Specifically, Spain, Germany, Austria and France are the major destination countries. Therefore, by using alternatives to maritime transport, Italy is able to partially offset the already mentioned issues related to the transportation system. As far as imports, the major Italian partners are Spain, from which the country gets 22% of the total flows, the Netherlands, Sweden and Norway, each of them supplying approximately 6% of the total import flows (EUMOFA, 2022).

Italy's fish Import/Export values		
Year	Import	Export
2019	\$5.238.390.704	\$476.816.905
2020	\$4.492.055.430	\$438.332.121
2021	\$5.913.451.292	\$543.437.712

Table 4. Italy's import and export flows 2019-2021. Source: personal elaboration from UN Comtrade Database

According to Istat, the main Italian exported products are tuna and bonito preserves and preparations, equivalent to 24.6% of the volumes and 28.6% of value in 2020. Clams, seabreams, sardines, seabass, and mussels follow. For what concerns the import flows, processed fish, crustaceans, and frozen molluscs constitute the major imported products (BMTI, 2020).

3.2 Challenges and trends in the fishing sector

In this paragraph, I will highlight the major challenges and trends that are affecting the fish and aquaculture industry. In the general part about the agri-food sector, I explained how some trends were already affecting the sector and have been exacerbated by the pandemic. Similarly, the trends affecting the fish industry were already present and some of them have been emphasised by Covid-19.

3.2.1 Sustainability

Sustainability has been always a crucial theme in the fishing industry. In fact, among the 17 SDGs that the UN fixed as the agenda for 2030, number 14 titled “Life below water” refers to the urgency of protecting and preserving oceans, seas and marine resources through sustainable practices. Strictly related to the 14th goal there are other objectives like zero hunger (2nd SDG), sustainable consumption and production (12th), and the urgent

action to fight climate change and its impacts (13th). The current state of the industry is still paying the consequences of decades and centuries of bad practices that severely altered the maritime ecosystem compromising the biological equilibrium and, consequently, the business of fisheries. The first significant issue is overfishing and unsustainable fishing techniques. Overfishing is defined as the action of fishing species at a pace that does not allow full natural replenishment of the fish stock in the sea. First traces of this issue date back to 1800, when the use of whale blubber to produce oil for lamps exploded (Warfield, 2020). The sensitivity about the issue of overfishing started to spread after the George's Bank Haddock's collapse. Haddocks' stocks in Canada were overfished until the early 90s, since being the main revenue source for New England fisheries. The continuing pressure on the stocks caused irreversible damages, arriving at the official declaration of the collapse of the species in 1992 and the consequent huge loss also in terms of jobs and revenues (MSC). According to FAO, the percentage of fish stocks that are considered within biologically sustainable levels has decreased, passing from 90% to 65.8% in the period 1974 – 2017. Moreover, over a third of the fish stocks have been overfished, reducing the available quantity, and limiting the possibility for the species to reproduce. The matter of overfishing is seriously dangerous: compromised species could take even decades to recover, whenever the equilibrium is not irreversibly compromised making any recovery almost impossible. Furthermore, it must be considered that an ecosystem follows specific biological rules that govern the delicate equilibrium of ocean wildlife. Overfishing a particular type of fish, thus, could not only cause the extinction of that specific species, yet could cause a collapse of the entire ecosystem as well. Overfishing is further exacerbated by the Illegal, Unreported, and Unregulated (IUU) fishing, which is believed to constitute almost 20% of the total catches per year, for a corresponding value of 10 to 23.5 billion \$ (FAO, 2018). The most common illegal and unsustainable fishing practices are bycatch, bottom trawling, cyanide fishing, dynamite fishing and ghost fishing. Bycatch refers to the accidental capture of non-targeted species that end up in the fishing nets or are hit by boats. It represents a severe threat to whales, dolphins, some species of sharks and turtles (Warfield, 2020). Bottom trawling refers to the action of trawling along the seafloor, damaging the biological physical substratum of the sea bottom. Cyanide fishing is a fishing technique that involves spraying cyanide into the fish's habitat to incapacitate them and facilitate the fishing. It is dangerous not only for the targeted species yet has serious side effects for corals too. Dynamite fishing involves the use of explosives which aggressively destroy the habitat

of multiple species. Finally, ghost fishing refers to accidental catches of species by abandoned or lost fishing nets. Such practices affect 11 to 26 tons of fish and are hard to stop. However, legal instruments on an international level are being implemented to stop unsustainable fishing techniques and preserve the marine ecosystem.

Besides overfishing and unsustainable fishing practices, the industry is affected by other environmental issues. For instance, climate change is a major threat. With the enormous emissions of CO₂ and other greenhouse gases, the globe's temperature has increased and consequently, also the water temperature has risen. Specifically, the ocean has absorbed 93% of the additional globe's heat and 30% of the CO₂ emitted. The direct consequence is increasing acidification and deoxygenation of the water that compromises the proliferation of species and the equilibrium of the ecosystem. Estimations say that, since the industrial revolution, water acidity has increased by 26% and is expected to grow in the future (FAO, 2018). Finally, gas emissions dramatically overwhelm the capacity of oceans to mitigate climate change. Another factor that pollutes water is human pollution in the form of plastic waste and microplastics. Improper waste management, freshwater input, residential and touristic activities, as well as harbour operations, brought to the current situation where more than 260,000 tons of disposed plastic float on the ocean's water (Thushari & Senevirathna, 2020). Dimensions vary from macroplastics, which constitute more than 65% of the present waste and are non-degradable plastics for the most part, to microplastics. These latter can originate in 2 ways, depending on whether they are primary or secondary microplastics. Primary microplastics are manufactured in a microscopic dimension from the start and are used, for example, in cosmetics. Secondary microplastics originate from the detriment of larger plastic items exposed to natural forces. Besides the classification of the types of plastic, the issue is of great magnitude: fish, turtles and other species continuously get trapped in plastic packaging, and plastic bags or even ingest such waste. Ingestion and entanglement are two of the main dramatic causes of fish death. Plastic pollution is not only a matter of protecting species yet has consequences for human consumption and the fish industry too. Organisms at lower trophic levels that ingest microplastics, could transmit these particles to other levels of the food web resulting in an accumulation of toxic chemicals that reach higher trophic levels like fish. This has direct consequences on the fish industry and aquaculture and represents both a health and an economic issue. In fact, not only contaminated products are dangerous for human life, but also contaminated fishery

sources have low demand and generate, thus, economic losses (Thushari & Senevirathna, 2020).

To conclude this insight on sustainability, it is important to mention one last issue that represents a challenge for firms involved in the transformation of seafood products: food waste. Waste is generated at different stages of the supply chain from capture, as I mentioned talking about bycatch, to consumption, passing through the transformation phases. As I will discuss in the next chapter based on empirical evidence, some companies try to use as much raw material as possible. This is an urgency that arises both from an economic and environmental perspective. On the one hand, exploiting parts that are usually discarded allows the creation of new products for human consumption or animal feed, generating new revenue streams. On the other hand, producers, clients and society, in general, are more and more aware and sensitive toward environmental issues. Therefore, companies want to commit themselves and embrace the cause.

Environment-wise the pandemic offered a great opportunity to rethink the sector's structure and how companies operate within the industry toward a greener, inclusive and resilient system (Ruiz-Salmón, et al., 2021). The reduction of catches due to restrictive measures generated benefits in terms of less use of fossil fuel and, consequently, fight against climate change through fewer CO₂ emissions. On the other hand, though, the pandemic highlighted several issues in terms of social sustainability in the fish sector. Personnel and professional seafarers could not disembark and travel through different countries. Foreign and transitory workers were severely penalised. Therefore, the pandemic offered an opportunity to reshape the sector also in this direction, toward a more socially sustainable industry. Finally, one could argue that the slowdown of fishing activities could have benefitted the recovery of overfished species. However, most studies suggest that this view is totally utopistic: depleted stocks require at least 10 to 15 years of reduced fishing in order to recover (FAO, 2020).

3.2.2 Purchasing factors and preferences

To better understand the impacts of Covid-19 on companies operating in the fish industry, it is worth analysing the consumption trends and the purchasing preferences of customers. The overall product, collected through catches, aquaculture and import flows, is commercialised through 4 main channels: directly through the fisherman, fishmongers or specialist shops, grocery stores and super/hypermarkets, and fish markets. Figure 8 below

shows a comparison of the preferences of Italian and European consumers with regard to the choice of the purchasing channel.

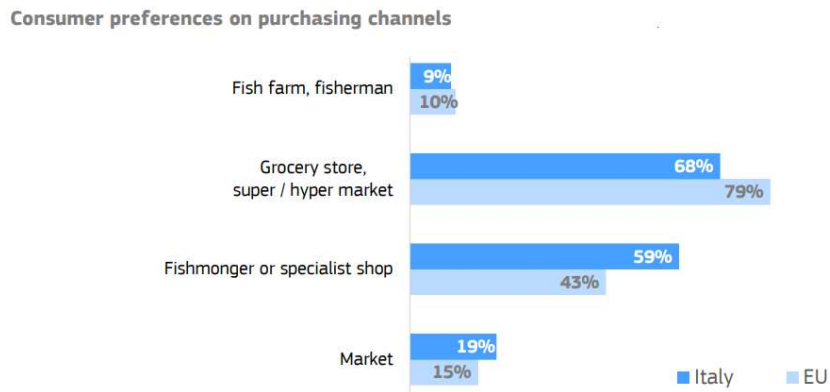


Figure 8. Consumer preferences on purchasing channels. Source: Eurobarometer 2021

Most Italian consumers purchase fish products through grocery stores, super/hypermarkets, and smaller fish markets, in line with the European results. It is important to consider these tendencies in light of the pandemic since restrictive measures impacted big retail stores with a relatively minor magnitude. The closure of the Ho.Re.Ca. channel could suggest a shift of the quantities previously consumed there toward retail stores. However, the empirical evidence collected for the dissertation in the next chapter shows different results. In particular, domestic consumption has not been able to compensate for the closure of restaurants (Ismea, 2021). Another important factor to analyse the fish demand in Italy is what the customers value more when choosing a product. This information suggests consumers' habits, lifestyles and preferences and is useful for companies to shape their offers. It is important also because this factor is an ever-changing indicator since the customer base evolves, preferences and needs change.

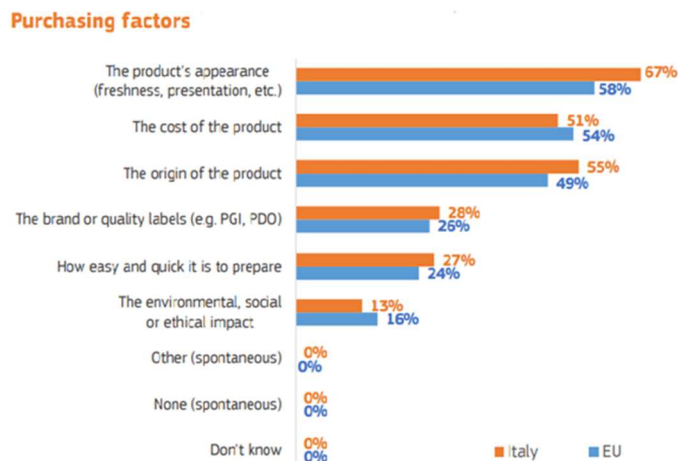


Figure 9. Purchasing factors. Source: Eurobarometer 2021

As Figure 9 shows, the majority of consumers value products' appearance. This element is particularly important for packed products since their growth during the pandemic urged companies to invest in packaging and communication in order to communicate the quality and the freshness of the products. Cost is another crucial factor for Italian consumers. During the first phase of the pandemic, lots of consumers purchased huge quantities of long-lasting products in a phenomenon called “stock-buying”. With a saturation of domestic stocks and a decrease in available financial resources, general agri-food purchases stabilised, including fish products (CREA, 2020). The growth of fish sales is mainly due to an increase in frozen, canned, marinated and smoked fish. In fact, the fresh component dramatically decreased. This result is not only caused by the closure of the Ho.Re.Ca. channel and the difficulties in the reconfiguration of retail stores' offers, yet also by the fact that fresh fish is generally more expensive. It is particularly interesting to briefly comment on the fact that 27% of Italian consumers are interested in buying easy-to-cook products. Fish is generally perceived as a complex product to prepare and cook. Therefore, companies are investing in research and development to create new products that meet these customers' needs. It is a particularly important matter also in light of the pandemic since the recreation of the restaurant experience at home through ready-to-eat products became an important competitive factor for transformation companies. Among the other factors indicated in the graph, it is interesting to quickly comment on the fact that the environmental impact of the products is the least valued element. Despite a general growing awareness and sensitivity toward environmental issues, consumers do not seem to consider it as a fundamental factor. This is due to the fact that there is little knowledge about sustainability issues in the fish industry. Moreover, the certification labels on the products do not help to understand how the product contributes to reducing the environmental impacts. In fact, consumers do not have a culture about the meaning of the different certifications and implications, therefore sustainability is considered a minor purchasing factor.

3.2.3 *Distribution issues*

Distribution represents a crucial theme for the fishing industry. More specifically, fresh fish transportation must be as effective as possible to ensure that the products reach their destination fast. Fish is distributed through different means, the main one being maritime transport. Countries like Sweden and Norway export and import products via the sea. The sea transportation sector is facing severe challenges in multiple aspects: the already

discussed sea freights are causing delays and are compromising the cost structure of transformation and commercial enterprises. Moreover, the skyrocketing cost of oil is further exacerbating the delicate situation. Another transportation route is the road. Similarly to maritime routes, road transport is suffering from the current oil price inflation. Moreover, one of the major consequences of such a transport system is traffic congestion, a growing phenomenon positively correlated with the increasing dimensions of cities. Also, the general structure of road transport suggests the urgency to find alternative solutions to improve the current situation. Destinations and demand are known nodes of the chain. Distributors can arrive at the client's location on time, but in case of delay fuel costs increase, CO₂ emissions rise and there is a tangible risk in terms of food safety. As delay increases, in fact, it is more and more complex to maintain the cold chain necessary to transport fresh fish. An effective solution is rail transport and innovations in this realm have been recently introduced. For example, Salmon Express is a train that connects Norway with the rest of Europe. Its 18 wagons transport Norwegian salmon to all destination countries where it is transformed and then sold. By guaranteeing at least as much rapidity as road transport, Salmon Express delivers 700 tons of fish, eliminating 10,000 road trips and cutting CO₂ emissions by 20,000 tons per year (Sfragasso, 2021). Besides transports, distribution channels have been hardly hit by the pandemic too: the closure of boundaries slowed down international trade flows, the closure of the Ho.Re.Ca. channel significantly changed the composition of sales and new channels developed as valuable alternatives. According to Ismea (2020), the sector experienced exponential growth of e-commerce platforms and, especially during the peaks of the pandemic, consumers preferred local retailers and supermarkets. A form of distribution that developed in Europe and started to spread also in Italy is to purchase directly from fishermen. Such a type of sale is called direct-to-consumer (D2C) and became essential to ensure business continuity. Not only D2C is a way for producers to continue their activity also in periods of uncertainty and crisis like the pandemic, but it is also a way to encourage shorter supply chains and consumption of local products. In this direction, the EU issued a regulation to discipline direct sales of fresh food directly to consumers (CREA, 2020). In general, the pandemic pushed toward the adoption of already existing solutions that were little developed and spread. However, it showed how such solutions could be life savers in periods of crisis and their potential to ensure business continuity. E-commerce, phone orders, and D2C are still a small fraction of the fish distribution.

Nevertheless, companies that implemented such changes will probably maintain these infrastructures as valuable complements to more traditional distribution channels.

In conclusion, according to the literature, the major trends the sector is facing in terms of consumer preferences concern the product itself and the distribution channel. As far as preferences for the products, consumers increased their consumption of canned, dried and, in general, low-perishable fish, and decreased the demand for fresh fish. Moreover, frozen products' sales grew in the last few years. On the distribution side, apart from supermarkets, consumers purchased more from local small stores and adopted alternative solutions such as D2C and e-commerce, especially during the pandemic. The big challenges the sector is facing in terms of distribution are to offset the increasing costs of transport, specifically sea freights and fuel, and to find alternative transport solutions that guarantee the cold chain, avoid delays, improve traceability, and shorten the supply chain. Finally, sustainability is a major issue to address, also in light of the UN's SDGs Goals that push toward a more environmental-friendly fish industry.

3.3 The European legislation for the fishing and aquaculture industry

Sustainability is a particularly important theme in the fish and aquaculture industry, as pointed out in Paragraph 3.2. Besides the UN's Agenda 2030 and the relative SDGs, the European Union too issued a set of regulations that define specific goals to be achieved. Moreover, together with these provisions, funds have been earmarked to realise different projects in the realm of sustainability in the fish industry. I will briefly illustrate 4 main programs, namely the Common Fisheries Policy (CFP), the Sustainable Blue Economy, the Aquaculture Policy and the European Maritime and Fishery Fund (EMFF)³.

3.3.1 The Common Fisheries Policy (CFP)

The Common Fisheries Policy, commonly referred to through the acronym CFP, is a set of rules and prescriptions for the sustainable management of the European fishing fleets and to preserve fish stocks. It was originally part of a broader programme called Common Agricultural Policy (CAP) yet was separated and developed independently when the Common market organisation was introduced in 1970. Common market organisation can be defined as the fundament of how the European fish sector works and is structured. In particular, it is articulated in 5 main areas:

³ All information about the different programs is taken from the official European website https://ec.europa.eu/oceans-and-fisheries/index_en.

- 1) Organisation of the sector: producers and organisations are the core of the sector. Through their activity they deliver a common fisheries policy and contribute to the sustainability of the sector.
- 2) Marketing standards: they are crucial to establish a uniform set of characteristics and requirements that products must satisfy in order to be commercialised within the European market.
- 3) Consumer information: strict rules state which information must be included in the products to allow for maximum transparency and better-informed purchasing decisions.
- 4) Competition rules: rules that govern the sector, together with the exceptions that ensure the correct functioning of the policy and the achievement of EU objectives.
- 5) Market Intelligence: the EU created EUMOFA, a web platform through which official data, statistics, reports can be accessed by whoever is interested. The platform aims at ensuring full transparency about market dynamics.

The current legal framework developed after 2013, when the latest reform in the field was issued. The objectives of the policy can be summarised in 3 pillars, as suggested by the roadmap enclosed in the Council Regulation no. 2371/02. The first goal is the achievement of a healthy marine ecosystem through responsible and sustainable fisheries and aquaculture activities. In other terms, there is a particular attention toward the health of fish stocks, but a more comprehensive approach is adopted. In fact, the focus is on preserving the entire marine ecosystem, rather than a pure fisheries perspective. Secondly, the framework aims at an economically viable competitive fisheries and aquaculture industry, benefitting the customer at the same time. Lastly, the final goal is to guarantee a fair standard of living to all people involved in the industry or that depend on it (Frost & Andersen, 2006).

Despite being one the most long-established and controversial common policies in the EU in the field, the Common Fishery Policy represents the ground for the Member States' fishing activities since it sets quotas on the allowable catches, conditions on fishing gear and techniques, as well as record obligations and marketing requirements.

3.3.2 The Sustainable Blue Economy

The Sustainable Blue Economy is strictly related to the European Green Deal, a series of projects and plans oriented toward becoming the first continent without any environmental impact. In other terms, the plan is to transform the EU into a modern

economy guaranteeing a full environmental respect by cutting greenhouse gases emissions and revolutionising the whole European policy set in terms of climate change, energy, transports and economy. Intuitively, EU's blue economy is a crucial step to achieve such results, also given the importance of oceans for human life. Oceans contain 97% of the global water available, they provide food for almost half of the world's population and are an important economic asset thanks to the different economic activities that are somehow connected to fishing, water, trade (European Commission, 2021). As mentioned in Paragraph 3.2, oceans are also our most important climate regulator and plastic pollution, greenhouse gases and climate change are compromising its mitigation capacity. Looking at the agenda for the blue economy more in depth, 3 main objectives stand out: firstly, the exploitation of renewable energy sources with a consequent decarbonisation of the maritime transport and greener ports. The decarbonisation of the maritime transport is particularly important: not only it is a way of decreasing greenhouse gases emissions, yet also to diminish air pollution, water pollution and underwater noise. Secondly, the idea of circular economy seems to be relevant: starting from the fishing gear and ship components, it is important to re-utilise materials that are still usable to fully exploit their productivity. Lastly, the importance of biodiversity and landscapes, severely damaged by illegal fishing practices and pollution, is a central point. The urgency to safeguard coastal areas arises to favour the conservation and reinstatement of coastal swamps, mangroves and submarine meadows, fundamental for the decarbonisation of the sea. Moreover, the plan suggests the importance of developing greener infrastructure in coastal areas to preserve biodiversity and coastal ecosystems, while fostering sustainable development of tourism and economy. Lastly, the EU underlines how the green and digital transition proposed in the Blue Economy has a great potential in terms of job creation and the development of new competences.

A first comparison can be made between the CFP and the Sustainable Blue Economy plan. While the former is more concerned with regulating the general structure and functioning of the fish industry and the relative market, the latter focuses more on the issue of sustainability in the sector, by underlying the major challenges and how to face them through an action plan oriented toward sustainable development in a broad sense (environmental, social and economic). The EU points out the importance of investing in research, skills and innovation, also through public fundings, to achieve the ambitious results of the agenda.

3.3.3 *The aquaculture policy*

If fisheries are EU's exclusive competence, the case of aquaculture is more complex. In fact, if on the one hand Europe fixed some common rules regarding environmental protection and human and animal health, on the other hand the actual structure and organisation of the aquaculture activities is a competence of each member state. In particular, in 2013, the Commission adopted a non-binding set of strategic guidelines to guide each member state in the predisposition of its own national plan. Through the so-called "open method of coordination", the different EU countries can exchange the best practices adopted also through technical seminars. In fact, such system allows for the identification of problems and the facilitation of cooperation and policy coordination among the member states. The general strategic guidelines can be found in the communication of the European Community 2021 no. 236 and cover the period 2021-2030. Similarly to the Sustainable Blue Economy, the aquaculture policy and the relative guidelines aim at offering to the Member States a set of tools to foster and favour the development of aquaculture for the achievement of the broader European Green Deal. However, the EU provided a large body of legislation to regulate aquaculture activities given their complexity. Many elements such as the use of water, space, animal's care and welfare, and products' safety are involved in aquaculture production. Therefore, it is important to have a common set of rules each member state must comply with to satisfy general standard of health and safety. Within this framework, the different national provisions are developed. The common strategic goals the EU indicated are the creation of a resilient and competitive sector, the supply of healthy and safe food, the reduction of EU's dependence upon import flows from external partners, the creation of job positions and the creation of economic opportunities. Lastly, the objective is to make the EU aquaculture industry an international reference point for sustainability. On a more pragmatic point of view, the aquaculture policy is articulated in 4 pillars: resiliency and competitiveness, contribution to the green transition, social acceptance and consumer information on the different activities and products, and increased knowledge and innovation in the sector.

3.3.4 *The European Maritime and Fishery Fund (EMFF)*

The realisation of projects, plans and the achievement of the goals included in the various policies described above require significant investments of financial resources. Therefore, besides pure legislation, the EU set a specific fund dedicated to the different investments

in the fish and aquaculture sector. The first fund was issued in 2014 and covered the period 2014-2020. The so-called “European Maritime and Fishery Fund” (EMFF) was designed to help fishers become more sustainable on the one hand, and to help coastal communities to diversify their economies in the direction of more socially sustainable communities along the EU’s coasts on the other hand. The EMFF is part of a broader funding plan articulated in 5 European Structural and Investment Funds (ESIF) which are complementary and are designed to deliver more jobs, welfare, and growth in the EU. The underlying logic of the EMFF is built around 4 main topics, namely the intelligent and environmentally friendly fishing to work in the direction of sustainable fish industry, smart and environmentally friendly aquaculture, social sustainability for communities that depend on the fish industry or are somehow related to it, cross-sectoral maritime policies that generate savings and growth. The total fund of 6.4 billion € was divided into shares allocated to each Member State in proportion to the dimension of the fishing industry. Each Member State was then supposed to prepare a detailed operational plan to set out in detail how the fund would have been used for the funding period 2014-2020. Once the plan was approved by the Commission, the Member State could decide which projects to fund, taking responsibility for the relative successful implementation. Italy received a total of 537 million €, distributed over the period considered as shown in Figure 10.



Figure 10. EMFF funds per year for the period 2014-2020 in Italy. Source: <https://pofeamp.politicheagricole.it/en/>

On a total of 13,329 monitored projects, 1% is concluded, 81% are settled and 18% are still ongoing⁴.

The 7th of July 2021 the Commission approved the new European Maritime, Fisheries and Aquaculture Fund (EMFAF) for the period 2021-2027 that substitutes the previous

⁴ Data are taken from <https://pofeamp.politicheagricole.it/en/i-numeri-del-feamp/>.

EMMF. The regulation, entered into force on 14th of July 2021, goes in the same direction as the already existing fund. In particular, it supports EU's objectives in terms of food security, growth of sustainable blue economy, securely and sustainably managed seas and oceans. Moreover, it helps to achieve the already mentioned SGD number 14 about the protection of marine resources to which Europe is committed. The priorities, then, are very similar to the EMMF, pointing toward a sustainable exploitation of the seas and the relative marine resources. The total amount of the fund is 6.1 billion € and its management is divided in two components: 5.1 billion € are under a shared management, where the different Member States issue their operational plans that are co-financed by EU and EU countries, similarly to EMFF. Moreover, each Member State receives funds according to the same proportion adopted for the period 2014-2020. The remaining 797 million € are under direct management, so they are directly provided by the Commission.

To conclude, EU is strongly committed to SGD 14 and the protection of seas, oceans and marine resources. Different policies regulate fishing activities, aquaculture and coastal activities to achieve sustainable goals toward the Blue Economy, that contributes to the broader programme of the Green Economy. In fact, as stated by Virginijus Sinkevičius, European Commissioner for Environment, Oceans and Fisheries, *"To be truly green, we must also think blue"* (European Commission, 2021) The shift toward sustainability in the fishing industry will open new opportunities, will create new jobs and will benefit the planet. Therefore, protecting such natural resources must be a major interests of all members of a community. Politicians, entrepreneurs, citizens, through their efforts, are the very actors that can realise the shift from mere exploitation to sustainability and resilience.

3.4 The role of aquatic food on the global food system

When we think about the food system, what usually comes first to mind is meat, poultry, fruit, and vegetables. Fish is less considered. This is due to a lack of awareness on how fish and aquaculture products contribute to the global food system and the potential for future development. Secondly, blue food tends to be marginally considered in policy discussions and implementation. However, aquatic food covers a crucial role and could represent an enormous opportunity to improve equity, health, and sustainability of the global food system.

3.4.1 Aquatic food to reduce hunger and malnutrition

Blue food provides protein for over 3.2 billion people and is a source of nutrients for many communities. However, hunger and malnutrition still affect poorer populations and are widespread phenomena on a global scale. According to the World Food Programme, around 700 million people suffer from hunger. Of those, 250 million risk starvation. With the current situation, if no corrective measures are implemented, the situation is expected to get even worse: 840 million will be going hungry by 2030 (Nature, 2021). More in depth, among children under the age of five, 149 million suffer from stunting and 45 million from wasting. As far as adults, obesity affects over 2.1 billion people globally (Golden, et al., 2021). Malnutrition and dietary inadequacies are at the base of nutrient deficiencies that generate severe diseases and mortality. Scientific studies show the concrete contribution of aquatic food to reduce malnutrition globally. Specifically, it can contribute under 3 different aspects: first, it can reduce micronutrient deficiencies, reducing the occurrence of subsequent diseases. Second, aquatic food is a major source of omega-3 long-chain polyunsaturated fatty acids, docosahexaenoic acid (DHA) and eicosapentaenoic acid (EPA), fundamental to reduce the risk of heart disease and improve brain and eye health. Multiple species, such as pelagic fish, shellfish and salmonid, provide greater quantities of nutrients (omega-3, fatty acids, vitamins A and B12, calcium, iodine, iron and zinc) than beef, lamb, goat, chicken or pork. Lastly, it can substitute the consumption of red and processed meats, thus reducing the adverse health outcomes that the actual rates of red meat consumption cause (Golden, et al., 2021).

It is commonly agreed that there is the urgent need to transform the global food system. However, the role of aquatic food for such transformation has always been minimised. In fact, in almost all policies, the category was undervalued as a nutritional solution because the diversity of species has been often reduced to the nutritional values of a single food type. Consequently, the variety of species has been treated as a homogeneous group, limiting the consideration in global diets. Moreover, the nutritional contribution of aquatic foods has traditionally focused on its low contribution in terms of calories and protein, failing to consider the contribution via the fundamental micronutrients and fatty acids mentioned above. Finally, international food policy dialogue such as the UN's SDG n. 2 called "Zero Hunger" even completely ignores the role of aquatic food. From this brief dissertation, the role of aquatic food to reduce food-related health issues is evident and an urgent modification of global food systems is needed. Of course, the topic is much more articulated and other factors come into the discussion: environmental, social and

economic characteristics vary widely across the planet, with consequences on the biodiversity of the wild-capture and aquaculture sectors. In addition, micronutrient requirements vary as a function of age and sex and differ between individuals (Lauritzen, 2021). However, it is at least important to start introducing blue food into policy discussion, also considering the scenario depicted by scholars according to which a sharp increase in blue food production and consumption by 2030 could prevent undernutrition in 166 million people (Golden, et al., 2021).

3.4.2 Aquatic food for social sustainability and equity

The fishing and aquaculture sector supports the livelihood of around 800 million people. While national and international policy debate is often focused on expansion of capital-intensive fisheries, transnational investments and offshore mariculture, the majority of these people works in small-scale systems, the so-called small-scale fisheries and aquaculture (SSFA). SSFA are fundamental actors of the supply chain: they produce more than half of the global fish catch and two-thirds of aquatic foods for human consumption and represent 100 million full- and part-time jobs across connected supply chains. Moreover, they provide aquatic foods to consumers of different social classes, from wealthy consumers accessing luxury products in global markets, to poorer consumers accessing products from local markets (Short, et al., 2021). SSFA are of fundamental importance in developing countries: 90% of the fishing workforce is constituted by small-scale fishers that, by operating on inland and coastal areas, significantly contribute to the social, economic, and cultural development of the relative rural and coastal communities. However, the vast heterogeneity of actors and the relative products is often ignored by policy makers, thus compromising their persistence, and penalising the entire food systems they belong to (Short, et al., 2021). What is important to consider in the competitive scenario is the interaction between industrial fishing and aquaculture and SSFA. Competing dynamics deriving from globalisation risk on damaging small fishing activities, therefore it is important to equilibrate their co-existence. For example, the rise of international demand for marine products often led to the industrial fishing and transformation of species that were previously destined to local consumption and represented important revenue streams for small-scale fishers and source of nourishment for local communities. In general, SSFA are the first actors to be extremely penalised by governance failures, poor political representation and power, resource overexploitation,

habitat degradation, illegal activities, climate change, inequitable resources and limited social inclusion (Short, et al., 2021).

