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How SMEs in the agri-food sector deal with digital communication.

An empirical analysis on the olive-oil sector.

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INTRODUCTION

The purpose of the following work is to investigate the olive-oil sector in Italy, given its deep historical roots and its link to national culture, dating back millennia. Next step of the analysis is to try to understand how companies in the sector, which are often small and family-run, interface with the trend generate by new technologies, especially with the use of digital communication. This new type of communication, which has emerged in recent decades, often tests the communication skills of companies, both in terms of strategy and the communication media used. Ultimately, the aim is to see if there is a match between the new communication trends and the skills possessed by the small to medium-sized enterprises in the olive-oil sector.

Business peculiarities are also expected to be the most critical points in digital adoption. The strong ties to tradition and the age of entrepreneurs sometimes block companies and move them with blinkers on towards novelty.

Within the agri-food sector, the focus of the research is on the olive-oil sector. Its presence within the national territory is deeply rooted in time and this has led to the main product, olive oil, assuming a relevant role within the gastronomic culture, and not only, of our country. Also within the same chapter, an attempt is made to give an overview of the structure and typical characteristics of the sector, including the peculiarities of the alternative supply chains that have emerged in more recent times, such as the organic and geographical indication sectors, as well as the international context characterizing the sector.

Next, the evolutionary process that marketing has undergone in recent decades is exemplified, from the form considered traditional to the emergence of new modes of communication provided by the emergence of digital channels.

The third chapter deals with an empirical analysis of the level of digitalization, with reference to communication, enjoyed by SMEs operating in the agri-food sector, within which holdings belonging to the olive sector are also included, with reference to the Triveneto region. The analysis is carried out thanks to the use of data, contemporary as well as historical, provided by the Agrifood Management & Innovation lab in relation to the companies that make up the sample for the annual census relative to the 'Food Strategies and Innovation Observatory.

Key benchmarks on which the paper focuses are the presence and use of social media and the company website.

To conclude the analysis and return the focus entirely on small and medium-sized enterprises involved in olive oil production, Chapter 4 contains three specific business cases, which are explored in depth through interviews. One of the three companies chosen as an in-depth study does not represent a traditional business model; it is in fact the first online platform dedicated exclusively to the sale of olive oils.

CHAPTER 1 – THE ITALIAN OLIVE OIL SECTOR

1.1 ORIGIN AND HISTORY

The olive tree (Olea europea L.) is a plant of fundamental importance to human civilization and its development, due to its impact on culture, religion and nutrition. The story of the olive tree, as we know it today, begins several millennia ago and is deeply connected to the Mediterranean Sea.

The first appearance of the oleaster (Olea europea, subsp. *oleaster*), the wild form of the olive tree, is traced back to around six to seven thousand years ago in the Middle East, although chronologically earlier finds have been found in regions equivalent to Mesopotamia and Ancient Persia.

This period insists within the Neolithic (7000-3500 B.C.) and represents a crucial phase in the development of the human species and the domestication of the olive tree, coinciding with the change from nomadic to sedentary life, based on animal husbandry and agriculture.

During the Bronze Age (2300–700 B.C.), olive oil began its spread, thanks to increasing trade, reaching many countries in the Mediterranean area including Palestine, Syria and Crete.

The olive spread from the east to the west, initially to Greece where it began to play a predominant role in the Hellenic culture around four thousand years ago.

A few centuries later, around three thousand five hundred years ago, the olive tree reached Italian soil. We must wait until around the 7th century B.C. to observe its actual spread, by Carthaginian and Phoenician traders. Local populations already realized the potential of this product and used the oil for a variety of different purposes: as food, cosmetics, medicine and as a sacred liquid during religious rites.

The first peoples, within the territory of the peninsula, to learn and experiment with olive cultivation and pressing techniques were the Etruscans (IX c. B.C – I c. B.C.) and the Romans (I c. B.C – IV c.). The latter developed advanced cultivation techniques and extended plantations to southern Italy and northern Africa. The Romans advocated an early classification of the quality of oils obtained from the pressing of olives to be able to distinguish different products according to their intended uses.

The development of the art of olive oil production in Italy, as in the entire Mediterranean basin, subsequently underwent a slowdown that corresponded with the progressive fall of the Western Roman Empire. This decline lasted until around the year 1000 when,

mainly thanks to the monastic communities scattered across the peninsula, interest in olive growing resurfaced.

The olive tree regained its splendors, during the Renaissance period (XV-XVI c.), thanks to the Medici family (**1434 -1737**), whose rule over Tuscany granted free land for olive growing.

From the 18th century onwards, the Italian olive oil industry accelerated, with the increase of land for olive growing, and consequently also related sectors such as food, canning and soap making.

The advent of the 20th century together with technological progress has allowed for a simplification and acceleration of all the steps involved in the production of oil, without affecting its social importance, resulting in lower prices and faster distribution.

1.1.1 SACREDNESS AND SYMBOLOGY

The development of olive oil brings with it a close connection to the world of the sacred. It features as a pivot in the three monotheistic religions that have developed around the Mediterranean over time: Christianity, Judaism and Islam.

The term Christ whose meaning is 'anointed' derives from the Greek translation of the Hebrew word *mašíakh*, an anointing that remains a fundamental element in many liturgies of the Christian religion. The olive plant, on the other hand, symbolizes peace and regeneration through the representation of a twig of it held by the beak of a dove.

This sacredness linked to Christianity seals a strong link between the olive tree and Italian culture. Italy has always been a country where Christianity, in particular the Catholic branch of the latter, has had a not inconsiderable importance. Evidence of this is the fact that the Vatican City State, the seat of the Catholic Church, is surrounded by Italian soil and that it was only in 1989 that secularism was enshrined for the first time in the official state order.

Concerning Judaism, the subject of anointing as a process of consecration remains important. This religion also values the olive from a dietary point of view: the Jews' holy book forbids them to consume many animal-derived fats, thus making olive oil a fundamental element in their cuisine.

Islam, too, attaches importance to the olive tree, defining it in the sacred scriptures as 'the blessed tree'.

The symbolism, not necessarily connected with religion, linked to the olive tree has very ancient origins. The Hellenic poet Homer mentions it in his Odyssey as a sign of life and peace, and the winners of the Olympics were crowned with olive branches and presented with a cruet of oil. Athena, the Greek goddess of wisdom and war, was credited with the birth of the world's first olive tree.

In ancient Rome, on the other hand, the olive tree represents the shelter under whose branches the twins Romulus and Remus, later founders of the city, were born.

1.1.2 A COMMON HERITAGE: THE MEDITERRANEAN DIET

The teachings, which ancient peoples helped to shape, on the use of olive oil are still today a common heritage for the countries of the Mediterranean basin.

The substantial dedication in terms of prior investment and labour that these people devoted to olive farming can be legitimized not only by the many uses they derived from olive oil but probably also by a combination of benefits it could bring to their diet in nutritional terms.

The benefits, proven in modern times, that olive oil brings to health include the reduced occurrence of cardiovascular problems, high antioxidant properties and better functioning of the digestive system. However, the use of extra virgin olive oil, as a primary source of unsaturated fats, must be limited to avoid overuse and the preferred way to consume it is raw.

Olive cultivation and the products derived from it, in particular extravirgin olive oil, today constitute an essential element of the dietary style that has been defined as the Mediterranean Diet.

On 16 November 2010, the Mediterranean Diet was inscribed on the UNESCO Intangible Cultural Heritage List, accepting the application of Italy, Spain, Greece and Morocco, and became important due to the balance of macronutrients it contains. The definition extends beyond the confines of a simple list of elements and encompasses a set of knowledge, symbols and traditions related to agriculture, animal husbandry, fishing, cooking and food sharing and consumption.

The term Mediterranean Diet and its coining, around the 1970s, originated in Italy. The American scientist Ancel Keys, who coined the term, in his Seven Countries Study (1958) found a correlation between the eating style of Mediterranean populations, longevity and

prevention of cardiovascular disease. The study stressed the consumption of olive oil, a source of unsaturated fats, as an essential element in obtaining the benefits of this dietary style.

Olive oil is defined as a nutraceutical, a combination of nutrients and medicine because, in addition to being assimilated as nutrition by the body, it has benefits for the latter (Ciccantelli et al., 2016).

The special properties that are recognized in olive oil are due to the presence of polyphenols, oleic acid and vitamin E. These substances not only have health benefits but also affect the organoleptic qualities of the oil: the polyphenols characterize it with bitter and spicy notes, the monounsaturated fats (oleic acid) make it smoother and the chlorophyll, intended as a booster for the absorption of oleic acid and vitamin E, gives the product a dark green color.

1.2 NATIONAL OLIVE OIL INDUSTRY

The connection between olive growing and Italy not only has ancient roots but is of far greater importance to the national economy.

The complexity of the olive-oil sector requires in-depth analysis to be able to accurately track its development and understand its dynamics.

1.2.1 BIODIVERSITY AND CULTIVAR

Italy has one of the most consistent biodiversity patrimonies in Europe, in fact on national soil more than 670 cultivars[1], from the Latin *varietas culta*, are recognized, and understood as cultivated olive varieties, representing about 40% of all those known worldwide. The rough approximation in calculating the number of cultivars in the national territory is due to the presence of synonyms, given by the fact that in some cases the same variety has been given different names[2].

The Italian situation stands out compared to other countries in the Mediterranean area, such as Spain and Greece, where the number of cultivars present is much smaller.

[1] https://oleario.crea.gov.it/cultivar-regionali/
[2] *Ibid*

This abundance, compared to other countries, is motivated by the morphological complexity of the Italian territory and the multitude of habitats in which the olive tree has settled and evolved over the centuries.

The myriad of combinations that can be established between olive trees and the habitats in which they settle generate an important contribution to the surrounding ecosystem.

Their ecological value, in addition to their fundamental contribution to biodiversity, extends to their ability to stem soil erosion by water and wind, thus limiting the loss of organic substances[3]. In particular, the centuries-old olive trees represent an invaluable source of biodiversity for both the surrounding vegetation and wildlife[4].

The geographical spread of cultivars shows that the Italian region with the highest number is Tuscany with 115, followed by Sicily, Campania and Apulia. It can be observed that the northern regions of the country are the poorest in terms of olive biodiversity present.

Graph 1.1. Geographic cultivar layout

Source: CREA OFA elaborations updated to 2021

[3] Calabrese G., Ladisa G., Tartaglini N., (2012), *Studio sulla Biodiversità negli oliveti secolari*, CIHEAM, Mediterranean Agronomic Institute of BariEditors.
[4] *Ibid*

Each cultivar is distinguished from the others based on specific factors, among which we can include: the relationship the plant has with the soil and the climate, the yield in terms of oil production, the quality of the oil produced, size and colour of the olives, flowering and ripening period, robustness of the plant, colour of the foliage, solidity of the plant and resistance to parasite attack.

In the preceding lines, it has been noted how vast is the range of cultivated varieties of olive trees in Italy. However, within this multitude it is possible to identify a few cultivars that are more widespread and preferred by consumers for the production of olive oil, they are described in the table below.

Table 1.1. Consumers' most favorite varieties and their characteristics

Variety	Area	Peculiarities	Average weight olives in (g)	Yield in %	Characteristics of the oil
Frantoio	Tuscany	High and constant productivity, great adaptability.	2	23	Green colour with minimal yellow notes. Fruity flavour, medium to strong intensity.
Leccino	Central Italy	Early fruit ripening.	2-2,5	20	Golden yellow colour. Delicate, lightly fruity taste
Coratina	Apulia	Slightly asymmetric fruit shape.	4	25	Colour is golden yellow tending to green. Bitter taste, with a spicy aftertaste.
Ogliarola Barese	Provinces of Bari, Foggia, Basilicata	Considerable crown size and reduced resistance to weather and pests.	2	20	Intense yellow colour with green hues. Fruity taste with slight bitter notes.
Ogliarola del Gargano	The Gargano area	Medium but intermittent productivity.	2	25, with peaks of up to 28	Golden yellow with hints tending towards green. Medium fruity taste with almond notes.

Nocellara del Belice	Sicily	Olive is also intended for table use.	5-7	20	Intense green colour with golden hues. The bitter taste of medium intensity, hints of green tomato.
Moraiolo	Central Italy	Delicate and slow-healing plant.	≦1	20	Clear green colour. Bitter and spicy taste.