First useful steps could be the rebalance of the access to capital and the political influence of SSFA, by considering their key role in the future of the food system. Furthermore, addressing the issues listed above can support the development of sustainable and equitable food systems. In fact, responding to globalisation only through large-scale industry undermines the cultural integrity, equity, nutritional security, and livelihoods of local communities that benefit from SSFA's activity. In essence, the fact of re-thinking the global food system by including aquatic products in global policy making and considering small-scale fishing activities as a key components can contribute to the creation of healthier, more sustainable, and equitable food systems.

3.4.3 Aquatic food for environmental sustainability

The current food system is a major source of environmental change. In fact, it is responsible for one-quarter of the total greenhouse gas emissions, occupies half of the ice-free land and is responsible for three-quarters of the total water consumption. Aquatic food represents an interesting and valuable opportunity to improve nutrition following the dissertation of Paragraph 3.4.1, yet with a relatively low environmental impact (Gephart, et al., 2021). Sustainability with regards to blue food can be assessed by looking at 4 main environmental stressors: greenhouse gas (GHG) emissions, freshwater use, land use or occupation and, finally, nitrogen and phosphorus emissions per tonne of edible weight. More specifically, GHG emissions in the fed aquaculture sector are mainly caused by feed, while fuel is the main responsible for pollution in caught fisheries. As far as land use, most of the land is occupied for feed production destined for fed-aquaculture. Even though blue food is produced in water, the rates of freshwater consumption are, once more, linked to feed production. Finally, nitrogen and phosphorous emissions are responsible for seawater eutrophication and, in the case of fed systems, most of the emissions are produced on farm. For each environmental stressor, different species contribute with different magnitudes. For example, farmed seaweeds and bivalves generate the lowest GHG emissions, whereas flatfish and crustaceans generate the highest. Capture fisheries, despite wide variations in terms of GHG emissions, register low impacts on other stressors. Moreover, research shows that non-fed species, as well as unfed and unfertilized finfish systems, remove more nitrogen and phosphorus than the emitted quantity to produce them, resulting in negative emissions (Gephart, et al., 2021).

An interesting observation clarifies the potential of blue food to improve sustainability. A comparison with terrestrial foods, in fact, shows that chicken, which is the less-polluting production among other livestock, produces the same amount of pollution as the most common fed-aquaculture species or is even more polluting. It is evident that to fully exploit blue food for environmental sustainability, it is crucial to distinguish the various categories and species. The already cited problem of considering blue products as a homogeneous category prevents us from seeing the contribution of each category in terms of reduction of the environmental impact. A clear distinction and a separate analysis allow for the exploration of new trade-offs and synergies that can foster the production of species with high nutritional values and low environmental impacts. The distinction also facilitates the formulation of precise policies and the orientation of investments toward promising technological innovations that can reduce environmental stressors.

To conclude, this brief dissertation sheds a light on the fundamental role of aquatic food in global food systems. Food insecurity is growing and has been exacerbated by the pandemic and the challenge to feed a growing population without exhausting the available natural resources is more and more compelling. In this scenario, the fishing sector can contribute by providing accessible and affordable sources of animal proteins and nutrients to a large population. As I described above, aquatic food is not only important to stem and improve global famine and malnutrition yet is an important source of income and work for thousands of coastal and rural communities as well. Proper management and policymaking in the fishing sector are key elements to exploiting the potential of blue food for environmental sustainability. The so-called Blue Transformation promoted by FAO is the targeted effort to promote innovative approaches that foster the contribution of aquatic food in global food systems in terms of food security, nutrition, affordable healthy diets, and social and environmental sustainability. Specifically, the project is based on three core objectives (FAO, 2022):

1. Expansion and intensification of sustainable aquaculture: the aim is to achieve food security targets and satisfy global demand ensuring equitable distribution of the benefits at the same time.
2. Effective management of all fisheries to deliver healthy stocks and secure livelihoods.
3. Upgraded value chains to ensure social, economic and environmental viability and sustainability of aquatic food systems.

Blue Transformation can support the international community to maximize the contribution of aquatic food for the achievement of the Sustainable Development Goals by 2030, Moreover, if properly supported, it can sustainably provide around 25% growth in per capita aquatic food consumption by 2050, when the global population is expected to reach 10 billion people (FAO, 2022). The implementation of such a plan requires targeted and specific planning, legal and institutional frameworks and policies that consider the vast heterogeneity of aquatic food. Only by taking into account the diversity of blue foods, it is possible to exploit the contribution of the different species for nutrition and sustainability.

4. Covid-19 and Business Model modifications in the fishing industry

4.1 Research methods

4.1.1 The Agri-food Management and Innovation Lab

The present essay shows the result of a research conducted on the fishing and aquaculture industry in collaboration with the Agri-food Management and Innovation Lab of Ca' Foscari University of Venice. The research team, born in 2019 after the approval of the Lab by the Department of Management, has the aim of collecting and analysing data on the major innovation trends affecting the agri-food sector. The main focuses are digitalisation and sustainability, two phenomena that are deeply changing how companies operates within the industry and the companies' structures at the same time. Specifically, the Lab started a strand of research on the adoption of digital marketing tools in the agri-food sector, to understand how companies cope with digital technologies and online presence at different stages of the production process. This dissertation starts from the basis of the main strand of research of the Lab. Hence, the main topics to be analysed have not been altered and are structured as follow:

- 1) Understanding the online presence of agri-food companies in different digital channels.
- 2) Outline how companies organised their human resources for the management of the different digital technologies adopted.
- 3) The factors that pushed or influenced the adoption of digital technologies.
- 4) Performance measures.

In order to collect data, the team developed a digital questionnaire to investigate on these themes that was then presented to a sample of local companies. In particular, the companies were selected in Veneto and Friuli Venezia Giulia, within the so-called Triveneto.

However, this thesis points toward a slightly different direction. In the previous chapters, I have broadly discussed the implications of Covid-19 for the agri-food sector. In particular, I have focused on the impacts that scientific articles, newspapers, official statements highlighted as the major impacts of the pandemic on business models. In light of these theoretical evidence, to empirically verify which modifications Covid-19 brought to agri-food business models was a missing piece in this research field. More specifically, the fishing and aquaculture industry was essentially unexplored. Therefore, I was given a

set of companies working in the field to analyse. The fishing industry is a continuously evolving sector where innovative trends are observed: digitalisation and sustainability are shaping the competitive scenario especially after Covid-19. In this chapter, I will present the collected results and I will discuss the findings. It is important to point out that the current work is not intended to provide absolute results, nor to contribute to the literature on the topic by providing definitive scientific results. The conducted research is a qualitative investigation on a small panel of local and heterogeneous companies. Therefore, the presented results are just a starting point for future research on the impacts of Covid-19 on the reconfiguration of business models in the agri-food sector and, more specifically, in the fishing industry.

4.1.2 Data collection and interviews analysis through the Gioia Method

To collect data, I contacted different local companies working in the fishing and aquaculture industry to interview them. In order to create a heterogeneous dataset to work on, I chose companies working in different subsectors of the industry, namely mussels, clams and both fresh and frozen fish (Cam Evolution in the Appendix), stockfish (Tagliapietra Srl in the Appendix), trout (FriulTrota in the Appendix) and local molluscs (O.P. Bivalvia Veneto s.c./I PescaOri in the Appendix). The interviews were conducted either in presence, by phone or videocall and recorded. Each interview lasted, on average, one hour and has investigated the research topics following a draft. The interview's draft structure was provided by the research team of Ca' Foscari University to investigate the core themes of the strand of research. Since the current work has a slightly different aim compared to the Agri-food Lab, I modified the draft by implementing some questions more focused on the actual impacts of the pandemic on companies' business models. All interviews have been transcribed and are the main foundation of the data analysis in this chapter. Whenever necessary, I also proceeded with a second interview to delve into specific aspects emerged from the previous interviews that were useful to have a broader and clearer picture of the company and its decisions. Before moving to the data discussion, it is important to present the analytical methods used to extract concrete results from the interviews collected. First of all, it is important to underline once more the qualitative nature of this work. To build and investigate a broad sample of companies would require years of studying. Therefore, 4 main business cases have been studied to answer the underlying research question of this thesis. Despite the qualitative nature of the investigation, it is important to extract results with enough scientific rigour. Hence,

the Gioia Method has been applied. Excerpting from Gioia's, Corley's and Hamilton's "Seeking Qualitative Rigor in Inductive Research: Notes on the Gioia Methodology" (2013), the starting point of the methodology relies in the fundamental difference between construct and concept. Constructs are abstract theoretical formulations about observed phenomena of interest that delineate a domain of attributes usually quantifiable as variables. Concepts are, instead, more general and less-specified formulations that delineate qualities and characteristics of phenomena. Traditional approaches to research are usually focused on constructs formulation. The underlying philosophy of the Gioia methodology follows a different path, instead: concepts are precursors to constructs. Therefore, it is fundamental to first identify a set of concepts that can, then, guide the formulation of constructs.

The method is articulated in 3 different phases: the 1st order analysis, the 2nd order analysis and the identification of aggregate dimensions. In the 1st order analysis, the method suggests pointing out the emergent themes adhering to the informants' terms. That is, it is better to avoid any attempts to already reconduct the highlighted topics to the relevant theories in this first phase. As the authors suggest, the identified categories tend to be numerous at this initial stage. I applied this first step to the interviews by putting side comments on the different answers given by the respondents. Each point resumed the core concepts expressed by adhering as much as possible to the respondents' terms and without altering the company's narrated experience. On average, for each interview, 30 to 50 first order codes have been identified and noted. The comments were further elaborated on a second analytical phase following the second step of the method, called 2nd order analysis. The 2nd order analysis looks for any similarities and differences among the many categories resulting from the previous step. More importantly, the second phase puts labels or briefly describes the emergent topics to have a clearer picture of the relevant themes. This allows to start looking for correspondences with the existing literature. Once the first two steps were made, I proceeded with the final step of the Gioia Method: the identification of aggregate dimensions aimed at building the data structure upon which the research is grounded. The results of this third analysis on the interviews are 4 major categories where the influence of Covid-19 was evident and had consequences on the business model configuration. Specifically, I have identified the following areas of interest: e-commerce and distribution channels, consumer preferences, sustainability, and effects on the cost/revenue structure. Each aspect has been commented by highlighting which building blocks of the Business Model Canvas described in Paragraph 1.2.2 were

involved in the transformation, following the approach of the dynamic business model and underlying the interdependencies that link the different blocks. These three categories of elements resulting from the whole analytical process, allow to extract and organise relevant themes on a set of qualitative information with scientific rigour. The logic is the one described above: starting with the first two phases, the main concepts are extracted. By identifying aggregate dimensions, and by seeking correspondences with the literature, we start modelling our information into constructs with theoretical relevance. The same process has been used to elaborate the information collected through the interviews.

4.2 The major impacts of Covid-19 on BMs: strategies and implications

4.2.1 Diversification of the distribution channels and e-commerce

The first building block that has been impacted by Covid-19 is the distribution channels. The closure of the Ho.Re.Ca. channel during the lockdown posed severe challenges to companies whose major clients were restaurants, catering and the food service in general. As stated by Mauro Vio, business development manager of O.P. Bivalvia Veneto s.c. and I PescaOri: the pandemic

“made us realise that if you depend too much on a single market, you get stucked when things like this happen”.

Hence, the diversification of distribution channels is a fundamental strategy to offset the negative performance of a market. More in detail, serving both the Ho.Re.Ca. channel and the large-scale distribution channel allowed operators to still generate revenues. In the case of O.P. Bivalvia Veneto s.c., entering the large-scale distribution channel was exactly the strategy pursued: the company had 200 pallets of products ready to be sold to the food service. Since no restaurants, bar or caterings were ordering due to the lockdown, they decided to enter large-scale distribution channels by reducing the quantity per product, shifting from 2 kilos packages to 200/300 grams ones. Being flexible opens new possibilities that deeply modify business models and are likely to permanently reshape them. Excerpting from Mauro Vio’s interview, in fact:

“we understood that also the big distribution channel can be an opportunity to keep up”.

Similarly, Trota Oro Srl, whose only clients are operators of the Ho.Re.Ca. channel, suffered losses due to the high dependence on a single market. However, in this case, no diversification of distribution channels has been implemented. They kept the business as

it was, with consequent negative performances in terms of gross revenues, net revenues and margins. As I will discuss later, they tried to open an e-commerce platform, without achieving the expected results.

On the other hand, companies already working with the large-scale distribution suffered the impacts of the pandemic less. Restrictive measures, as already stated in the previous chapters, did not affect supermarkets, hypermarkets, and grocery stores. Therefore, such actors continued to order products from their suppliers. Mauro Vio states:

“operators already working with large-scale suppliers saw a double-digit growth that year”.

The assumption is confirmed by Andrea Crozzoli, general manager of Cam Evolution Srl:

“we saw a growth with all our clients. In some cases, it has been more consistent, in some other less significant.”.

In addition, he states that:

“The pandemic positively influenced our business because, besides April 2020, when we registered a decrease, we started to grow”.

Most part of this success is due to the fact that the company serves discounts. This particular type of client has multiple benefits: first of all, they are big chains with centralised control. This means that all selling points follow the same strategy and have almost the same assortment all over the country. Secondly, they are widespread, with lots of selling point in the national territory. Therefore, serving discounts allows for an extensive distribution of the product and has been a vital resource for the company. An interesting perspective on the diversification of distribution channels is provided by Luca Tagliapietra, production manager of Tagliapietra & Figli Srl. The company serves both large-scale distribution and the Ho.Re.Ca. channels. With the closure of this latter, they had repercussions in terms of revenues since restaurants and catering significantly contributed to the business. However, they still generated revenues by being present with lots of different products in the major retail points. Moreover, they profited from the “calm period” of the lockdown to focus on new products development in the ready-to-eat sector. In other terms, the closure pushed toward investing in the profiting channels (retailers) by offering new products that met new consumers’ preferences.

Hence, the importance of diversifying the distribution channels is evident. Relying too much on a single set of clients belonging to the same macro channel represents a risk. In fact, in case of dramatic events like the pandemic, companies face huge difficulties. From the evidence collected, we could also state that large-scale retailers are a sort of “safe harbour” for firms. Since they supply essential products, such distributors are the last actors to be affected by restrictive measures. Being able to modify the internal processes and organisation to expand the array of distribution channels is a winning strategy to face a crisis like the one experienced in 2020. To implement the strategy of diversification of the distribution channels, another fundamental building block is involved: key partners. New distributors become part of the business model and their strategy must be considered when elaborating the offer. In the interview with Andrea Crozzoli, this aspect is explained in detail: discounts follow the above-described mechanism, whereas Coop or Conad, the two major retailers in Italy, follow different strategies for each cooperative. Hence, serving Coop means to serve 4 different clients, with different assortments and commercial strategies. Therefore, also these aspects must be considered when enlarging the panel of distributors, in order for the strategy to be profitable and effective. From Mauro Vio’s experience one last important aspect emerges: the modification of key processes. If serving the Ho.Re.Ca. channel requires specific quantities per package, large-scale suppliers, serving private consumers, require smaller quantities of product per package. This has implications in terms of the product itself, the packaging, the logistics. It is, however, a minor modification since it does not require further investments nor deep modifications of the processes.

The literature on the impacts of Covid-19 on business models in the agri-food and fishing sector highlights the rise of e-commerce as a further distribution channel for companies working in the fishing sector. Empirical evidence on the issue produced contrasting results. In the interviewed sample, in fact, there is a heterogeneous experience with regards to online purchases of fish products. More specifically, I found positive opinions and high consideration of such channel, extremely negative experiences, passing through high consideration of the potential, yet impossibility to implement it. Let us start by observing the objective transition e-commerce is bringing into the sector. It is beyond all doubts that online purchases are growing and reserve profitable opportunities for companies working in the field. Both in the case of Tagliapietra & Figli Srl and O.P. Bivalvia Veneto s.c./I PescaOri, the e-commerce platform has been opened as a response

to the pandemic. Both companies needed to partially compensate the closure of the Ho.Re.Ca. channel and integrate the earnings generated through retailers. Moreover, for Tagliapietra & Figli Srl, the online platform

“allowed to save lots of small clients [...] since we gave them the possibility to keep on purchasing also profiting from small discounts”.

Besides the straightforward advantage of opening an e-commerce as an integration of the business, the interviewees pointed out the relative issues that constitute challenges also from a business model perspective. It is important to consider an e-commerce platform as a global investment. That is, it requires multiple investments for different aspects: the design of the platform, the financial effort to develop and implement the appropriate website, investment in education and personnel. To start, in the totality of instances, the platform is developed by a third party in charge of concretely creating the layout and programming the website. Furthermore, once the e-commerce is operative, in most cases the third company is also in charge of monitoring the results and sharing them with the management. From the interviewees' experience, it is clear how the third party in charge of creating the platform and sharing data becomes a key partner. The data generated by the online platform are useful information upon which firms can take decisions. For instance, data can guide the decision on whether it's worth keeping on offering a certain product or whether it is better to eliminate it from the catalogue. Therefore, using those information is not only a matter of verifying if and how much the platform is contributing to the overall revenues of the company. It is also a way to adjust the offer and improve the performances. For example, Trota Oro Srl opened the e-commerce during the pandemic hoping to generate some revenues. The only information they monitor is how much they sell via the web. However, given the low performances, this approach creates a vicious circle: low performances push toward *“not even considering it part of the revenues”*, so no particular data analysis is performed, losing opportunities to improve the system and the performances. As a result, online sales get worse and so on. The totally different approach followed by Tagliapietra & Figli Srl suggests how data analysis is useful to understand the criticisms and act consequently. In fact, by monitoring the results they understood that the problem of logistics, that I will discuss later, is of major magnitude and negatively affects the performance. Hence, *“we concentrate on the dried products, which do not require the cold chain”*. It is evident how data analysis can guide decisions to partially offset emergent issues and make the e-commerce platform still

profitable. Data and data analysis are, then, key resources and key activities respectively. However, the financial effort to launch the e-commerce is not enough to make it profitable. Dedicated personnel must be trained to use and manage it. For example, in the case of Tagliapietra & Figli Srl, there is an employee fully dedicated to the e-commerce, which has been trained and monitors the stocks, manages the orders and communicates with clients. Dedicating existing staff or hiring new employees to implement the delivery service sometimes represents an organisational obstacle: in Cam Evolution Srl, despite already having a project for the e-commerce, the issue of having dedicated personnel blocks the implementation. In fact, the general manager states:

“you must have a dedicated staff member that deals with it because you cannot rely on the employees in charge of everyday business”.

Yet, contrasts with the property about new hirings prevents the realization of the project. The major issue of the delivery service in the fishing sector is logistics. Fish is a delicate product and food safety must be a priority. Fresh fish and frozen products require, then, the maintenance of the cold chain. Italy lacks a system of delivery that allows to distribute such products for private clients and relatively small clients. In fact, if on the one hand it is easy to find transporters that ensure the cold chain maintenance for big orders destined to large-scale retailers and Ho.Re.Ca., on the other hand there is not an adequate logistic infrastructure to serve the e-commerce platforms of firms. This has consequences on the performances and on the catalogue. Excerpting from Tagliapietra & Figli Srl,

“we used to offer both dried and fresh products. Unfortunately, the transporter does not guarantee regular deliveries and, above all, does not guarantee the cold chain which is fundamental. Therefore, the delivery of fresh products is suspended until we find an “Amazon” for fresh products. We focus on the dried products, which do not require the cold chain”.

To offset the absence of an adequate logistic system, O.P. Bivalvia Veneto s.c./I PescaOri relies on its own refrigerated vans. The downside is, intuitively, the fact that their served range is limited. In their case, they started from a range of 50 km from Caorle to arrive at the 200 km range of present times. Moreover, delivering fresh products is often not convenient: sometimes, the packaging to maintain the temperature costs more than the value of the product itself, as reported both by Mauro Vio and Andrea Crozzoli. Referring to the Business Model Canvas, the above observations suggest how e-commerce has

implications on key partners, key resources, and the cost structure. In fact, finding a logistic company that is able to deliver the products maintaining the cold chain is fundamental for the implementation. Once a national system is created and implemented, companies believing in the e-commerce as a business opportunity are ready to profit from it. Some examples of e-commerce platforms are becoming established. Among others, Cortilia is a web platform that allows customers to purchase food online, including fish and other sea products. However, besides exclusively serving the North of Italy, with the exception of Lazio, it represents a normal business client for transformation companies. In fact, as stated by Andrea Crozzoli, “*Cortilia for us is a normal retailer: it orders twice a week, and we deliver the product*”. Therefore, it is more of an intermediary between the transformation company and the final customer. Working with Cortilia, then, is not considered as having an e-commerce since the logistics and management of the private orders is controlled by Cortilia itself. Working with such platform does not imply significant business model modification, yet it could become a key partner once the revenues generated reach noteworthy levels. In the case of O.P. Bivalvia Veneto s.c./I PescaOri, the refrigerated van constitutes a key resource, since it allowed to implement the delivery service, yet on a restricted area. Finally, it is fundamental to consider the e-commerce as a global investment, with inevitable consequences on the cost structure of the company.

One final interesting observation about the e-commerce is related to the relationship with the customer and its implications. All the interviewed companies have their core business in the B2B segment: large-scale suppliers and the Ho.Re.Ca. channel. The implementation of an e-commerce platform is, instead, oriented toward the B2C segment. This translates into a totally different relationship with the customers and a totally different approach especially with regards to digital marketing and web presence. Specifically, the role of social media is crucial. As stated by Mauro Vio:

“social media activities have been fundamental [...]. If we had written the same thing on our website, it would not have been the same, because you look at our website only if you know us. If you provide some sponsored contents on social media, instead, people get curious and look at what you offer.”.

Similarly, Luca Tagliapietra states:

“we promoted mainly on social networks, then on the website there was the direct link [...]. However, mainly Facebook and Instagram were used to promote the e-commerce”.

Hence, social media are a key resource and have a fundamental role for the success of the e-commerce. From the experience of Trota Oro Srl, we can learn that the absence of social media activities specifically aimed at promoting the possibility to purchase online limits the performances. In fact, as stated by Daniele Leonardi, manager of the company, their social activities *“remained unvaried”* during and after the pandemic, with the consequent non achievement of the desired results. Serving the B2C segment is not only a matter of increasing the social media activities. It is more of a change in the approach to the customer compared to the B2B segment. An emblematic quote by Luca Tagliapietra helps in understanding the point:

“[...] our major clients are retailers. Once the first contact is made, so once our products are known by the client, we get the order independently from a direct and continuous contact”.

Therefore, in the B2B segment social media activities are less effective because the underlying business relationship has different bases. This observation is further reinforced by the experience of Cam Evolution, whose social media profiles are inactive since the company serves only the B2B segment. In the case of the B2C segment, customers must be taken care of, you must attract them, try to build brand loyalty. A continuous targeted social media activity is a fundamental prerequisite. A further difference between the two segments is the language and type of contents you produce to interact with consumers. Besides sponsored promoting contents, that play a central role and are important to reach the consumers as evident from O.P. Bivalvia Veneto s.c./I PescaOri's experience, recipes and short videos represent effective tools. In this direction, what Luca Tagliapietra reported is particularly interesting. With consumers it is important, in his experience, to set the social media profiles as a

“source of instructions, similar to YouTube: I do not know how to do something, I look up on YouTube how to do it. This is the role of social media.” This implies “a different way of proposing the product, teaching through social media by posting mini-videos where people can learn how to prepare the products and cook”.

Moreover, continuously posting pictures and recipes were key actions to maintain interest around the company. Finally, Mauro Vio provides an interesting observation regarding the customer experience with online purchases. Fish is still considered a delicate and complex product. Therefore, it is important to build trust and be reliable. What he observes is that

“clients are more willing to purchase when we offer boxes with suggested menus. [...] It is more difficult to receive the order from someone that autonomously buys trusting you.

Clients trust you more if you propose something rather than autonomously looking through the catalogue and order.”

In other terms, what Vio is stating is the importance of recreating the real-life experience of people going to the fishmonger: people like to ask for advice and trust you when you propose and suggest products and recipes. This further reinforces the idea of changing the mindset, the approach and the offer when serving the B2C channel especially with regards to online purchases.

To resume, e-commerce offers significant possibilities for implementing the business. Online sales of fish products are growing and implementing a web platform for online purchases could represent a competitive advantage over competitors. The implications in terms of business model are numerous: first, an e-commerce platform requires investments in terms of financial resources, human resources and education, thus affecting the cost structure of the company. Secondly, the absence of an adequate logistic system for fresh and frozen products delivery represents a challenge that forces companies to modify their offer as in the case of Tagliapietra Srl or to invest in key resources as in the case of O.P. Bivalvia Veneto s.c./I PescaOri and their refrigerated van. Social media promotion, finally, is of crucial importance to ensure positive performances. Serving the B2C segment involves a change in the customer relationship, in the approach, in the language and in the type of published contents. Therefore, social promotion and ad-hoc contents are key activities that significantly contribute to the performance of the e-commerce.

In conclusion, this first paragraph highlighted the major implications of Covid-19 in terms of distribution channels. Through the direct experience of the interviewees, it is evident how the dynamics described touch different building blocks of the canvas. As stated in Paragraph 1.2.3, in fact, the business model must be seen as a dynamic structure, where

many interdependencies connect the various building blocks. Hence, the implications of the pandemic on the distribution channels are pervasive and deeply modified all the others building blocks, especially customer relationships, key partners, key resources, and the cost structure.

4.2.2 Consumers' preferences and product innovation

When we think about the pandemic and its effects on companies, the first impact we generally think of is sales reduction and consequent revenue losses. This direct impact was, for sure, true also for the fishing sector. Luca Tagliapietra gives an interesting motivation for this decrease:

“Maybe we do not realise that raw material in the fishing sector is scarce. So, if it was once possible to make promotions, today fish products are costly. On average, they cost much more than meat and chicken. Between meat, chicken and fish, this latter is the most expensive. Therefore, when the pandemic started, [...] people tried to save money. To do that, they cut on what was more expensive, that is fish.”.

Nevertheless, the actual impacts on the cost/revenues building blocks are not as straightforward as often described, and the implications are much more articulated, also depending on the type of clients companies serve. In fact, as already mentioned in the previous paragraph, performances during the pandemic have been significantly different between companies working with large-scale retailers and those working with the Ho.Re.Ca. channel. The analysed set of firms is particularly effective to explain this observation: on a sample of four companies, one works exclusively with large retailers (Cam Evolution Srl), one exclusively with restaurants (Trota Oro Srl) and two firms with both channels (O.P. Bivalvia Veneto s.c./I PescaOri and Tagliapietra & Figli Srl). The first registered a positive trend in terms of sales, since supermarkets never closed also during lockdowns. Excerpting from the interview with Andrea Crozzoli, in fact, we acknowledge that

“for us it had a positive influence because [...] from April we started to grow. Especially thanks to the fact that we generate more than 50%/60% of our revenues through discounts. They have always performed well, but even better during the pandemic, also thanks to their widespread distribution”.

The second firm of the sample saw a decrease in the business due to the restrictive measures. The two latter applied the effective strategy of diversification of distribution

channels described above, compensating the losses in the Ho.Re.Ca. channel with e-commerce and retailers. However, the only fact of being present in a channel does not mean to be successful. It is crucial, in fact, to differentiate from competitors. Positioning is a fundamental lever that allows to distinguish the products among the offer of competitors. Daniele Leonardi from Trota Oro Srl, for example, states that their positioning is “*medium/high both for the price and the brand values*”, suggesting how the top quality of their trouts is the major lever to differentiate from competitors. A slightly different approach is adopted by Tagliapietra & Figli Srl, where the positioning is still medium/high, but for different reasons. As Luca Tagliapietra states, their positioning

“is the result of a choice: we already had a name, since Tagliapietra & Figli Srl was founded 70 years ago by my grandfather. It is a well-known company on the territory, and we invested a lot in marketing, promotions and sponsorships. [...] Therefore, to maintain our name, we try to keep medium/high quality standards. As far as price, we are a bit higher than competitors for equivalent products. Providing higher service and quality compared to the others, though.”.

Hence, the history of the company and the image are further levers that contribute to distinguish the products from competitors. Another different approach is adopted by Cam Evolution Srl, where the product has

“a higher quality positioning compared to competitors and a price positioning on the average [...]. If we had too high prices, nobody would buy our product.”.

In this instance, the price lever is crucial to generate sales. Therefore, the combination between the distribution channel and the right levers to differentiate from competitors played a fundamental role for the performances during the pandemic. Such levers can be included in the key resources building block of the Business Model Canvas.

Focusing the attention on retailers, a further element to consider is the variety of products offered, that is the assortment offered to clients. The sector is characterised by lots of different sub-sectors and Andrea Crozzoli states that “*new segments are continuously created. Positioning is what allows for product rotation*”. In other terms, be present in different sub-sectors is fundamental to strengthen the bond with clients and to increase sales. Cam Evolution Srl “*tries to continuously introduce new products*”. Similarly, Tagliapietra & Figli Srl offers

“traditional products like classic dried stockfish or, in general, raw products that are transformed by the client. Semi-finished products [...] which are a middle ground between raw and final product. And finally, there are the finished products”,

suggesting the idea of being present in different sub-sectors with multiple alternatives. Mauro Vio contributes with another interesting point of view according to which, besides offering different products for the various sub-sectors, it is important to be present in different selling points within the same macro distribution channel. In other words, in the large-scale distribution channel, it is important to be present in different chains so that your product is always among the available alternatives for the consumer. This aspect is observed also in other interviewees' experiences with retailers. To delineate a heterogeneous offer, especially if retail is approached as a diversification strategy in response to the pandemic, requires a re-definition of the value proposition. In fact, the needs, preferences and the consequent types of products are deeply different from the Ho.Re.Ca. channel, for instance.

The most important element that emerged from the analysis of the gathered qualitative data is the need to analyse trends in consumer preferences and develop new products to satisfy them. Product innovation in response to new consumers' needs is of vital importance to face crisis and to increase sales. According to the respondents, during and after the pandemic, there has been a rise in ready-to-eat products. The observed phenomenon pushed companies toward developing and introducing new products to be present with their offer also in this profitable market. The reason behind this growth, according to Luca Tagliapietra, is that

“restaurants were closed, and people tended not to stay too much at the served fishery desk. Therefore, we decided to focus on ready-to-cook and ready-to-eat products.”

There is a further sociological reason to explain the phenomenon in Tagliapietra's opinion: *“our frenetic lifestyle, the modification of the family structure compared to the past, the emancipation of women, the fact that the majority of adults work implies less time at home, so very little time to cook.”*

Similarly, Mauro Vio observes that *“more and more people ask for ready-to-cook products. [...] We do not have time (to prepare and cook food, An) anymore”*.

The following quote by Andrea Crozzoli further reinforces the rise of this trend:

“At the beginning, the pandemic fostered ready-to-eat products. Therefore, it helped us in reinforcing that part of the business. Afterward, when the emergency was waning, the fresh started to grow again”.

It is evident, then, how capturing such trends and be able to serve the market with your products is a winning strategy. However, there is the urgency to carefully interpret such trends and the consequent sales growth. Available literature on how Covid-19 impacted the fishing sector, the increase of fish sales is intended as the consequence of a correspondent reduction in meat consumption. As the data gathered prove, the relationship is not as straightforward. Luca Tagliapietra reported that

“people that used to eat out at restaurants, took ready-to-eat fish products at home. So maybe supermarkets registered a growth in fish sales [...] which is the fish product that would have been eaten at the restaurant. It is more of a shift in consumption”.

Andrea Crozzoli observed that

“now that people are eating out again in restaurants there is an objective decline (in ready to eat products, An) compared to the previous year”.

Therefore, the growth is not to be intended as a preference for fish instead of meat, yet as a shift in consumers' habits. However, it is still a profitable segment to serve, and a modification introduced by the pandemic that is likely to remain as part of the value proposition of firms. From the above dissertation what stands out as a crucial strategy to face crisis is the ability to analyse, interpret and monitor consumer trends in order to act consequently. Furthermore, once the trend is observed, being flexible and able to develop your own offer to satisfy the new market needs allows to be resilient. As stated by Luca Tagliapietra, in fact,

“if you are alert enough, flexibility allows you to pursue the change and not to be unprepared.”.

The importance of observing market evolutions and act accordingly is evident also from O.P. Bivalvia Veneto s.c./I PescaOri's experience. They realised that *“food service stopped and people only used to go to supermarkets”*. Therefore, it was worth exploring a business alternative not considered as valuable before by simply reducing the quantity per package of product. Such flexibility has not been observed by Trota Oro Srl and could be a partial explanation for the heavy impacts of the pandemic on the firm's performances.

The activity of monitoring and interpreting market trends becomes, then, a key activity in the business model of companies working in the fishing sector. Moreover, to be flexible means to intervene on key processes with the aim of generating new revenue streams.

In conclusion, consumption has been modified by the pandemic. Especially at the beginning, firms suffered from a loss in revenues due to the closure of the Ho.Re.Ca. channel and the fact that people wanted to cut on expensive products like fish. The analysis of emergent trends, though, allowed certain companies to profit from the positive performances of large-scale distribution channels and enter profitable markets like the ready-to-eat segment. Monitoring how market evolves becomes a key activity to face crisis and sustain the business. Furthermore, once the market is entered, it is important to differentiate from competitors by positioning its product differently, by using marketing levers: quality, price, brand image. Therefore, key activities and key resources are relevant building blocks for the implementation of such strategy that has the potential of creating new revenue streams for the company.

4.2.3 *Sustainability: consumer perception and economic opportunities*

In recent years, sustainability has become a major concern in the public opinion. The attention toward the environment deeply shapes consumers' needs and preferences, thus pushing companies to modify their offer to satisfy them. Moreover, legal obligations and environmental sensitivity of the company itself further drive businesses toward this direction. The dynamics about sustainability in the fishing sector after Covid-19 are particularly interesting. From the evidence collected, contrasting opinions about how the pandemic impacted sustainability in the industry emerge. To start, the general perception of almost all the interviewees is that the pandemic did not influence sustainability. Luca Tagliapietra states it clearly:

“the sensitivity (toward sustainability, An) in the sector did not increase with Covid-19. We observe that, based on our analysis, sustainability is more oriented toward cyber or mechanical aspects. So, elements that do not concern the product”.

Similarly, Daniele Leonardi states that in Trota Oro Srl they *“did not notice significant changes in terms of sustainability”*. Conversely, Mauro Vio observes how, in Italy, sensitivity toward the environment is growing starting from the pandemic. In his opinion, the growth is due to

“politics that encourages to purchase Italian products, to prefer short supply-chains, to care about natural resources and all the topics addressed by Greta Thunberg”.

Despite the difference of opinions, sustainability has implications in terms of business model. Companies that do not notice a particular role of the pandemic as far as sustainability, do not perceive the topic as an effective lever to act on to attract customers. Therefore, they embrace the environmental cause for two main reasons: legal obligation and/or economic advantage. Excerpting from the interview with Andrea Crozzoli, we acknowledge that

“you must indicate the sustainability of the product on the packaging. It is mandatory”.

In this instance, sustainability is communicated to address legal obligations that, on a European level, push toward an increase in sensitivity and eco-friendly practices. Luca Tagliapietra, instead, suggests how

“the environmental-friendly firm management allows to spare money. [...] With the present cost of energy, [...] to have a solar energy infrastructure is a strategy to save money over the years. The same being for wastewater: with the norms that we have today, to implement an eco-friendly infrastructure to dispose of wastewater is also an economic advantage. The drainage system’s authority charges us less if we dispose of cleaner wastewater.”.

He continues by stating that *“small companies must see an economic advantage. Once this is evident, all firms start to invest for lower environmental impacts.”.*

Likewise, Daniele Leonardi affirms:

“the underlying motivation is not to waste what nature offers us, so natural resources. This also has an economic advantage because if I use production waste to create new marketable products, I generate profits.”.

According to these observations, sustainability is not an effective marketing lever that contributes to the brand reputation and the firm’s image. Luca Tagliapietra clearly states:

“promoting the lower environmental impact creates advantages in terms of image [...] only with big companies. [...] It is not granted that small companies without a consolidated name that promote their lower emissions of CO2 and so on get advantages.”.

Companies that, instead, believe in the fact that the pandemic increased the sensitivity toward the environment, use it as lever to attract customers and to have returns in terms of reputation and image. Therefore, it is evident how, despite the underlying motivation, sustainability practices become fundamental key activities of the business model.

All interviewees consider sustainability important given the dramatic issues the whole sector is facing and that I discussed in Chapter 3. Therefore, independently from the economic returns, all companies put sustainability at the core of the business. In Daniele Leonardi experience, the company

“adopts a broad perspective, but there is not a dedicated function. All associates deal with everything that concerns sustainability”.

Similarly, Luca Tagliapietra states that *“we do not have a dedicated team. We have an approach to sustainability at the firm’s level”*. From this statements, two important aspects emerge: first, sustainability permeates the entire company, becoming a shared value that guides how the firm does business. In other terms, following the business model definition, sustainability influences how the company creates, delivers, and captures value. Second, from Leonardi’s statement, it emerges that, when talking about sustainability, we must adopt a broad perspective. Usually, we only refer to environmental sustainability, yet social and economic ones are important as well.

According to the specific business model of companies, sustainability impacts with different magnitude. For Mauro Vio, sustainability is of vital importance since the company is divided in two different areas: the fishing part and the transformation part. For this latter, I have already discussed the implications above. For the former, it is worth going a bit deeper to describe how sustainability can shape business activities. Co.Ge.Vo is an organization of fishermen and producers that puts together a total of around 100 fishing boats and that fish mainly molluscs in due macro-areas of the Adriatic sea, namely the Venice area (from Chioggia to Tagliamento) and the Chioggia area (from Chioggia to Po’). As stated by Mauro Vio:

“we must manage the sea as the farmer manages his field. [...] We have a continuous monitoring of the sea by biologists, we map the fishing areas, we know in real time how much resource is available in terms of density per square metre and dimension.

Everything that is under safety limits is not touched. For what is possible to commercialize, we look at the dimension. According to these criteria, we send the boats

to very specific areas. So, in some areas you can fish, in some other it is forbidden [...] to allow natural restocking.”.

Hence, this part of the business is heavily influenced by sustainability both for legal obligations on a national and European level, both for a matter of company social responsibility. One could argue that this aspect related to sustainability in Mauro Vio’s experience is not a direct consequence of the pandemic on the business model. The observation is partially true, however it is important to underline how such practices, once certified, became fundamental during and after Covid-19 to access new markets. In fact, the aspect of certifications is of particular interest to better understand the impacts of the pandemic on business models with regards to sustainability. As evident in multiple interviews, you must certify your products as sustainable in order to access certain markets (both countries and distributors). For example, Andrea Crozzoli underlines:

“in Italy if you sell a product which is certified, but it costs more, they look askance at you. But in Germany, for example, you do not sell if your products are not certified.”.

Similarly, Luca Tagliapietra explains:

“we have 3 certifications: BRC, ISF and 14.001. BRC and ISF are two food certifications, one for the Anglo-Saxon area and one for the European area. So, when I sell to retailers in Italy, the only certification I am required to show is IFS.”.

This further reinforces the role of certifications to enter new geographical markets or new distribution channels. Mauro Vio contributes to support the thesis by stating:

“if I think about how the market is evolving, I see that having certified products is becoming a fundamental prerequisite. For example, in Switzerland, where attention toward the environment is much more significant, associations for the environmental defence imposed 4 rules to access large-scale retailers. Specifically, you need to be certified for sustainable fishery, to have biological products, to have species raised through aquaculture and not to treat species under risk of extinction. [...] So, to be certified allows you to enter such markets or not.”.

As evident, certifications are becoming strategic assets, even if, on the consumer’s side, we are still at an early stage. Consumers are not fully aware of the issues the fishing sector is facing and are not familiar with the sustainability labels that communicate the origins

and that certify the sustainable provenance of products. Luca Tagliapietra is quite clear on the point:

“Sustainability in the fishing industry is a recent thing. You can see it also in television: the first to promote the fact of being certified through MSC label was Findus, followed by a competitor. Before that, nobody put the accent on the product sustainability. I am pretty sure that if you ask to a random consumer ‘What is MSC?’, which is the only available promotion label for sustainability, he will not know what you are talking about.”.

He also adds that *“Italy is a bit late compared to the rest of Europe. In the rest of Europe, MSC has been implemented for a few years”.*

As stated before, some of the interviewees do not interpret the need for certifications on sustainability as a consequence of the pandemic, or at least they do not see a significant increase in this direction. Conversely, Mauro Vio believes that the urgency of having certified products to access certain distribution channels has been exacerbated by the pandemic. In fact, in his experience:

“Until two or three years ago, retailers were not interested in the certified products I was offering. Nowadays, the situation is exactly the opposite: they look for you because they want to offer novelties on the shelves.”.

This observation suggests, then, how consumer preferences toward sustainable products is increasing, pushing retailers to include such items in their offer. The direct conclusion of the above dissertation based on the evidence is the strategic role played by certifications of sustainability. Since they allow to enter new markets and develop the business to embrace broader clusters of clients, they can be included in the key resources building block of the business model. In the case of the MSC certification, it is worth specifying one more aspect. MSC certifies the sustainability of the entire supply chain, from the fisherman to the distributor, passing through the transformation company. Therefore, to obtain such certification, the company must set a panel of key partners that ensure the respect of the required standards and practices. Thus, the MSC certification has implications also in the key partners building block. As mentioned, consumers are still unaware of the delicate sustainability issues the sector is facing. However, general attention toward such themes and the impacts of the economy are becoming sensitive topics for the public opinion. Therefore, it is plausible that also with respect to fish

products, consumers will be more and more demanding. Being certified and offering certified products becomes a strategic lever that modifies the value proposition. Therefore, sustainability has the potential of deeply transforming business models.

To resume, opinions about the effects of Covid-19 on sustainability are different. Even though the majority of the interviewees does not see any particular modification in this direction, other perspectives observe changes in terms of higher need to be sustainable after the pandemic. What emerges from the available data is that certifications of sustainability are key assets to access new markets and open new business opportunities. Therefore, the major implications of sustainability on business models after Covid-19 are observed in the key resources building block. Over the next years, it is believed that sensitivity toward the issue will increase also with regards to fish products. Hence, sustainability is likely to influence the value proposition, thus affecting the entire business model. Finally, certifications like MSC indirectly affect the key partners building block by forcing the company to rely only on certified producers, fishermen, transporters with the aim of ensuring sustainability over the entire supply chain.

4.2.4 The cost structure and the role of social media

In the previous paragraphs, I have discussed the reduction of sales and the implications of the diversification of distribution channels strategy. In the analysis of the e-commerce, I underlined how a platform for online purchases represents a multifaceted investment. In fact, it requires the financial resources to create the infrastructure through key partners, investments in employees' education to correctly use the infrastructure and manage the everyday online business. Furthermore, companies must invest in promotion, especially through social media that, according to the gathered evidence, are the most effective tools for the purpose. All the required investments have direct influence on the cost structure. In particular, implementing an e-commerce platform translates in an increase of fixed costs. However, drawing from the theoretical analysis in Chapter 1, the interviewed companies can be identified as value driven companies. That is, their business model is mainly concerned with value creation instead of cost minimization. In other terms, companies want to offer their clients the best possible products and services. Consequently, they are willing to invest resources in infrastructures that could open new business possibilities. Despite the negative performances of the platform, Daniele Leonardi states that they "*will keep the infrastructure*". Similarly, Luca Tagliapietra contributes by pointing out how, despite the lower performances due to the absence of

an adequate logistic system, they keep the investment. Indeed, besides generating revenues through dried products sales, they are ready to be fully operative once the cold chain could be maintained during transportation. Mauro Vio puts the accent on the intrinsic advantage of the platform as well, by saying that e-commerce *“is still working. With lower performances, but it works.”*. These statements signal how, in the logic of value driven business models, an increase in costs is not always a negative thing. In the case of e-commerce, the increase of fixed costs represents an investment that generate, in most cases, revenues already in the short term if well supported by ancillary activities such as social media marketing. Moreover, such investment is expected to generate returns in the long run given the observed growing trend of online purchases in the agri-food and in the fishing sectors. In Andrea Crozzoli’s experience, the absence of the e-commerce is not due to a lack of resources to invest. It is rather a matter of

“organizational issues because everything is already planned. [...] It is a matter of contrasts with the property, an issue related to (business, An) culture.”

Also in this case, the e-commerce platform and the related costs are seen as a valuable and profitable opportunity for business development and are considered worth the investment. Yet, organizational and cultural contrasts with the property block the implementation.

Another interesting perspective on the influence of Covid-19 on the cost structure is provided by Luca Tagliapietra. The restrictive measures posed challenges with regards to HR management. The implementation of remote working required investments in laptops and an overall re-configuration of the administrative team. In particular, he states that

“our administrative team, for a lack of physical space, was managed by having one person working on site and one working from home. To this latter, we gave a laptop.”

Differently from the e-commerce, though, the infrastructure for remote working is not considered as a valuable option to maintain. From the data gathered, nobody expressed any intention to consider remote working for future company internal organization. Luca Tagliapietra, in fact, underlines how

“we evaluated whether to consolidate this alternation of on site and remote working, but we concluded that, for our dimension and our job, it is too dispersive.”

On another extreme, Andrea Crozzoli declares that *“being a food firm, we worked every day without any issues”*, signalling how remote working was not even a considered option. Luca Tagliapietra, finally, brings up a noteworthy observation. National emergency policies had negative influence on the cost structure of companies during the pandemic. In fact:

“having the same number of employees with lower revenues, in a company like ours that was not even included in the ‘Cassa integrazione’ maneuver [...] had dramatic impacts. Our company has a physiological turnover of employees for different reasons. Yet, with the block of layoffs, it was impossible to implement it. These costs heavily impacted the business, given the lower levels of revenues.”

The other interviewees did not mention such difficulties, yet it would be interesting to analyse, in future research, the impacts of the policies adopted by the government to face the pandemic on business models.

I have discussed how companies faced different consequences due to the pandemic. In particular, I underlined the differences occurred among the sample related to the distribution channel. The main finding was that companies already operating with retailers did not suffer heavy consequences despite the restrictive measures. Conversely, companies serving the Ho.Re.Ca. channel were hardly hit. Finally, companies that adopted a diversification strategy in terms of distribution channels benefitted from a mechanisms of partial compensation. The distribution channel had implications also in terms of cost structure and revenue streams, in particular as far as propensity and possibility to invest. Specifically, companies working exclusively in the Ho.Re.Ca. channel were obliged to cut planned investments. Daniele Leonardi declares that

“we cancelled some already planned investments in digital innovation.”

The dramatic reduction of sales and revenues caused, for such companies, an unbalance between costs (both variables and fixed) and revenues, thus altering the equilibrium at the base of the business model. That is, altering the core building blocks that constitute the foundations for business prosperity and investment plans. On the contrary, companies working with retailers could profit from the already commented sales increase to invest in new product development, also in response to the ready-to-eat and ready-to-cook growing trends described above. For instance, Luca Tagliapietra points out:

“we launched new products. We created a sauces line called ‘I Toci’ with squid ink, squid, and cream and salmon. Then we created some sea salads...”

Similarly, Andrea Crozzoli tells:

“Starting from the pandemic, we focused a lot on molluscs. On the one hand, our focus was on pre-cooked products, and then we developed the raw segment. We did this, though, by introducing some process innovations and innovative packaging that allowed us to extend the normal shelf-life by 30%-40%. So, we introduced some novelties in the fresh segment.”

Finally, Mauro Vio contributes with an interesting consideration also related to the e-commerce platform:

“we introduced new products because I cannot offer only one product in the online purchasing channel. [...] If I offer a catalogue of 13 items, for example, once you tried one and you liked the overall experience, you will probably taste another product. To be effective as an online seller you need to offer multiple products. That is the reason why we added different items on the platform.”

Therefore, product innovation has been possible and contributed to business development in those firms where sales were not too much affected by Covid-19. In fact, differently from companies relying only on the Ho.Re.Ca. channel, the equilibrium between costs and revenues was still under control.

When talking about e-commerce and the diversification of distribution channels, I have thoroughly analysed the importance of social media. The need for different promoting actions, different communication and different approach to customers make social media a key resource for the company. From the interviews, two different social media management approaches emerge, with different implications on business models. Specifically, in Trota Oro’s experience,

“social media are managed by an internal employee.” The reason behind this is that *“years ago, we collaborated with an external partner. However, results were not satisfying so we decided to internalise”*.

In Cam Evolution, where all profiles are currently unactive, the reasoning is similar:

“we approached social media too early, when we had other issues to solve. We tried to use them, without the expected returns. I believe social network must be internally managed, they cannot be delegated to a third party that does not know the company.”.

Hence, from these two statements, what emerges is the preference to internally manage social networks and digital marketing actions. Following this approach, social networks become key resources which imply the implementation of a set of key activities for online promotion and interaction.

In the case of O.P. Bivalvia Veneto s.c./I PescaOri and Tagliapietra & Figli Srl a different approach is adopted. Excerpting from Mauro Vio’s interview, we acknowledge that

“ideas and contents are generated by me. Then, I rely on an external agency that oversees shootings, videos, communication. On the operational side, they are the ones in charge of the layout of contents, of programming posts and publishing contents. [...] It is obvious that those things must be done by experts in the field.”.

Luca Tagliapietra affirms that, in the company,

“all things related to social media are managed by an external partner that manages Instagram, Facebook and YouTube.”.

In these two instances, the third party that manages social media profiles becomes a key partner, especially in light of the fundamental role that social media played during the pandemic for the two firms.

I consider these last aspects as minor impacts of the pandemic on business models. In fact, from the empirical evidence analysis, what emerge are two main categories of impacts. The first category includes the direct impacts, that is to say the main building blocks affected by the pandemic. The second category includes all indirect impacts. In other terms, indirect impacts are a sort of side effect of the major modifications occurred on business models. Considering both categories together, we can conclude that Covid-19 had significant impacts on companies working in the fishing sector. In particular, their business model has been deeply modified through a series of direct and indirect consequences. To be able to reconstruct how such events alter and shape business models is crucial to be able to anticipate future crisis and be resilient.

4.3 Concluding remarks

After the in-depth analysis of the empirical evidence of the previous paragraphs, in this final part of the chapter I will outline the major strategic indications that, in my opinion, could help companies in navigating through crisis like the pandemic. Moreover, I will discuss which are the main weaknesses of the current business models of companies working in the fishing sector. Specifically, I will outline the elements that make such business models vulnerable to extreme events.

4.3.1 Strategic guidelines in the post pandemic scenario

In my opinion, from the available literature and the data analysis performed in the thesis, 3 major strategic guidelines can help fishing companies in facing future crisis. Specifically, flexibility and readiness to change, market analysis and digitalisation are, in my view, the cornerstones to be resilient and thrive even during hard times.

Covid-19 caught companies by surprise: the sudden closures and restrictive measures posed severe challenges and what often determined the increase or decrease of sales and revenues was the attitude toward the crisis. Keeping the business as-is, in most cases, exacerbated the impacts of the pandemic. Conversely, companies that were able to modify their business model at least partially compensated the suffered losses. Hence, it is important to consider the business model as a dynamic tool, as specified in Paragraph 1.2.3.

A dynamic vision ensures enough flexibility to move resources, people and capital toward the most profiting directions. In other terms, it allows for a re-configuration of the business model to profit from new trends and market evolution. Another important concept which is strictly connected to flexibility is readiness to change. High-impact events like the pandemic or the current geopolitical events will continuously occur, posing challenges for the economy. Referring to Black Swans, Nassim Nicholas Taleb states that “Black Swans being unpredictable, we need to adjust to their existence rather than naïvely try to predict them)” (Taleb, 2007). Ignoring the higher or lower degree of predictability that distinguishes Black Swans from Gray Rhinos (see Paragraph 1.3.1), what is urgent now is to reverse the normal logic that predominated the business world for decades. Nowadays, what we do not know is much more important than what we know. Therefore, companies must prepare in advance for such events, by planning possible courses of action in case of a crisis. Business strategy theory gives as the

fundamental tool of the scenarios analysis. What companies must learn to thrive during crisis is to plan or at least think about worst case scenarios. Risk management must become a key activity of the firm.

The combination of flexibility and readiness to change creates an advantage for the company. By not getting caught by surprise and by having a draft action plan, it can act fast, effectively, and efficiently. In the specific case of the fishing sector, to quickly modify the quantity per package, to obtain certifications and to innovate products and services are crucial factors that allow to enter new markets and offset difficulties deriving from high-impact events. This does not mean that companies are obliged to modify their business model even if no events occur. The underlying idea is to have all tools available, including a proper company culture for flexibility and change, to face low-probability, yet high-impact events.

The second strategic guideline is market analysis. The market is always evolving, and consumers' preferences are continuously changing. Dramatic events like the pandemic or the conflict between Russia and Ukraine have strong impacts on consumers and have the power to deeply shape their needs and priorities. Maura Latini, CEO of Coop Italia, states that "Health, climate, and economy are the new priorities for Italian consumers. [...] Selling points must follow new consumers' needs and innovate, enriching the offer to embrace all income brackets" (Bonotti, 2022). Paraphrasing this quote, I would affirm that not only selling points must follow new trends and needs, yet companies first must monitor the market and try to satisfy clients' preferences. In the interview analysis, I pointed out that the pandemic fostered ready-to-cook and ready-to-eat products. I also discussed how companies were able to expand their offer to satisfy this market. Oftentimes, as far as consumer preferences, such trends exist well before the occurrence of any high-impact events. In the instance of ready-to-cook products, it has been approximately 10 years that this trend has been observed in the sector. Yet, the magnitude of the phenomenon was quite limited. However, the pandemic acted as an accelerator, spreading the need for such products at the mass level. The ability to individuate emerging trends and anticipate them by developing a corresponding offer creates a competitive advantage and could represent a key success factor in periods of crisis. Intuitively, since an analysis of market trends is aimed at identifying new business opportunities, flexibility, and ability to change come back into play.

The third strategic step is digitalisation. As I thoroughly discussed above, e-commerce is a new frontier also in the fishing industry. The Italian agri-food sector, and the fishing sector in particular, is objectively late compared to the rest of Europe on this side. Yet, the pandemic fostered online purchases that are now a consolidated part of many businesses. The fishing sector suffers the already discussed lack of an adequate infrastructure to maintain the cold chain in fresh food deliveries. Moreover, there is a general tendency by consumers to still purchase such a delicate product in a physical space. The CEO of Coop Italia, Maura Latini, is straightforward, though. In her opinion companies must extend their offer also through online sales, to avoid falling behind the rest of the economy (Bonotti, 2022). As a matter of fact, market analysis and empirical evidence tell us that e-commerce is increasing and, if well implemented, contributes to the overall revenues. Hence, consumers are starting to rely on online channels and the fact of already having the infrastructure in place creates competitive advantage. In periods of crisis, the e-commerce platform can act as a partial compensation to losses in other distribution channels. For instance, with the increasing cost of energy, gas and oil and the consequent inflation deriving from the Russia-Ukraine conflict all prices will increase over the next years. Therefore, it is likely that restaurants and the Ho.Re.Ca. channel in general will face a new period of crisis due to the high costs and the low turnover. Hence, companies serving restaurants and caterings can find a business alternative on e-commerce. As already stated, the e-commerce management requires investments in terms of social media activity. Promotion and client interaction are fundamental levers to be successful. Hence, in my opinion, e-commerce and social media are the major strategic directions in terms of digitalisation company should consider in order to face crisis.

The three strategic indications I briefly described above are strictly correlated. In fact, to benefit from market analysis, companies must adopt flexible business models and spread the culture of change within the company. Foreseeing market trends in terms of new consumer preferences and set the processes to satisfy them are not possible actions if the company insists on using the same business model and the same approach. Flexibility and openness to change are also prerequisites for a correct implementation of e-commerce since, as discussed in Paragraph 4.2.1, a different approach, language and culture are required. Furthermore, market analysis and digitalisation are connected since through the former it is possible to observe the rise of online purchases and act consequently by

implementing the latter. Finally, continuous market analysis is useful to adjust and modify the online offer and presence to fully satisfy customer needs.

4.3.2 Weaknesses of existing business models in the fishing sector

The current context in the fishing industry is made for the most part of historical companies, with long family traditions in fishing and transformation activities. Traditional roots and the culture of the artisan are the core values that permeate the firms' culture and constitute the base of their business models. Yet, multiple related weaknesses make these firms more vulnerable to uncertainty and high-impact events.

To start, the strong bond with traditions and the historical roots that characterise fishing companies are often an obstacle to innovation. Especially some types of fish are still prepared following recipes handed down from one generation to another, resulting in strong resistance to evolving and embracing new trends. The new lifestyle of modern generations, the different dietary habits and the crisis generated by the pandemic create new market preferences that are totally different from traditional recipes. To be successful in an ever-changing context, companies must innovate products to keep up with market evolution. Tradition should not be lost, though. Especially in Italy, whose food historical roots are unique and are a precious heritage to maintain, the key to success is to be able to combine tradition with innovation. That is to say, companies must try to develop products that satisfy new customers' preferences always preserving part of the tradition and the identity. Thus, traditions must not be seen as obstacles to innovation, yet rather as an element of competitive advantage that can differentiate product innovations from competitors.

In the previous paragraph, I talked about the strategy of being ready and open to change in response to high-impact events. More precisely, the strategy requires a preventive approach. Therefore, companies should not try to predict the occurrence of such disruptions, yet they should adapt to their existence and be flexible to modify the business model. Risk management, the preparation of alternative courses of action and the exercise of worst-case scenarios require long-term orientation. Yet, what makes fishing companies vulnerable to high-impact events is the tendency toward short-term orientation. In most cases, the management is focused on day-to-day business and strategies aimed at increasing performance in the short run. Thinking in the long run, instead, allows firms to plan investments, analyse market trends and set processes to launch product innovations. It also allows for the evaluation of the convenience of entering new markets

both geographically and at the offer level through precise cost-benefit analysis. Conversely, the short-term orientation often prevents from seeing valuable and profitable opportunities and companies risk getting caught unprepared in case of crisis or market disruptions. This mechanism is resumed by a cognitive bias called myopia.

Strictly connected to the bond with historical traditions, there is a further weakness to mention: cultural resistance to digital innovation. I thoroughly discussed the increasing importance of building social media presence, interacting with customers through digital communication channels and the growing phenomenon of online purchases. Moreover, bigger companies are starting to invest in Industry 4.0 for automation and improvement of transformation and production processes. Yet, the level of adoption of these digital technologies is still very low. In the fishing sector, entrepreneurs' opinion about digital innovation is that it is not that useful for this particular type of business. Often the dimension of the company and the culture of the artisan prevent from seeing the opportunities deriving from digitalisation. Entrepreneurs, in addition, have low confidence on how digital technologies could contribute to improve business performance. The major fear is investing lots of money for scarce returns. This opinion is connected to the short-term orientation described above. For sure, investments in digitalisation are expensive and, in the short run, represent high costs. Yet, changing the perspective and looking at the long run, the opportunities and potential benefits are evident. Fishing companies' and entrepreneurs' culture is permeated by another bias called inertia. Inertia refers to the general tendency toward maintaining the status quo, the business as usual. In case of a crisis, this translates into adopting standardised courses of action without risking and considering alternative investments.

Essentially, what is required to overcome weaknesses and pursue the strategic paths suggested above is an entrepreneurial cultural change in the fishing sector. The pandemic deeply altered the competitive scenario with disruptive force. Specifically, the sector experienced the rise of new trends and the acceleration of already existing phenomena that were previously considered of minor importance. To conclude, it is beyond any doubts that Covid-19 impacted business model in the fishing sector. However, what is really changing is the mindset and the entrepreneurial culture. This is the fundamental prerequisite to start using the business model as a dynamic tool that allows to reinforce the competitive advantage of the company and to thrive even in periods of deep crisis generated by high-impact events.

4.3.3 Limitations of the study

The present work highlights the essential impacts of the pandemic on business models in the fishing sector. The strategic paths suggested are plausible and possible development trajectories for the future evolution of firms working in the industry. This dissertation, however, is purely qualitative. In fact, by answering to the underlying research question, it indicates which are the variables that Covid-19 introduced and how companies are coping or could cope with them to thrive during crisis based on a set of limited qualitative information. Therefore, this essay does not provide any quantitative measures on the observed phenomena. In other terms, it does not state how many companies in the sector actually pursued the emerged trends, strategies and actions.

In addition, the sample is not broad enough to extract definitive results and conclusions on the topic. The number of interviewed companies could have been larger. However, for time limits and availability of entrepreneurs, I chose the analysed sample trying to include sufficient heterogeneity to support the observations and extract meaningful conclusions.

Hence, the present dissertation can be interpreted as a starting point for future research. It lays the qualitative foundations for subsequent investigation on broader samples to better understand, also on a quantitative basis, how companies of the different sub-sectors responded to the challenges introduced by Covid-19 and how business models have been affected.

Bibliography

Accenture, 2020. *Superare l'incertezza: Gestire l'impatto del COVID-19 su dipendenti e azienda*. [Online]

Available at: <https://www.accenture.com/it-it/about/company/coronavirus-business-economic-impact>

[Accessed 18 March 2022].

Accenture, 2022. *From disruption to reinvention - The future of supply chains in Europe*, Dublin: Accenture.

ACEA, 2021. *Passenger car registrations: -23.7% in 2020; -3.3% in December*.

[Online]

Available at: <https://www.acea.auto/pc-registrations/passenger-car-registrations-23-7-in-2020-3-3-in-december/>

[Accessed April 2022].

AdnKronos, 2022. *Ucraina, grano bloccato e caro energia. Verso la crisi alimentare globale*. [Online]

Available at: https://www.adnkronos.com/ucraina-grano-bloccato-e-carso-energia-verso-la-crisi-alimentare-globale_7JCwtPvf5iIdqzidmIN7Dx?refresh_ce

[Accessed May 2022].