Source: *https://www.lifegate.it/cultivar-di-olive-da-olio-cosa-sono-caratteristiche-varieta*

It is worth pointing out that not all olive cultivars are suitable for the same purposes. The main distinction is between olives intended for olive oil production and the so-called table olives, there is also a third class consisting of olives that are suitable for both uses.
Olives intended for direct consumption, table olives, have a lower oil content and their size is larger than oil olives because the ratio of pulp to stone is unbalanced in favour of the former. Some examples of cultivars that are preferred for table consumption are:

- Ascolana tenera;
- Olive taggiasche;
- Bella di Cerignola;
- Sant'Agostino;
- Termite di Bitetto;
- Santa Caterina;
- Giaraffa;
- Nocellara del Belice.

The Graph 1.2 shows the geographical distribution, by region, of the total area in hectares that is covered by olive trees for oil production. As you can see, Apulia is the region with the largest olive cultivation area with 339,980 hectares, which therefore corresponds to the darkest colour on the map. Regions with lighter and lighter colours refer to less and less extensive areas. , down to the minimum, one hectare, in Valle D'Aosta.

Graph 1.2. Geographical distribution in hectares of land covered by olive trees for oil production.

Source: Istat http://dati.istat.it/Index.aspx?QueryId=33706#

Interestingly, there is no exact correspondence with what is presented in Graph 1.1, which means that greater biodiversity in terms of cultivars does not automatically or proportionally correspond to a larger area occupied by olive trees for oil production.

1.2.2 OLIVE OIL NOMENCLATURE

Italy is not only one of the European countries producing the most olive oil but also one of the largest consumers of it. More generally, it is possible to extend this importance to other states whose coasts are touched by the Mediterranean Sea, such as Spain and Greece.

This relevance of olive oil, both in the lives of consumers and companies, has made it necessary for supranational institutions to intervene to protect both parties involved

regarding the production process, the ingredients within it, and the bottling and labelling stage.

The latest event in this respect corresponds to the issuing by the European Commission of Regulation (EU) 2022/2014 on 29 July 2022, which supplements Regulation (EU) No. 1308/2013 of the European Parliament and of the Council about marketing standards for olive oil, and repeals Commission Regulation (EEC) No. 2568/91 and Commission Implementing Regulation (EU) No. 29/2012.

The European Union classifies eight different types of olive oil and olive-pomace oil, the only ones that can be bought at retail are: extra virgin olive oil, virgin olive oil, olive oil composed of refined olive oil and virgin olive oils, and olive-pomace oil.

Olive oil categories are differentiated from each other according to quality parameters related to physical-chemical characteristics and organoleptic characteristics.

The macro set of virgin olive oils, to which also belong extra virgin olive oils, understood as obtained directly from olives by mechanical means, is composed of three products[5]:

- extra virgin olive oil represents the highest quality. It does not indicate organoleptic defects and is fruity. Its acidity[6] must not exceed 0.8%;
- virgin olive oil, may have minimal sensory defects and its acidity level must not exceed 2%;
- lampante olive oil represents the virgin oil with the lowest quality, has an acidity level that exceeds 2% and is devoid of fruity notes. It is not retailed but may be refined to remove defects or used for industrial purposes. After possible refining, it obtains the designation 'refined olive oil'.

1.2.3 INDUSTRY STRUCTURE

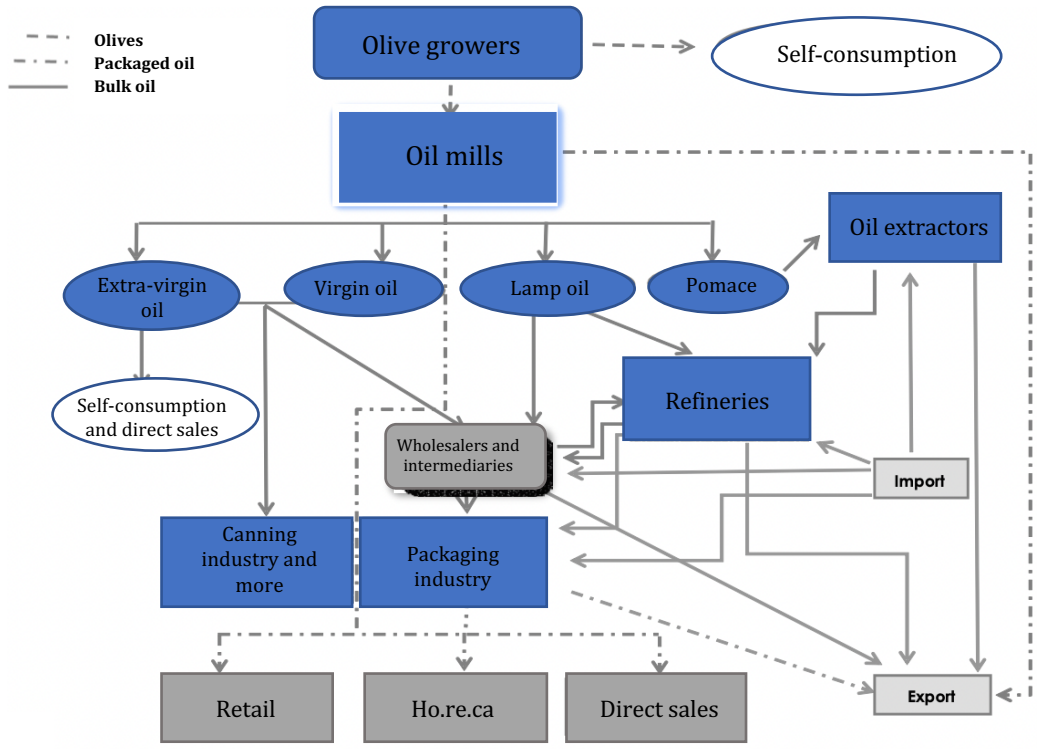
The olive oil supply chain is anything but linear. Its complexity is due to the presence of a multitude of different actors and the variety of products that are traded: olives, packaged The general trend of the sector is determined by two groups of interacting variables, which can be classified into domestic and those related to international trade. The first

[5] *https://agriculture.ec.europa.eu/farming/crop-productions-and-plant-based-products/olive-oil_it#oliveoillegislation*

[6] This feature of olive oil is determined by its molecular composition. Oil is made up of fatty acidst that generally come in groups of three, thanks to glycerol, the molecule that unites them. This group is called triglyceride. https://carapelli.com/en/what-is-the-acidity-level-of-extra-virgin-olive-oil/

category is divided into domestic production and consumption, and the second into imports and exports. All these variables will be explained in the following subsections.

Graph 1.3. Structure of the olive oil industry in Italy



Source: ISMEA

The starting point of the olive-oil sector is the olive farms, i.e. those involved in the cultivation of olive trees. They are very heterogeneous, both in terms of size and the techniques used.

A first classification is possible of the type of plantation, and it is possible to identify (Camarsa et al., 2010):

- Traditional low-impact plantations: generally of ancient origin, low input of chemicals (e.g. pesticides, fertilisers), and high labour requirements for their management.

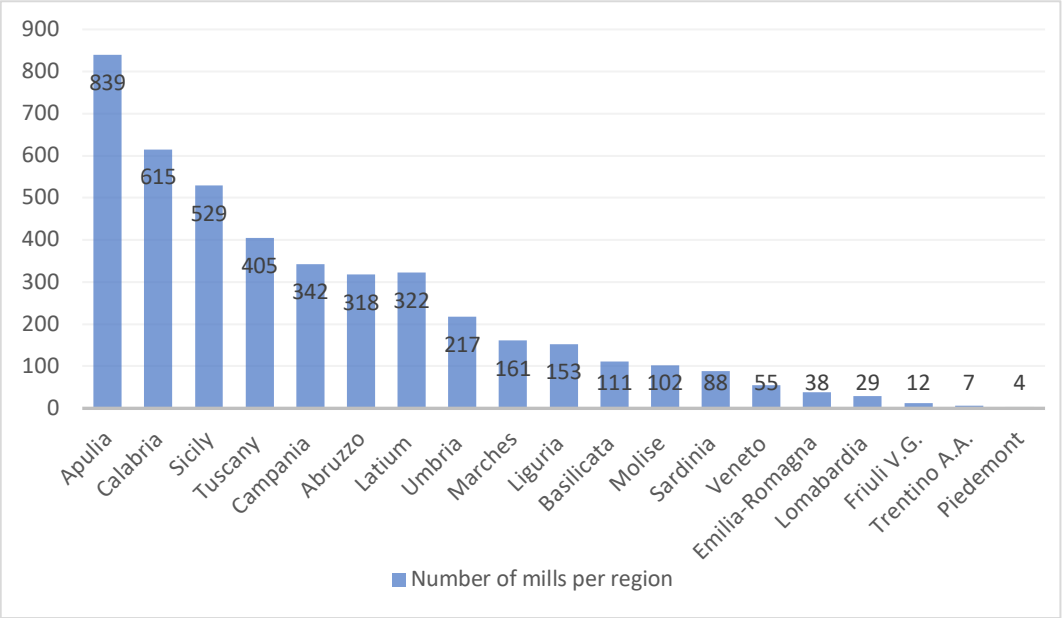
  Given their centuries-old existence, they are an important source of biodiversity and are considered an integral part of the surrounding landscape. They are often subject to abandonment due to their limited productivity in economic terms.

- Intensive (or traditional intensified) plantations: like the previous ones but managed in an enhanced way. The use of chemicals is customary, the space between the olive trees is reduced and irrigation and mechanical harvesting of the olives is frequent.
- Modern super-intensive plantations: the olive varieties found in this type of plantation are usually small due to the high density. Mechanisation and certain agrochemicals remain present.
- Organic plantations: conducted without the use of chemical products, more specifically they are managed according to Regulation (EU) 2018/848 of the European Parliament and the Council, repealing Regulation (EC) No 834/2007 of the European Council.

An additional distinction, more interesting for an economic analysis of the sector, which can be applied to those actors in the supply chain who are involved in olive growing is that between competitive and marginal firms (ISMEA, 2014).
Competitive enterprises account for 37% of the total (ISMEA, 2014) and are in turn divided into large enterprises, medium-large enterprises and small-family enterprises.
The remaining 63% (ISMEA, 2014) is occupied by marginal companies, which are distinguished into medium-large companies, small family businesses and small family businesses.
The olive oil industry generated a turnover of EUR 3 billion in 2020, accounting for 3.2% of the total amount of the Italian food industry (ISMEA, 2020) consisting of several stages.
The next actors after the farms are the oil mills and they deal with what is called first processing. They differ from each other in the different techniques used to transform the olives into oil: traditional or modern (Camarsa et al., 2010).
The methods classified as traditional represent the same ones that have been in use for centuries. The main characteristic of these methods is that they are classified as 'discontinuous' systems because they are characterized by a production process marked by frequent interruptions that give rise to individual batches of oil rather than constant production.

Modern production methods, on the other hand, refer to often very large plants that are characterized by working on continuous cycles and being fully mechanized, from the milling of the olives to the packaging of the oil.
The mills currently operating in Italy are estimated to be around 5000, of which 70% are in the south of Italy (Cola et al., 2020).

Graph 1.4. Regional distribution of active oil mills



Source: elaboration RRN-ISMEA based on AGEA data

The next stage of the chain is bottling, the so-called second processing, which in the national scenario is characterized by its geographical duality. In the central-northern part of the country, between Umbria, Tuscany and Liguria, large companies are concentrated that contribute to the generation of most of the oil industry's turnover. The south, on the other hand, is populated by a multitude of small bottling companies whose economic contribution is minimal compared to the total.
This seems to contrast with the distribution of olive mills across the country. There is no contradiction, however, because there is a substantial flow of olive oil in bulk from its regions of origin in Southern Italy to Central and Northern Italy to be bottled and marketed (Cola et al., 2020).

The final destinations of the product are 65% in the domestic context and the remaining 35% in hotels, restaurants and catering (ho.re.ca), according to the available data for the period 2015-19.[7]A distinction can be made, within the quantity destined for domestic consumption, regarding the sales channel used: 29% of the product is sold directly to the final consumer, while the remaining 71% is destined for retail through large-scale distribution (Cola et al., 2020). After what has been said, however, it is necessary to emphasize that tracking oil sales in Italy is a complex process due to the consistent use of the bulk product that many households make. The reference is to self-production or direct purchases at oil mills or farms.