Alpi, M., 2021. Crisi dei container: facciamo il punto. *International Tools*, Volume November 2021, p. 36 et seq.

Aschemann-Witzel, J., Futtrup Gantriis, R., Fraga, P. & Perez-Cueto, F. J. A., 2020. Plant-based food and protein trend from a business perspective: markets, consumers, and the challenges and opportunities in the future. *Critical Reviews in Food Science and Nutrition*, 61(18), pp. 3119-3128.

Assefa, T. T., Meuwissen, M. & Oude Lansink, A. G., 2015. Price Volatility Transmission in Food Supply Chains: A Literature Review. *Agribusiness - An International Journal*, Volume 31, pp. 3-13.

Baden-Fuller, C. & Morgan, M. S., 2010. Business Models as Models. *Long Range Planning*, pp. 156-171.

Bagnoli, C., 2020. *Business Models beyond Covid-19*, s.l.: Ca' Foscari Challenge School, Strategy Innovation Hub (SIH).

Barman, A., Das, R. & Kanti De, P., 2021. Impact of COVID-19 in food supply chain: Disruptions and recovery strategy. *Current Research in Behavioral Sciences*, Volume 2.

Bellman, R. et al., 1957. On the Construction of a Multi-Stage, Multi-Person Business Game. *Operations Research*, pp. 469-503.

BMTI, 2020. *Annuario sul mercato ittico 2020*, Rome: BMTI; Mipaaf; Feamp.

Bonotti, E., 2022. *La grande distribuzione alle prese con le nuove preferenze dei consumatori: tra online e onland*. [Online]

Available at: <https://www.milanofinanza.it/news/la-grande-distribuzione-alle-prese-con-le-nuove-preferenze-dei-consumatori-tra-online-e-onland-202209151405031458>

Boscolo, M., 2022. *Gli effetti sul mercato agroalimentare della guerra in Ucraina*. [Online]

Available at: <https://ilbolive.unipd.it/it/news/effetti-sul-mercato-agroalimentare-guerra-ucraina>

[Accessed May 2022].

Burkhart, T., Krumeich, J., Wert, D. & Loos, P., 2011. *Analyzing the Business Model Concept - A comprehensive classification of Literature*. Shanghai, s.n.

Business Intelligence Group, 2021. *Il settore agro-alimentare in Italia*. [Online]

Available at: <https://www.businessintelligencegroup.it/il-settore-agro-alimentare-in-italia/#:~:text=Secondo%20gli%20ultimi%20dati%20ISTAT,Europa%20per%20valore%20aggiunto%20agricolo>.

[Accessed March 2022].

Capasso, A., 2022. *Così l'invasione in Ucraina sta mettendo in crisi gli allevamenti nell'Ue*. [Online]

Available at: <https://www.agrifoodtoday.it/attualita/impatto-guerra-Ucraina-agroalimentare.html>

[Accessed May 2022].

Chesbrough, H. & Rosenbloom, R. S., 2002. The role of the business model in capturing value from innovation: Evidence from Xerox Corporation's technology spin-off companies. *Industrial and Corporate Change*, pp. 529-555.

CNBC, 2022. *A fertilizer shortage, worsened by war in Ukraine, is driving up global food prices and scarcity*. [Online]

Available at: <https://www.cnn.com/2022/04/06/a-fertilizer-shortage-worsened-by-war-in-ukraine-is-driving-up-global-food-prices-and-scarcity.html>

[Accessed May 2022].

Coldiretti, 2021. *Covid: sos container sul record del cibo made in Italy*. [Online]

Available at: <https://www.coldiretti.it/economia/covid-sos-container-sul-record-del-cibo-made-in-italy>

[Accessed April 2022].

Coldiretti, 2022. *Ucraina: porti chiusi bloccano 25 mln di tonnellate di grano e mais*. [Online]

Available at: <https://www.coldiretti.it/economia/ucraina-porti-chiusi-bloccano-25-mln-di-tonnellate-di-grano-e-mais>

[Accessed May 2022].

Coluccia, B., Agnusdei, G. P., Miglietta, P. P. & De Leo, F., 2021. Effects of COVID-19 on the Italian agri-food supply and value chains. *Food Control*, Volume 123.

Confindustria, 2021. *2020-2021 Effetto Covid-19 sul trasporto marittimo e container*, Udine: Confindustria Udine.

- ConSORZI Agrari d'Italia (CAI), 2022. *Nella prima settimana di guerra grano +13% e mais +29%*. [Online]
Available at: <https://www.consorziagrariditalia.it/news/nella-prima-settimana-di-guerra-grano-13-e-mais-29/>
[Accessed May 2022].
- Coop, 2021. *Rapporto Coop 2021. Consumi e stili di vita degli Italiani di oggi e di domani.*, Rome: Ancc-Coop.
- Cosenz, F. & Noto, G., 2018. A dynamic business modelling approach to design and experiment new business venture strategies. *Long Range Planning*, pp. 127-140.
- Costello, T., 2020. *New survey finds nearly 20 percent of U.K. micro-businesses set up online presence for first time, as they innovate to survive lockdown.* [Online]
Available at: <https://uk.godaddy.com/blog/new-survey-finds-nearly-20-percent-of-u-k-micro-businesses-set-up-online-presence-for-first-time-as-they-innovate-to-survive-lockdown/>
[Accessed April 2022].
- CREA, 2020. *L'emergenza Covid-19 e il settore ittico italiano: impatti e risposte*, Rome: CREA, Nisea.
- CREA, 2021. *Annuario dell'agricoltura italiana 2019*, Rome: Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria (CREA).
- Dahan, N. M., Doh, J. P., Oetzel, J. & Yaziji, M., 2010. Corporate-NGO Collaboration: Co-creating New Business Models for Developing Markets. *Long Range Planning*, pp. 326-342.
- D'Aria, I., 2022. 23 milioni di italiani in sovrappeso dopo il Covid, un Festival dedicato alla dieta mediterranea. *La Repubblica*, 30 March.
- de Vet, J. M. et al., 2021. *Impacts of the COVID19 pandemic on EU industries*, Luxembourg: Publication for the committee on Industry, Research and Energy, Policy Department for Economic, Scientific and Quality of Life Policies, European Parliament.
- Deloitte Private, 2020. *Covid-19. Cambio di paradigma per le aziende Private*, s.l.: Deloitte Italy S.p.A.
- Deloitte, 2021. *Future of Food*, Italy: Deloitte Italy S.p.A.
- Demil, B. & Lecocq, X., 2010. Business Model Evolution: In Search of Dynamic Consistency. *Long Range Planning*, pp. 227-246.
- Denniston, K., Giaimo, C., Rathke, S. & S. Beredo III, C., 2020. *Impacts to Automotive Supply Chains from COVID-19.* [Online]
Available at: <https://www.globalsupplychainlawblog.com/automotive/impacts-to-automotive-supply-chains-from-covid-19/>
[Accessed April 2022].
- Direzione Generale per la Promozione del Sistema Paese. Ministero degli Affari Esteri, 2021. *Ministero degli Affari Esteri e della Cooperazione Internazionale.* [Online]

Available at: <https://www.esteri.it/mae/resource/doc/2021/10/eccellenze2021.pdf>
[Accessed March 2022].

Ellen MacArthur Foundation, 2009. *What is a circular economy?*. [Online]
Available at: <https://ellenmacarthurfoundation.org/topics/circular-economy-introduction/overview>
[Accessed April 2022].

EUMOFA, 2021. *The EU Fish Market*, Luxembourg : EUMOFA.

EUMOFA, 2022. *Italy in the World and in the EU*, Luxembourg: EUMOFA.

EUMOFA, 2022. *The European Union in the World*, Luxembourg: European market observatory for fisheries and aquaculture products.

Euratex, 2020. *Facts & Figures on the European textile and clothing industry*, Brussels: Euratex.

Eurispes, 2021. *33° Rapporto Italia. Percorsi di Ricerca nella Società Italiana*, Rome: Euispes .

Eurocontrol, 2021. *What Covid-19 did to European Aviation in 2020, and Outlook 2021*, s.l.: Eurocontrol - Aviation Intelligence Unit.

Euromonitor, 2021. *Fine Wines/Champagne and Spitis in Italy - Analysis*, England: Euromonitor International.

Euromonitor, 2021. *Wine in Italy - Analysis*, England: Euromonitor International.

European Commission, 2020. *Monitoring EU agri-food trade*. [Online]
Available at: https://ec.europa.eu/info/sites/default/files/food-farming-fisheries/trade/documents/monitoring-agri-food-trade_june2020_en.pdf
[Accessed April 2022].

European Commission, 2020. *Monitoring EU agri-food trade*. [Online]
Available at: https://ec.europa.eu/info/sites/default/files/food-farming-fisheries/trade/documents/monitoring-agri-food-trade_dec2020_en.pdf
[Accessed April 2022].

European Commission, 2020. *Monitoring EU Agri-Food Trade: Developments in 2019*, Brussels: European Commission.

European Commission, 2021. *A new approach for a sustainable blue economy in the EU - Transforming the EU's Blue Economy for a Sustainable Future*, Bruxelles: European Commission.

European Commission, 2021. *Putting the Blue into the Green - Sustainable Blue Economy*, Bruxelles : European Union.

European Commission, n.d. *Oceans and Fisheries*. [Online]
Available at: https://oceans-and-fisheries.ec.europa.eu/index_en

FAO, 2018. *Achieving Blue Growth - Building vibrant fisheries and aquaculture communities*, Rome: Food and Agriculture Organization of the United Nations.

- FAO, 2018. *Impacts of climate change on fisheries and aquaculture*, Rome: Food and Agriculture Organization of the United Nations.
- FAO, 2018. *Livestock and agroecology - How they can support the transition towards sustainable food and agriculture*, Rome: Food and Agriculture Organization of the United Nations.
- FAO, 2020. *The impact of COVID-19 on fisheries and aquaculture food systems, possible responses: Information paper November 2020*, Rome: FAO.
- FAO, 2022. *Blue Transformation: a vision for transforming aquatic food systems*. [Online]
Available at: <https://www.fao.org/3/cc0461en/online/sofia/2022/transforming-aquatic-based-food.html>
- FAO, 2022. *The importance of Ukraine and the Russian Federation for global agricultural markets and the risks associated with the current conflict - Executive Summary*, Rome: Food and Agriculture Organization of the United Nations.
- FAO, n.d. *Aquaculture; Fisheries*. [Online]
Available at: <https://www.fao.org/aquaculture/en/>; <https://www.fao.org/fisheries/en/>
- Feamp, n.d. *PO 2014-2020 European Maritime and Fisheries Fund - Feamp Insights*. [Online]
Available at: <https://pofeamp.politicheagricole.it/en/i-numeri-del-feamp/>
- Fielt, E., 2014. Conceptualising Business Models: Definitions, Frameworks and Classifications. *Journal of Business Models*, pp. 85-105.
- Frost, H. & Andersen, P., 2006. The Common Fisheries Policy of the European Union and fisheries economics. *Marine Policy*, p. 737–746.
- Gephart, J., Henriksson, P., Parker, R. & al., e., 2021. Environmental performance of blue foods. *Nature* 597, p. 360–365.
- Geppa, 2018. *34% In più di fatturato: l'e-commerce agroalimentare vola sul web*. [Online]
Available at: <https://www.geppa.it/34-in-piu-di-fatturato-le-commerce-agroalimentare-vola-sul-web/>
[Accessed April 2022].
- Gioia, D. A., Corley, K. G. & Hamilton, A. L., 2013. Seeking Qualitative Rigor in Inductive Research: Notes on the Gioia Methodology. *Organizational Research Methods*.
- Giudice, F., Caferra, R. & Morone, P., 2020. COVID-19, the Food System and the Circular Economy: Challenges and Opportunities. *Sustainability* , 12(19).
- Golden, C., Koehn, J., Shepon, A. & al., e., 2021. Aquatic foods to nourish nations. *Nature* 598, p. 315–320.

- InfoMercatiEsteri, 2020. *Scheda di Sintesi Settore Agroalimentare*. [Online]
Available at: https://www.infomercatiesteri.it/ranking_scheda_sintesi.php?id_settori=1#
[Accessed March 2022].
- Ismea , 2022. *Dinamiche fondamentali dei cereali e situazione degli scambi commerciali con Ucraina e Russia*, Rome: Ismea.
- Ismea Mercati, 2020. *Indicatori di competitività - Agroalimentare*. [Online]
Available at: <https://www.ismeamercati.it/osservatori-rrn/indicatori-competitivita/agroalimentare/produzione-consumi-intermedi-valore-aggiunto-agricolo>
[Accessed March 2022].
- Ismea, 2020. *Emergenza Covid-19. 2° Rapporto sulla domanda e l'offerta dei prodotti alimentari*, Rome: Ismea.
- Ismea, 2021. *Consumi ittici a più di un anno dall'inizio dell'emergenza Covid19 - I consumi domestici dei prodotti ittici*, Rome: Ismea.
- Ismea, 2022. *La Congiuntura Agroalimentare 2021 - Anticipazioni e prospettive per il 2022*, Rome: Ismea.
- Istat, 2016. *Quality agro-food products (PDO, PGI and STG) - Year 2015*, Rome: ISTAT.
- Istat, 2020. *TRENDS IN THE AGRICULTURAL ECONOMY*, Rome: Istat.
- Istat, 2021. *Rapporto Annuale 2021. La situazione del Paese*, Rome: Istat.
- Italia in Dati, 2021. *Il settore agroalimentare in Italia*. [Online]
Available at: <https://italiaindati.com/agroalimentare-in-italia/>
[Accessed March 2022].
- Johnson, M. W., 2010. *Seizing the White Space: Business Model Innovation for Growth and Renewal*. Boston: Harvard Business Press.
- Jurgilevich, A. et al., 2016. Transition towards Circular Economy in the Food System. *Sustainability* , 8(1).
- Kortunov, A., 2022. Sette capi al collo della Russia. *Limes - Rivista Italiana di Geopolitica* , February, Issue 2, pp. 35-40.
- Lauritzen, L., 2021. *A spotlight on seafood for global human nutrition*. [Online]
Available at: <https://www.nature.com/articles/d41586-021-02436-3>
- Levitt, T. & McCullough, C., 2022. Global food price fears as Ukraine farmers forced to reduce crop planting. *The Guardian*, 2 April.
- Luk'janov, F., 2022. La stabilità è solo strategica. *Limes - Rivista Italiana di Geopolitica*, Issue 2, pp. 41 - 43.
- Magretta, J., 2002. Why Business Models Matter. *Harvard Business Review*, May, pp. 86-92.

- Manuelli, M. T., 2021. Il delivery non rallenta: con Just Eat +50% di ristoranti nell'ultimo anno. *Il Sole 24ore*, 30 November.
- McKinsey & Company, 2021. *COVID-19: Implications for business in 2021*. [Online] Available at: <https://www.mckinsey.com/business-functions/risk-and-resilience/our-insights/covid-19-implications-for-business-2021> [Accessed March 2022].
- McKinsey Global Survey, 2020. *How COVID-19 has pushed companies over the technology tipping point and transformed business forever*. [Online] Available at: <https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/how-covid-19-has-pushed-companies-over-the-technology-tipping-point-and-transformed-business-forever> [Accessed March 2022].
- Mezquita, Y. et al., 2020. Blockchain-Based Architecture: A MAS Proposal for Efficient Agri-Food Supply Chains. In: P. Novais, et al. eds. *Ambient Intelligence – Software and Applications – 10th International Symposium on Ambient Intelligence*. Avila: Springer, pp. 89-96.
- Minenna, M., 2021. Supply chain: anatomia di una crisi. *Il Sole 24ore*, 29 November.
- Ministry of Health Singapore, 2014. *Ministry of Health Singapore*. [Online] Available at: <https://www.moh.gov.sg/docs/librariesprovider5/diseases-updates/interim-pandemic-plan-public-ver- april-2014.pdf>
- Mintzberg, H. & Van der Heyden, L., 1999. Organigraphs: Drawing how Companies Really Work. *Harvard Business Review*, September-October, pp. 87-94.
- Morris, M. H., Schindehutte, M. & Jeffrey, A., 2005. The entrepreneur's business model: Toward a unified perspective.. *Journal of Business Research*, pp. 726-735.
- MSC, n.d. *Oceans at risk - Overfishing*. [Online] Available at: <https://www.msc.org/en-au/what-we-are-doing/oceans-at-risk/overfishing>
- Mussell, A., Bilyea, T. & Hedley, D., 2020. *Agri-Food Supply Chains and Covid-19: Balancing Resilience and Vulnerability*, s.l.: Independent Agri-Food Policy Note.
- Nature, 2021. *Harness the world's aquatic 'blue' food systems to help end hunger*. [Online] Available at: <https://www.nature.com/articles/d41586-021-02476-9>
- Nielsen, C. & Lund, M., 2014. A Brief History of the Business Model Concept. In: *The Basics of Business Models*. Copenhagen: BookBoon.com/Ventus Publishing Aps, pp. 21-28.
- OECD, 2020. *COVID-19 and the food and agriculture sector: Issues and policy responses*, Paris: OECD.
- Osservatorio Food Sustainability, 2021. *Continua l'innovazione nell'agroalimentare: boom di startup agrifood sostenibili (+56%)*. [Online] Available at: <https://www.osservatori.net/it/ricerche/comunicati-stampa//agroalimentare->

agrifood-mercato-innovazioni

[Accessed April 2022].

Osservatorio Smart Agrifood , 2021. *Il mercato dell'Agricoltura 4.0 in Italia, 2017-2020*, Milano: Osservatorio Smart Agrifood della School of Management del Politecnico di Milano e del Laboratorio RISE (Research & Innovation for Smart Enterprises) dell'Università degli Studi di Brescia.

Osservatorio Smart Agrifood , 2022. *Agroalimentare italiano: è boom del mercato dell'Agricoltura 4.0*. [Online]

Available at: <https://www.osservatori.net/it/ricerche/comunicati-stampa/agroalimentare-italiano-mercato>

[Accessed April 2022].

Osservatorio Transizione Industria 4.0, 2021. *Industria 4.0 in Italia: un mercato da oltre 4,5 miliardi €*. [Online]

Available at: <https://www.osservatori.net/it/ricerche/comunicati-stampa/industria-4-0-italia>

[Accessed April 2022].

Osterwalder, A., 2004. *The Business Model Ontology: A proposition in a design science approach*, Lausanne, Switzerland: University of Lausanne.

Osterwalder, A. & Pigneur, Y., 2010. *Business Model Generation. A handbook for visionaries, game changers, and challengers*. s.l.:John Wiley & Sons, Inc..

Osterwalder, A., Pigneur, Y. & Tucci, C. L., 2005. Clarifying Business Models: Origins, Present, and Future of the Concept. *Communications of the Association for Information Systems*, pp. 1-25.

Pachlovska, O., 2022. Ucraina, limes Europae. *Limes - Rivista Italiana di Geopolitica*, Issue 2, pp. 44-57.

Peñarroya-Farell, M. & Miralles, F., 2021. Business Model Dynamics from Interaction with Open Innovation. *Journal of Market Innovation: Technology, Market, and Complexity*.

Porter, M. E., 2001. Strategy and the Internet. *Harvard Business Review*, March, pp. 63-78.

Putin, V., 2021. *On the Historical Unity of Russians and Ukrainians*. [Online]

Available at: <http://en.kremlin.ru/events/president/news/66181>

[Accessed May 2022].

Rappa, M., 2000. *Managing the Digital Enterprise - Business Models on the Web*, s.l.: North Carolina State University.

Ruiz-Salmón, I., Fernández-Ríos, A., Campos, C. & Laso, J., 2021. The fishing and seafood sector in the time of COVID-19: Considerations for local and global opportunities and responses. *Current Opinion in Environmental Science & Health*.

- Sadhukhan, J. et al., 2020. Perspectives on “Game Changer” Global Challenges for Sustainable 21st Century: Plant-Based Diet, Unavoidable Food Waste Biorefining, and Circular Economy. *Sustainability*, 12(5).
- Scozzari, C., 2022. Perché la guerra in Ucraina fa salire i prezzi di benzina, pane e pasta. *La Repubblica*, 01 March.
- Sfragasso, G., 2021. *Primo viaggio per “Salmon express”*. [Online] Available at: <https://www.pesceinrete.com/primo-viaggio-per-salmon-express/>
- Short, R., Gelcich, S., Little, D. & al., e., 2021. Harnessing the diversity of small-scale actors is key to the future of aquatic food systems. *Nat Food* 2, p. 733–741.
- Sodano, V., 2004. *Introduzione allo studio dei mercati agroalimentari*, Università degli Studi di Napoli Federico II: Materiale didattico per il corso di “Politiche ambientali e sanitarie”.
- SRM, 2021. *Italian Maritime Economy. Porti, rotte, noli e shipping: specchio di un cambiamento globale*, Naples: SRM.
- Sumarliah, E., Usmanova, K., Fauziyah, F. & Kawther, M., 2021. Managing the Risks in the Clothing Supply Chain Considering the Coronavirus Pandemic. *Operations and supply chain management*, 14(4), pp. 576-587.
- Taleb, N. N., 2007. *The Black Swan: The Impacts of the Highly Improbable*. s.l.:Penguin.
- The Huffington Post, 2022. *Caro gas, la tempesta perfetta dell'agroalimentare*. [Online] Available at: https://www.huffingtonpost.it/entry/car-gas-la-tempesta-perfetta-dellagroalimentare_it_61a8cf03e4b044a1cc1fb850/ [Accessed May 2022].
- The New York Times, 2020. *How the Virus Got Out*. [Online] Available at: <https://www.nytimes.com/interactive/2020/03/22/world/coronavirus-spread.html> [Accessed April 2022].
- Thushari, G. G. N. & Senevirathna, J. D. M., 2020. Plastic pollution in the marine environment. *Heliyon*.
- Timmers, P., 1998. Business Models for Electronic Markets. *Journal on Electronic Markets*, pp. 3-8.
- Ulvenblad, P.-o., Ulvenblad, P. & Tell, J., 2019. An overview of sustainable business models for innovation in Swedish agri-food production. *Journal of Integrative Environmental Sciences*, 16(1), pp. 1-22.
- von Rosing, M., von Scheel, H. & Scheel, A.-W., 2015. *The Complete Business Process Handbook. Body of Knowledge from Process Modeling to BPM, Volume I*. s.l.:Morgan Kaufmann.

Warfield, S., 2020. *The Issue of Overfishing in the United States*. [Online]
Available at: <https://english.umd.edu/research-innovation/journals/interpolations/fall-2020/issue-overfishing-united-states>

Wirtz, B., Pistoia, A., Ullrich, S. & Vincent, G., 2016. Business Models: Origin, Development and Future Research. *Long Range Planning*, pp. 36-54.

Wucker, M., 2016. *The Gray Rhino. How to Recognize and Act on the Obvious Dangers We Ignore*. s.l.:MPS .

Appendix

Andrea Crozzoli – CAM EVOLUTION SRL (Fish&Friends)

Data intervista	12/05/2022
Azienda	Cam Evolution Srl
Codice ATECO	10.2
Intervistatore	Giovanni Serena, Francesca Checchinato
Intervistato	Andrea Crozzoli (General Manager)
Presenza file audio/video	Sì
Presenza di interviste precedenti	No

Dal questionario ho visto che l'attività è essenzialmente B2B, giusto?

Sì, allora B2B perché noi vendiamo alla grande distribuzione.

Ok quindi grande distribuzione.

Solo grande distribuzione.

Ok. A livello di posizionamento, la vostra azienda come la definirebbe? In termini, per esempio, di prezzo medio rispetto ai concorrenti.

Beh, un prezzo... un prezzo medio. Nel senso che ha un posizionamento di qualità superiore alla media e un posizionamento di prezzo nella media, anche perché diciamo che è un settore che non è particolarmente... dove per ogni segmento non è che ci siano tanti competitors. Perciò, poi si creano continuamente nuovi segmenti e il posizionamento è quello che consente una rotazione del prodotto. Se noi facessimo posizionamento troppo alto di prezzo il prodotto resterebbe "piantato là". Essendo un prodotto fresco lo delisterebbero dopo poco. Non so se mi sono spiegato.

Sì sì. Lei parlava di segmenti perché, se non sbaglio, i vostri prodotti sono prodotti freschi.

Noi facciamo prodotti freschi confezionati a base ittica e, diciamo, competiamo nel segmento, nel mercato della pescheria della grande distribuzione. Come pescheria intendo sia dove c'è la pescheria vera e propria, sia dove c'è il reparto che vende i prodotti freschi confezionati di pesce.

Posso chiederle: di solito, quello che abbiamo notato da altri studi, è che la grande distribuzione fa fatica ad accettare produttori e richiede delle caratteristiche ben specifiche. Secondo lei perché la grande distribuzione vi accetta e vi continua ad accettare all'interno del loro portafoglio prodotti?

Perché innanzitutto noi abbiamo un livello di qualità e di sicurezza del prodotto, perciò certificazione dei processi eccetera, che è sicuramente ai vertici della categoria. Noi abbiamo puntato su questo. Poi perché inizialmente abbiamo introdotto delle innovazioni, cioè abbiamo creato dei segmenti e perché continuiamo sostanzialmente a mantenere un livello di qualità, a cercare di introdurre, compatibilmente con la nostra dimensione e tutta una serie di altri problemi, cercare di introdurre continuamente delle cose nuove sia fatte da noi, sia fatte magari da altri nostri partner esteri magari.

Quindi la rotazione delle novità, la rotazione del catalogo è importante.

Fondamentale, per noi.

Tutti i prodotti sono a marchio Fish&Friends, giusto?

Sono o a marchio Fish&Friends o a marchio del distributore, perciò, nella fattispecie, a marchio di Conad, di Lidl e di Penny, che sono i 3 marchi privati che facciamo. Il resto lo facciamo a marchio nostro.

Fish&Friends, quindi, è di proprietà di Cam Evolution?

Sì, sì. È un marchio, tra l'altro, che ho sviluppato io su Internet. Al posto di andare di andare da un'agenzia, ho scritto un brief, sono andato su un sito, che adesso non mi ricordo nemmeno, dove prima ho fatto il nome e poi ho fatto il marchio. Non mi hanno... Ho speso 800/1000€. Mi sono arrivate una caterva di cose e poi ho un po' alla volta... si chiama design... è un sito tedesco.

Sì sì, è quello dove fai un brief e tutti partecipano...

Sì, puoi fare il marchio, puoi fare il catalogo, puoi fare qualsiasi roba. E devo dire che è stata una bella roba perché ho speso niente e francamente il marchio è carino.

Nel brief c'era già il nome o c'era solo l'idea?

No, prima ho fatto il brief per il nome e poi ho fatto quello per il marchio.

Che è un marchio registrato, immagino?

Tutto registrato, sì.

E i cataloghi chi ve li fa?

Beh, i cataloghi li scrivo io e la grafica l'ho fatta fare, la prima volta, sempre su Internet. Poi ho un'agenzia, che è un amico, che, per esempio, ha fatto il packaging però tutta la creatività iniziale l'ho fatta tutta su Internet con una spesa ridotta. E poi, siccome in passato io avevo lavorato parecchie volte con le agenzie, non mi trovo tanto bene sulla parte creativa perché alla fine tutti hanno comunque un'impronta. Alla fine, si offendono se gli dici che non ti piace e costano tanto. Fuori scala completamente. Perciò quando eravamo all'inizio, perché l'azienda l'abbiamo fatta da zero, stavamo facendo la fabbrica, avevo tempo e mi sono messo a fare questa roba qua.

Effettivamente il logo è molto bello.

Sì beh, rispetto anche a quello dei nostri concorrenti.

A proposito di questo, chi sono i vostri principali concorrenti?

Beh, i nostri principali concorrenti sono... Diciamo, all'interno della pescheria ci sono vari segmenti e non è che i concorrenti siano trasversali a tutti, perché noi facciamo sia la parte precotta sia la parte fresca. Diciamo, l'azienda n.1 in Italia si chiama Fiorital ed è qui, in marittima. Ed è anche una delle aziende più grandi in Europa perché comunque è un'azienda che fattura attorno ai 300 milioni. La gran parte sono di commercio, trading, cioè importazione e distribuzione di pesce fresco, però poi hanno anche una parte di

prodotto soprattutto confezionato fresco e poi hanno cominciato a fare anche prodotti trasformati. Perciò questo è uno. Poi c'è un'azienda spagnola che si chiama Angulas Aguinaga, che è un'azienda storica di proprietà di un fondo che poi è stata acquistata da un altro fondo e ha una politica di acquisizioni, ha già comperato un paio di aziende anche in Italia. Fa prodotti essenzialmente trasformati: all'inizio a base di cozze, adesso li sta facendo a base di molluschi. Li fa a base anche di polpo. Ecco, i molluschi e le cozze sono le due (*principali*). Poi ci sono delle aziende qui del territorio, quasi tutte di Portoviro e Taglio di Po', perché è un'area cardine sia per la logistica che per la cosa del pesce in Italia, cioè gran parte degli operatori logistici e delle aziende di trasformazione hanno sede lì, in particolare quelle dei molluschi. Perciò ce ne sono altre due tre lì: una che si chiama Mancin Nadia, che però faceva una volta solo prodotto marinato e adesso ha cominciato a fare anche prodotti freschi, poi c'è Finpesca che è un'azienda storica sempre del settore che varie cose e poi c'è un'azienda, abbiamo un competitor nella parte delle zuppe che è un'azienda di verdura che si chiama Naturello. Ha sede sui colli euganei, è un'azienda che era partita col basilico, lo coltivavano, erano grandi produttori di basilico, facevano il pesto. Poi si son messi a fare le zuppe di verdura e poi ad un certo punto si sono messi a fare le zuppe di pesce, fanno solo le zuppe di pesce che vendono solo al Lidl e hanno rubato il business a noi perché il prezzo nostro era più alto e allora... Però non mi pare siano particolarmente... Però va beh, credo che con le zuppe di pesce facciano un buon... Perciò sono degli operatori trasversali tra le verdure e il pesce. E poi c'è un'altra azienda, si chiama Regnoli che anche questa era leader, è leader incontrastato della parte dei marinati, fanno insalate di mare con il marchio Medusa, che forse avrete visto, e che adesso sta cominciando a fare anche dei prodotti freschi.

Eh, si sta muovendo tanto il settore del precotto, no?

Molto, molto. Dell'ittico in particolare si sta muovendo.

Sì sì, dell'ittico, perché ci siamo accorti di questi cambiamenti.

Perché è la stessa cosa che è successa con le carni e il pollo. Adesso sta succedendo anche con l'ittico.

Ma questo, secondo lei, è dovuto anche ai cambiamenti della dieta delle persone, che mangiano più pesce rispetto a carne, o no?

Beh, questo è una cosa che si dice da anni, che tutti dovrebbero consumare più pesce e che in Italia c'è un consumo ridotto di pesce. Poi, negli altri paesi c'è più consumo di pesce però di prodotti che poi, alla fine, son tutti prodotti salati, secchi, cioè le aringhe, le cose. Perché se poi uno va in Germania e guarda la pescheria c'è ben poco. Però...