1.2.3.1 PECULIARITIES OF THE CHAIN

From the above analysis of the Italian olive oil sector, it is possible to summarize some of its characteristics (Cola et al., 2020):

- the agricultural phase is dominated by small farms; the average area occupied by each is 1.81 hectares, well below the agricultural sector average of 9 hectares. Small farm sizes are the main cause of limited entrepreneurship and reluctance to innovate. This phenomenon is in addition to the ageing of the specialized olive farms from which the sector is already suffering.
- In the processing stage, two different currents can be identified, the productive and the commercial ones. The number of mills active in our country is very high when compared to national production values, comparing production with other countries such as Spain. However, their role is changing thanks to technological innovations and modern contractual forms with which they deal with olive growers.

[7] Istat, *Dati sui consumi di olio d'oliva*, 2015-2019.

Table 1.2. Industry numbers at a glance

	uom	2017	2018	2019	2020	Var. % 2020/19
Structure						
Farms	(n)	646.326	-	-	-	-
Surface	(ha)	1.170.157	1.164.067	1.164.568	1.164.568	0,0
Average dimension	ha/farms	1,81				
Active mills	(n)	4.870	4.056	4.480	4.403	-1,7
Industrial firms	(n)	220				

Source: elaborazioni ISMEA-RRN su dati 1) ISTAT SPA 2016; 2) Agea; 3) elaborazioni ISMEA-RRN su dati Censimento ISTAT dell'Industria 2011 e Assitol

Also defined as peculiarities of the supply chain are its low profitability and its unequal redistribution of value among the actors in it.

In 2019, in Italy, the total value generated by the consumption of oils and fats amounts to approximately EUR 5.3 billion, adjusted for external costs, imports and VAT, the added value related to the olive-oil sector corresponds to EUR 1.5 billion (Ministero per le Politiche Agricole e Forestali, 2016) , of which only 10% are net profits (The European House – Ambrosetti, 2019).

The result of this is that for every 100 euros spent, only 3 are allocated to the remuneration of the supply chain (The European House – Ambrosetti, 2019). The remaining 97 are divided between logistics, transport and energy services (46.1%), personnel costs (18.2%), government coffers (18.6%), banks and suppliers of machinery and real estate (6.4%) and net imports (7.7%) (The European House – Ambrosetti, 2019).

The second component related to structural imbalances in the olive oil sector is evident from the results of the study by The European House - Ambrosetti, based on Aida - Bureau Van Dijk data conducted in 2019. The processing took into consideration more than 8,000 companies in the database, from which many family businesses that do not publish their balance sheets are excluded.

The least remunerative stage is the agricultural one (15.2%), to which about 0.50 euro per 100 is due (The European House – Ambrosetti, 2019). According to the Olive Oil Sector Plan, drawn up by the Ministry of Agriculture and Forestry in 2016, the operating income received by the olive grower, once investments have been amortized, salaries paid, and

net of contributions to support agriculture, is around 3.5% on consumption of extra virgin olive oil.

Such low profitability of the agricultural sector makes it difficult to bear any costs, both in terms of the farmer's remuneration and investments to improve the technological development of enterprises.

The prevailing amount of value falls on the actors involved in the transformation phase (50.6%) and especially on those companies that are vertically integrated and include both milling and bottling processes (33.9%) (The European House – Ambrosetti, 2019).

1.2.4 THE NATIONAL PRODUCTION

The economic performance of the olive oil industry, year by year, depends profoundly on the yield, in terms of olive production, that the trees produce. The so-called oil harvests manifest themselves differently each year following the characteristic alternation that marks production. This variability has been exacerbated in recent years due to climate change which often causes sudden and extremely damaging phenomena for crops, which unfortunately many producers are unable to cope with due to the lack of entrepreneurship that often characterizes olive growing.

The production variability of a crop like the olive tree inevitably generates alternating results over time. In the years analyzed, for two years the 200 thousand tons threshold was exceeded, with 2018 representing the lowest production ever reached. The level of national production has therefore the ability or otherwise of Italy to be self-sufficient in terms of matching domestic supply and demand. The self-supply rate fluctuates following the trend of domestic production. The condition for which this index never reaches its maximum value is identified in the insufficiency of Italian production concerning consumption, compensation from abroad is therefore necessary.

Table 1.3. Available production in thousands tones and rate of self-supply

	2015/16	2016/17	2017/18	2018/19	2019/20
Available production	475	182	429	175	366
Self-supply %	84,7%	42,0%	75,7%	43,8%	77,9%

Source: ISMEA

Another factor whose impact is reflected in production is the low level of "entrepreneurship" (Cola et al., 2020) that still characterizes Italian olive growing.
Olive oil production is focused on the southern regions of the country, as also seen above in the distribution of the land occupied by olive growing. In first place is Apulia, which alone accounts for more than 51% of the total, followed by Calabria (13%) and Sicily (10%) (Cola et al., 2020).

Graph 1.5. Regional breakdown of Italian production: average campaigns 2016-2019

Source: elaboration RRN-ISMEA on AGEA data

1.2.4.1 PRODUCTION FORECASTS

Estimates based on the most recent olive oil harvest, which straddles 2022 and 2023, are anything but optimistic. According to observations made in early November, during the beginning of the olive harvest period, the pessimistic forecasts that had been created will be confirmed.

The negativity of expectations can be translated into production for the 2022/23 olive crop year of 208 thousand tones, 37% less than the previous year (ISMEA, 2022). The hole thus created in the supply of olive oil damages both domestic consumption and the related exports of Italian companies.

The symptoms of the drop in production can be found in some typical features of olive growing. Olive trees do not guarantee a constant production year after year but are subject, like other tree plants of agricultural utility, to busy years ('year ON') and years of little or no production ('year OFF'), the case of the year in question (Salimonti & Vatrano, 2021).

Contingent causes, such as the climatic peculiarities observed during the year 2022: a year characterized by the worst drought in Europe for 500 years, contributed to the worsening of the situation, given the natural production drain dictated by the 'year off' (Coldiretti, 2022).

The climatic conditions caused damage to the entire agricultural sector amounting to around 10% of the relevant national production.

The high temperatures, a good +2.88 degrees above average (Coldiretti, 2022), recorded during the summer period and the persistent drought have therefore considerably complicated the vegetative development of the olive trees, making it necessary to resort to artificial irrigation. This latter solution, capable of guaranteeing water resources even at the most critical times, is becoming increasingly necessary for olive farms. The climatic phenomena we are currently witnessing are part of a broader process of tropicalization of the climate (Coldiretti, 2022), which also translates into an increased frequency of violent events, short-lasting but heavy rainfall, seasonal displacements and a sudden transition from sunshine to bad weather with small temperature swings.

The aforementioned production crisis can be extended to the entire national territory without forgetting certain exceptional cases. Olive cultivation is subject to certain peculiarities, including those related to climate, that a total generalization would be excessive by excluding different identifiable differences between neighbouring areas.

A more accurate observation is therefore that which identifies the southern regions as having the greatest drop in production, also considering their weight within the entire sector (ISMEA, 2022).

Table 1.3. Italian olive oil production

	Average 18-21	2021	20/22*	VAR% 22/21
Piedmont	14	10	16	+57%
Lombardy	751	157	380	+142%
Trentino A.A.	317	90	200	+122%
Veneto	1.865	420	700	+67%
Friuli V.G.	102	74	104	+40%
Liguria	3.201	1.517	1.934	+27%
Emilia-Romagna	1.185	1.165	1.631	+40%
Tuscany	15.461	10.918	13.866	+27%
Umbria	5.096	3.178	4.036	+27%
Marches	2.999	3.682	2.761	-25%
Latium	12.253	12.166	14.288	+17%
Abruzzo	8.770	11.037	6.622	-40%
Molise	2.818	3.158	2.684	-15%
Campania	11.443	10.853	10.853	0%
Apulia	145.037	177.407	85.686	-52%
Basilicata	4.413	5.919	3.551	-40%
Calabria	35.593	44.792	26.109	-42%
Sicily	31.153	38.870	29.316	-25%
Sardinia	3.416	3.613	3.142	-13%
Italy	285.888	320.026	207.879	-37%

Source: until 2021 ISMEA-Agea data; 2022: estimate by Agea in collaboration with Italia Olivicola and Unaprol*

One way that entrepreneurs in the olive oil industry have of reacting to the production deficit, as in the case of the 2022-2023 campaign, is through blending. This means that

companies mix oils with different origins and tastes to provide consumers with consistent products in terms of quantity and quality.

Other elements, from a more macro perspective, must be added to the low yield of the olive trees to get a complete picture of the current production situation.

The production system in general, including the olive sector, has been shaken by an increase in input prices. Although the cost structure of olive farms is difficult to understand, given the scarcity of information on the subject and the multiple production models adopted, it is possible to identify the main sources of cost increases[8] in wages, energy products and consequently fertilizers given the energy expenditure required to produce them.

The Russian invasion of Ukrainian territory, and the resulting political tensions, is the main cause that has destabilized the market for agricultural inputs and commodities.

Overall, the increase in costs that olive growers, as members of the vegetable crop aggregate, incur is around 20.4 % on an annual basis in 2022[9], compared to +5.27% in 2021.

The increase in production costs added to low national and supranational production, consequently, generating an increase in producer prices and ultimately an increase in the price to which the end consumer will be subjected. Effective communication, especially regarding higher quality oils such as extra virgin, can be a key tool to overcome this critical moment and elevate the product due to its unique value.

1.2.4.2 XYLELLA FASTIDIOSA

Xylella fastidiosa is a highly transmissible bacterial pathogen affecting plants, which arrived in Italy in 2008 on a coffee plant from Central America (Almeida et al., 2021), and is spread by insects that act as vectors, such as the medium spittlebug (*Philaenus spumarius*). The bacterium is associated with serious diseases affecting many plants, causing latent infections that can lead to death.

Its aggressiveness manifests itself most strongly against olive trees but affects other plants such as vines, orange and peach trees, as well as some ornamental plants.

[8] https://www.ismea.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/11813
[9] https://www.ismea.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/11813

The bacterium's mechanism of action consists of attacking the lymphatic system, which is responsible for the circulation of water and nutrients necessary for plant sustenance, where it reproduces to the point of obstructing ducts, limiting the plant's functionality and causing it to progressively dry out[10].

Its presence in the European Union was first detected in 2013 on olive trees in Apulia, more precisely in the province of Lecce. Since then, the bacterium has spread to other countries in the Mediterranean basin such as France, Spain and Portugal. Its presence in Italy did not remain confined to the Apulian territory but reached Tuscany, in December 2018, and Lazio in November 2021[11].

The most disastrous economic consequences of X. fastidiosa are confined to the Apulian territory. Coldiretti Puglia estimates that the pathogen has already affected a portion of the regional soil equal to 8 thousand square kilometres on which more than 21 million plants insist, causing a death toll of olive trees.

An initiative aimed at overcoming the production crisis caused by X. fastidiosa is promoted by CREA (Council for Agricultural Research and Analysis of Agricultural Economics) through its contribution to the European GEN4OLIVE project. The aim of the project, which will end in 2024, is to promote and valorize olive genetic resources to make them available to breeders and farmers[12] and thus promote more resistant varieties, considering that currently only 5% of all available olive cultivars are commercially exploited.

Planting olive trees from cultivars with resistant genotypes is one of the most viable solutions in combating the spread of X. fastidiosa. To date, the cultivars Leccino and 'FS17' (also known as 'Favolosa') have shown resistance to the bacterium (Aprile et al., 2021).

[10] http://www.efsa.europa.eu/en/topics/topic/xylella-fastidiosa

[11] https://food.ec.europa.eu/plants/plant-health-and-biosecurity/legislation/control-measures/xylella-fastidiosa/latest-developments-xylella-fastidiosa-eu-territory_en

[12] https://www.crea.gov.it/-/gen4olive-il-crea-partner-del-progetto-europeo-per-il-miglioramento-genetico-dell-olivo

1.2.5 CONSUMPTION AND BEHAVIOUR

Italy is the first country in the world in terms of olive oil consumption, with a total quantity of around 500 thousand tonnes[13].

Table 1.5. Apparent human consumption in Italy, thousand of tonnes

2015/16	2016/17	2017/18	2018/19	2019/20
561	434	567	400	470

Source: Bilanci di approvvigionamento, according to the Coi scheme and European Comminssion.

The huge amount that is consumed is consistently higher than domestic production according to Ismea data. Apparent human consumption, which is calculated according to the formula (production+imports-exports), settles at a per capita level around an average value of 7.5-8 kg.

According to data reported by ISTAT, each Italian household spent an average of around EUR 14[14] on the purchase of products related to the oils and fats category in 2020-2021. The annual value is therefore around 170 euros, of which about 70%[15], as estimated by Coldiretti again based on ISTAT data, was spent on the purchase of olive oil.

There are three main uses for which olive oil is put by consumers (ISMEA & Mipaaf, 2018):

- Condiment: with raw food;
- Ingredient: within preparations, with a preference for the low to medium price range product;
- Gift: increasing trend especially in the northern regions. Denoting a different perception that consumers associate with the product, quality oils obtain a characterization similar to that already enjoyed by wine.

The main place where olive oil consumption takes place is within the home, while about one-third of the total meets the final consumer through ho.re.ca. channel.

[13] https://www.repubblica.it/economia/rapporti/osserva-italia/mercati/2021/09/10/news/olio_italia_prima_al_mondo_per_i_consumi_ma_il_50_degli_italiani_non_riconosce_la_qualita_-317271828

[14] http://dati.istat.it/Index.aspx?QueryId=16826

[15] https://www.teatronaturale.it/pensieri-e-parole/associazioni-di-idee/38541-aumento-consumi-diminuzione-produzione-olio-oliva-italiano.htm

It has already been pointed out that the preferred channel for purchase is through the large-scale retail trade, followed however by a notable relevance of direct purchase in oil mills. In addition to the two channels already mentioned, there are two others, whose contribution, however, is marginal, and they are the oil stores and e-commerce.
Contrary to what one might think, consumers, perceive and associate different attributes with different purchasing channels (ISMEA &. Mipaaf, 2018):

- GDO: is perceived as synonymous with the great variety of products on offer.
- Oil mills: they signal to the consumer a guarantee of the origin of the olives and oil.
- Oleoteche: they are specialized shops, like wine shops as regards the marketing of wine, and rarely spread throughout the territory. They are associated with the sale of niche oils, whose quality is associated with high costs.
- E-commerce: they are subject to a kind of transversal resistance and mistrust that affects not only consumers but also the producers themselves.

Consumer behaviour, at the point of sale, is related to the quality and variety of the assortment they find on the shelf in front of them: the greater the latter, the greater the time needed to make their choice.
The long time (ISMEA & Mipaaf, 2018) (range from 2 to 5 minutes) dedicated to the choice represents an opportunity for companies to capture, better than their competitors, the attention of consumers through clear and captivating labels.
After what has been said, however, it must be emphasized that tracking oil sales in Italy is a complex process due to the consistent use of bulk products that many households make. The reference is to self-production or direct purchases at oil mills or farms.
The main competitors intended as substitutes threatening the sales and consumption of olive oil are other oils and fats of both vegetable (e.g. hemp, flax, rice, sesame, maize and peanut oils) and animal (e.g. butter) origin. The reasons for substitution are often insufficient knowledge of the beneficial properties of olive oil, sometimes associated with a low level of education, and limited economic availability.
The intangible heritage that olive oil represents for Italy is very often not understood by consumers, partly due to a lack of organization within the supply chain to exploit its potential by communicating it. This disorganization is the result of a predominantly small company size and thus, many times, a consequent lack of economic resources, necessary to activate such initiatives.

According to an Ismea analysis, Italian consumers have little knowledge of olive oil, regardless of their geographical area of residence. The most evident gaps are in terms of awareness: of the differences between product categories (extra virgin, virgin and olive oil), the relationship between organoleptic characteristics and cultivars, and the health benefits (ISMEA & Mipaaf, 2018).

Other trends, in addition to the previous ones, that emerged from the study are confused about the value of brands (geographical indications, organic), the association between quality and product origin, increased confidence in buying a safe product and the search for direct contact with the producer (ISMEA & Mipaaf, 2018).

Despite the lack of clarity that lurks in the minds of consumers, some recurring factors that are analysed during the purchasing process can be identified, they are (ISMEA & Mipaaf, 2018):

- The origin of the product and the raw material: oil with a national origin is favoured over foreign oil. The strictly regional origin of some oils is perceived and remunerated as synonymous with quality, especially by the younger and middle-income brackets.
- Price: it is subject to particular attention especially when the oil is used as an ingredient and by young and low-income consumers;
- Brand: its relevance increases as the price of the product in question decrease, for consumers it represents a reliable indication of standardized quality and taste;
- Taste: preferences in this area are varied, but those oils that state their taste on the label and offer indications of possible culinary pairings are highly appreciated by consumers;
- Colour: responds to subjective criteria because it is not associated with technical or scientific evaluations. The choice can vary between a soft colour and a more intense green colour, plus the possibility of it being more or less cloudy;
- Label and packaging: the first information that catches the attention of consumers is the place of origin and if the labelling is unclear, consumers will be discouraged in their choice. There is a growing interest in attractive packaging.

Consumers are therefore interested in olive oil, but to maximise their potential, institutions and companies need to invest more in communication or innovative marketing attractions.

According to Ismea's report on domestic consumption 2/2022, the most decisive driver in the purchase of olive oil is the origin of the raw material (66%), followed by organoleptic qualities (20%) and brand (10%).
The elasticity of demand to price increases is weak, as the same report shows that purchases in terms of quantity of olive oil will continue to be the same.

1.2.5.1 CHANGES IN CONSUMPTION DUE TO THE COVID-19 PANDEMIC

With the spread of the Covid-19 pandemic in the early 2020s, the way consumers approach food has changed. Food is no longer seen as a mere means of satisfying one's physiological needs, but as a tool through which one can improve and maintain one's state of health. Confirmation of this can be found in the growth in demand for extra virgin olive oil in 2020, around 12%.
The Ho.re.ca distribution channel suffered a heavy slowdown due to the government restrictions applied so far in the early phase of the Covid-19 Pandemic.
Looking now at the supply side, however, it is necessary to emphasize that not all companies within the production system have been equally affected by the health emergency. The companies that have suffered the greatest damage are the small to medium-sized ones that often have no commercial relationship with the large-scale retail trade and have suddenly seen their orders from Ho.re.ca.
The Coronavirus also created difficulties with the labour needed for the olive harvest. Restrictions on travel caused delays and difficulties in finding the necessary labour force.

1.3 ALTERNATIVE SUPPLY CHAINS

The often uncontrollable uncertainty that characterizes every olive oil production year has pushed the production system to focus on quality rather than quantity.
To revive the olive oil sector, to revitalize it on an ongoing basis, a strategy of differentiation has been adopted. It is implemented through the participation of companies in alternative supply chains such as Geographical Indications (GI) or organic production, also thanks to the institutional support provided to them.

1.3.1 PGO AND PGI

The choice that the consumer, particularly in Italy as the world's leading consumer country[16], must make when purchasing olive oil may not be so simple. Large-scale organized distribution, which in Italy accounts for 80% of olive oil distribution channels, very often does not make it easy for the consumer. The main disturbing factors are related to so-called 'Italian sounding', i.e. the reference through the brand or product name to Italian culture by companies that have very little Italian about them, and the increasingly low prices to which even valuable products such as extra virgin olive oil are subject.

The use of designations of origin is a protective instrument, created in Europe in 1992 (EU Geographical Indication system), which guarantees the quality of food products, mainly based on geographical criteria. In 2022, Italy registered 319 geographical indications (GIs) related to the food sector, 49 of which relate to the olive oil category.

The first Italian olive oil to obtain GI status was the Olio Extra Vergine di Brisighella PDO in 1996, thanks to a traceability project started as early as 1975 through which all bottles of oil produced from the olive trees located in the surrounding of Brisighella, a village in the Tuscan-Emilian Apennines, were numbered and self-certified[17].

Olio Campania PGI, on the other hand, represents the next entry into the Italian PGI family of olive oil. The process to obtain the certification was started in 2019 and on 25 November 2022, the application for registration was published in the European Official Journal, which, if unopposed, will lead to the recognition of the mark within the EU. The objective of this certification is to protect extra virgin olive oils that are produced in the Campania region, from olives harvested in the same region.

The weight in economic terms is equivalent to 1% of the total value of production and exports within the food GIs (ISMEA & Qualivita, 2022). Despite the growth in quantities, and overall value, that obtain GI recognition, their weight concerning the entire olive oil sector remains minimal (ISMEA & Qualivita, 2022).

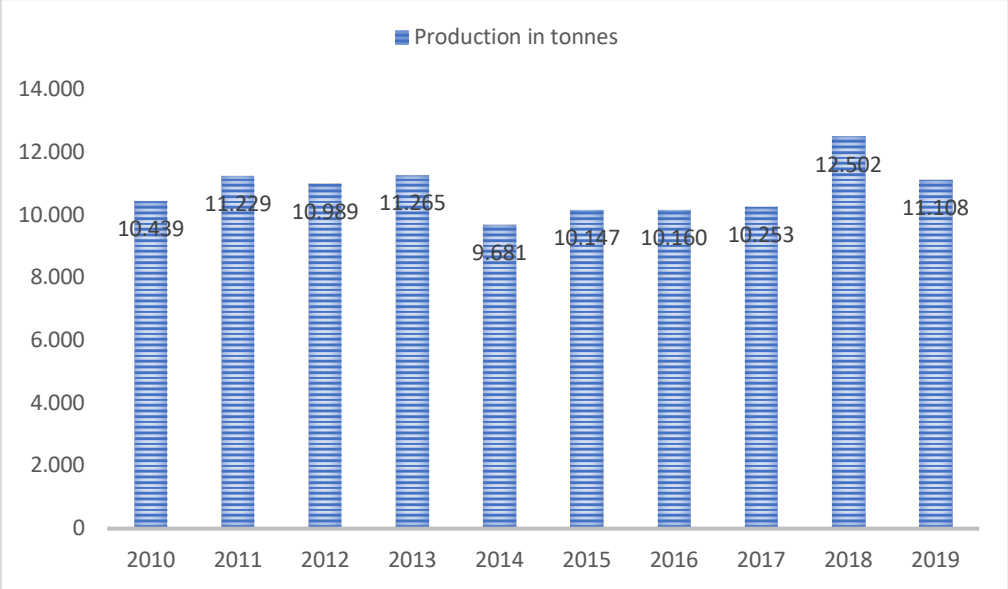
[16] https://www.qualivita.it/news/filiera-olio-dop-igp-la-necessita-di-crescere-prima-che-sia-troppo-tardi/

[17] https://olivoeolio.edagricole.it/olio-dop-igp/olio-terra-di-brisighella-60-anni-eccellenza-percorso-in-crescita/

Image 1.1. PDO and PGI logos

Source: https://www.europeantreasures.eu/index.php/en/pdo-pgi-2

Graph 1.6. Certified Italian Production in tonnes



Source: ISMEA on Certification bodies data

The GIs mentioned above are divided into 42 PDO (Protected Designation of Origin) and 7 PGI (Protected Geographical Indication) oils, to which are added numerous Slow Food presidia.

Certified production is 75%, regarding 2021, from just four PGIs: Toscano PGI, Terre di Bari PGO, Terre di Mazzara PDO and Sicilia PGI.

Table 1.6. GIs production between designations

	PRODUZIONE CERTIFICATA (tonnellate)			VALORE ALLA PRODUZIONE (milioni di euro)			VALORE AL CONSUMO (milioni di euro)			VALORE ALL'EXPORT (milioni di euro)		
Prodotto	2020	2021	Var 21/20	2020	2021	Var 21/20	2020	2021	Var 21/20	2020	2021	Var 21/20
Toscano IGP	2.594	3.076	+18,6%	23	28	+18,6%	39	46	+18,6%	33	41	+25,1%
Terra di Bari DOP	1.930	4.338	+124,7%	7,1	20	+182,8%	16	36	+126,8%	6,2	14	+124,7%
Val di Mazara DOP	926	1.472	+58,9%	5,5	8,4	+53,4%	8,9	14	+56,6%	1,9	3,0	+58,9%
Sicilia IGP	903	1.171	+29,6%	5,5	6,9	+25,1%	8,1	11	+31,6%	0	0	-
Riviera Ligure DOP	439	507	+15,4%	5,3	6,1	+15,4%	8,1	9,4	+15,4%	1,0	1,1	+13,9%
Umbria DOP	542	411	-24,3%	4,5	3,6	-20,9%	7,4	5,8	-21,4%	1,7	1,3	-24,3%
Garda DOP	224	241	+7,4%	2,4	2,8	+15,6%	6,7	7,2	+7,4%	0	0	-
Monti Iblei DOP	299	300	+0,4%	2,1	2,1	+1,1%	4,0	4,2	+4,1%	2,5	2,5	+1,9%
Dauno DOP	362	316	-12,6%	1,3	1,4	+12,9%	2,9	2,5	-12,6%	2,7	1,1	-59,6%
Sabina DOP	151	143	-5,2%	1,4	1,4	-5,2%	2,9	2,7	-5,2%	0,6	0,3	-52,6%
Altri prodotti DOP IGP	1.648	1.356	-17,7%	13	11	-16,2%	19	17	-13,1%	2,7	2,1	-20,3%
Totale Oli di oliva	10.020	13.330	+33,0%	71	91	+27,9%	123	155	+26,2%	52	66	+27,7%

Source: ISMEA – Qualivita 2022

The PDO denomination guarantees that the entire production process takes place in a delimited geographical area, while to obtain PGI it is sufficient that only one production phase takes place in the area indicated in the specification, provided that this phase is essential for obtaining the qualities whose uniqueness is being protected. To obtain certification it is necessary to start a formal procedure in which a recognized third-party body guarantees that the product, the producing company, complies with a pre-established production process and quality standards. Obtaining certification is voluntary, which is why producers are not subject to any legislative obligations.