Però magari hanno una parete di salmone preconfezionato...

Di salmone e quella roba là, di quelle robe secche. Perciò sicuramente uno è il discorso della voglia di mangiare pesce però c'è un ostacolo al fatto che la gente considera ancora il pesce una materia prima difficile da conservare, da cucinare, da trattare, da riconoscere. Perciò c'è un po' di paura, in special modo lontano dalla costa: più ci si allontana dalla costa, a parte Milano, ovviamente, però se uno va a Bergamo o comunque nel mezzo della pianura padana le cose sono diverse da come sono qui. Perciò questo discorso di fare il prodotto confezionato, pronto, eccetera poi va anche incontro al fatto di avere un prodotto

veloce. Ecco, durante il lockdown sono ritornati di moda i prodotti freschi però pronti alla cottura e c'è stato un calo dei prodotti confezionati pronti. Perciò adesso il trend non è più fare una cosa completamente pronta ma fare delle specie di kit che uno può, in ogni caso, cucinarselo lui.

Tipo il fresco già curato, per dire?

Sì, lei intende il pesce fresco già curato? Quello, però, ha tutta una serie di altri problemi: che dura troppo poco, che alla fine non si riesce a scaricare il costo e di conseguenza fare del margine sul prodotto perché la grande distribuzione lo considera un prodotto di servizio e lo mette in competizione con il fresco quando, in realtà, son due cose completamente diverse. Noi facciamo il prodotto a marchio per Conad. Facevamo 5 referenze, salmone e quella roba là, però era meglio buttare la roba dalla finestra perché era perdita secca di tanti soldi. Questo lavoro lo può fare solo un'azienda come la Fiorital che è un'azienda integrata, di conseguenza compra i branzini perché li deve vendere. Dopodiché arriva l'ordine, li confeziona e quelli che avanzano li vende. Ma noi che non siamo integrati... Non è solo il margine, ma poi ci perdi soldi. Poi è difficile perché uno deve ordinare le sogliole e le compra in Olanda. Le compra due volte a settimana in Olanda e deve fare la previsione di vendita e fare il conseguente piano di produzione. Nel mentre ti arrivano gli ordini che sono diversi ovviamente da quello che (*hai previsto*) allora ti avanzano 10 chili di sogliole, che sono 160€. Cosa fai? La Fiorital li vende al mercato a Venezia. Noi dobbiamo chiamare, dire (*discutere con il gruppo*). Perché se uno fa industria, fa industria, altrimenti fa il pescivendolo, che non c'entrano niente.

Due mondi completamente diversi.

Sì. Ecco, tornando, questi sono i competitor principali. Poi al sud ce n'è uno che si chiama Lepore Mare che però, diciamo, sembra che, se uno guarda il sito, facciano robe straordinarie poi alla fine il 99%...

Ma voi distribuite in tutta Italia o...?

Noi distribuiamo in tutta Italia sì. Perché noi lavoriamo solo con clienti che ci assicurano un certo volume. Abbiamo provato a lavorare con aziende tipo Ali o aziende locali qui che distribuiscono, perché in Veneto è pieno di catene.

Tipo la Pam?

Sì, ma con la Pam noi lavoriamo a livello nazionale. Il problema poi è che Ali ha 120 negozi, di cui 90 trattano l'ittico, 50 sono interessati ai tuoi prodotti, ti comprano 2 referenze e vuol dire che tu gli devi consegnare due volte alla settimana 30 cartoni e allora, anche là, ti conviene buttare via la roba perché la logistica, nel fresco, è estremamente pesante.

Perciò io considero i nostri competitor quelli nazionali, poi a livello locale c'è tanta gente.

Sì, poi cambiano ovviamente da città a città. Lei va a fare visite in giro per l'Italia per vedere eventualmente chi sono e cosa fanno?

Gli stock check? Sì, è una parte fondamentale del mio lavoro, però è anche una cosa che ho sempre fatto in tutte le attività. Cioè, trovo che sia fondamentale altrimenti come faccio.

No no perché non tutti lo fanno per cui chiedo perché le risposte possono essere varie.

E come fanno. No no, ma lo so che non tutti, anzi, la maggior parte della gente non lo fa. Perché se uno gli dice “Ho visto il tuo prodotto a Roma” risponde “Ma come, chi?” e dico “Ma scusa, è il tuo prodotto, mica il mio”.

Ah no, ma c'è molta perdita di controllo, in un certo senso, di dove va a finire il prodotto. Quindi non tutte le aziende poi effettivamente controllano soprattutto se hanno vendite con la grande distribuzione. Nel senso: ho venduto, fine. Ed è questo il motivo per cui tante poi non...

Certo, però è anche abbastanza difficile. Cioè uno può andare a fare un giro, però, per esempio, nel caso di Eurospin, Lidl, Penny io so che più o meno tutti i negozi sono uguali perché c'è una strategia. Nel caso di Conad e di Coop, per esempio, ogni negozio è un mondo a parte. Primo perché hanno 3/4 tipi di negozi, poi nel caso di Conad la proprietà è diversa perciò c'è cooperativa nazionale, la cooperativa locale e il proprietario del negozio sicché è difficile, veramente.

Sì sì ma poi fanno un assortimento che è proprio calato sul territorio.

Sì, non so se abbiano ragione loro o i discount. Visto come vanno i discount rispetto a loro, credo abbiano ragione i discount.

Sono due filosofie diverse, secondo me. Due strategie proprio completamente diverse. Forse esistono tutti e due perché ci sono clienti che vogliono cose diverse.

Sì, però per fare quello che dice lei correttamente, bisognerebbe essere capaci a farlo e io dubito sulla loro capacità, conoscendo i buyer, di fare questa cosa qua. Perlomeno quelli che conosco io.

Passiamo un po' all'organizzazione dell'azienda. Visto che abbiamo parlato anche del catalogo, mi pare di capire che della funzione marketing si occupa principalmente lei.

Sì, diciamo che la funzione marketing è molto occasionale.

Nel senso che non c'è una vera e propria funzione marketing e il marketing viene fatto da chi in quel momento si trova...

Da me.

Solo da lei?

Sì.

Ok. Forse da suo figlio, in futuro, no?

No, mio figlio spero che intraprenda vie più interessanti.

E prima, se non sbaglio, parlava di rapporti passati con delle agenzie.

Allora noi abbiamo sbagliato tempistica e fatto subito attività sui social. Avevamo investito per fare il sito e poi un profilo su Instagram, su Facebook e su Twitter.

In che anno siamo?

Siamo nel 2017/2018. Noi abbiamo iniziato a lavorare nel 2016 perciò...

(Riferendosi ai social) Dove facevamo anche, perlomeno mi dicevano perché io non ho gli strumenti per controllare, delle campagne mirate. Non so facevamo delle promozioni, al tempo avevamo anche delle catene locali su, non so, Milano. Allora facciamo un'azione su Milano, su Roma. Poi in realtà questa cosa aveva dei costi spropositati, io non avevo il tempo materiale di controllare cosa si facesse, di produrre materiale perché il materiale bisogna produrlo internamente. Sicché, dopo un po', abbiamo lasciato stare. E basta. Dopodiché, come attività di marketing, diciamo che ci siamo sempre concentrati sul prodotto. Avevamo anche fatto, avevamo una specie di merchandiser che, soprattutto il Lombardia, usciva e andava a vedere il discorso del posizionamento dei prodotti cioè il fatto di dire "Ma come, perché non hai il prodotto in assortimento? Qual è il problema? Non l'hai ordinato? Non lo stai comperando?". Però, per esempio nel caso di Coop, dopo un po' loro ogni tanto mi chiamavano e mi dicevano "Guarda che ti buttiamo fuori se mandi ancora in giro la gente" perché non volevano il controllo. Perciò, dopo un po' anche questo l'abbiamo lasciato stare e, di conseguenza, poi quando abbiamo cominciato a fare marca privata abbiamo preso un paio di clienti grandi tipo Eurospin che ci hanno assicurato un volume grande abbiamo fatto un lavoro sul...

Sì sì, la parte principale è il prodotto. Qualche promozione in-store no?

Ecco, le promozioni in-store noi le abbiamo fatte fino ad un certo punto con le dimostratrici per fare gli assaggi soprattutto delle zuppe. Anche lì, sforzi mostruosi, investimenti mostruosi per ritorni, francamente, secondo me non in linea.

E Cibus che abbiamo citato prima, voi avevate uno stand?

No, noi non abbiamo mai fatto fiere. Anche se avremmo dovuto. Anche lì, mi auguro, quando faremo una fiera, so che lo sforzo organizzativo, oltre che economico, è importante. Perché non sia un investimento buttato.

Sì, forse è più l'investimento organizzativo che non economico. Adesso comunque siete presenti, giusto, su Facebook anche se non molto attivamente?

Bah, credo che l'abbiamo ancora, sì, ce l'abbiamo ancora di sicuro però e anche Instagram però non stiamo facendo niente.

Sì, abbiamo visto. Avete i profili, ma non sono aggiornati. È una scelta? In futuro pensate di continuare?

Certamente in futuro. Son tutte cose che... però noi abbiamo avuto un periodo un po' negativo in cui, sostanzialmente, abbiamo continuato a crescere però la capogruppo è andata in concordato. La capogruppo è anche il nostro principale ed obbligato fornitore di tutta una serie di materie prime, perciò, nonostante noi nel 2021 abbiamo fatto +35% rispetto all'anno prima e nel 2020 abbiamo fatto +70% (*di fatturato*). Noi siamo partiti nel 2016 da zero e abbiamo chiuso l'anno scorso a 7 e quest'anno faremo 8.5. Perciò siamo cresciuti abbastanza bene, però abbiamo avuto questo periodo che ci ha un po'... e che non è ancora finito e ci sta limitando da tutta una serie di punti di vista.

Quindi, come canale, l'e-commerce è lontanissimo?

No, allora, per l'e-commerce ancora 3 anni fa avevo fatto uno studio, un progettino perché volevamo cominciare a fare un po' di e-commerce B2B. L'idea era: siccome i nostri prodotti possono andare bene anche per i food service, per i bar e tutti i ristoranti, perché abbiamo due tre robe interessanti che potrebbero andare bene abbiamo detto facciamo un'area test su Milano. Prendiamo come riferimento i ristoranti di pesce e i ristoranti di cucina locale. Io ho chiesto a Compass che avrebbe fatto il mailing e il recall per una cifra (*bassa*)... 1500/2000€ e l'idea era proprio quella di dire noi vi possiamo dare questo, questo e questo. Poi avremmo fatto, ovviamente gestito tutto come fosse un e-commerce però targettizzato ad un'area. Poi, per quanto riguarda la logistica, avremmo trovato. L'altra cosa dell'e-commerce, noi adesso stiamo lavorando con un'azienda che si chiama Cortilia. Noi siamo uno dei tanti fornitori di Cortilia, però per noi è come se fosse una catena: ci fanno gli ordini due volte alla settimana, glieli spediscono, finito. Siccome il discorso logistico è importante anche per il discorso della sostenibilità, se uno fa e-commerce con questi prodotti rischia di consegnare un metro cubo di polistirolo e di ghiaccio chimico per 50€ di controvalore. In realtà, da anni, ci sono tutta una serie di supporti per gestire la logistica che sono totalmente sostenibili perché fatti di carta riciclata e acqua (sacchetti di nylon fini). In particolare, c'è un'azienda con la quale lavoriamo che è un fornitore di packaging che si chiama Sealed Air, multinazionale americana. Loro hanno una cosa che viene usata che si chiama Sunbasket. Praticamente è un cartone con all'interno dei cuscinetti per ogni faccia del cartone fatti di cartone riciclato pieno di pasta di carta riciclata, che è estremamente termoisolante, tiene tantissimo. In più, si associano dei sacchetti con all'interno dei filamenti di cotone e acqua che si congelano. Questa cosa qui è testata per tenere fino a 4° per 48h con all'esterno 40°. È totalmente riciclabile ed ha un costo che è inferiore a quello del polistirolo. Alla fine, quello che volevamo fare era sviluppare anche questa roba qui però poi per tutta una serie di problemi son tutte cose belle che sono messe là.

Quindi, il test sull'area Milano non l'avete fatto mentre con Cortilia lavorate.

Sì e poi abbiamo tutti questi progetti pronti che, per ragioni organizzative più che economiche perché è già tutto pronto, sono lì. Si tratta di avere una persona che si occupi di queste cose perché non possono essere gli stessi che si occupano della gestione di tutti i giorni.

Questo sicuro. L'e-commerce da questo punto di vista del personale è comunque molto impegnativo.

Ovviamente poi ci sarebbe da fare un investimento nell'adeguamento del sito. Noi il sito l'abbiamo risistemato tante volte sulla carta anche con la parte dedicata all'e-commerce, poi si è fermato.

Ma, appena si risolvono i problemi, siete pronti a investire e ad assumere persone?

Non so, è una questione che riguarda dei contrasti con la proprietà, è una questione di cultura. Quando siamo partiti c'erano degli obiettivi, degli accordi. Poi, com'è normale, si è modificato eccetera. Sicché adesso siamo in una fase di impasse. Grazie a Dio continuiamo a crescere per l'introduzione delle innovazioni eccetera, però...

Non si riesce a fare il salto.

E, stando così le cose, non si farà mai.

È che, sulla carta, ci sono tutte le premesse.

Sulla carta c'è una base solida, molte premesse e opportunità. Anche perché per fortuna la maggior parte dei competitor sono dei follower. Le zuppe di pesce ce le siamo inventate noi, non le faceva nessuno al mondo. Abbiamo mutuato un'esperienza passata e queste ci sono servite per entrare ovunque. Adesso un po' alla volta ce le hanno copiate. Lo stesso i molluschi cotti. C'era questa azienda spagnola che faceva le cozze. Noi abbiamo cominciato a fare le cozze, all'italiana però, poi abbiamo introdotto una serie di altre cose. I molluschi crudi: erano tutte aziende che facevano sostanzialmente allevamento e confezionamento in retina, senza strutture particolarmente sofisticate industriali. Le facevano sottovuoto perché in sostanza le cozze e i molluschi vivi li devi semplicemente tenere chiusi perché vivono dell'acqua che hanno dentro. Nel momento in cui si aprono, mollano l'acqua e muoiono. Allora, la durata è tenerli chiusi. Noi abbiamo detto sì, bisogna tenerli chiusi però siccome loro non stanno mai chiusi chiusi, se noi creiamo un ambiente non ostile all'esterno cioè facciamo un'atmosfera modificata compressa otteniamo le due cose: li teniamo chiusi o quasi chiusi e in più creiamo un ambiente esterno favorevole. E abbiamo quasi raddoppiato la shelf life. Dopo si son messi a farlo tutti. Voglio dire, niente di che, a noi è parso. Eppure, nessuno lo faceva. E tutto questo lo facciamo giorno per giorno.

È che è un peccato, lo vediamo tantissimo soprattutto nel Triveneto. Ci sono aziende come la vostra che dal punto di vista delle innovazioni di prodotto e del prodotto stesso sono perfette però è come se ci fossero le ali tarpate, no? Quindi non si riuscissero poi a sviluppare.

Beh, io provato ad acquistare l'azienda due volte con due fondi diversi. Sempre facendo finta di non esistere se no si innescano altre dinamiche. Però tutte e due le volte niente, perché sapete com'è qui: "Muoi io, l'azienda muore con me".

Visto che abbiamo toccato vari temi, dal marketing, agli investimenti in innovazione, sostenibilità e anche l'e-commerce: la situazione pandemica ha in qualche modo influito? Ha creato nuovi progetti? Ha spinto in qualche direzione nuova?

Per noi ha influito positivamente perché a parte l'inizio, ad Aprile 2020 che stato uno dei mesi più bassi, poi da aprile ha cominciato ad andare su. Soprattutto grazie al fatto che noi abbiamo oltre il 50%/60% del nostro fatturato generato dai discount e i discount oggettivamente sono sempre stati performanti però con la pandemia, grazie ad una distribuzione più capillare, ancor più. Poi, all'inizio, durante la pandemia ha spinto molto i prodotti cotti, perciò, ci ha aiutato a consolidare la parte cotti che facevamo. Poi in fase calante della pandemia, si è invertita la tendenza: abbiamo la parte fresca che è in sviluppo. Poi noi, grazie a Dio, essendo un'azienda alimentare siamo andati tutti i giorni a lavorare senza problemi.

Vedo anche dal questionario che avete lanciato dei nuovi prodotti proprio in risposta al Covid-19.

Sì sì, durante la pandemia abbiamo fatto diverse cose. Però ripeto siamo sempre molto a giri ridotti per una questione organizzativa perché magari uno si trova con più problemi che benefici.

Mi pare di capire, quindi, che nelle diverse fasi dell'andamento della pandemia, avete notato anche dei cambiamenti a livello di domanda, nel consumo.

Sì, all'inizio... Al contrario, i prodotti precotti sono calati però in realtà siccome alcuni dei nostri sono anche prodotti che possono essere usati come ingredienti, alla fine si sono stabilizzati. Adesso quelli precotti stanno oggettivamente scendendo rispetto a prima, abbiamo il discorso del fresco che abbiamo sviluppato durante la pandemia con queste caratteristiche innovative che sta tornando su. Però di fatto è stato abbastanza altalenante il discorso. Solo adesso la gente ha cominciato ad andare al ristorante e perciò c'è un calo oggettivo adesso rispetto all'anno scorso. Le catene mi dicono che fanno -15/-20% rispetto all'anno scorso.

Tornando un attimo a Cortilia, com'è iniziato il rapporto e come avviene adesso? Se vi fornisce dei dati.

No, Cortilia no. Anche perché i nuovi clienti di solito li seguo sempre io all'inizio e poi li passo. Loro ci hanno chiamato all'inizio perché erano interessati. Io onestamente non pensavo perché avevano tutta una serie di produttori locali, specializzati, eccetera. Invece poi... però non è che stiamo facendo dei volumi stratosferici.

Però comunque siamo su meno del 5% con Cortilia?

Sì sì, nettamente.

E vi hanno cercato loro, quindi?

Sì.

E come funziona? Ci sono degli ordini settimanali?

Noi consegniamo a tutti, a tutte le piattaforme, mediamente, o 3 o 2 volte alla settimana. Gli ordini sono in giorni prestabiliti, arriva l'ordine e noi spediamo. Normalmente a noi arriva l'ordine alla mattina e al pomeriggio spediamo il prodotto.

E Cortilia vi fornisce dei dati su come vanno?

No, ma nessuno lo fa.

Perché passando al vino, che è un altro settore che abbiamo analizzato, invece Tannico fornisce dei dati sulle visite al prodotto, eccetera.

Allora glielo chiederò, adesso. Anche perché con Cortilia... Noi facciamo anche un prodotto che è la granseola fatta a mano, come al ristorante, che vendiamo tra l'altro ad una cifra importante. E loro ne comprano sì, ma niente di che, anche perché costa molto.

Quindi la fornite già aperta, già curata?

Guardi, eccola qua. È come fosse al ristorante. Prima vengono cotte da vive, poi vengono spolpate, confezionate, vengono pastorizzate leggermente, poi le abbattiamo e durano 15 gg. Sono pronte al consumo. Ce le aveva chieste anche Esselunga però lì bisognava fare

un po' un mix: comprare quella già fatta industrialmente e mischiarla con quella fatta a mano per fare un prodotto di media qualità che non costasse 40€ se no dopo non la comprano.

Prima ha detto Cortilia e le altre piattaforme, ma le altre piattaforme sono quelle della distribuzione?

Sì sì perché Lidl ha per esempio 10 piattaforme, eccetera. Non altre piattaforme online.

Quindi neanche informazione sui clienti che comprano?

Zero, ma forse perché non gliele ho chieste. Adesso proverò a chiedere.

Tornando alla sostenibilità, avevo letto sul sito un'intervista credo proprio a lei, tra l'altro, dove parlava, oltre al progetto di allungare la vita del prodotto sullo scaffale, anche di utilizzare quelle parti dei prodotti ittici che di solito vengono scartate per la preparazione di altri piatti.

Sì, però quella cosa lì non c'è più perché non facendo più il prodotto fresco non abbiamo più gli scarti. Però, per la sostenibilità, c'è il discorso del packaging dove noi sostanzialmente noi facciamo packaging riciclabile al 100%. Cioè, monomateriale plastico e carta, sostanzialmente. Quella è una prima cosa. Adesso, dall'anno scorso, c'è che bisogna indicare in maniera più chiara sul packaging... questo poi è un obbligo, perciò. Poi noi utilizziamo sostanzialmente quasi tutto materiale PP, polipropilene che va nella plastica e poi la carta. Poi c'è il discorso delle materie prime: noi siamo certificati sia MSC che FoS. MSC è molto difficile trovare le materie prime. Nel caso, per esempio, dei molluschi che sono la gran parte delle materie prime che utilizziamo, non esistono fornitori certificati in Italia. Esistono cozze MSC in Spagna. Mentre in Italia se vai a vendere e dici che hai il prodotto certificato che però costa di più ti guardano male, in Germania per esempio, non vendi se non sei certificato. In Italia il problema è che i produttori di materia prima o i trasformatori primari non sono certificati perché costa e perché il settore ittico italiano è ai minimi termini, di sussidiati, di gente che ha sempre vissuto ai margini della legalità. Perciò fare i prodotti MSC è molto complesso. FoS ha delle caratteristiche che francamente da dentro posso dire che è abbastanza "farsesca" come cosa, però. Adesso, per esempio, noi dal mese prossimo cominceremo a fare il prodotto per Lidl a marchio Lidl FoS. Per cui c'è il bollino, poi c'è ovviamente tutta la rintracciabilità.

E il biologico?

Ecco, il biologico, noi abbiamo creato un piccolo assortimento di biologico dove facevamo per un cliente, che era la Coop, le cozze che ancora facciamo e che vendiamo anche a Cortilia, se non ricordo male. Però anche lì, le cozze biologiche sono una cosa abbastanza ridicola perché sono biologiche di default e poi quelle certificate biologiche sono di fianco a quelle normali solo con filari più alti. La certificazione, che è molto complessa. Soprattutto perché noi abbiamo uno stabilimento piccolo e nel momento in cui uno produce biologico non può più produrre il resto. Però avevamo creato un piccolo assortimento, cioè avevamo un prodotto che ci facevamo arrivare da un'azienda olandese che erano le mazzancolle biologiche confezionate, le cozze che facevamo noi e poi compravamo branzini e orate biologiche dalla Grecia e le confezionavamo con un

confezionamento, questo sì innovativo. Praticamente è un sacchetto di carta, anche se sembra plastica, che può essere utilizzato per la cottura sia in forno a microonde che in forno normale e dentro c'è atmosfera modificata protettiva. Perciò avevamo fatto un packaging che aveva quasi zero plastica e poteva essere utilizzato per la cottura. Però è un prodotto che poi la catena ci deve credere; perciò, noi abbiamo cominciato a venderlo con una catena che fa volumi ma non è molto grande, Unicoop Firenze, che fa numeri mostruosi per il numero di negozi che è però, alla fine, circoscritta. Prodotto bello, però dopo era talmente complesso e generava perdite per cui l'abbiamo sospeso per il momento. Poi è una linea di produzione diversa perché bisogna farlo con una macchina che fa sottovuoto, visto che il sacchetto non può essere confezionato in linea. Però ecco, questo a noi sembrava un mix coerente e bello tra bio e sostenibile con packaging e, secondo me, può essere una cosa che, nel momento in cui si ha tempo e voglia, si può riproporlo perché è una bella cosa. Perché alla fine altrimenti fare una cosa che è sostenibile, ma che lo è solo in un pezzettino e tutto il resto non è sostenibile è una cosa ridicola. O è sostenibile quasi tutto o altrimenti siamo al ridicolo. Poi per quanto riguarda anche il discorso delle specie ittiche: il 90% delle specie ittiche dell'Adriatico sono in situazione di stress, cioè sono sovra pescate. Questo lo dice l'Ispra. Ovviamente ci sono poche specie che non lo sono tipo il cefalo. Il cefalo però deve essere trasformato, cioè io devo prenderlo, spinarlo, aprirlo, sfilettarlo. Cosa che può essere fatta anche a macchina fino ad un certo punto. Dopo potrebbe essere trasformato in mille maniere. Però anche questo, noi non abbiamo la forza organizzativa ed economica per dire "provo a investire un milione di € per fare una linea di prodotti che siano 100% locali e sostenibili" perché non siamo in grado. Uno dovrebbe investire in una linea di produzione, sviluppare un sistema per rendere utilizzabile la materia prima. Le sardine lo stesso, il pesce locale in stagione. Quindi, dovrebbe investire risorse nel fare questo e poi nello sviluppare prodotti. Quest'ultimo è la cosa più banale, il problema è la materia prima.

Farla anche accettare al consumatore?

Bah, io credo che dopo il consumatore un po' alla volta, se si trova il prodotto giusto. Dipende sempre anche dalla catena. Per esempio, uno come Cortilia questa cosa te la compra ad occhi chiusi, però poi uno dovrebbe andare dalla Coop e trattare, discutere, convincere.

Sì, questo lo abbiamo visto anche in altri corsi dove stiamo trattando il settore ittico. Il discorso delle specie è molto sentito per cui alla fine il consumatore finale compra sempre le stesse cose.

Il salmone. Il salmone è una porcheria immonda insostenibile. La gente pensa che l'abbiano pescato il giorno prima invece come minimo l'hanno pescato una settimana prima, costa moltissimo, è un mercato speculativo con prezzi che vanno su e giù. Eppure... Per me è tipo pollo il salmone, no? Però questo dipende dall'istituzione che gli mette il salmone in tutte le risme.

Dipende dalla distribuzione e dipende, forse, anche dalla facilità di cuocere alcuni tipi di pesce piuttosto che altri e per questo, se glieli fai trovare già pronti, forse...

Esattamente. Cioè, l'ombrino, che va beh si alleva ed ha molto scarto, è un pesce dove il filetto è il 40% e dove con il restante 60% posso farci un sacco di cose. Però anche là,

ripeto, un'azienda come Fiorital potrebbe fare una roba del genere perché investe e mette due o tre persone, dei soldi per fare questa roba qua e in un anno e mezzo sono pronto a farlo. Poi ecco, c'è un'altra cosa che è il discorso della shelf life, perché alla fine il congelato è una roba e il fresco è un'altra. Oggettivamente sarebbe meglio comperare roba congelata perché alla fine sei più sicuro, però devi avere il congelatore e si innesca tutta una serie di costi. Sul discorso del fresco c'è il problema che il pesce dura troppo poco. Però in realtà ci sono delle tecnologie, che non sono nemmeno particolarmente innovative, tipo l'alta pressione che servono a dare una vita molto più lunga senza modificare le caratteristiche organolettiche, nutritive e nemmeno fisiche del prodotto. Ed è una tecnologia che esiste, che per esempio in Italia hanno 3 o 4 aziende. Una della gastronomia sta facendo questa cosa, però storicamente ce ne sono due del baccalà. Noi abbiamo cominciato a lavorare con un'azienda spagnola e adesso abbiamo lanciato le alici del Cantabrico con una shelf life di 15 giorni, mentre è un prodotto che normalmente già dopo 3 giorni comincia ad avere problemi. Ecco allora, secondo me, anche questa è un'innovazione che va nel senso della sostenibilità perché tutto il pescato locale tu lo puoi rendere disponibile per un tempo più lungo e soprattutto lo puoi usare da congelato e vendere come fresco, senza che questo modifichi le caratteristiche.

Ha visto il progetto di e-commerce "Pescaori"?

Sì, ma sono quelli del Cogevo. Li conosco da anni, ma a me sembra che non siano molto politici.

Loro rappresentano 160 barche, la flotta più grande dell'Adriatico, che vanno fuori e pescano. Ma non sono ancora riusciti a organizzare i fermi pesca eccetera. A me, onestamente, quei personaggi lì sono sostanzialmente la parte politica delle 160 barche, il loro obiettivo è tenere contenti i loro associati e far finta che stanno facendo qualcosa. Ma alla fine sono lì da anni, hanno il mare e sono loro che dovrebbero occuparsi di salvaguardare il mare. Non mi pare che siano nemmeno interessati a fare questa cosa qua. Non so, io sono abbastanza disilluso sulla categoria. Secondo me hanno due problemi: uno è che sono esageratamente sussidiati e due che è gente che è sempre stata abituata a non rispettare la legge, per cui pescare dove non doveva, eccetera, salvo poi lamentarsi delle condizioni critiche del pescato.

Andrea Crozzoli – CAM EVOLUTION SRL (Fish&Friends)

Seconda intervista

Data intervista: 22/07/2022

L'azienda serve il canale B2B, in particolare servite esclusivamente la grande distribuzione. Ci potrebbe dare una panoramica su come è ripartito il giro d'affari? Cioè, chi sono le principali catene di grande distribuzione che servite?

Le catene sono Conad che a sua volta è divisa in varie cooperative. Organizzativamente ha una sede centrale con una funzione di qualità e commerciale soprattutto per lo sviluppo dei prodotti a marchio. Poi ha 5 cooperative che sono territoriali, una serve il nord-est, le Marche e parte della Lombardia dopo l'acquisizione di Auchan, una serve la Lombardia

e la parte centrale del Nord, poi una serve il centro, la Toscana e il nord ovest e due cooperative al sud che sono le più grandi. Comunque, a parte questo, Conad è stato il nostro primo cliente e facciamo sia prodotti a marchio loro sia a marchio nostro. Attualmente pesa attorno al 15-20% del fatturato. Poi c'è Coop e noi collaboriamo con tutte le sue cooperative perché anche Coop ha tutta una serie di divisioni territoriali. Rappresenta meno del 10%. Poi c'è Pam che è una sede sola con varie piattaforme che però è una catena nazionale e anche nel caso loro diciamo che vale meno del 10%. Infine, noi lavoriamo molto con i discount che ormai, mentre una volta erano concettualmente separate dalla GDO, adesso credo possano tranquillamente entrare nella GDO perché sono concorrenti diretti, non sono un canale a parte con consumatori particolari. Uno va dove è più conveniente sia dal punto di vista economico, sia dal punto di vista geografico. Nei discount lavoriamo con Lidl, Eurospin e Penny. Ognuna pesa circa il 15-20% del nostro fatturato.

Questi clienti, negli ultimi anni e anche durante la pandemia, che tendenze hanno mostrato in termini di volumi d'affari? Essendo diversi clienti, perché come mi diceva, per esempio, i discount hanno delle dinamiche leggermente diverse, come hanno performato?