Nowadays the GI system, concerning PDOs and PGIs, is regulated by Regulation (EC) No. 510/2006, which replaces the previous Regulation (EC) No. 2081/92 and (EC) No. 2081/92[18].

About the production of olive oil, the specification for obtaining the PDO specifies, in addition to the geographical area of interest, also the cultivars that may be used, the period and method of harvesting the olives, the maximum production of olives per hectare, the maximum yield of olives in oil, the type of fruitiness and its characteristic aromas, the intensity of bitterness and pungency, the colour and some chemical

[18] https://icea.bio/typical-products-pdo-pgi-igt-etc/

parameters that are important for the geographical area and usually more restrictive than those required by law[19].

The prices that are applied to GI-guaranteed oils are, in some cases, higher than those of non-certified oils because of the predefined production yields, the organoleptic parameters that must be respected and the cost of obtaining recognition, which is borne entirely by producers.

However, the high number of GIs on Italian territory does not correspond to a high production of the latter, which stands at a few percentage points of the total national olive oil production. A possible answer to the untapped potential of GI olive oil production has to do with profitability. Although it was mentioned above that GI oils are subject to a higher price, this is not the case in all cases. In fact, in some situations, the price of the certified product does not differ substantially from the 'conventional' one, thus intimidating producers as to the real profitability of obtaining the GI.

A possible solution to enhance potential lies in increasing the awareness and knowledge end consumers have of GIs. Increasing and improving the quality of the communication carried out by protection consortia and individual companies is one way to achieve this goal.

1.3.2 ORGANIC

During the most recent decade, the organic sector has experienced high growth both within and beyond national borders, bringing about a change in agri-food policies, consumer choices and the commercial programs of the companies that make up the agricultural supply chain (CIHEAM-Bari & ISMEA, 2022).

The core principles of organic farming were developed by the International Federation of Organic Agriculture Movements (IFOAM) and are intended internationally as a reference point and guide on which standards and control systems can then be developed at national and supranational levels. The IFOAM NORMS are as follows

for organic production and processing (2014 version):

- The health principle: organic agriculture must support and improve the health of the soil, plants, animals, humans and the planet as an indivisible whole;

[19] https://www.slowfood.it/dop-e-igp-possono-aiutarci-nella-scelta-dellolio-extravergine/

- The ecology principle: organic agriculture must be based on living ecological systems and cycles, work with them, emulate them and help sustain them;
- The principle of fairness: organic agriculture should build on relationships that ensure fairness concerning the common environment and life opportunities;
- The principle of care: organic agriculture should be managed in a precautionary and responsible manner to protect the health and well-being of current and future generations and the environment.

Globally, organic olive cultivation ranks as the sixth largest of all organic crops with an area occupied of 882,899 hectares in 2017, an increase corresponding to +135,259 hectares over the previous year (Lernoud et al., 2019). Within the category of permanent crops alone, however, it ranks second, behind only organic coffee cultivation.

Organic olive growing in Europe, like all such products, is today regulated by Regulation (EU) No 2018/848, which legislates the rules of organic production and labelling of organic products. This regulation enters into force on 1 January 2022, repealing and replacing the previous legislation (Regulation (EC) No 834/2007).

To obtain organic certification, it is necessary for the farm concerned to undergo a conversion period, in which it is conducted according to organic production standards, although the fruit produced during this phase is not considered organic. Products can therefore only be distributed on the market as organic at the end of the conversion period.

Within the more general discourse on the olive-oil sector in Italy, it is not possible to omit the discussion of the organic segment given its importance in terms of extension: organic olive growing represents the third largest crop after fodder crops and cereals[20].

The most recent survey, by Certification Bodies, on national organic olive cultivation is dated 31 December 2019 and shows how the latter represents 21% of the total area occupied by olive trees for oil production (ISMEA, 2021). The part of the total that is in the conversion phase corresponds to 16.2% of the entire area allocated to organic olive cultivation. The area allocated to organic table olive production is minimal.

[20] https://www.ismeamercati.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/12012

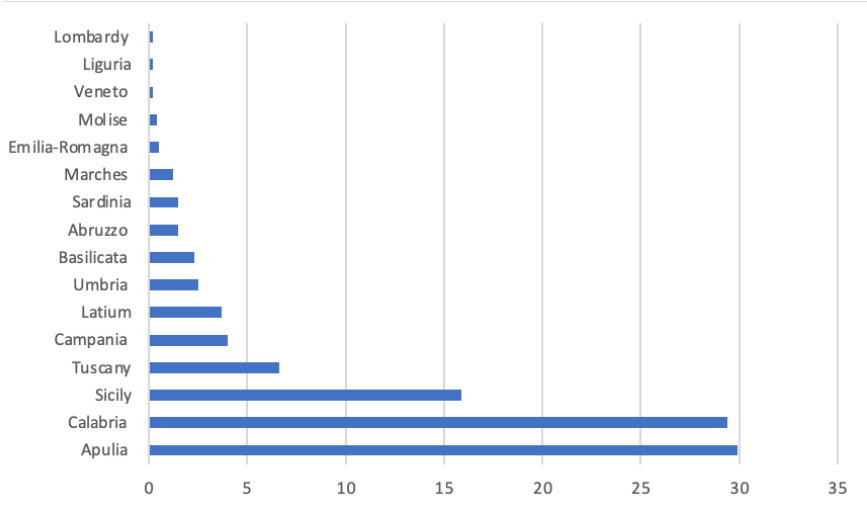
Table 1.7. Olive oil: organic areas in Italy in hectares

Surface Italy	Under Conversion	Converted	Total organic
Olive tree	39.434	203.273	242.708
Table olives	118	1.149	1.266
Olives for oil	39.317	202.125	241.441

Source: SINAB data

During the ten years from 2010 to 2019, a 98% increase, almost a doubling, of the organic area occupied by oil olives was shown (ISMEA, 2021) The increase in area was recorded in all Italian regions except Valle D'Aosta and Friuli-Venezia Giulia. In percentage terms, Lombardy, Apulia and Campania sustained the largest increase (ISMEA, 2021).
Speaking now in absolute terms, and no longer in relative terms, the distribution over the national territory sees the same regions as those of conventional olive growing: Apulia (72,282 ha), Calabria (70,981 ha), Sicily (38,389 ha), Tuscany (16,036), Campania (9,643 ha), Latium (8,921 ha) and Umbria (6,151 ha) (ISMEA, 2021).

Graph 1.7. Breakdown of organic olive grove areas on the total by region (%)



Source: SINAB data

In Italy, the number of farms with certified organic land is, as of 2019, 42,588, compared to 646,326 reported as conventional (ISMEA, 2021).

Table 1.8. Companies in the industry, conventional and organic report for the year 2019

	N. companies	Surface ha	Olive oil production	Average surface
Olive growing	646.326	1.164.568	366.469	1,8
Organic olive growing	42.588	241.441	45.988	5,7
Organic-conventional ratio	7%	21%	13%	315%

Source: elaboration ISMEA-RRN on ISTAT data; Agea; SIB

From the same year are data on the average size of olive farms operating in the organic segment. Organic farms are three times larger than conventional ones, with 5.70 ha on average compared to 1.80 ha, and are more frequently professionally run (ISMEA, 2021). Organic certification is obtainable not only at the farm level but can also be extended to the subsequent stages in the chain. Organic preparers are referred to as those who are in charge of the processing stage. In 2018, 1733 organic mills were registered in SIB (Sistema Informativo Biologico) and 1733 organic crushers (SINAB, 2021).

They are understood as mills indicating their willingness to use, on a continuous or cyclical basis, facilities for the production of certified organic oil.

The price charged for organic oil is higher than for conventional oil, although the general trend of the two can be likened to each other. However, fluctuations are more pronounced due to the ban on intervention to limit the damage caused by weather events or harmful insects.

In general terms, the structure of the organic segment traces the traits of the sector as a whole: a few competitive and large companies contrasted with a large number of small competitors often relegated to marginal positions in the market.

Three supply chain models can be identified regarding organic olive oil in Italy (SINAB, 2021):

- Short Chain: farms distribute directly what they produce, without the use of intermediaries, including through the use of e-commerce. These entities usually do not own their oil mill so they rely on third-party facilities for milling the olives, instead, they own modest facilities for bottling.

- Millers' chain: the mills purchase the olives from the farms for subsequent milling. The next stage may be the sale of the oil obtained in bulk to bottling companies or self-packaging and then distribution.
- Industrial Chain: the key actors in this model are the bottling companies. The latter buy the oil in bulk from mills or directly from farms and then market the oil under their brand or the brand of modern distribution.

The distribution of flows among the three models weighs disproportionately in favour of the Industrial Chain from which about 85% of all organic oil produced transits (SINAB, 2021). A marginal role is reserved for the Millers' Chain and the Short Chain, with 11% and 4% respectively (SINAB, 2021).

1.3.2.1 NATIONAL ORGANIC OLIVE OIL PRODUCTION

To analyse the national production of organic olive oil, we consider the report prepared by ISMEA in 2021 which analyses the chain of organic olive oil, in the period between 2017 and 2020.

The 2017/2018 olive oil campaign saw the milling of 211,980 tonnes of olives for the production of organic oil. This quantity represents only 25% of the total organic oil olives harvested during the season. The large difference between the two figures, therefore, represents an untapped potential for farms, often small to medium-sized ones, to increase their organic olive oil production. Of the total volume of olive oil produced in Italy, organic accounted for 9.3% (40,099 t), while in value terms it represented 14.7% (€ 237,971,375).

The following olive oil campaign, the one referring to the 2018-2019 period, is not considered significant due to the low production affected by the adverse weather conditions.

Instead, it is relevant to report the data that emerged in the 2019-2020 campaign. Organic oil production was estimated at 45,988 tonnes, an increase of 15% compared to the 2017/2018 period. This increase is supported by two main factors: over the years, the agricultural areas allocated to organic olive growing have increased and the year under consideration enjoyed better weather conditions than the reference year.

In volume terms, organic production in the 2019-2020 campaign is equivalent to 12.5% (45,988 t) of the total, while in economic terms it corresponds to 14.05% (€ 193,149,600).

1.4 INTERNATIONAL CONTEXT

Olive oil production, as is well known, is concentrated in the Mediterranean basin, specifically, Spain and Italy account for almost all world exports, with 60% and 20%, respectively (ISMEA, 2021), joined by Tunisia, Greece and Portugal.

Regarding production, on the other hand, Italy ranks second (15%) globally behind Spain (45%). Italy's role is also relevant on the import front, being one of the largest customers, with one-third of the total, followed by the United States (ISMEA, 2021).

1.4.1 INTERNATIONAL CONSUMPTION

Data on world olive oil consumption and production are made available through the work of the International Olive Council (IOC), as the only intergovernmental organization uniting producers, consumers and operators in the olive oil and table olive sector. The organization was founded in Madrid, Spain, in 1959 under the leadership of the United Nations and today has the participation of 45 states.

Italy is one of the founding countries, together with Belgium, France, Greece, Portugal, Spain and the UK, and contributes with the rest to the responsible and sustainable development of olive growing, the mission of the IOC[21].

Olive oil consumption, like production, is a typical characteristic of countries around the Mediterranean basin. According to data reported by the IOC, 50.8% of the global quantity of olive oil is consumed by EU member states. In first place is Spain (17.8%), followed by Italy (16.2%) and Greece (4%). Outside the borders of the Union, but still overlooking the Mediterranean, we can count Turkey (5.5%) and Morocco (3.9%). Another country that deserves a mention for its conspicuous consumption is the USA with 10.7%, despite the very low national olive production and tradition.[22]

[21] https://www.internationaloliveoil.org/about-ioc/mission-basic-text/

[22] https://www.internationaloliveoil.org/wp-content/uploads/2020/05/IOC-Olive-Oil-Dashboard-Apr-2020-rev1.html#consumption-1

The global picture regarding production is not different from that previously highlighted by consumption, with some nations playing an important role in both areas. The European Union dominates the global scenario producing, according to IOC data 64% of the world's olive oil, which corresponded to 2,011 tones in 2019[23].

Again referring to the 2019/20 production year, within the EU we find Spain (39%, 1,230,000 t), Italy (10.8%, 340,000 t), Greece (9.5%, 300,000 t) and Portugal (4%, 125,000 t). Outside the EU, however, Tunisia (9.5%, 300,000 t), Turkey (7.2%, 225,000 t), Morocco (4.6%, 145,000 t) and Syria (3.8%, 120,000 t) are noted for their high production levels.

Not all the states that consume the largest quantities of olive oil are also their respective producers, this is the case for example of the US highlighted above to which other trade dynamics are added. To reach an equilibrium condition at the level of individual states, they have to resort to imports and exports.

Overall, the EU member states absorb 17.2% of total global olive oil imports, with Spain (17.2%, 171,000 t) and Italy (9.2%, 92,000 t) always in the lead.

The US, mentioned above, dominates the non-European import market with 31.7%, equivalent to 315,000 t in 2019 followed by Brazil (9.0%, 90,000 t), Japan (7.5%, 75,000 t) and Canada (4.7%, 47,000 t)[24].

International trade in olive oil is regulated by international agreements that have the aim of creating economic and social relations and fostering international cooperation.

1.4.2 ITALY'S TRADE BALANCE

According to Coldiretti surveys, in 2022 Italian olive oil exports increased by 23% compared to the previous year, despite the negative impact suffered due to climate change and the slowdown in international trade caused by the war in Ukraine.

The main foreign market for Italian oil is the United States, accounting for 62% of the total value, followed by Germany, France, Japan and Canada[25].

[23] https://www.internationaloliveoil.org/wp-content/uploads/2020/05/IOC-Olive-Oil-Dashboard-Apr-2020-rev1.html#production-2

[24] https://www.internationaloliveoil.org/wp-content/uploads/2020/05/IOC-Olive-Oil-Dashboard-Apr-2020-rev1.html#imports-2

[25] https://www.coldiretti.it/economia/export-vola-lolio-italiano-nel-mondo-23

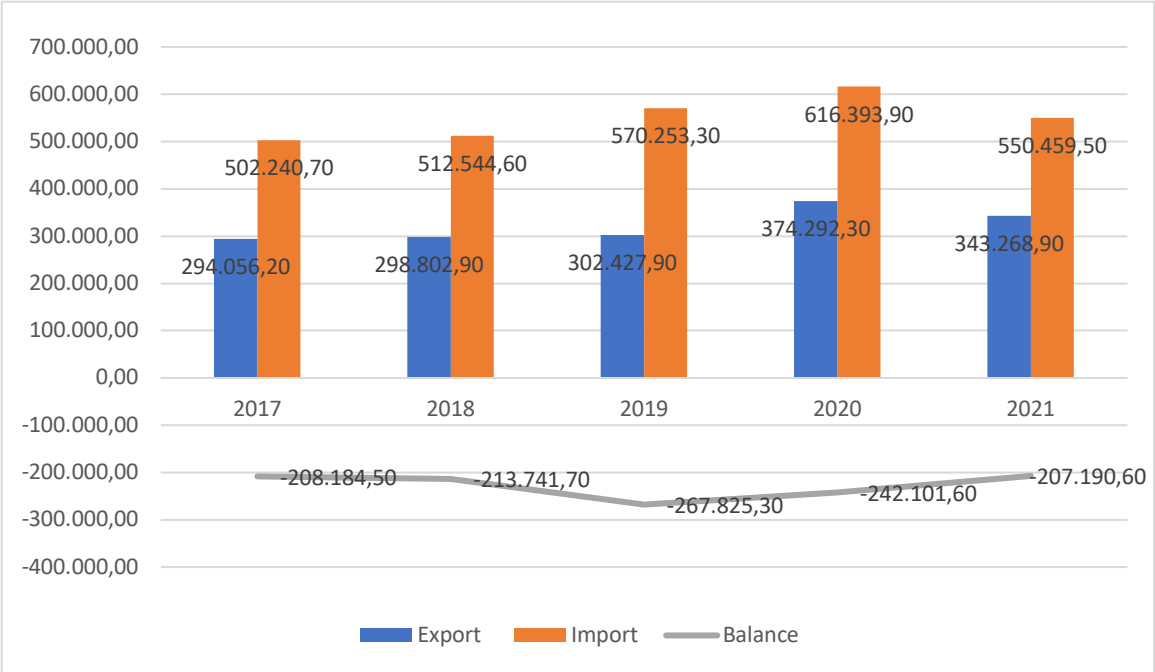
The substantial international demand for Made in Italy olive oil is supported by the rich biodiversity of olive trees on Italian soil, which translates into the presence of as many as 49 GIs.

As already mentioned, Italy also occupies one of the first places in the ranking for imports, therefore synonymous with non-self-sufficiency. The need to import olive oil from abroad is because domestic consumption is steadily higher than production, and the situation is aggravated by high export quantities.

Thanks to data made available by ISMEA, it is possible to observe how the trade balance expressed in quantity (tones) for olive oil in Italy is perennially negative, considering the period between 2017 and 2021, the last year for which data are available. This means that imports from foreign countries are higher than the quantities exported.

The negative trend characterizing the balance in quantities can also be translated to its counterpart in value, imports in value exceed exports expressed in the same unit of measurement.

Graph 1.8. Italy olive oil trade balance in quantity (t)



Source: ISMEA Mercati

The category of olive oil that is most imported is extra virgin, followed by virgin and lampante. The same order can be attributed to Italian olive oil that is exported to the world (ISMEA, 2021).

Most of the olive oil that is imported comes from within the borders of the European Union. In general terms, the main Italian suppliers are Spain, Greece, Tunisia and Portugal. The situation with Italian olive oil exports is different. The largest quantity is destined for non-EU countries, and the main recipients include the USA, Germany, France and Japan (ISMEA, 2021).

CHAPTER 2 – PAST TO PRESENT OF FOOD COMMUNICATION

2.1 THE EVOLUTION OF MARKETING

The discipline of marketing has its roots in the past, a not so distant past since it coincides with the beginning of the 20th century, as a consequence of the advent of mass industry. In spite of its deep connection to the society in which it developed, the Fordist society linked to standardized products, marketing enjoys characteristics of flexibility and adaptability that allow it to still be an indispensable tool for the business of companies today. American economist Philip Kotler has come up with a modern definition of the concept that allows to fully understand the meaning of this discipline today:

"The marketing concept supersedes the older concept that marketing is the task of selling whatever the company makes. The new marketing concept reverses the logic and calls on the company to make what it can sell. The marketing concept calls for the identification of areas of unsatisfied customer needs. It calls for seeking profits through the creation of want-satisfaction. It calls for coordinating all the company functions that impinge on the costumer."

(Kotler, 1965)

The first step that companies must take in order to be able to operate what Kotler theories is the elaboration of a marketing strategy, which includes as essential steps those of market segmentation, the identification of the target audience and the choice of positioning.

Moving downstream in the marketing process, companies are faced with planning the marketing mix. It consists of a series of marketing tools that can be designed, managed, controlled and harmonized by the company in order to achieve the desired reactions within the target market (Ancarani et al., 2019).

Hence, the wide variety of tools that can be used can be traced back to four macro areas, called the 4Ps:

- Product: the combination of goods and services that the company offers to customers,
- Price: the amount of money that customers have to pay when acquiring the product;

- Place: are understood to be all the activities that the company puts in place to make the product available to customers;
- Promotion: set of activities focused on communicating the merits and characteristics of the product to customers with the aim of inducing them to purchase the product.

2.1.1 TRADITIONAL MARKETING COMMUNICATION CHANNELS

Having developed a stunning marketing mix is not enough, companies must now be able to communicate it to their target audience as efficiently and effectively as possible. At this point, the choice of a communication channel through which to spread one's message becomes crucial. In recent times, this choice has become a challenging task for marketers who have seen the emergence of new and unusual channels of communication, mostly due to the disruptive spread of digital technologies that now characterize many aspects of the daily lives of both consumers and companies.

Advertising is the most widely used form of communication and is defined by Richard and Currant (2002) as "a paid, mediated form of communication from an identifiable source designed to persuade the recipient to take some action, now or in the future". Despite its widespread use, it has become evident in recent times that the reaction of consumers to advertising has diminished and as a consequence, it has a reduced impact on their buying behaviour (Abideen et al., 2001).

Since communication, traditionally, is based on a message issued by a sender and directed to the attention of a receiver, it is necessary to carefully consider which channel each of the two parties prefers. The sender of the message has his prediction of the best channel of communication (D'Ambra et al., 1998), the same goes for the receiver and his preference.

To increase the effectiveness of an advertisement, it is necessary to convey it through the appropriate communication channel. In this regard, what was mentioned earlier about the modification of the media used to convey communication is taken up again.

The channels considered traditional through which communication is carried out are:

- Television advertisements: for many years it was considered a glamour-advertising medium (Baack & Clow, 2012). Despite its declining audience it

remains necessary to easily reach millions of consumers at a low cost per contact. Using this medium as a communication channel allows you to communicate directly with your chosen target audience, finding the right program or broadcast channel according to their preferences (Baack & Clow, 2012).

- Radio advertisements: have a low implementation cost in relation to the wide coverage they can reach. It allows you to communicate to your target audience thanks to the possibility of choosing between different radio stations, each with its own reference public (Dhar & Winer, 2010). It is highly effective, especially at times when consumers are travelling between home and work, and vice versa, and during those times they cannot do anything else but drive and listen to the radio (King et al, 2011).
- Newspaper advertisements: one of the oldest traditional communication channels, in use for centuries. This printed medium facilitates subsequent communication through other means (Belgaonkar & Dash, 2013). It has greater information power than other modes (Gurevitch et al., 1973) because it allows more information, data and images to be conveyed. It makes it possible to reach a wide audience of consumers through the daily or periodical distribution of newspapers.
- Outdoor advertisements: through this channel, communication tries to attract the attention of consumers, even if they are busy with other activities, creating an uneasy forgettable impression (Kumar, 2012). The advantages that are proposed in support of this technique are its geographic flexibility, economic efficiency, and the high frequency with which it can be exposed to consumer attention (Al-Abdallah & Sahar, 2020).ù

The communication channels listed all belong to a category of one-way communication, typical of mass media, which refers to so-called conventional marketing.

Traditional or conventional marketing stands for a non-digital way of promoting a product or service carried out by a business entity (Aini et al., 2022). Its primary objective is to create brand awareness in consumers without seeking to establish a real relationship with them, which is why it is considered unidirectional.

2.1.2 THE DIGITAL REVOLUTION

The world we live in is increasingly 'digital', in every aspect, including the world of business and communication.

Digital transformation has had as its main consequences: an increase in technology, and its level of complexity, that now characterizes people's lives, and the intensity of connection that characterizes interpersonal relationships, thanks to a wide range of communication channels that can be exploited for personal communication, advertising, sharing, social networking and even learning*.

As a massive trend, digital is dragging with it the behaviour of companies that want to remain competitive in their industry. In this scenario, companies have two options: 'disrupt' or 'be disrupted'. The first hypothesis implies changes at the strategic level, including a reorganization of the marketing strategy, following a digital approach.

The digital transformation, which came to be known as the Third Industrial Revolution, has manifested itself over time in different phases, which are distinguished by the disruptive impact they have on business processes. The most primitive phase, as well as its driving force, is 'digitisation', which refers to the transformation of analogue information by encoding it in zeros and ones so that it can be stored, processed and transmitted via computer[26]. Examples of digitisation can be found within companies for decades, the best known being the conversion of handwritten or typewritten texts to a digital version produced using a computer. This process exploded with the development of information technology in the twentieth century.