I discount hanno come dinamica che normalmente sono delle catene molto grandi e molto centralizzate. Perciò, dal punto di vista dei punti di vendita, sono tutti attorno ai mille e oltre negozi, sono nazionali quindi operano su tutta l'Italia con varie piattaforme logistiche e lavorano con delle strategie commerciali e di offerta di prodotto abbastanza omogenee. Nel senso: il negozio che c'è a Marghera lo si può trovare anche a Messina quasi uguale anche in termini di assortimento. Questo, un produttore, è ovviamente molto meglio perché significa che il proprio prodotto è automaticamente distribuito in quasi tutta Italia. Poi ci possono essere delle strategie commerciali diverse per piattaforma logistica: per esempio, la piattaforma della Sicilia può avere un assortimento leggermente diverso di quello di altre località ma in linea di massima è quello. Nel caso di Conad e Coop, che sono le catene di GDO più grandi in Italia, le strategie sono molto diverse tra cooperative. Perciò è come avere a che fare con 4 clienti diversi, nel caso di Coop, anzi è proprio così. Nel caso di Conad più o meno uguale. Dal punto di vista della strategia, all'interno della stessa cooperativa e della stessa piattaforma ci sono negozi che si definiscono come cluster con tipologie diverse. Ci sono ipermercati, superstore, negozi di vicinato ecc, e ognuno di questi ha un suo assortimento e una sua strategia. Poi ognuno di questi può avere una proprietà diversa sicché è difficile perché hai a che fare con tanti interlocutori diversi tra loro, perciò è difficile applicare una strategia ed è difficile, soprattutto per prodotti come i nostri che non sono prodotti necessari, concretizzare una strategia commerciale o di marketing e avere un ritorno di volumi importante. Noi che lavoriamo con il fresco e dobbiamo consegnare 3 volte alla settimana a ciascuna piattaforma abbiamo bisogno anche di volumi per ottimizzare i costi logistici. Perciò con i discount è più facile raggiungere un certo volume anche dal punto di vista delle singole consegne.

Quindi, in questi anni, ci sono state delle dinamiche in termini di crescita o riduzione del volume d'affari con i diversi clienti?

No no, i clienti sono tutti cresciuti. Abbiamo perso dei clienti e ne abbiamo guadagnati degli altri però in tutti i clienti con cui lavoriamo si è vista una crescita, in alcuni casi importante in altri meno significativa. Quest'anno noi stiamo facendo il 35% in più dell'anno scorso, l'anno scorso abbiamo fatto il 70% in più, l'anno precedente più del 100%.

Avevamo accennato alle difficoltà, per gli operatori del settore, di farsi accettare dalla GDO e mi diceva che, nel vostro caso, il livello di qualità e di sicurezza del prodotto erano elementi che favorivano e accennava alle certificazioni dei processi. Che cosa intende per certificazione dei processi, quali sono certificati e perché sono importanti per accedere alla GDO?

La certificazione di processo presidia 2 ambiti: la tracciabilità e lo certifica in maniera precisa ed inequivocabile. La tracciabilità è un obbligo di legge però poi dimostrare che qualsiasi cosa si faccia è perfettamente tracciabile è un altro discorso. La seconda cosa è il rispetto delle buone pratiche di lavorazione. Perciò io da un lato certifico in maniera inequivocabile che tutte le materie prime, tutti i semilavorati e i prodotti sono perfettamente tracciabili partendo dalla materia prima per arrivare al prodotto finito. Per quanto riguarda le buone pratiche di lavorazione, questo riguarda la pulizia della fabbrica, la pulizia degli addetti, la formazione, il rispetto delle temperature che per prodotti come i nostri è fondamentale ed è parte del processo. Nel momento in cui io faccio un prodotto che ha una determinata shelf life, quest'ultima è assicurata dal processo. Shelf life e sicurezza sono collegate l'una all'altra e il rispetto delle temperature è un aspetto strettamente connesso. Le certificazioni di processo sono quelle che dicono cosa viene fatto una volta che arriva la materia prima, le procedure adottate nel riceverla, stoccarla, lavorarla. Se il camion che la trasporta rispetta le temperature, se il fornitore è qualificato, affidabile, ecc. Cosa succede in caso di non conformità, come conservo la materia prima, come la conservo, come la inserisco nel processo di trasformazione e come funziona il processo di trasformazione. Vengono identificati degli ambiti più o meno critici dove ci sono tutta una serie di valutazioni e di registrazioni sempre e nel momento in cui si registrano dati fuori dagli standard è una situazione che mi obbliga a concludere e sostituire. Tutto fino alla fine, alla realizzazione del prodotto e alla sua spedizione, a come avviene tutto il processo logistico che poi fa arrivare il prodotto al cliente. Tutto questo è qualcosa che deve essere dimostrato: prima di tutto lo devo disegnare, poi lo devo tenere continuamente monitorare e devo registrare queste cose. Devo dimostrare che è sempre tutto sotto controllo. Se anche solo una di queste fasi va fuori standard cosa devo fare? Devo anche dimostrare come gestisco queste situazioni. In sostanza, tutto deve essere comprovato e registrato dinamicamente. Io vengo qua, visito, vedo che tutto sia a posto nello stabilimento dagli spogliatoi fino ai laboratori verifico che tutto sia fatto secondo le procedure. Dopodiché passo alla verifica documentale che è quella che molte aziende sembra che non riescano a soddisfare. Una cosa importante: in Italia, siamo ad un livello di sicurezza nettamente più alto di molti altri paesi europei, ma nettamente! Cioè, una fabbrica come la nostra in Germania con gli standard nostri dell'Italia, da noi sarebbe chiusa. Poi, ovviamente, siccome siamo in Italia, l'ASL che fa le ispezioni evita di andare in tutta una serie di aziende storiche perché altrimenti le dovrebbe chiudere. Anche questa, però, è una forma di concorrenza sleale secondo me. Se una fa un'azienda nuova deve essere perfetta. L'azienda che ha 20 anni può essere fuori standard e lavorare comunque altrimenti si rischiano posti di lavoro.

Voi avete il marchio vostro Fish and Friends e poi fate prodotti a marchio del distributore quindi Conad, Lidl e Penny. Quanto vale, in proporzione, il marchio vostro e quanto il private label?

Il marchio vale più del 30%, attorno ad un terzo. Il fare prodotti a marchio per una catena della distribuzione è una garanzia di qualità per tutti gli altri clienti su tutti gli altri prodotti. Perché, ovviamente, un distributore come Lidl o Conad, che sono catene di massimo livello, nel momento in cui mettono il loro marchio sul prodotto vogliono essere super sicuri che il prodotto è esente da rischio e fatto a regola d'arte. In più, ovviamente, ci sono dei capitolati che, anche in questo caso, regolano sia la gestione delle materie prime, sia la gestione dei processi. Perciò, spesso, la visita di ispezione di una catena per verificare il rispetto del capitolato è più dura di chi ti certifica tutta l'azienda proprio perché ci stanno mettendo la faccia. Quindi il fatto di fare prodotti a marchio privato è senz'altro un elemento che ti permette di crescere come azienda. È una rottura di scatole, però diventa un elemento di garanzia sul prodotto e sull'azienda in generale.

Il marchio Fish&Friends l'ha sviluppato lei su Internet. Come mai ha preferito svilupparlo privatamente invece che affidarsi ad un'agenzia?

Per un'esperienza personale. Avendo lavorato in passato con agenzie, ho visto che alla fine hai uno che ti dice quello che piace a lui. Perciò è un po' limitato e ti trovi nelle condizioni di dover rifare il lavoro 100 volte con dei costi che spesso, per chi li deve sostenere, non sono giustificati. Chiaro che dall'altra parte c'è del lavoro che va compensato, però avendo la possibilità ed il tempo di fare questa cosa e, sostanzialmente, partendo da zero forse vale la pena anche investire un po' di tempo e un po' di denaro nel farsi queste cose, nel cercare le idee le più diverse per quanto poi capisca che ci sia anche gente che rimette là sempre le stesse cose. Era così per provare qualcosa che fosse gestibile direttamente senza condizionamenti personali o di relazione con chi ti propone le cose.

Aveva parlato di alcune promozioni locali che avevate avviato sui social. In particolare, mi parlava di due azioni che avevate iniziato su Milano e Roma che poi erano state accantonate per mancanza di tempo, difficoltà organizzative e di gestione dei materiali da produrre e poi per i costi spropositati.

Più che costi spropositati, diciamo che noi abbiamo approcciato i social troppo presto, quando non avevamo ancora una distribuzione consolidata, quando avevamo tutta una serie di altri problemi da risolvere. Abbiamo provato a farlo e alla fine non si riusciva a dare un contributo diretto. Alla fine, credo sia una cosa che l'azienda deve gestire internamente, che non può semplicemente affidare ad un terzo che lo fa senza conoscere bene l'azienda. Sicché alla fine non vedevamo un ritorno e ci siamo concentrati su altre cose. Probabilmente adesso sarebbe utile.

Però mi diceva che c'erano dei problemi legati alla proprietà per cui c'erano diversi progetti in cantiere che però facevano fatica.

Certo, progetti ce ne sono tanti, però purtroppo per gestirli bisogna avere delle persone e senza le persone puoi anche avviarli, ma devi avere chi poi li segue. Purtroppo, noi non abbiamo una struttura interna né fisicamente né in termini di competenze in grado di fare questo, per il momento.

Parlavamo di come il Covid ha influenzato domanda e offerta nel vostro caso. In particolare, mi diceva di un aumento del precotto che poi, in fase calante della pandemia, ha lasciato spazio al fresco. In generale, anche sul questionario, diceva che durante la pandemia avete lanciato dei nuovi prodotti. Che tipo di prodotti avete sviluppato in risposta alla pandemia?

Non è che fossero in risposta alla pandemia. Noi abbiamo sempre avuto come focus quello di innovare continuamente. Abbiamo 2 ambiti: il fresco e il precotto. A parte la linea delle zuppe, ci siamo concentrati molto, a partire dalla pandemia, sui molluschi. Da un lato il nostro focus era soprattutto sul precotto, poi siccome la materia prima è la stessa, abbiamo rilanciato il discorso del crudo che era presidiato soprattutto dai produttori. L'abbiamo fatto, però, introducendo un'innovazione di processo e di confezionamento che ci ha concesso di avere una shelf life più lunga del 30-40% di quella che era disponibile sul mercato. Questo è quello che abbiamo fatto. Adesso abbiamo stretto una partnership con un produttore spagnolo che fa prodotti in alta pressione e sono dei prodotti molto innovativi nel senso che sono freschi ma, grazie a questo trattamento di alta pressione, hanno una vita molto lunga. Allora ci siamo inseriti con tutta una serie di cose nuove più sul fresco.

Un ultimo aspetto: parlavamo anche della sostenibilità e mi diceva che la vostra azienda ha due certificazioni, la FoS e la MSC. Per entrambe, che tipo di processo si segue per ottenerle, chi la rilascia, che criteri devono essere rispettati e che controlli vengono fatti, che costi comporta avere queste certificazioni?

In entrambi i casi si tratta di una certificazione di filiera, cioè di tracciabilità. Perciò, c'è un produttore che fa la materia prima e innanzitutto la materia prima deve essere certificata. Perciò, in tutti i casi, sia di MSC (pescato), sia FoS (pescato+allevato), il primo step che è anche il più complesso è quello che chi pesca o alleva sia certificato. Adesso, dire in particolare quali siano i criteri per far sì che un pescatore o un allevatore francamente non lo so. Dal momento in cui il produttore è certificato, si tratta semplicemente di una cosa di filiera cioè io devo dimostrare che quel prodotto lì continua ad essere quello dell'origine. Quindi il trasportatore deve essere certificato, il trasformatore deve essere certificato e così via. La certificazione, per quanto riguarda noi, è semplicemente una certificazione di rispetto della tracciabilità. Di conseguenza, gestire le bolle, la documentazione in una certa maniera e gestire la materia prima, sia in termini di stock, sia di gestione all'interno del processo produttivo, sia fatto in una certa maniera. Infine, c'è la gestione del marchio che ha delle regole, cioè quando posso apporlo, che tipo di marchio, com'è fatto, le caratteristiche grafiche e quelle cose là. Questo è sostanzialmente. Diciamo che, per quanto ci riguarda, è semplicemente una cosa burocratica nel senso di dover dimostrare che sicuramente abbiamo utilizzato la materia prima certificata che viene dal produttore certificato, che non hai fatto finta di usarla in favore magari di un'altra esteticamente uguale non certificata. È un po' come il discorso bio, ma lì ci deve essere anche tutto un discorso di non contaminare. In questo caso non è una questione di contaminazione, ma di rispetto di tutta una serie di criteri che in maniera inequivocabile certificano che stai usando la materia prima certificata.

Data intervista	31/05/2022
Azienda	Tagliapietra & Figli Srl
Codice ATECO	10.2
Intervistatore	Giovanni Serena
Intervistato	Luca Tagliapietra (Responsabile produzione)
Presenza file audio/video	Sì
Presenza di interviste precedenti	No

A che target si rivolge l'impresa?

Allora, noi ci rivolgiamo principalmente alla GDO, alla distribuzione organizzata. Quindi supermercati, catering. Tutto ciò che, diciamo, non raggiunge direttamente il consumatore finale. Non la ristorazione e non il consumatore finale. Però copriamo un pochino tutto, dal trading, quindi pescheria, oppure supermercati o catering, per quanto riguarda la ristorazione.

Quindi esclusivamente un orientamento B2B.

Esatto.

Che tipo di posizionamento avete in termini di prezzo medio rispetto ai concorrenti?

Come fascia di posizionamento siamo una fascia medio-alta. Abbiamo fatto una scelta: siccome avevamo un nome come azienda, perché la Tagliapietra & Figli nasce ormai quasi settant'anni con mio nonno. È un'azienda conosciuta nel territorio, dove è stato investito molto in marketing, pubblicità e in sponsorizzazioni. Per esempio, sponsorizziamo la Reyer, tutte le nostre confezioni hanno il nostro logo, la nostra immagine sopra. Quindi, per mantenere il nostro nome, cerchiamo di mantenere anche una qualità del prodotto medio-alta. Quindi, rispetto al prezzo che ci può essere, a parità di prodotto, su scaffale noi siamo leggermente più alti della concorrenza. Dando, però, quel servizio e quella qualità in più che gli altri non danno.

Ha anticipato leggermente la domanda successiva. Avete un vostro marchio per i prodotti?

Ne abbiamo più di uno. Tagliapietra è il marchio storico dell'azienda. Dopo abbiamo i Pronti d'Amare, che è il nostro marchio per i prodotti ready to eat, pronti da mangiare. Poi ci sono Stocco Facile e Baccalà Facile che sono degli altri marchi dei nostri prodotti. Se dovessimo suddividere i prodotti che noi facciamo, ci sono prodotti tradizionali come lo stoccafisso classico secco o comunque prodotti, materie prime che dopo devono essere trasformate dall'utilizzatore. Semilavorati, dove ci sono Stocco Facile e Baccalà Facile o altri semilavorati per l'industria che sono una via di mezzo tra prodotto finito e materia prima. E poi ci sono i prodotti finiti veri e propri che sono i Pronti d'Amare. I Pronti d'Amare sono quelli dove adesso stiamo investendo di più. Su questi anche abbiamo fatto anche delle collaborazioni con Giovanni Rana. Hanno fatto i tortellini del Giro d'Italia e su quelli al baccalà il ripieno era il nostro. Quindi tutta un'evoluzione su questa cosa qua. Dopo abbiamo altri marchi, come Vestelfjord che è sempre una materia prima un po' più

economica rispetto alla Tagliapietra. Dopo abbiamo, per quanto riguarda il marketing, il Festival del Baccalà su cui è stato investito moltissimo. È una gara culinaria per professionisti itinerante. Siamo riusciti a coinvolgere 3, 4 regioni con il patrocinio anche della Camera di Commercio Norvegese. Gli chef e i vari ristoranti proponevano i loro piatti innovativi a base di stoccafisso e poi c'era la gara finale dove i vincitori, oltre che la coppa, vincevano un viaggio per due persone in Norvegia.

Questo è un evento che avete creato voi?

Sì, l'abbiamo creato noi. Che poi con la città, con camera di commercio norvegese si crea tutto un movimento attorno per creare interesse, alla fine. Alla fine, è quello un po' l'obiettivo.

Chi sono i vostri principali concorrenti?

Come principali concorrenti noi abbiamo... Siamo in pochi, per fortuna. C'è la Rivamar, di Rovigo. Dopo c'è la Gisa che è una commerciale di Milano e basta. Non ci sono altri concorrenti, cioè ne abbiamo altri però nel nostro territorio ci sono questi due. Essendo però che noi andiamo su tutta Italia poi abbiamo delle concorrenze minori perché ci sono altri importatori di stoccafisso nelle varie aree di consumo di Italia che sono Liguria, dove ce ne sono pochi, Poliartigiana è uno di questi, a Napoli c'è Davino che è un produttore di stoccafisso e a Messina c'è Sunny, che è un altro produttore di stoccafisso. Basta, non ce ne sono altri. Non siamo in tantissimi che facciamo questo lavoro qua.

Parlavamo prima del marketing, su cui avete investito molto. Come è organizzata la funzione marketing all'interno dell'azienda?

La funzione marketing è nella figura del commerciale che sarebbe mio fratello Daniele. Lui gestisce il budget del marketing e lo suddivide in base a ciò che lui ritiene più opportuno. C'è stato un periodo dove abbiamo cercato di concentrare un discorso massivo, con pubblicità in televisione. Lo spot si può ancora vedere nel sito Internet, è molto carino. Successivamente, siccome il nostro budget non è infinito, è sempre stato intercalato con attività di forte interesse. Per esempio, abbiamo sponsorizzato la Reyer l'anno che ha vinto tutto, le coppe varie, maschili. Siamo ancora sponsor della Reyer ma minoritario perché adesso facendo gli investimenti con il nuovo capannone abbiamo deciso di abbassare un attimino il budget per quanto riguarda la divisione marketing. E dopo abbiamo tutto ciò che è l'immagine, cioè la confezione che va al supermercato, lo studio del cartoncino, che fa parte della nostra pubblicità, cioè veicolare il nostro nome all'interno del punto vendita.

Per quanto riguarda il packaging e la funzione dell'immagine, è sempre qualcosa che viene svolto internamente?

No, ci appoggiamo alla Drive Design che sono due ragazze che collaborano con noi in maniera molto stretta perché da quando hanno aperto il loro piccolo studiolo hanno lavorato con noi e sviluppato negli anni il discorso dell'immagine e delle confezioni.

Ho visto anche che siete molto attivi sui social network. Vengono gestiti internamente?

No, anche questa cosa qua viene gestita esternamente da una persona dedicata a gestire Instagram, Facebook eccetera.

Esiste una persona o un team dedicato alla sostenibilità?

No, non esiste un team dedicato. Noi come azienda abbiamo un primo approccio in termini di sostenibilità intesa come impatto ambientale nella certificazione 14001. Abbiamo ottenuto la certificazione però, ed è un po' una critica quella che faccio, noi come azienda abbiamo 3 certificazioni: BRC, ISF e 14001. BRC e ISF sono 2 certificazioni alimentari come la FDA americana, ma una per il blocco anglosassone (BRC) e una per il blocco europeo (ISF). Quindi, quando devo andare a vendere alle catene di supermercati, l'unica certificazione che viene richiesta per bypassare i controlli dei clienti è l'IFS. BRC e 14001 nessuno mai te li domanda, ed essendo che noi non esportiamo, o meglio lo facciamo in piccolissima parte, abbiamo abbandonato il seguire BRC e 14001 per concentrarci su IFS. Però la 14001 ha creato una sensibilità interna all'azienda che un po' alla volta si sta soprattutto esprimendo sulla struttura del nuovo stabilimento. Nel nuovo stabilimento, infatti, tutto il concetto dell'impatto ambientale è stato preso molto in considerazione. Se non in termini di immagine, perché lì c'è una cosa ambivalente: pubblicizzare il minor impatto ambientale crea pubblicità positiva per l'azienda. Ad oggi non crea solo pubblicità positiva ma crea un risparmio economico, cioè la gestione ambientale dell'azienda crea risparmio. Faccio degli esempi che ho vissuto ultimamente con la costruzione del nuovo stabilimento. Parlando dei pannelli fotovoltaici: visto il costo dell'energia di adesso, il pannello fotovoltaico non diventa una pubblicità. Perché fino a poco tempo fa non c'era una reale convenienza, era più che altro se ci sono incentivi oppure se c'è un ritorno di immagine. Ad oggi, invece, fare un impianto fotovoltaico diventa una strategia di risparmio negli anni. Oppure lo smaltimento dei reflui: con le norme che ci sono oggi giustamente, fare un sistema di smaltimento dei rifiuti rispettoso dell'ambiente è anche un risparmio economico perché l'ente di fognatura che riceve il nostro scarico, più pulito lo riceve meno ti fa pagare. Quindi è tutto un discorso economico. Come anche il riciclare il materiale, son tutte formule che aiutano a far risparmiare l'azienda in termini economici. Sono obiettivi che, secondo me, adesso innescano un meccanismo virtuoso per tutti perché fin che era un discorso di immagine non sempre funzionava. Funzionava sulle aziende di grandi dimensioni, meno sulle piccole aziende. Le piccole aziende devono vedere il discorso economico. Allora il discorso economico torna velocemente e tutti iniziano ad investire per avere un minor impatto ambientale.

Magari dopo si mescola anche ad un ritorno di immagine.

Esatto, però bisogna sempre pensare che un'azienda magari piccolina, noi siamo già medi e abbiamo già una struttura di immagine e di marketing, ma aziende piccoline che non hanno nome, non hanno niente, il fatto di pubblicizzare che loro risparmiano o le emissioni di CO2 eccetera fa rendere di più come no, in termini di immagine sul consumatore.

Visto che siamo in tema di sostenibilità, mi diceva che state investendo sul fotovoltaico e poi che altri progetti?

Stiamo investendo nel fotovoltaico, nell'isolamento, perché la produzione non sempre, ma nel nostro caso sì, prevede che gli ambienti di lavoro e stoccaggio siano refrigerati. Perciò tutti gli impianti nuovi sono impianti con gas rispettosi, secondo la normativa nuova. Già lì abbiamo rispettato i due step previsti per il 2025 e il 2030, che mettono fuori legge alcuni gas. Abbiamo anticipato i tempi, perché l'arco temporale da qui al 2030 è talmente breve che comprare un'attrezzatura che poi, nel 2030, sei costretto a cambiare non ne varrebbe la pena. Il discorso isolamento: è vero che se da un lato ho i pannelli fotovoltaici ho più energia a disposizione "gratuita" per raffreddare, però è anche vero che se io isolo di più, mi serve meno energia perché la dispersione è minore. Quindi abbiamo investito moltissimo nell'isolamento della struttura: negli edifici di produzione, amministrativi e anche nelle celle interne, quindi, è stato sovradimensionato il tutto proprio per risparmiare il più possibile. Quindi, in termini ultimi, le emissioni di CO2 ridotte tantissimo, anche dal punto di vista dell'isolamento della parte amministrativa, dove abbiamo fatto pompa di calore, tutte con tecnologie nuove quindi senza la presenza del gas ed emissioni di CO2. Poi noi abbiamo un altro forte impatto all'interno della nostra struttura che è l'utilizzo di acqua, perché per ammorzare lo stoccafisso c'è bisogno di molta acqua. Noi mediamente consumiamo circa 200 metri cubi, che sono una grossa quantità. Abbiamo quindi studiato un impianto su cui si possono fare degli upgrade. Praticamente ad oggi noi abbiamo un impianto dove con minor quantità di acqua può essere ammorzato più stoccafisso, con impatti inquinante sui reflui minore e c'è già in progetto che assieme ad un sistema al plasma, quindi con la produzione di ozono, viene sanificata l'acqua reflua che viene poi reimpressa in circolo. Così si ha un doppio risparmio: sia di acqua come quantità, sia di frigoriferie perché l'acqua che noi mettiamo nelle vasche è raffreddata. Quindi se io metto dentro l'acqua e poi la butto via ho uno spreco enorme di frigoriferie termiche. Invece io sanificandola e mescolandola con una parte di acqua nuova recupero energia frigorifera e acqua.

Una sorta di economia circolare dell'acqua. Rispetto al prodotto che poi vendete, la sostenibilità viene comunicata in qualche modo?

Sì, noi facciamo parte della filiera MSC. Normalmente il bollino MSC viene dato solamente a tutta una filiera della pesca, cioè non può essere data ad un singolo produttore di stoccafisso, ma può essere data a tutti i produttori di stoccafisso, alla filiera di pesca e così via. Questo viene pubblicizzato attraverso il bollino MSC che, oggettivamente, in Italia è un po' in ritardo rispetto al resto d'Europa. Nel resto d'Europa è già da un po' che c'è questa certificazione sulla sostenibilità del prodotto. A questo si aggiungono altri elementi di sostenibilità tipici dello stoccafisso. Oltre alla pesca sostenibile che vuol dire che il pesce, con i ritmi di pesca, con le quantità attribuite alla pesca stagionale che variano in base a dati scientifici e che varia ogni anno sulla base di parametri scientifici che sono stati inseriti, c'è anche un discorso tipico dello stoccafisso. Lo stoccafisso è un prodotto che viene appeso all'aria, quindi non ci sono forni, non ci sono attrezzature di conservazione, non c'è nulla. È la natura stessa che lo disidrata e, disidratandolo, si evita l'ausilio di frigoriferi ecc e si ha anche un vantaggio notevole nel trasporto, cioè l'incidenza di CO2 per chilo è molto ridotta, nonostante viaggi con un camion, quindi su gomma. Un camion dopo diventano cinque camion, come quantità reale. Liofilizzarlo aiuta la natura ed è la natura stessa che lo fa, non è che ho sprecato energia per liofilizzarlo. È un prodotto tradizionale, ma essendo molto antico ha delle caratteristiche che lo rendono libero dalla tecnologia. È stato pensato nel 1400 giù di lì, quando non

c'erano frigoriferi, non c'era tecnologia, l'impatto di CO2 era praticamente nullo ed era la natura stessa che faceva i prodotti. Tutto quello che è venuto dopo si può togliere dallo stoccafisso e, di conseguenza, si ha un impatto minore.

Secondo lei con il Covid-19 è aumentata l'attenzione verso la sostenibilità dei vostri prodotti oppure era già un filone che era particolarmente importante da seguire? La sensibilità è aumentata?

No, secondo me, con il Covid-19 la sensibilità non è aumentata nel nostro settore. Anzi, è un po' un settore Cenerentola rispetto ad altri. Io vedo che, in base alle nostre analisi, la parte di sostenibilità è più orientata verso ciò che è informatico, meccanico ecc. perciò non elementi riguardanti l'alimento. L'alimento nutre di un vantaggio che può essere l'alimento bio, con caratteristiche particolari per il consumatore, a basso contenuto di grassi ecc. A queste cose qua i consumatori prestano molta attenzione. La sostenibilità, ripeto la MSC eccetera, è appena entrata. Lo si vede anche in televisione: il primo che ha pubblicizzato MSC è stato Findus, dopodiché un suo antagonista. Fino a prima non c'era nessuno che avesse posto l'accento sulla sostenibilità del prodotto. E io sono abbastanza sicuro che se si va da un consumatore e gli si chiede "Cos'è l'MSC", che è l'unico mezzo di pubblicità della sostenibilità che abbiamo, sono sicuro che nessuno sappia di cosa si tratti.

Condivido. Parlando di investimenti, saprebbe stimarmi in valore assoluto o percentuale sul fatturato a quanto ammontano gli investimenti in innovazione e, nello specifico, in trasformazione digitale?

Dal lato del digitale l'azienda è in continua crescita. L'investimento per il gestionale, i software per interagire con i macchinari e la classica industria 4.0, per capirsi, è molto alto. Noi abbiamo, ad esempio, acquistato un'autoclave per la sterilizzazione dei prodotti che è direttamente collegata al gestionale e il gestionale estrapola informazioni, calcola l'algoritmo con dei valori e decide se la cottura è conforme agli standard o no. Tutte le interazioni tra gestionale e macchinari ammontano a circa 50.000 € all'anno, tutti gli anni, è un investimento standard. In più si aggiungono tutti quei tentativi tecnologici, perché non è sempre automatico che l'investimento crei un vantaggio, però si aggiungono tutti gli anni altri 50.000 €. Son 100.000 € di investimento sia tecnologico che informatico. Lasciando stare il grosso investimento che stiamo facendo per la nuova struttura.

Sugli investimenti in digitale quanto ha influito il Covid-19, se ha influito? Per digitale intendo anche tutta la parte di gestione social, per cui digitale in senso ampio.

Ha influito su una nuova concezione... gli investimenti sono stati indirizzati marginalmente, nel nostro caso... perché, essendo che la nostra clientela sono le catene di supermercati una volta avuto il primo contatto quindi una volta codificati i nostri articoli, l'ordine arriva indipendentemente dal rapporto diretto con la persona. Infatti, in epoca Covid noi non abbiamo mai chiuso, la produzione è sempre andata avanti e quello che era minore, in termini di lavoro, era l'area amministrativa e commerciale, il contatto con i clienti. Perché se io vado a dividere in segmenti ho i normal trade cioè le pescherie in cui i social, Teams, Skype o qualsiasi altro tipo di tecnologia per mettersi in contatto praticamente non esistono. Con le catene di supermercati l'unico rapporto che abbiamo

avuto per un anno era unicamente la mail, non andavi neanche più a trovarli perché non si poteva. Il catering ancora meno perché era quasi fermo durante il Covid perché i ristoranti erano chiusi. Di conseguenza, l'investimento unico che l'azienda ha fatto in termini di gestione diversa delle risorse umane è stato il lavorare da casa. Quindi i dipendenti amministrativi, per una questione di spazi, venivano gestite con un rapporto di una persona in presenza e una in remoto, a cui veniva dato un PC. Questo è stato l'unico cambiamento che avevamo valutato anche noi se potesse essere consolidato cioè mantenere questa rotazione in ufficio, però poi è stato valutato che la nostra dimensione di azienda e il volume di informazioni da trattare è talmente basso che diventa dispersivo per noi. Siamo già ritornati alla normalità, tutti in presenza.

Sono state lanciate delle nuove linee di prodotti in risposta al Covid-19?

Il Covid ci ha dato l'opportunità di rimetterci in discussione. C'è stato un calo di fatturato nel primo mese, marzo, del 30%, mentre abbiamo chiuso l'anno con -17%. Nel 2021 un pochettino meno, mentre nel 2022 stiamo già ripristinando i numeri del 2019 perché comunque per fortuna l'alimento è una cosa bene o male... Nonostante però mancassero dei segmenti importanti, come la ristorazione. Ad esempio, la ristorazione Polo ci ordinava 300/400 cartoni di prodotto congelato ogni 2 settimane. Durante il Covid ci ordinava 20 cartoni, quindi livelli completamente diversi. Però questa tranquillità ci ha permesso di concentrarci e lanciare dei nuovi prodotti anche alla luce del fatto che ci spostiamo nel nuovo stabilimento. E abbiamo puntato su tutto quello che è pronto da consumare. Essendo che la ristorazione era ferma e le persone avevano una tendenza a non sostare al banco servito della gastronomia, abbiamo deciso di puntare sul libero servizio: vaschetta da prendere e portarsi a casa. Lì, sempre con lo studio d'immagine nostro, creando delle nuove linee proprio, abbiamo lanciato nuovi prodotti. Abbiamo creato dei sughi che si chiamano "I Toci" al nero di seppia, ai calamari e panna e salmone. Poi abbiamo creato delle insalate di mare oppure le insalate che sarebbero quelle col baccalà essiccato, pomodori secchi eccetera. Quindi abbiamo creato queste linee di prodotti cavalcando l'onda dell'unico settore che era in crescita cioè la GDO.