Examples of digitisation have been present in companies for decades, the best known being the conversion of handwritten or typewritten texts into a digital versions produced by a computer. To give a stronger idea of the pervasive impact that digitisation has had, one can consider the fact that in 1986, 99.2% of the world's storage capacity was analogue and by 2007, 94% of the world's information storage capacity had shifted to digital[27].

The next step is 'digitalization' or 'the use of digital technologies to change a business model and provide new revenue and value-producing opportunities' according to the Gartner Glossary[28]. This phase coincides with the increasing deployment, to the mass

[26] https://www.forbes.com/sites/jasonbloomberg/2018/04/29/digitization-digitalization-and-digital-transformation-confuse-them-at-your-peril/?sh=2ada4ab02f2c
[27] https://www.sap.com/insights/digitization-vs-digitalization.html
[28] https://www.gartner.com/en/information-technology/glossary/digitalization

market, of technologies such as cloud computing, machine learning, artificial intelligence, business intelligence and the Internet of Things over the last decade[29].

One of the major implications of digitalization has been automation, both in terms of shifting working roles and a generic transformation of business processes[30].

2.1.3 DIGITAL MARKETING

Digital marketing has the same objective as traditional marketing, namely the promotion of goods and services, but using digital technologies. This new avenue has substantially changed the approach of companies to communication technologies.

A fundamental step in the historical journey of digital marketing can be identified in the year 1971, when Ray Tomlinson, an American programmer, invented email, which allowed people to exchange data with each other at a distance. The clear beginning, however, of the digital marketing era is made to correspond with the year 1991 when the Archie browser was developed as an archive of File Transfer Protocol Pages (FTP) (Puthussery, 2020).

From this point onwards, computer memories began to be large enough to accommodate large amounts of consumer data and companies began to evaluate the potential, albeit primitive, of digital strategies. an example of this is the use of advertising servers, at the expense of limited list brokers, as databases that allowed companies to handle their customer data more efficiently (Puthussery, 2020).

In the 1990s, the term Digital Marketing was coined for the first time, and from this period onwards, the discipline will increasingly broaden its scope in line with technological developments to the modern days.

The main characteristics of digital marketing can be summarized as ease of access, competitive edge and efficiency (Puthussery, 2020).

The fundamental objective of digital marketing is to satisfy the new needs of consumers by catering to them. Therefore, in order to remain competitive, companies must identify the creation of experiences, connection and strong customer relationships as the goals of their communication activities. Due to the new objectives that the digital revolution has

[29] https://www.sap.com/insights/digitization-vs-digitalization.html
[30] https://www.forbes.com/sites/jasonbloomberg/2018/04/29/digitization-digitalization-and-digital-transformation-confuse-them-at-your-peril/?sh=2ada4ab02f2c

placed at the top of companies' priorities, the traditional marketing mix based on the 4Ps is obsolete. In order to achieve the goals, set, a contemporary elaboration of the classic model is necessary, which is characterized by the replacement of all four elements to achieve the 4Es[31]:

- Experience rather than Product: services and products are no longer sufficient to meet the increasingly experience-oriented demands of consumers.
- Exchange instead of Price: price is no longer the key discriminator in product choice, consumers are willing to pay more in exchange for a slice of brand's worth.
- Everyplace rather than Place: the distinction between the physical and digital worlds is now minimal and for this reason the consumer's search for experience takes place in both environments, omnichannel is therefore a prerequisite.
- Evangelism rather than Promotion: nowadays, consumers are often wary of advertising. Instead, the greatest effectiveness is achieved when consumers themselves or people working within the company voluntarily do brand advocacy.

The possibilities offered by digital marketing are numerous, and so are the subcategories into which it can be divided.
Some of the major application areas of digital marketing are:

- Search Engine Optimization (SEO): This mode of digital marketing aims to position the considered company among the top positions in Google search results and thus increase search engine traffic to its website.
- Pay-Per-Click (PPC): refers to paid advertising and promotion of search engine results with the aim of increasing website traffic. Its focus is short-term and its implementation is completely dependent on payments. Its classical manifestation is via banner advertisements.
- Social Media Marketing: encompasses the entire set of activities that companies carry out via social media, following a strategic and integrated approach that goes deeper than the creation of posts merely. This type of marketing, to be effective, must be carried out in coordination with the other activities of this type that the company carries out, to convey a coherent message.

[31] https://davidpaulcarter.medium.com/the-4ps-are- out-the-4es-are-in-9399b91549ec

- Content Marketing: its purpose is to increase brand awareness with storytelling and information sharing to build a solid relationship with the reader that will then drive him/her to take an action to become an actual customer. The term 'content' refers to a set of deliverables such as blog posts, papers and e-books, videos and podcasts.
- Email Marketing: can be partially subsumed within content marketing and aims to have valuable communication with customers and to convert a target audience into customers over time. To make their emails more effective, marketers can create a sense of urgency, personalize them and let subscribers set their own preferences[32].
- Mobile Marketing: refers to that branch of digital marketing that aims to get in touch with its target audience from smartphones or tablets. This is achieved through text messages, social media, websites, emails and applications for mobile devices[33]. Geographical location or time of day can be used as a discriminator to create and propose tailor-made content.
- Marketing Analytics: is that part of digital marketing that today allows consumer behaviour to be tracked with a high level of detail, such as how many times they click a link, the time spent on a web page and much more. The huge amount of information and data that can be found in this way can be filtered, metabolized and used as a learning tool by companies.
- Influencer Marketing: also known as affiliate marketing is used by many companies as a tool to narrow the gap between themselves and consumers. It does this by using the reputation of industry experts or social media influencers to collaborate with companies and promote, through content creation, their products in return for financial compensation.

From its first appearance in an embryonic state to the present day, the progress of digital marketing has followed a parallel course with the development of digital technologies, such as the sophistication of the internet and the emergence of social media, which can support this new mode of communication.

[32] https://www.snhu.edu/about-us/newsroom/business/types-of-digital-marketing
[33] *Ibid*

The growth of the digital world continues today and is registering even higher rates than before the pandemic. The annual Digital 2022 Global Overview Report, conducted by We Are Social and Hootsuite, provides a clear picture of the state of the digital world today.
In order to build an overview, it is useful to present some macroscopic data, starting first with the global population, to better understand the scope of the digital phenomenon by analyzing it in relative terms.
At the beginning of 2022, the global population reached 7.91 billion, with an annual growth rate of just under 1%, of which just over half live in urban areas. 67% of the population, corresponding to 5.31 billion, own and use a mobile phone, registering a positive sign of +1.8% compared to the previous year (Hootsuite, 2022).
Another revealing fact mentioned in the report by We Are Social and Hootsuite is the number of internet users, which is quantified at 4.95 billion in 2022. This figure was half the size in 2012 and this increase over time represents significant possibilities for the advancement of digital marketing, particularly for web marketing, i.e. the branch that uses the internet to communicate and market products to the public. It is also worth emphasizing how, in addition to the increase in the number of users, the average time spent on the internet by users has also increased, reaching almost 7 hours, and also the percentage of access via mobile phones, which in 2022 will represent 92.1% of total access (Hootsuite, 2022).
Those just mentioned are the foundations on which the success of digital marketing has been built and developed in recent years.
Another subset of digital marketing that deserves mention for its growth is social media marketing. This progress was supported in the decade 2012-2022 by a massive increase in social media users more than tripling to 4.62 billion in January 2022 (Hootsuite, 2022), with an average annual growth rate of 12%. Factors such as the increased amount of time users spend on social platforms also contributed to this growth, with each consumer using an average of 7.5 social platforms per month (Hootsuite, 2022).
The maximum potential of social media marketing, as of digital marketing in general, can be considered as not yet reached also since social users globally represent 58.4% of the world's population, still leaving ample scope for growth.

2.2 FOOD MARKETING

Food is not simply food: the role it plays in people's daily lives and the importance attached to it make it much more than just nourishment. For this reason, food marketing has developed as a category within the vast world of marketing and now enjoys and now enjoys considerable relevance.

As a definition, food marketing links the producer to the consumer and includes the whole range of activities that take food from the 'farm gate to the plate'[34]. This process can include many different producers and companies and is subject to a dynamism over time that causes changes in it.

Examples of this are the three historical phases that food marketing in the US has gone through. Three phases can be identified, each with its characteristics: The Fragmentation Phase (before 1880), the Unification Phase (1880- 1950), and the Segmentation Phase (1950-on).

Marketing is fundamental to every type of business, from the small local producer to the large multinational food company. It can be done in a variety of ways such as creating bonds with customers, boosting brand equity, new product development, promoting them via advertising, and even paying grocery shops for important shelf space, all to boost sales[35].

Traditionally, it is possible to look at food marketing under two different interpretative keys. The production-focused view is an institutional one and mainly concerns producers and the institutions working with producers. this represents the classic and more primitive agricultural view of food. These actors, who are usually close to the area where the production of the product takes place, focus on improving production efficiency and then facilitating the sales process. According to this perspective, marketing is understood primarily as a distribution activity where the product is passed on to the institution occupying the next position in the chain.

The determining factor in the choice of food to produce is the understanding of the demand expressed by consumers, a process that increases in complexity as the distance between consumers and producers increases.

If the product is a commodity or comes close to being one, the producer loses some of the control he exerts over its price due to the good's undifferentiation.

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[34] https://www.foodsystemprimer.org/food-and-nutrition/food-marketing-and-labeling/

[35] *Ibid*

The second mode focuses on consumers and aims to understand their exact needs so that the companies involved in the supply chain can extract as much value from them as possible. In contrast to production focus, the latter allows greater flexibility and enables companies to develop skills that enable them to anticipate consumer demand. This latter approach is typical for companies operating in the consumer packaged goods industry, although over the years it has gained relevance among commodities.

2.2.1 BASIC ELEMENTS OF FOOD MARKETING, ACCORDING TO THE CONSUMER FOCUS APPROACH

To meet consumers' needs, it is necessary, as a preliminary step, to understand their needs and identify the elements they have in common, to generate a unified response. Segmentation, targeting and positioning are the key steps to achieve this.

The first step is to identify those groups of consumers who have common characteristics with each other. There are many criteria for doing this and the four most used are:

- Behavioural segmentation sells based on the response consumers have towards the product, such as the benefits sought, purchase occasion, purchase behaviour and frequency of usage.
- Psychographic segmentation is related to lifestyle, personality and values.
- Demographic segmentation is based on a statistical description using objective criteria of the chosen population such as age, gender, life phase, education and income.
- Geographic segmentation assumes that consumers in the same location have similar needs and want and they are grouped by region or location, confident state, climatic zones, size of the cities, and population density.

However, those just listed are not the only segments that can be identified. The agri-food sector is not immune to fashions and trends that influence consumers and hijack their preferences and choices. There are constantly new segments emerging whose importance should not be underestimated. Grunert identifies these as new segments: sustainable and responsible consumers, environmental consumers, bio consumers, functional consumers, animal-friendly consumers, private label powers and many others.

Next is the choice that has to be made is that of targeting, i.e. deciding on the single segment, or multiples, on which the company concentrates its efforts.

The last step, positioning, is to create a product that is attractive in the eyes of the chosen segment.

This is done by using a tool formed by four levers that form the so-called marketing mix: product, price, promotion and place.

The 4-Ps that make up the marketing mix are characterized as follows (Wansink, 2008):

- Product: To engage consumer preferences, manufacturers have the option of developing new food products or modifying or enhancing already existing ones. In both possibilities, common steps can be identified which are followed in the process and which correspond, in order, to the creation of possible ideas, the selection of the best ideas and subsequent attractiveness tests.
- Price: in contrast to the manufacturer, companies involved in the processing of raw materials into finished food products have more flexibility on price. This room for manoeuvre is made possible by the degree of differentiation that can be given by them to the product for final consumption.
- Promotion: the promotion of a food product to the consumer can take place in different places, outside the store, in the store and directly through its packaging.

  Pre-purchase promotion as advertising through the media or print media has the purpose of bringing consumers closer to the product in a positive way so that they go to the store to buy it or recall their image when buying something else. Promotion is an effective tool not only if the consumer is new to the product, but also if they are already familiar with it, to reinforce the positive opinion formed following a purchase.

  An important role is also played by the promotional activities that are activated directly in-store and through product packaging. It is estimated that about 70% of the total food-related purchases that take place there are for brands that the consumer did not consider until the point-of-purchase was reached. The remaining part is represented by purchases that consumers make having already a certain brand in mind. This means that promotion in-store and through packaging is a tool that should not be underestimated.
- Place: indicates what is necessary for the distribution and storage of products from the manufacturer to the place where the consumer can buy them. The combination of the four P's mentioned above, and the relative importance and complexity of each, varies depending on the type of product being considered.