Interessante. Quindi mi accennava prima a questo trend, se possiamo definirlo così, dei consumatori che preferiscono qualcosa di pronto o comunque facile da consumare.

Sì, noi questo trend qua lo vediamo, ormai, da una decina d'anni. Il reparto di qua che è quello dello stoccafisso secco che è quello tradizionale che viene abbattuto, portato a casa, messo in ammollo, poi c'è tutta una procedura che ogni 3 giorni bisogna cambiare l'acqua, cucinarlo, spinarlo eccetera... Se io domando a te che sei giovane se l'hai mai visto fare a casa tua mi rispondi di no. Infatti, l'esempio più semplice è il piccolo spaccio che abbiamo qua sotto che noi utilizziamo come test. Ogni tanto mi viene qualche signore vecchiotto che mi fa "ah, sono venuto a prendere una baccalà che glielo porto a mia mamma da cucinare". Io lo guardo e gli chiedo "ma lei quanti anni ha?" e questo mi risponde che ne ha 70. Quindi la persona di 70 anni lo porta a casa a sua mamma, che come minimo ne avrà 90, che lo cucina. Chiaro che se io vado a pensare il mio futuro basato sul consumo di quel prodotto lì non c'è futuro; infatti, c'è stato un calo di circa il 15%. Che però è stato compensato da un settore che adesso sta cavalcando l'onda che è la gastronomia industriale, appetibile anche per i fondi di investimento. I fondi di

investimento, che normalmente hanno due o tre indici, se non hai una certa redditività non si avvicinano neanche. E invece nell'ultimo anno e mezzo, hanno fatto una raccolta di aziende che fanno gastronomia industriale, quindi tutti i preparati tipo baccalà alla vicentina in vaschetta, l'insalata russa, eccetera. Perché le persone per un motivo di ritmo di vita, per il fatto che la struttura familiare si è modificata, la donna è emancipata, non sta più a casa, non è più casalinga, lavora di conseguenza il tempo che una famiglia passa a casa è ridotto, così come il tempo per farsi da mangiare. C'è anche un fattore sociale che non è legato al fatto di non avere tempo di cucinare, ed è il fatto di andare fuori a mangiare perché mi piace, perché ci sono più soldi che girano... e quindi la ristorazione negli ultimi 5 anni ha visto un'impennata pazzesca, dal mio punto di vista. Cambiando la struttura e tutto quanto, il prodotto è calato e noi ci siamo concentrati nel dare servizio alle gastronomie industriali fornendo un semilavorato; quindi, mettendo già in ammollo il prodotto puro, noi facciamo circa 2 tonnellate al giorno di prodotto, e lo distribuiamo quotidianamente freschissimo alle gastronomie industriali che lo cucinano. Oppure, facciamo dei semilavorati congelati per il catering, per la ristorazione, oppure facciamo semilavorati per La Massaia che sono Baccalà Facile e Stocco Facile, cioè dei filetti di stoccafisso già ammolati, preparato, pastorizzato che basta infarinare per prepararlo alla vicentina oppure metterlo nella planetaria per fare il mantecato in 10 minuti. Quindi abbiamo cercato di superare lo scoglio e andare avanti. Da lì abbiamo fatto già il passo successivo che è quello di dire "prendo la vaschettina, vado a casa e me la mangio" oppure con un pacchetto di cracker me lo mangio su una panchina seduto fuori. Per fortuna una cosa che abbiamo noi italiani è l'elasticità, una velocità di reazione al cambiamento mostruosa. Questo ci permette, se si è attenti e accorti, di correre dietro al cambiamento, non farsi trovare impreparati. Altrimenti il calo dovuto al Covid, se non avessimo fatto il resto, ci avrebbe messi in difficoltà.

Quindi velocità e facilità di cottura oggi sono un fattore importante nella realizzazione del prodotto.

E anche il sapore. Certi prodotti tradizionali stanno scomparendo perché hanno sapori troppo forti. I murici ad esempio sono piatti tradizionali, marginali per carità, però che saranno sempre meno utilizzati perché hanno dei gusti e degli odori molto forti. La nostra società sta andando verso prodotti asettici e molto standardizzati dal punto di vista dell'immagine: quando compri la carne deve essere rossa, non marroncina o rosata. Quando compri il pesce deve essere bianco, a meno che non sia tonno, spada o salmone. Tutto il resto del pesce deve essere bianco. Ci sono questi luoghi comuni che limitano moltissimo il consumo di altre tipologie e varietà di pesce. Il salmone è il primo prodotto consumato al mondo come pesce, subito dietro c'è il merluzzo. Il salmone è uno dei pesci a più alta redditività perché mi pare che la Norvegia, che è il primo produttore al mondo, spenda per portare a maturità il pesce tipo 3 € e lo sta vendendo qui in Italia a 10/11 €. E stiamo parlando su miliardi di fatturato, quindi capisci che margini ci siano.

Nella poca letteratura che c'è sugli effetti del Covid-19 sulle abitudini di consumo si legge da più parti che in termini di domanda si è notata una riduzione del consumo di carne in favore di un maggior consumo di pesce. Voi la vedete questa tendenza?

Io posso dirti che, parlando con il buyer quindi il compratore del supermercato, quello che loro hanno visto è stato, nel primo impatto nella prima fase della pandemia, che ciò

che si vendeva di più erano le farine, il pane confezionato e i salumi pre-affettati in vaschetta. Queste erano le 3 cose che trainavano facendo fare dei fatturati mostruosi. Pesce, carne eccetera si sono inchiodati in automatico, infatti noi abbiamo avuto un -30%. Chi faceva insaccati, prosciutti hanno avuto un exploit con le vaschette con il discorso che la gente non voleva avvicinarsi al banco servito. Dopo si è un po' normalizzato, però non c'è mai stata un'impennata nel consumo di prodotti ittici. Anche perché ciò di cui forse non ci rendiamo conto è che c'è scarsità di materia prima nel pesce, una carenza. Per cui mentre ci sono stati anni in cui era possibile fare promozioni, ad oggi mediamente il pesce ha un prezzo significativo, molto più di quello della carne, per non parlare del pollo. Tra avicolo, carne e pesce quest'ultimo è il più caro. Quindi, quando si è entrati nella pandemia, soprattutto all'inizio quando tutti avevano paura di tutto, c'era un pessimismo che diceva "ah adesso torniamo all'età della pietra, non si produce più, non ci danno più soldi" quindi la gente cercava di risparmiare. Il risparmio lo fai dove c'è il prodotto più caro: il pesce. Alla fine, il riflesso è stato un po' questo. Si è trasformato il consumo: se le persone andavano fuori 2 volte alla settimana pesce al ristorante... persone mediamente benestanti economicamente, perché le persone normali difficilmente vanno 2 volte a settimana al ristorante. Anche perché la persona benestante non lo è solo in termini economici ma anche intellettuali/culturali. La povertà porta anche ad un'ignoranza generalizzata e di conseguenza anche il consumo alimentare non è solo legato alla capacità economica ma anche intellettuale. Le persone che però andavano fuori a pranzo a mangiare, se lo sono portato a casa. Quindi, il supermercato magari vede un'impennata del consumo ittico (relativamente, non le impennate che si possono pensare) che sarebbe quel prodotto ittico che normalmente veniva consumato al ristorante. Quindi di per sé c'è stato uno spostamento di consumo. Anche noi l'abbiamo visto: ad un certo punto è cresciuto però, essendo che lo stoccafisso è stagionale, il picco ce l'ho a marzo. Dopo cala e riprende a settembre. Quindi io sono riuscito a fare il picco e poi c'è stato il Covid quando io ero già in fase calante. Il consumo leggermente maggiore io l'ho effettivamente visto d'estate ma era marginale perché nel fatturato più basso di stagione. Anche in epoche non c'entrava niente la pandemia ma dove c'erano altri fattori come l'aviarria, la mucca pazza eccetera ho pensato "bene, adesso la gente mangerà meno pollo e più pesce". Ma non è stato così. Stessa cosa con la carne: la gente ridurrà la carne e aumenterà il pesce... Sì, leggermente di più, ma se la perdita di volume sulla carne è di 1000 tonnellate, il pesce cresce di 30. Perciò non è proporzionale, nonostante adesso tutta la comunità scientifica dice che mangiare la carne fa male. C'è una lieve tendenza di miglioramento dal punto di vista del consumo di prodotti ittici ma non ci sono spostamenti sostanziali di fatturato. È una crescita un po' lenta, basata anche sull'educazione e la formazione che ha ricevuto una persona.

È interessante questo perché si trovano sempre questi titoloni "Si riducono i consumi di carne in favore di una dieta più equilibrata e sana" e includono il pesce, lasciando intendere che tolgo di qua e aggiungo di là, quando non è così diretto il passaggio.

Infatti, quelli che vanno a riempire quelli spazi al posto della carne è tipo Kioene che fa tutti quei prodotti a base vegetale. Io so chi è Kioene e loro fanno dei soffritti in brasiera con vari ingredienti vegetali e con degli addensanti le legano e fanno gli hamburger. Io che sono del settore dico "di male in peggio, non stiamo migliorando l'alimentazione", ma è chiaro che il consumatore che si vede la scritta "vegano" o "vegetariano" sulla confezione si fa ammaliare. Quindi quegli spazi che vediamo di minor consumo di carne

non sono perché si buttano nel pesce, anche perché è sempre stato un prodotto complesso. Una bistecca la prendi e anche chi non ha mai cucinato la sa fare. Se ti do una sogliola da fare a casa magari non sai neanche come curarla. Perché a differenza della bistecca, che è già pronta, la sogliola devi curarla. Ok, prendo quello già pronto; ma devi farlo in forno! Cioè, è più complesso come prodotto, a meno che non ci sia un'educazione dietro.

Quanto, secondo lei, l'attività sui social network può lavorare in questa direzione, cioè di istruire il consumatore su come trattare un prodotto che, per l'appunto, è complesso?

Noi lo stiamo già facendo e secondo me è un'azione dove non ci sono preconcetti. Mi spiego meglio: lo stoccafisso viene utilizzato principalmente in qualche zona d'Italia: Veneto, Friuli, Liguria, qualcosa ad Ancona, Campania solo nella zona di Napoli, qualcosa in Calabria e, in Sicilia, solo nella città di Messina. Noi abbiamo provato a fare il Baccalà Facile e lo Stocco Facile che sono semilavorati dove ci sono le classiche istruzioni a prova di chiunque: apri la confezione, metti il prodotto all'interno della planetaria, fai partire la planetaria, aggiungi olio, sale ed è pronto. Istruzioni basiche proprio per avvicinare il consumatore a un prodotto "difficile" come lo stoccafisso. Il vantaggio maggiore ce l'hai nelle zone dove non ci sono preconcetti, cioè dove non c'è una storicità e tradizione su quel prodotto lì. Per esempio, noi tramite Carrefour che è nostro cliente, vendiamo questi due prodotti a Roma, nel Lazio, in centro Italia; quindi, zone dove lo stoccafisso non era mai stato consumato. Allora facendo 2 + 2 vuol dire che proporre il prodotto in maniera diversa, istruendo tramite i social media dove c'è più di qualche mini-video che dà la possibilità in brevi passaggi di prepararti da mangiare, oppure ci sono degli chef quotati che attraverso lo scherzo ti fanno vedere come prepararlo, ha maggiore incisione su quelli che non conoscono il prodotto, non sanno cosa sia e quindi sono più ricettivi. Qui da noi in Veneto fai fatica veicolarlo perché c'è il preconcetto che lo stoccafisso va fatto così, punto. Questo ti blocca un po'. Quindi i social media funzionano, non è vero che non funzionano, soprattutto quando li imposti non come una ricerca libera ma come una fonte di istruzioni, un po' come si utilizza YouTube: non so fare una cosa, cerco su YouTube come farla. Questo è un po' la funzione dei social network. I social media funzionano meglio per la persona che è acculturata, che viene agli eventi del Festival del Baccalà, che viene a contatto con chef stellati, sperimentazione su cibo, non la classica ricetta ma un prodotto particolare, la capacità di giudizio. Tutte queste persone vengono inserite nei nostri social e abbiamo visto che abbiamo un seguito, cioè partecipano, controllano, guardano, se si fa qualcosa sono sempre presenti. Quindi c'è una continuità da questo punto di vista.

Questo in generale o anche durante e/o a seguito della pandemia, quando tutta una serie di eventi era bloccata? Cioè, hanno avuto un qualche ruolo?

No, nel caso nostro no. I social continuavano a postare immagini e ricette per tenere vivo il movimento però senza creare... ecco, per esempio è una cosa a cui non avevo pensato quella di gestire i social media come strumento di contatto, creare l'interesse e creare qualcosa all'interno del social media. Noi li abbiamo sempre gestiti come un modo di raggiungere le persone ma in maniera unidirezionale.

Ho visto che sul sito c'è un blog. Come mai è stato aperto e che tipo di risultati vi ha portato?

Questo non lo so, perché è una cosa che gestisce mio fratello Daniele. Io so che viene sempre gestito dalla persona esterna ed è anche quello lì un modo per ricevere osservazioni, perché essendo che il nostro prodotto passa per diverse mani, arriva al consumatore in condizioni diverse da quelle in cui è uscito dalla fabbrica. Il rischio principale della nostra azienda è che la persona si lamenti: compra un prodotto, lo trova cattivo o brutto allora non compro più Tagliapietra. Noi invece vogliamo che la persona per errore nostro, per una filiera che non presta attenzione perché bisogna sempre pensare che le catene di supermercati, per quanto siano strutturate, hanno le loro difficoltà nella gestione dei prodotti, quando riceve un prodotto non conforme vogliamo che si lamenti con quel supermercato, che mandi sul blog le osservazioni o che scriva una mail o ci chiami piuttosto che non ci compri più i prodotti. Questo è deleterio per noi. Però non so dirti bene se ci sia una continuità nel blog, se è vivo o se funziona a spot.

La parte delle ricette è abbastanza aggiornata, in passato forse di più ma ultimamente una o due ricette all'anno vengono postate. Poi c'era un'altra sezione, quella degli eventi, meno aggiornata ma comunque molto ricca perché anche se non aggiornata ha uno storico piuttosto lungo. Per il canale YouTube ho visto che è fermo a 7 anni fa con qualche spot... c'era anche il video di una premiazione.

N.B.: Le domande sull' e-commerce e sulle fiere sono state fatte alla persona che si occupa direttamente della gestione dello shop online, Simona.

Passerei all'e-commerce. Quando è stato aperto e come mai è stato aperto?

Abbiamo iniziato nel lockdown ed è stato quello che ha salvato tanti piccoli clienti che erano abituati perché abbiamo dato l'opportunità anche a chi è delle zone limitrofe di poter continuare a comprare anche godendo di un piccolo sconto.

La chiusura del canale HORECA ha avuto una compensazione con l'e-commerce oppure questo è esclusivamente indirizzato al consumatore finale?

No, è solo per il cliente finale. A volte dei piccoli ristoratori comprano perché non hanno bisogno di grossissime quantità. Per cui se è uno che mi compra un pesce o due va da sé che non fa un ordine da 12kg. Passa e ordina quello che gli serve. Sa che paga un pochino di più, che ci sono le spese di spedizione se non raggiunge un minimo e così via.

L'andamento delle vendite da quando è stato aperto è positivo?

Sì. Abbiamo solo un problema principale legato al trasporto. Prima facevamo sia il secco, quindi conserve, acciughe eccetera, e tutta la parte del fresco. Purtroppo, il trasportatore non garantisce delle consegne costanti e soprattutto non aveva la catena del freddo che era fondamentale per il prodotto. Perciò abbiamo sospeso la parte del fresco fino a quando non troveremo un degno sostituto, un Amazon refrigerato, è non è facile. Ci concentriamo sulla parte del prodotto secco, che non ha bisogno del fresco.

Come vengono monitorate le performance dello shop online? Ci sono delle metriche particolari?

C'è un'azienda, che è quella che ci ha fatto un po' tutto il programma, che controlla l'andamento. Adesso è andato molto a rilento con questo discorso che non abbiamo il

fresco. Tanti clienti continuano a chiamare perché vedono i prodotti esauriti per cui ha avuto un po' un calo.

Aprire una piattaforma di questo tipo che tipo di investimenti richiede? Puramente finanziario o anche personale dedicato, formazione...?

Beh, di formazione, me lo sono gestito tutto io perché tranne l'impostazione di base che è stata data, io ho inserito tutti i prodotti, le fotografie, carico le quantità. Perché, per esempio, per il secco abbiamo diviso tutte le principali linee di prodotto e io controllo che ce ne siano ancora, inserisco tutto. Mi è stata fatta una formazione da parte di chi ha imbastito il sito e poi per il resto gestisco tutto io: sono io che faccio le comunicazioni di spedizione merce, sento i clienti...

Voi avete aperto l'e-commerce durante la pandemia che però va a colpire un segmento di clientela che non era stato toccato fino a prima cioè il cliente finale. Tramite che strumenti è stato quindi promosso il vostro e-commerce?

Abbiamo fatto promozioni principalmente sui social e poi dal sito c'era il link che diceva "compra i nostri prodotti online". Principalmente però Facebook e Instagram sono stati usati per la promozione.

Parlavamo prima delle fiere, dei festival e della gara che avete inventato voi. Partecipate alle fiere solitamente?

No, come azienda no. Partecipiamo come visitatori, non come espositori.

L'impossibilità di poter realizzare gli eventi a causa del Covid-19 che conseguenze ha avuto?

Luca: Un risparmio economico. Sì, perché il festival è una struttura costosa e macchinosa. C'è chi studia la parte di marketing, tutti i banner e la roba che viene comprata per la gestione. È impegnativo anche in termini di tempo per il personale che deve organizzare.

Simona: La finale quest'anno, che è stata l'edizione più lunga in assoluto visto che di solito dura 6/7 mesi circa e quest'anno è durato due anni, perciò, siamo arrivati alla fine che quasi gli chef non si ricordavano neanche le ricette che avevano proposto, è stata organizzata in una settimana, proprio al fulmicotone. Abbiamo fatto tutti le corse, dagli chef all'organizzazione, display e tutto ciò che serviva. L'abbiamo fatta sulla terrazza del Danieli.

Diciamo che, però, è un investimento che ritenete importante fare, nonostante con il Covid abbiate visto che è economicamente conveniente non farlo?

Luca: Sì sì. Diciamo che noi adesso tutto ciò che è investimento l'abbiamo sospeso alla luce del nuovo stabilimento. Però sono tutte cose sospese, non cancellate. Logicamente fin che non abbiamo assestato bene il ritmo che ci permette di pagarci il capannone non ci addentriamo in altre spese.

Simona: Anche perché comunque questa era la decima edizione ed arrivati alla decima bisogna comunque dare una svolta e fare qualcosa di diverso. Per cui dare un'impronta diversa e il discorso della azienda nuova cade a fagiolo: sospendiamo un attimo e proporremo sicuramente un festival diverso, più giovane, fresco...

Luca: Ecco, anche questo è importante. Ci siamo resi conto che lavorando su una fascia vecchia della popolazione con un certo reddito e una certa cultura stiamo toccando una minoranza, mentre il nostro interesse è toccare la maggioranza della popolazione. Quindi, si pensava di andare più verso lo stile sagra che festival d'élite. Trovare una formula nuova dove riuscire a conciliare le due.

Simona: Anche perché in passato era già stata fatta una versione più giovanile che era Baccalando, che poi era stata accantonata ma che potremmo riprendere perché era più giovane come idea.

Ultimo spot: preferenze di consumo, sostenibilità, digitalizzazione e andamento dei costi e dei ricavi. In quale ordine metterebbe questi impatti del Covid-19 in ordine da quello con maggior rilevanza a quello con minor rilevanza, in riferimento alla vostra azienda?

Le preferenze di consumo sono quelle su cui, secondo me, il Covid-19 ha influito maggiormente. Dopo metto la digitalizzazione sicuramente perché nell'aspetto quotidiano nostro ma di tutti anche a casa ha rappresentato la salvezza, per certi versi. Sulla sostenibilità, secondo me, non ha influito per nulla il Covid. Cioè non è un tema che interessava a nessuno nell'epoca Covid. Con la scusa che tutto era fermo abbiamo sicuramente avuto dei benefici con minori emissioni, miglior qualità dell'aria eccetera, ma era una conseguenza involontaria.

Ho avuto questa percezione anche io leggendo un po' di materiale: che in maniera un po' semplicistica venga incluso tra gli impatti. Forse anche perché da noi c'è stata, con il Covid, la spinta, l'incentivo ad una mobilità sostenibile. Per cui è stata buttata un po' dentro.

Sì, esatto. Che poi, anche nella mobilità, la gente si è buttata sulle biciclette eccetera per evitare i mezzi pubblici e il contatto con l'altro. Quei mezzi ti permettevano di non entrare in contatto con altre persone. Per quello dico che è una cosa involontaria: non era legato direttamente. Anche se, nella realtà, lo è come si legge ne "Gli olocausti tardo-vittoriani", uno studio scientifico sulle grandi carestie di fine '800/inizio '900 che hanno causato moltissimi morti a causa di una mala gestione del suolo dove i coloni andavano, abbattevano intere foreste per piantare piante non locali cambiando completamente il clima a livello globale. Sicuramente quindi c'è una conseguenza di matrice umana su quello che è successo con il Covid, con l'aviaria, eccetera. Lo vediamo anche adesso con la peste suina. Però non c'è la consapevolezza nella persona media per collegare le due cose, è più facile fare i complottisti piuttosto che fare ragionamenti seri. Probabilmente se la gente si fosse resa conto che l'impatto ambientale causato dall'uomo ha accelerato e aumentato le probabilità che fenomeni di questo genere succedano, forse ci sarebbe stato un lieve cambio di rotta. I costi, fino alla fine del 2021, non sono aumentati come materie prime ma sono aumentati i costi per la gestione del personale: il fatto di avere lo stesso numero di persone con livelli inferiori di fatturato per un'azienda come la nostra, che non faceva nemmeno parte di quelle incentivate dallo Stato, in cui la cassa integrazione poteva essere fatta solo qualche mese e avendo bloccato i licenziamenti, è stato un grosso impatto per l'azienda. In un'azienda come la nostra abbiamo necessità di fare una piccola rotazione del personale per competenza, calo di lavoro eccetera, ma

avendo ingessato i licenziamenti abbiamo dovuto tenerceli accollati. E quelli son costi che pesano su un minor fatturato, il famoso -17% di cui ti parlavo prima.

A registrazione terminata sono state aggiunte le seguenti informazioni:

Nell'ambito della sostenibilità, l'azienda riutilizza lo scarto di produzione vendendolo a Monge, azienda produttrice di cibo per animali. Inoltre, nel nuovo impianto, verrà installato un macchinario che permette il recupero di ben il 70% dello scarto produttivo da poter destinare a tal scopo.

Data intervista	19/05/2022
Azienda	Trota Oro Srl
Codice ATECO	10.2
Intervistatore	Giovanni Serena
Intervistato	Daniele Leonardi (socio-amministratore)
Presenza file audio/video	No
Presenza di interviste precedenti	No

Prima di cominciare le comunico che il caso verrà utilizzato all'interno dell'osservatorio digital marketing nel food dell'Agrifood Management & Innovation Lab i cui risultati saranno presentati in eventi pubblici durante l'anno e poi in un report che faremo avere alle aziende che partecipano.

La prima domanda che volevo farle è qual è il target a cui si rivolge l'impresa?

Ci rivolgiamo alla ristorazione, quindi una clientela B2B. L'unico canale B2C che abbiamo è lo shop online ma è talmente irrisorio che non lo conto neanche come percentuale di fatturato.

Come definirebbe il vostro posizionamento? Per esempio, in termini di prezzo medio rispetto ai concorrenti e ai valori/immagine del brand?

Il nostro posizionamento di prezzo lo definisco medio/alto. Stessa cosa per i valori associati al brand.

Commercializzate i prodotti attraverso un marchio?

Sì, tutti i nostri prodotti hanno il nostro marchio, di nostra proprietà.

Chi sono i vostri principali concorrenti?

Non voglio fare nomi e cognomi. Diciamo che i nostri concorrenti sono tutte le aziende che oltre a fare prodotti simili (*a base di trota*), lavorano anche il salmone.

Passerei all'organizzazione interna. Potrebbe descrivermi com'è organizzata la funzione marketing, se esiste, e chi si occupa di marketing all'interno dell'azienda?

Non c'è una vera e propria funzione. Sono io la persona che segue anche quell'attività.

E lei si occupa anche della gestione dei social?

No no, per quelli abbiamo un'altra persona che li segue. Sempre interna all'azienda, però è un'altra persona.

Non avete nessun appoggio esterno per quanto riguarda il marketing o il marketing digitale?

No. Anni fa c'eravamo avvalsi di una collaborazione esterna ma i risultati non erano soddisfacenti quindi abbiamo cambiato, abbiamo internalizzato un po' la cosa.

C'è una persona che si occupa della sostenibilità?

Sostenibilità di che tipo? Economica, ambientale, sociale...

Sostenibilità in senso ampio.

No, perché spesso si parla solo di quella ambientale, ma anche quella sociale ed economica sono aspetti da monitorare. Noi adottiamo questa prospettiva più ampia, però non c'è una funzione particolare. Noi soci seguiamo tutto ciò che riguarda la sostenibilità.

Riguardo sia alla sostenibilità sociale che a quella ambientale, avete notato dei cambiamenti a livello di domanda a seguito della pandemia in questa direzione?

Da parte dei clienti? Non in modo particolare, dire.

Passiamo agli investimenti. Può indicarmi in termini assoluti o in percentuale sul fatturato gli investimenti in attività di innovazione e nello specifico in digital transformation?

Eh, non abbiamo... Cioè dipende da cosa si intende con innovazione e digital transformation.

Innovazione sia di processo che di prodotto e innovazione digitale. Così come la parte digitale legata al marketing.

Mi sembra un po' riduttivo come concetto, per cui non saprei dire una percentuale di fatturato che investiamo in queste cose.

Come la situazione creatasi dalla pandemia da Covid 19 ha inciso sugli investimenti in digitale?

Sono stati annullati degli investimenti che avevamo pianificato.

Ok, quindi ha avuto un effetto negativo. Lo stesso vale per lo sviluppo di nuovi prodotti e/o servizi?

No, su quello no. Siamo ancora lavorando e non siamo ancora arrivati al dunque.

Avete notato particolari cambiamenti nelle preferenze dei consumatori a seguito o durante la pandemia? Come questi trend hanno modificato la vostra organizzazione/processi/struttura?

Ad esser sincero, non abbiamo notati grandi cambiamenti.

Ho visto che siete presenti sui social media e che i profili sono abbastanza attivi. Come avete iniziato a costruire la vostra presenza nei social, quali motivazioni vi hanno spinto ad aprirli?

All'inizio è stato più per moda, poi andando avanti è stata un po' un'esigenza per seguire la comunicazione con alcuni clienti che postavano contenuti. Diciamo che è stato un po' un modo per far conoscere loro il marchio.

Come vengono monitorati i risultati legati ai social? Avete qualche metrica che usate?

No, non li teniamo particolarmente monitorati.

C'è stata un'intensificazione dell'attività social a causa della pandemia da Covid-19?

No no, è rimasta quella di prima.

Prima mi parlava del canale di vendita online. Quali ragioni vi hanno spinto ad aprire il canale eCommerce?

L'abbiamo aperto durante la pandemia. Pensavamo che ci avrebbe aiutato a fare qualcosina, ma non è stato così, non abbiamo avuto i risultati attesi.

Avete intenzione di mantenere l'infrastruttura?

Sì sì, la teniamo.

Che tipo di metriche usate per monitorare la performance dello shop online?

Unicamente le vendite, anche se come dicevo non ne teniamo particolarmente conto.

Che tipo di investimenti (finanziari, di formazione del personale, in infrastrutture) ha richiesto il suo sviluppo?

Solo investimenti di carattere finanziario.

Ho visto anche che siete molto presenti alle fiere. Quali sono i maggiori benefici che vi hanno portato ad aderire a queste iniziative?

Pre-Covid era un canale positivo per portare nuovi risultati e quindi abbiamo deciso di prendervi parte. La fiera a cui abbiamo partecipato dopo il Covid è stata un po' deludente da un punto di vista di feedback perciò valuteremo se, in futuro, parteciperemo ancora a questo tipo di eventi.

Quindi la pandemia ha influenzato molto questo tipo di attività.

Forse ancora non so dire se, per gli eventi fieristici, non siamo ancora usciti dal Covid oppure... Però diciamo che l'evento a cui abbiamo preso parte il mese scorso è stato un po' deludente.

Sempre riguardo alle fiere, ho visto che hanno fatto delle edizioni virtuali. Voi avete partecipato?

No, non ne abbiamo preso parte.

Per concludere, tornerei un attimo sulla sostenibilità in particolare legata al prodotto. Che tipo di progetti avete implementato negli ultimi anni?

Essenzialmente il recupero di quello che è lo scarto di produzione. Questa è stata la principale direzione.

Questo ha riguardato solo i vostri processi interni o ha riguardato anche altri attori lungo la filiera?

No, ha riguardato solo i nostri processi interni.

Questo tipo di iniziative di sostenibilità da che tipo di esigenze vengono trainate? Da esigenze provenienti dai clienti, oppure da normative vigenti, entrambe... Che tipo di spinte ci sono in questo senso?

La spinta è quella di cercare di non sprecare quello che la natura ci dà, quindi la materia prima. Questo ha anche motivazioni di carattere economico perché comunque se riesco a rivalutare un prodotto che altrimenti sarebbe di scarto ne traggo beneficio dal punto di vista economico, oltre che ambientale.

Data intervista	25/08/2022
Azienda	I PescaOri/O.P. Bivalvia Veneto (Co.Ge.Vo Venezia)
Codice ATECO	10.2
Intervistatore	Giovanni Serena
Intervistato	Mauro Vio (Business Development Manager)
Presenza file audio/video	Sì
Presenza di interviste precedenti	No

Partiamo dall'azienda in generale. Come nasce i PescaOri e come descriverebbe il vostro modello di business?

Noi nasciamo nel 2006 come organizzazione di produttori quando veniamo ufficialmente riconosciuti dalla regione, dallo stato italiano e dalla comunità Europea sotto la spinta di una politica comunitaria che voleva e vuole, nel primario, la crescita e lo sviluppo concreto delle organizzazioni dei produttori. Lo abbiamo visto prima in agricoltura e, da una decina di anni a questa parte, anche nella pesca. Questo per ovvi motivi, perché la politica comunitaria economica vuole partner affidabili, solidi e importanti che quotano sul mercato. In altre parole, interessa poco la barchetta, l'impresa di pesca che sul mercato incide fino ad un certo punto, ma se mi rappresenti 100 barche per me sei un partner su cui costruire politiche di sviluppo comunitario. Quindi andiamo a riconoscerci, a creare questa organizzazione di produttori che è una sorta di messa insieme di aziende di pesca che contano circa un centinaio di pescherecci e quotano, nello specifico dei molluschi bivalvi, quasi un quarto della produzione nazionale italiana. Quindi, insieme nel Veneto, abbiamo due realtà che insistono su due compartimenti marittimi: a Venezia, compartimento marittimo che va da Chioggia al Tagliamento, mentre il compartimento marittimo di Chioggia va da Chioggia a sud fino al Po'. Queste sono le due macroaree. Mettendo insieme queste due realtà di pesca legate, nello specifico, alla raccolta dei molluschi bivalvi, e parlo di vongole di mare, di cannicchi, fasolari, ecc., mettiamo insieme una bella realtà. Per noi è stato più facile rispetto ad altri mestieri di pesca perché proveniamo da una storia di consorzi di gestione ovvero, nel 1995, su spinta del Ministero delle Politiche Agricole, vengono creati in Italia, partendo dalla dorsale Adriatica per prima e poi la parte Tirrenica, una serie di consorzi di gestione che avevano a disposizione un'area di mare, nel nostro caso i due compartimenti marittimi di Venezia e Chioggia, quindi il Veneto, su cui insistono un numero fisso di imbarcazioni. Quindi, tu consorzio hai delega dal Ministero a gestire quell'area di mare con un numero di barche, hai il tuo orticello e te lo devi gestire in maniera responsabile, in autogestione, i primi passi verso una pesca gestita e responsabile. La cosa ovviamente parte timidamente per guerre a guardia e ladri, a chi rubava di più, insomma, poi ci sono state un po' di difficoltà riguardo la pretesa sui territori che veniva un po' da vecchie posizioni dove Chioggia pescava a Venezia e non accettava il fatto di essere reclusa all'interno di spazi ben definiti. Nel momento in cui il tempo ha fatto sì che tutti, ovviamente facendo dottrina tutti i giorni con i pescatori, i vertici, ecc., con una sorta di management messo in campo per far capire un po' questa nuova politica gestionale, è stato colto il buono di questa iniziativa. Tanto

che, dopo 10 anni, nel 2006, abbiamo creato l'organizzazione di produttori. La domanda che faccio io è, parliamo in concreto dell'organizzazione di produttori con il brand I PescaOri o parliamo di consorzio? Perché il consorzio di gestione si occupa della risorsa, ovvero dei banchi naturali. Invece, O.P. è più qualcosa che completa la gestione a mare in quanto entra nella fattispecie anche nella parte più interessante che è quella del mercato, della logistica, della vendita.

Questa seconda parte qui è il focus.

Eh, infatti, perché se no parlare solo di gestione a mare è un po' zoppo, manca un buon braccio destro che è tutta la parte commerciale.

Quindi da una parte c'è il consorzio e dall'altra O.P. che si occupa anche della trasformazione della materia?

Sì, in sostanza O.P. Bivalvia Veneto si occupa di ricevere il conferimento di tutte le barche associate a seconda di quella che è la necessità del mercato. Quindi, prima di andare in mare ho già venduto in una sorta di raccolta ordini pre-pesca che mi dà una quota di vendita che il mercato mi chiede l'indomani per cui io oggi pomeriggio so già domani cosa sarà venduto. Non darò mai un chilo in più, magari ne darò uno in meno. Se ho, 3 mila sacchi da 10 chili venduti, perciò 30.000 chili venduti domani e ho 100 barche dirò ad ognuna di pescare 300 chili. Questo perché devo controllare la domanda ma anche l'offerta se no il meccanismo non funziona. Tutto questo riguarda la pesca, nel tempo però abbiamo capito che la fetta più interessante era la trasformazione. Tutto quello che i pescatori hanno da sempre consegnato in termini di marginalità alle aziende commerciali e di trasformazione siamo riusciti a farla parzialmente nostra. Parzialmente perché comunque ancora per la parte di commercio all'ingrosso ci affidiamo anche ad altre aziende. Però piano piano stiamo crescendo. Abbiamo fatto chiaramente investimenti importanti in termini di logistica, per cui trasporti, strutture ricettive, celle e abbiamo messo in piedi una struttura in Caorle e una in ... , due strutture di proprietà su cui abbiamo investito parecchie risorse soprattutto per la trasformazione. Pesco il prodotto, lo lavoro a due ore dalla pesca e lo consegno con un vero principio di filiera corta. Io quindi sono attore della pesca, attore ricettivo e attore di trasformazione e confezionamento, dopo aver controllato, pulito ed etichettato la merce. Passo ulteriore in più, fatto nel tempo in seguito ad indagini di mercato condotte sui prodotti e sulle esigenze del mercato, la trasformazione ci ha portato a fare investimenti su tutta quella fase del processo di trasformazione riguardante il pulire il prodotto dalla sabbia, abatterlo, surgelarlo e via dicendo. Perciò investimenti sotto il profilo produttivo, macchine nuove, linee produttive nuove, processi nuovi. Ci siamo visti coinvolti in qualcosa che non era nostro, perché abbiamo sempre fatto i pescatori, però abbiamo sempre alzato l'asticella per togliermi dal convenzionale fatto di un prodotto che hanno tutti, anche i colleghi dell'Adriatico, ma che in realtà veniva premiato solo se grosso di misura o se costava poco. Uscendo un po' da questa spirale che porta verso il basso ho preferito guardarmi intorno verso il non convenzionale. Ecco che quindi ci siamo affacciati al mercato delle certificazioni, certificazione di pesca sostenibile da noi praticata ma non recepita dal mercato. Questo perché se io ti dico che il vino è buono, io sono l'oste. Deve dirlo un altro che il vino è buono. Ecco che quindi, coinvolto un ente certificatore che adotta un protocollo mondiale dettato da MSC ci certifica con 4 anni di studio in approccio pubblico

nel mondo dove tutti potevano appellarsi alla nostra volontà di certificarci, noi abbiamo messo a disposizione tutta la nostra storia ma in termini di pubblicazioni scientifiche, di pareri scientifici con istituti di ricerca, con il Ministero, con le Università che attestano quello che è stato il nostro impegno sulla pesca responsabile, è diventata a luglio 2018 certificata come pesca sostenibile. Prima fishery certificata in Italia per la pesca sostenibile e, a distanza di quattro anni, siamo ancora la prima e unica fishery certificata. Ma quello che è più interessante nel prodotto è che la vongola di mare Chamelea Marina, è l'unica nel mondo ad essere certificata. Da queste fasi di certificazioni, siamo riusciti a penetrare quei mercati dove la certificazione è richiesta. Ad esempio, il canale della Svizzera, di Coop, di Migros, di Bofrost. Oltre a questa certificazione, abbiamo portato avanti anche l'altra certificazione di pesca bio, con la vongola biologica di Caorle che produciamo noi e trovi nei banchi di Natura Sì, sotto il nostro brand La Venexiana, o che adesso troverai sui banchi di Coop Italia sotto il marchio O.P. Verde da ottobre. Quindi, diamoci una dimensione ufficialmente riconosciuta, siamo un gruppo, creiamo un'identità con un nome e un brand, I PescaOri, diamoci un altro brand che è La Venexiana, per essere riconosciuti nel mercato. Perciò non è più quella vongola che è quella che costa poco o quella che è più grossa, ma è quella certificata. È sottile la cosa, ma non è di nessun altro. La vongola biologica è unica in Italia ad essere certificata tale.

Voi avete questi due brand. In percentuale, quanto pesa l'uno e quanto l'altro sul totale?

Allora, il brand I PescaOri abbraccia un po' tutta la nostra produzione di produttore ittico, mentre La Venexiana è riferito ad un prodotto in particolare che è la vongola biologica di Caorle. Se sotto il brand i PescaOri metto la vongola, il cannolicchio, il fasolaro, la capasanta, il moscardino, il calamaretto, insomma, tutto, allora minima parte è riferito alla Venexiana. Se facessi 100 di tutto ciò che esce, direi 15% scarso è La Venexiana.

Che tipo di clientela servite? Supermercati, mi pare di capire, quindi GDO e poi?

Allora, i prodotti che noi proponiamo sono eccellenze della pesca locale, non facciamo import/export quindi lavoriamo solo con le nostre barche e dei mercati di Caorle e Chioggia, solo prodotti locali di cui la ristorazione professionale è ghiotta. Per noi, il core business è il food service, canale Ho.Re.Ca. Siamo entrati nel retail e nella GDO giocoforza nell'emergenza pandemica, dove tutta la ristorazione era bloccata, avevamo 200 pallet in cella pronti da consegnare che nessuno ci ritirava. Abbiamo deciso di "sgrammare" un po' le confezioni, passando dalla confezione da 2 chili per la ristorazione professionale alla confezione da 300/400 gr per la linea retail. Lì abbiamo compreso che anche la parte legata alla GDO può essere per noi un'opportunità per reggere, perché se dipendi troppo da un mercato ti blocchi quando succedono cose così. In fase emergenziale, quando la gente era a casa, abbiamo attivato il door to door, perciò la parte delivery e consegne online dove tu fai l'ordine e noi te lo portiamo a casa, che ancora oggi funziona, seppur meno di prima.

Essendo il vostro prodotto un prodotto locale e di alta qualità, quali sono i vostri clienti principali nella GDO?

Attualmente noi lavoriamo con Natura Sì, MD, Cadoro, Iper Rossetto, Bofrost, Visotto, stiamo entrando con Coop Italia e ci sta facendo la corte anche Conad, è solo questione

di tempo. Lì ci vuole un po' di corteggiamento, dopo 2 anni di studio poi hai dei prerequisiti. Come stabilimento, per essere partner affidabili di queste strutture devi avere delle certificazioni anche sul piano alimentare quindi certificare lo stabilimento con standard IFS e sotto il profilo della sicurezza alimentare è un upgrade rispetto allo standard di autocontrollo che ha qualsiasi azienda alimentare. Qui, diciamo, l'attenzione e il controllo sui processi industriali e i prodotti è molto elevato. Noi l'abbiamo conseguita con un punteggio di 97.5 su 100 quindi buono per essere la prima volta. Deve anche cambiare un po' la mentalità, ci sono dei prerequisiti per entrare in queste realtà che non vogliono fastidi. Nel momento in cui sei qualificato come partner, come fornitore ufficiale, allora la parte più interessante arriva.

Parlando dell'e-commerce, questo è un punto un po' critico nel settore. Si passa da un'estrema fiducia nell'e-commerce, ad aziende che non lo considerano affatto, passando per aziende che pur ritenendolo valido non hanno le possibilità finanziarie e organizzative di predisporre l'infrastruttura. Voi che tipo di esperienza avete a riguardo? Che tipo di resistenze avete trovato, se ne avete trovate, o come è andata nel vostro caso?

Noi siamo partiti proprio durante l'emergenza Covid-19, quando la gente era chiusa in casa, faceva qualche volta la spesa con paura, e quindi trovava più facile farsi portare la spesa a casa. Ci sono due elementi fondamentali che bisogna inquadrare: pesca e prodotto fresco con shelf life di 5 giorni, oppure prodotto surgelato che, a due ore dalla pesca, viene lavato, mondato, pulito ecc ma con shelf life di 18 mesi. Siamo ad un bivio incredibile perché troviamo una difficoltà in genere sul piano logistico a consegnare un prodotto mantenuto a temperatura controllata, dove la catena del freddo viene sempre garantita e mai interrotta. I prodotti con shelf life a 5 giorni devono essere mantenuti a 2-4 gradi, quelli surgelati con durata 18 mesi devono essere sempre mantenuti a -18 gradi senza mai interrompere la catena del freddo. Quello che manca in Italia è proprio questa logistica, di consegna a temperatura controllata sul delivery, ovvero sul privato. Sul piano di mezzi frigoriferi pesanti, quindi camion e autotreni, non c'è problema a caricare pallet da consegnare in tutta Italia ed Europa con temperatura controllata. Il delivery sconta un po' di problemi. Noi lo facciamo con un nostro mezzo dedicato, partendo da un raggio di 50 km da Caorle. Poi uno di Padova che magari stava a 60 km voleva ricevere il prodotto e quindi ci siamo allargati a 100km, fino ad arrivare all'attuale raggio di 200 km da Caorle. Chiaramente, però, quando spingi le campagne promozionali sui social arrivi dappertutto. Nonostante magari pubblicizzi la tua offerta mirata al territorio che ti interessa, la voce poi circola e quindi ci arrivano richieste dalla Toscana, dalla Liguria, dal Trentino, ecc. In quel caso là è difficile raggiungere la famiglia con un pacchettino da 50€. So che i colossi della logistica si stanno muovendo in questa direzione, ad esempio Amazon si sta muovendo sotto questo profilo. Però, per dirti, se oggi tu ordini un'orata su Amazon, ti arriva il furgoncino di Bofrost a casa. Non è la mia orata, è chi ha già una struttura organizzata sul territorio che può permettersi di portarti a casa con il delivery il prodotto ittico. Non è, per capirci, la cassetta di arance che ordino dalla Sicilia, che tutto sommato non ha grandi esigenze di temperatura nel trasporto. Il prodotto ittico è molto delicato e sulla sicurezza alimentare bisogna stare molto attenti.

Su questo punto: quella di cui mi parla è una difficoltà dal punto di vista del produttore. Dal punto di vista del cliente, invece, qual è la predisposizione all'acquisto di un prodotto online così delicato?

Noi abbiamo una serie di prodotti, una sorta di menu, che viene aggiornato a seconda della stagionalità. Quello che noi consegniamo è surgelato, può essere la capasanta nostrana mezzo guscio, il cannolicchio, il calamaro, la vongola, alici, acciughe e hanno tutti un prezzo. Qualche cliente che è abituato si fa il suo bell'ordine, magari approfittando di qualche agevolazione tipo il mancato addebito dei costi di spedizione per ordini superiori ai 50€ ecc. Vedo che i clienti sono più propensi ad ordinare quando facciamo le box con il menu suggerito. Abbiamo fatto la box di Natale, di Pasqua e di Ferragosto. Tu proponi un menu completo di antipasto, primo e secondo e metti gli articoli, che presi separatamente avrebbero nel complesso un costo di 53€, all'interno di una box ad un costo inferiore e i clienti ti fanno l'ordine. È più difficile ricevere l'ordine di qualcuno che in autonomia prende e si fida. Si fidano di più di ciò che tu proponi rispetto a spulciare il catalogo e fare l'ordine. Probabilmente ci vorrà tempo, però non è come ordinare un libro o un paio di scarpe. È simile a ciò che la gente fa quando va in pescheria. Se vai in pescheria fai l'acquisto se ti fidi di quel pescivendolo, dopo che gli chiedi consiglio. Il classico "Com'è? È fresco?" e il pescivendolo ti dice "Sì, fidati, è buono. Fallo così, colà", ti dà la ricetta. Acquistarlo su Internet... c'è qualche realtà che ha sviluppato la vendita online come Cortilia, Orapesce, ci sono un po' di realtà che cominciano a partire. È più facile magari con la carne, le verdure. Con il pesce è più difficile. Per concludere, se noi avessimo la Amazon di turno che ci garantisse il surgelato consegnato in tutta Italia per noi sarebbe la svolta. È inutile che io ti metta il mio prodotto con il ghiaccio secco dentro il contenitore isotermico se tutto l'imballo ti costa di più del prodotto stesso. Questa è la situazione adesso.

Che tipo di investimenti richiede l'implementazione e la gestione di una piattaforma di questo tipo?

Sinceramente non lo so, nel senso che io mi appoggierei sempre a ditte esterne per la logistica, non ci investirei.

Prima mi parlava delle promozioni sui social. In generale, com'è organizzata la funzione di marketing e chi si occupa del marketing digitale?

Le idee e i contenuti partono da me, poi mi affido ad un'agenzia che ovviamente mi segue tutto quello che riguarda shooting, video, modalità di comunicazione. La studiamo insieme però poi a livello pratico loro si occupano di creare l'impaginazione, il layout, di pubblicare programmando una serie di post che portano a tenere alta la reputazione aziendale perché devi sempre esserci, devono riconoscerti, devi essere affidabile come azienda. È ovvio che lo debba fare qualcuno che è del mestiere.

Quanto l'attività social è utile ed è cambiata con il Covid, se è cambiata?

È stata fondamentale perché tutti noi, quando eravamo a casa, guardavamo Internet tutti i giorni. Quindi è stata indispensabile, senza di quella non avremmo raggiunto tutte le persone. Se avessimo scritto la stessa cosa sul nostro sito non sarebbe stato lo stesso perché il sito lo guardi se mi conosci. Se in qualche modo ti arriva qualcosa di sponsorizzato crei curiosità, la gente viene incuriosita e guarda.

I risultati di interazione e visualizzazione vengono monitorati internamente o tramite l'agenzia?

Sempre tramite l'agenzia.

Come vengono usati questi dati?

Li usiamo per capire se ripetere o no le azioni pubblicitarie. Nel momento in cui tu fai delle azioni sui social le devi monitorare in termini di risposta. È valsa la pena? Sì, la riproponiamo. È stata un buco nell'acqua? Cambiamo strada.

Nel settore del pesce, in generale, che impatti ha avuto il Covid? Che influenze ha avuto?

Ha avuto conseguenze drastiche perché le barche erano ferme, non essendoci la richiesta. Erano crollati i prezzi perché c'era troppa offerta e quindi le barche i primi giorni hanno lavorato, ma una volta visto che nessuno ritirava il prodotto sono rimasti a casa. Il food service era fermo, la gente andava solo al supermercato. Perciò chi era già dentro al retail, alla rete di supermercati, ha avuto sicuramente incrementi a doppia cifra in quell'anno. Faccio un esempio: Bofrost ha registrato, nel 2020, un +35%, una soglia mai vista prima. Però loro venivano a casa a consegnarti il prodotto. La pesca è stata molto bastonata con il Covid, finché non hanno riaperto i ristoranti.

Quindi, nel vostro caso, la vendita online non è stata in grado di compensare la chiusura del canale Ho.Re.Ca.?

No no. D'altronde se tu pensi di mangiare pesce, su 10 volte dove vai a mangiarlo? Te lo farai a casa una/due volte, ci provi. Ma 8 su 10 vai al ristorante a mangiarlo. È ancora lì il punto di riferimento per mangiare pesce, il ristorante. A casa uno se lo fa una volta alla settimana, forse. Per la pesca professionale non è tanto il retail la parte più importante, è la ristorazione.

Con le novità che ha introdotto la pandemia, quindi l'apertura dell'e-commerce ecc., che tipo di scenari futuri intravede? Che scenari ritiene possano verificarsi vista questa trasformazione innescata dal Covid? È qualcosa di temporanea o vede uno sviluppo futuro?

Semplicemente parlando di delivery, è nato con il periodo della pandemia ma sta ancora funzionando, con numeri inferiori ma funziona. È un servizio che prima noi neanche valutavamo, abbiamo dovuto farlo perché avevamo le bollette da pagare, i dipendenti da pagare e quindi, con 200 pallet in cella, era un capitale fermo che non fruttava. A noi, ha fatto anche riflettere in termini di linea sulla GDO, quindi, ha portato le nostre considerazioni anche sul retail, non lasciando il food service, ma sviluppandolo in parallelo. Servire entrambe, anche quello che per noi non era interessante, cioè farti la scatoletta da 300gr... io voglio fare il bancale da 6 quintali, però se questo è il mercato lo devi soddisfare.

Per entrare in questi canali, se capisco bene, la trasformazione che è stata fatta a livello non è stato introdurre dei nuovi prodotti, ma lavorare sulla quantità dello stesso prodotto, cioè uno stesso prodotto in confezioni più piccole.

Abbiamo anche inserito dei nuovi prodotti perché io non posso proporti una vendita online e proporti solo vongole. Così ti faccio una sola volta la vendita. Se invece ti propongo un paniere di 13 prodotti, per esempio, una volta provi uno e se ti sei trovato bene riconosci quel marchio come qualità, garanzia ecc. e provi un altro prodotto. Per essere un fornitore accreditato devi essere un po' pluriprodotto a livello di offerta, ecco perché abbiamo aggiunto al nostro prodotto principe, la vongola, delle altre referenze.

Parlando del settore in generale, è un periodo storico particolare con diverse criticità. Che tipo di sfide stanno attraversando gli operatori del settore del pesce dal suo punto di vista?

Ti parlo di lato pesca. La pesca in Italia ha subito, con le regole comunitarie, uno stravolgimento incredibile perché ha limitato molto il prelievo, ha portato alla rottamazione e demolizione di tanti pescherecci e ha visto ridurre, tendenzialmente, del 50% la flotta in Italia. Questo ha creato alle imbarcazioni rimanenti tutta una serie di problematiche mai viste prima. Quindi le quote del tonno, attenzione al gambero non più di tot... Si è innescato questo brutto sistema per cui ti devo controllare, dove il pescatore, che prima trovava il suo mestiere come il più bello che potesse esistere, adesso lo trova un po' pesante perché sente il peso della burocrazia, delle limitazioni. Non che prima fosse il far west, perché comunque il pescatore è il primo che si preoccupa che ci sia ancora pesce per domani, per suo figlio, per i suoi nipoti. Sto parlando proprio di rispetto delle risorse. Imposto così diventa un po' più difficile, vedi un lento abbandono, non c'è il passaggio generazionale e quindi veramente temo che ci sia sempre meno prodotto nazionale e sempre più prodotto importato. È quello a cui stiamo assistendo adesso, quando non troviamo prodotto locale a parte in questo mese di agosto perché c'è il fermo pesca ufficiale, però c'è sempre meno prodotto proveniente dai nostri mari. Se la penso un po' più in grande e la stessa considerazione la estendo a tutto il settore primario vedo che anche in agricoltura è successa la stessa cosa. Perciò se devo importare del grano perché mi è imposto, o del latte perché imposto, o la barbabietola da zucchero perché è imposto, non posso produrre più di un tot di tonnellate di soia perché devo comprarlo altrove... tutto questo si sta facendo anche con la pesca, purtroppo. E questo non è sempre dettato da logiche ambientali, anzi usano le logiche ambientali per farti digerire che bisogna acquistare la cozza dalla Spagna invece che dall'Italia, o dal Cile per accordi extra UE.

Queste criticità a monte della filiera come si riverberano sulle fasi successive della catena?

Eh, che tu se vuoi mangiare moscardino, non lo trovi più. Il moscardino di Caorle non lo trovi più perché o diventa antieconomico o non posso prenderlo, e quindi ti arriva una scatoletta dal Marocco. Oppure te lo rifilano al ristorante perché non trovano altro.

Parlando delle tensioni geopolitiche che caratterizzano il periodo che stiamo vivendo, penso all'aumento del costo del carburante che ha innescato una serie di scioperi dei trasportatori. Che effetti hanno avuto questi fenomeni sulla redditività degli operatori del settore?

È stata drastica la cosa perché il gasolio costava 30/40 centesimi al litro e adesso costa 1.30€ al litro. Per la stessa barca, per lo stesso utilizzo. Vedo barche che escono e fanno

20.000€ quando fanno il pieno di gasolio. Molte volte si gioca sulla opportunità di uscire perché magari i costi dell'uscita in barca superano le entrate di quanto riesci a pescare; quindi, tante volte i pescatori decidono di non uscire perché ci rimettono. Attualmente è grave, senza parlare chiaramente dei costi relativi alle manutenzioni, all'officina che hanno subito incredibili aumenti, se trovi il pezzo di ricambio.

Prima mi parlava delle certificazioni e della sostenibilità talvolta usata come pretesto. Quanto conta la sostenibilità nel settore del pesce? Che sfide ne nascono e come viene comunicata al consumatore?

Per me ha un valore fondamentale. Se penso a come si sta evolvendo il mercato vedo che diventa un requisito indispensabile avere un prodotto certificato. Faccio un esempio: in Svizzera, dove sono molto più attenti alle logiche ambientali, la politica delle associazioni ambientaliste ha imposto ai buyer della GDO 4 regole: tu puoi acquistare prodotto solo se è certificato da pesca sostenibile, è biologico, è da allevamento, non è una specie a rischio estinzione. Quindi loro trovano stretto il loro campo d'azione nell'acquisto, mentre prima potevano comprare di tutto adesso non possono più comprare quello che vogliono. Quindi, avere un prodotto certificato ti fa entrare o non ti fa entrare. Sul piano della nostra gestione, quindi parlo dei molluschi che noi curiamo, dal 2005 al 2022 vedo che non è stato facile, ripeto dottrina tutti i giorni ai pescatori, ci si sta rendendo finalmente conto, anche dal lato del pescatore, che bisogna gestire il mare così come il contadino gestisce il campo agricolo. Devi avere la logica delle piantagioni: semini, aspetti e raccogli. Nel nostro caso, hai un monitoraggio costante del mare con i biologi a bordo dei pescherecci, mappiamo il mare e le aree di pesca, sappiamo in tempo reale quanto prodotto presenti in termini di densità al metro quadro ma soprattutto in termini di taglia. Tutto ciò che è sub-commerciale non si tocca, per tutto ciò che è commerciale guardi quanto è medio, quanto è di grosso calibro. In funzione di questi elementi, noi dirottiamo la flotta, quindi in determinate zone di mare si può pescare, in altre no. Anzi, se quell'area è in sofferenza perché mancano riproduttori, o c'è poca densità al metro quadro, devi chiuderla. Oppure se in quella zona c'è troppa densità al metro quadro che non permette l'accrescimento naturale perché c'è competizione naturale tra gli esemplari, fai un'operazione di restocking, quindi di diradamento da quella zona verso altre aree in sofferenza. La zona rimane ferma 5/6 mesi finché la natura non fa il suo decorso, finché non si ripresentano in buona forma i riproduttori e la specie si riproduce. Quando la ricerca fa le analisi con esito positivo, allora si può ricominciare l'attività. I fermi biologici riproduttivi sono fondamentali, il Ministero ci impone due mesi all'anno, noi mediamente ci fermiamo 4 o 5 mesi all'anno per favorire l'attività riproduttiva. Preleviamo, come si diceva prima, solo il prodotto che è venduto. Non ci sarà mai un ammasso di prodotto sprecato che il mercato non vuole, perché lo gestiamo in quote pro capite, quote di pescato. Tu potenzialmente puoi pescare 400 chili di pescato al giorno; se è venduto te lo faccio raccogliere, se no, se è venduto 200 o 300 chili, quello ti faccio pescare, te lo impongo. Questo chiaramente devi farlo in alleanza con le autorità marittime, le capitanerie di porto, la guardia di finanza e i carabinieri che ti aiutano a far rispettare le regole che ci diamo. È assolutamente indispensabile pensare alla sostenibilità. Se te la fai certificare tanto meglio.

È fondamentale per entrare in alcuni canali, ma quanto, secondo lei, il cliente finale considera importante la sostenibilità in questo settore, nel prodotto ittico? Ha

consapevolezza, è interessato? Secondo lei, a seguito della pandemia, c'è stato un aumento nella sensibilità, nella consapevolezza e nell'interesse circa la sostenibilità del prodotto?

Dipende dall'area geografica che prendiamo in considerazione. Se prendiamo il Centro/Nord Europa questa tematica è già considerata sensibile da diversi anni. In Italia, lo si sta registrando fatalità proprio dal periodo post pandemico quando le politiche anche italiane hanno cominciato a dire "Compra italiano, prediligi la filiera corta, preoccupiamoci delle risorse, preoccupiamoci delle tematiche sollevate da Greta Thunberg". Alla GDO, fino a due/tre anni fa, quando proponevo il prodotto certificato da pesca sostenibile, non le interessava niente. Adesso, si sta realizzando il contrario: vengono loro a cercarti perché vogliono quell'elemento di novità da proporre sul banco. Perché vedono la sostenibilità come opportunità commerciale: il prodotto nuovo che è certificato da pesca sostenibile te lo spingono perché dietro hanno un interesse a farlo. Quindi, coincidenza vuole che negli ultimi due anni, per il periodo pandemico o meno, si sta evolvendo in positivo. Era solo questione di tempo, io me lo aspettavo. In Italia si recepisce un po' la moda o la tendenza non subito. Se parlo di moda sì, se parlo di ambiente un po' meno.

Chiudiamo con un ultimo aspetto: l'innovazione. Prima mi parlava degli investimenti che avete fatto per implementare le fasi di trasformazione. Nel vostro caso che tipo di innovazioni sia di prodotto che di processo state perseguendo? Che tipo di investimenti prevedete di fare? Quanto, in generale, gli operatori del settore sono propensi ad abbracciare l'innovazione?

Ricerca e sviluppo è uno dei rami aziendali su cui puntiamo sempre molto. Se arrivi per primo, trovi spazio, mentre se arrivi dopo aver copiato qualcun altro ovviamente non trovi molto. Lo sviluppo è quindi la nostra massima attenzione, ci proviamo tutti i giorni, poi non sempre i prodotti che studiamo sono di interesse. Quello che io ho compreso è che sempre più persone chiedono il ready to cook. La massaia come poteva essere mia mamma, che ha il tempo di andare in pescheria, pulire il pesce, farselo, non c'è più. Mia moglie non ha quel tempo, noi non abbiamo più tempo. Quindi siamo fortemente spinti agli acquisti online, per esempio, perché non abbiamo tempo da dedicare agli acquisti. Se io ti do un prodotto... faccio un esempio: se ti do una capasanta nostrana che devi portare a casa, pulire, lavorare, cucinare è un prodotto anche abbastanza semplice. Ma se ti do un'anguilla da portare a casa, ammazzare, aprire, spinare ecc. è complesso. Quindi, la qualità del prodotto deve essere sempre al top, ma il servizio che ci metto sopra molte volte è quasi ritenuto più importante del prodotto stesso. Se io al ristorante do una confezione gastro da chilo con dentro 20 capesante già pulite, mezzo guscio ecc., lui se la tiene in freezer 18 mesi e quando arriva il cliente che fa l'ordine lui la prende dal freezer, apre il pacco, tira fuori il prodotto, lo mette sulla griglia e lo cucina. Finito. Diversamente, approvvigionandosi dal fresco, devi avere fatto la spesa del fresco, sul lavello devi lavare e mondare il prodotto e magari ti finisce il prodotto perché ne hai trovato solo qualche chilo. Così tu hai sempre una riserva e quindi notiamo che anche la ristorazione mostra questa tendenza. Magari fanno questo e quello: io dico loro di prendere pure il fresco, ma di avere una riserva surgelata per soddisfare le esigenze. Perché se hai un piatto in menu, devi poterlo fare sempre, indipendentemente se quel giorno c'era il fermo pesca, se il mercato non aveva sufficiente prodotto, ecc.

Tornando alla domanda, sì prodotti nuovi ma che abbiano una quantità di servizio importante. Non farò mai il prodotto di quinta gamma dove devi solo scaldare, perché sei tu lo chef. Io fornisco un prodotto buono, di pesca locale, pulito, ready to cook ma la ricetta la fai tu.

Quindi il prodotto come ingrediente.

Sì, però non tal quale, bensì definito, pulito.