2.2.2 THE EVOLUTION OF FOOD MARKETING

Thanks to the advent of the Internet and the subsequent development of digital technologies, food-related marketing, like that of all other sectors, has also undergone profound changes: not only have the communication channels that are used changed but also what consumers are looking for.

Contemporary consumers do not go for a superficial knowledge of the product they are going to buy but seek deeper and more detailed information in order to ultimately choose the product as responsibly as possible and to really feel part of their food choice. This is why consumer satisfaction is the top priority in the digital world. Therefore brands, in order to remain competitive, must increase their transparency by enabling consumers to satisfy their need for disclosure.

The additional information consumers need today refers to more detailed topics beyond those concerning the product, such as the history of the producing company and its commitment to sustainability, where the individual ingredients come from and what techniques they were grown or bred with. More generally, it can be said, echoing what Mark Cotter, CEO of marketing firm The Food Group, said, that interest in 'what I put in my body' has increased. This information can be found directly by the consumers themselves thanks to the easy accessibility and widespread use of the web. Due to technological progress, which allows free access to information by anyone, and the increased interest consumers take in their food choices, the content of marketing messages from food companies has started to change.

In the late 2000s, with the increasing advent of social media, the focus of marketers is no longer on product placement but rather on creating content through which brands can communicate more directly with their target consumers.

From then onwards, consumers become seekers of their own information and, thanks to digital technologies, can juggle an immense amount of potentially necessary data.

These new technologies have changed the way brands communicate with consumers. The flow of conversation is no longer unidirectional and passively endured by the end customer but occurs through reciprocal exchange.

2.3 FOOD COMMUNICATION IN ITALY

Italy and Italians have a special relationship with the gastronomic world. The great success of Italian cuisine, both within and beyond national borders, is primarily due to the existence of a robust gastronomic culture.

The strength of this culture, its spread and its passing d over time are due, among other factors, to the strong bond that binds Italians to food.

This is supported by what is reported in the 49th Report on the Social Situation of the Country, drawn up by Censis in 2015, which classifies the Italian population into different categories based on their interest in the gastronomic world.

At the base of the pyramid that the report identifies are those who are defined as 'enthusiasts'; they are estimated to be just over 29 million and are people who like to inform themselves and talk about food. The middle level is filled by 'connoisseurs', an estimated 12 million, who are able to knowledgeably discuss recipes, preparation and culinary traditions. The top of the pyramid is occupied by the experts, about 4 million, i.e. people who experience the culinary world professionally, such as chefs, gastronomes and food experts (CENSIS, 2015).

Assuming that the Italian population is just under 60 million, a very small portion of the country is excluded from this involvement with food.

The following paragraphs will focus on the topic of communication related to the agri-food sector in Italy because the excellence of the territory needs effective communication in order to reach its full potential.

2.3.1 SHORT HISTORY OF FOOD COMMUNICATION IN ITALY

The link between food and Italian culture has very ancient roots; not so ancient, but nevertheless dated are the traces relating to agri-food communication. Due to the economic situation in 19th century Italy, where the economy was still predominantly based on agriculture and poverty was the prevailing social condition, the development of printed advertising lagged neighboring states such as France, towards the end of the century. An important contribution to the development of printed food communication was made at the beginning of the next century by the artist Cappiello through the invention of the figure of 'The waiter climbing the lamppost' on behalf of Bitter Campari.

Image 2.1 Bitter Campari. uomo in frack e guanti bianchi arrampicato su un lampione, 1900-1916, L. Cappiello

Source: https://catalogo.beniculturali.it/detail/HistoricOrArtisticProperty/0500672257

With the advent of fascism, which was an advocate of an autarkic policy, and the development of the artistic movement of futurism, products of national origin, accompanied by slogans and graphics typical of the regime, became the protagonists of communication. In the same historical period, radio communication also began to spread, which was attractive to consumers thanks to the use of a rhyming lexicon.

In order to observe a new channel of communication, it was necessary to wait until the end of the Second World War with the start of television broadcasting by the only public network, RAI (Radio Televisione Italiana).

In January 1954, the first television broadcasts began in Italy, which at that time represented an innovation in terms of communication and in the long term would contribute to the modernization of the country.

Food communication is marked by the launch of *Carosello* in 1957, whose format made it particularly attractive in the eyes of the public. The TV program was structured in daily episodes, lasting about ten minutes, which were shown at the end of the evening news. *Carosell*o is seen today as a primitive attempt at emotional marketing with the attempt to create a feeling of emulation in the consumer by proposing mass consumption-oriented behaviour patterns typical of the economic boom of that period.

Image 2.2 Carosello, cover picture

Source: https://www.novecento.org/dossier/italia-didattica/carosello-la-trasmissione-piu-amata-dagli-italiani/

The advertising offered by this medium was the protagonist of an increase in consumption as well as certain changes within the food industry. Consumers' choices were increasingly diverted towards foods resulting from industrial processing, such as the replacement of bread with other, more processed bakery products.

Commercial storytelling in the second half of the 20th century paralleled changes in consumer preferences, which at the time were hedonism-oriented and attracted by advertising sagas and promotional campaigns that created an emotional bond with the product and brand. In this period, therefore, the figure of the brand becomes stronger and appears in the eyes of consumers as synonymous with reliability and quality. Other aspects of consumption change, such as the places consumers go to access products as large organized distribution takes over from small neighborhood shops.

The 1980s marked a flourishing period for the development of television in Italy and led to an increase in the investments companies made in this medium. Promotions began to be used as a marketing tool due to the competition that began to intensify in the market. Consumer hedonism of the time was satisfied through the creation of advertisements with simple and reassuring tones. The progressive standardization of products meant that communication became an integral part of the added value perceived by consumers, and

therefore its implementation in a effective manner decreed the success of the company itself, on a product par with competitors.
However, the following decade the course takes a different direction and communication returns to focus on the individual consumer and his subjectivity.
Latest upgrade regarding food communication in Italy coincides with the advent of the new millennium, as in the rest of the world, thanks to the development of the internet, more generally of digital technologies, irreversibly changing the relationship between company and consumer. Major changes stem from the multitude of new communication channels emerging and the possibility they offer the consumer to be a creator and disseminator of information himself.

2.3.3 MARKETING OF THE HIGH QUALITY OLIVE OIL

Olive oil is not just any agri-food product. The deep roots that its production and consumption have in Italy make it a symbolic product of national culture and as such, its communication is subject to its own peculiarities. Despite its importance, the sector is also experiencing a rather backward phase, compared to similar products such as wine, especially in terms of communication and effective consumer awareness.
Marketing is used not only for purely commercial purposes, but about high-quality olive oils it is also a tool that companies can implement to protect their products from counterfeit competition. In addition to being a means of quality protection, an effective id marketing policy allows the company to distinguish itself and stand out among its competitors as well as promote its product, in this case oil, to the detriment of other substitute products in Italian consumption.
The levers at the disposal of companies producing quality olive oils are those of marketing management. Their concrete implementation, however, is affected by the specificities of the sector, which can be traced back to the limited size of the company and the biological specificities of the production processes (Marchini, 2012). Another element impacting marketing strategies is the fact that, being a food and therefore consumed mainly through ingestion, manufacturers cannot disregard the qualities of the raw materials used, the shelf-life management of the product and the perception of food risk by the end consumer. Food risk is defined as the likelihood of a harmful event occurring to human health, as defined in EC Regulation 178/2002, art. 3, point 9. The perception of risk that

characterizes the consumption of olive oil is unparalleled among consumer goods, barely lower than that attributed to cosmetic products and pharmaceuticals.

In this market companies focus their efforts on differentiating themselves from their competitors, promoting the brand as a point of differentiation and increasing customer loyalty. Differentiation remains the prevailing strategic choice among SMEs in the sector as cost-cutting policies are often presented as unfeasible. The reasons for this are again attributable to the very characteristics of the companies, which, due to their small size, are unable to exploit economies of scale and have little bargaining power vis-à-vis other actors in the supply chain.

The competitive advantage that companies seek to pursue must be communicated effectively so that it is understood and subsequently appreciated by consumers. Inability of cutting production costs, which are often still linked to manual and non-mechanized labor, plus the annual variability of production, makes the price of quality olive oil often high in the eyes of the consumer. This translates into the need for companies to justify to the customer the actual quality of the product as a justification for the price charged for it.

According to the traditional view, the design of the marketing mix is articulated through the 4Ps. Starting with the product, the complexity of its design is greater within the agro-food industry. In the case of quality olive oils, therefore, a series of elements must be considered such as safety, sensory, nutritional and functional characteristics that create difficulties within small companies, which often lack dedicated professionals. Because of this, the smallest realities of the sector present on the market a product whose characteristics are dictated by internal possibilities (push strategy) rather than the search for customer satisfaction.

The path that small companies take, in order to reach markets increasingly distant from the local ones, presupposes a focusing of company resources on the more intangible components of the product, such as the brand. This also allows companies of this type to conquer and maintain their market niche through differentiation. In order to differentiate, it is necessary to understand the aspects that are most attractive in the eyes of consumers. Over time, regionalization and the resulting local production tradition have been determining factors in consumption experiences, also linked to the manifestation of consumers' sense of belonging to a particular territory. Taste and psychogenetic factors (Marchini, 2012), such as family approval seeking in the choice of oil, are also relevant.

Next, the price is considered, which primarily symbolizes the value of the product itself. Due to information asymmetries in the olive oil market, the relationship between price and perceived value is often not linear. This mismatch between the information possessed by the two exchange members has become entrenched over time and has thus become characteristic of the high-end olive oil market. Consumers are therefore often unable to assess the actual quality of oils and use price as the most popular clue, when in fact it should be high quality that is synonymous with a high purchase price. The factors that determine the price are the costs the company must bear and the analysis of the competitive scenario. Price-determining factors are the costs the company has to bear and the analysis of the competitive scenario.

High-quality olive oil industry is characterized by intense competition and maturity. This is evidenced by: the reduced marginality that marks the upstream stages of the supply chain and therefore pushes small companies to limit the number of commercial steps before the consumer, the possibility of finding similar products on the shelf sold at markedly different prices due to the possibility of finding raw materials across borders, and lastly, the high costs per unit related to marketing (Marchini, 2012).

The third of the 4Ps indicates distribution, which can be done in two ways: direct, in which the company itself sells the product to the end consumer, or indirect by relying on specialized distribution operators. The second option has advantages such as the possibility of expanding contacts with end customers, making the distributed assortment broader and obtaining information on consumer tastes more easily. These are actions that, in the case of the indirect channel, do not burden the shoulders of the small manufacturer, thus limiting the organizational problems that may arise within it. A negative consequence, however, of not dealing directly with distribution is the loss of close contact with the end consumer and thus control over all those activities necessary for optimal brand management.

Lastly, there is the communication issue. It consists of a number of different channels that need to be harmonized with each other to provide a coherent and credible image of the product itself. The traditional channels through which messages are conveyed are: media advertising, sales personnel, sales promotion, direct marketing and external relations. Because of the high product differentiation that is characteristic of the market for quality olive oils, companies must choose communication channels that allow them to convey enough information to make the consumer aware. Another not infrequent mistake that

companies make is to assign under the umbrella of a single brand a too wide range of products with clearly different quality characteristics, undermining the credibility of higher-end products. The labelling of olive oils has been standardized at European level, thus standardizing the work of companies in this respect. Companies often communicate purely informative notions to consumers, dictated primarily by regulations. The choice of purchase, and subsequent loyalty, however, is mainly based on the evocative elements elicited by the brand itself, such as the history of the company. Having production specifications, as in the world of wine, containing all the technical information that companies try to communicate through labels would allow them to focus their labelling on the evocative aspect so sought after by consumers.

2.4 SME DIGITAL TRANSFORMATION IN ITALY

In Italy, SMEs account for 99.9% (European Investment Bank, 2021) of the total number of active enterprises in the country, which is why they represent a widely studied and noteworthy phenomenon. More generally, the phenomenon related to the spread of SMEs is not only limited to the national territory but also extends beyond its borders to include neighboring countries. Their widespread presence at territorial level allows comparisons to be made in order to assess the performance of national SMEs.

Italian SMEs, according to the report released in 2021 by the European Investment Bank, characterize their operations with lower productivity than the European average and peers. The different sectoral mix in the national context contributes to the explanation of the differences in productivity mentioned above. In Italy, in fact, most SMEs are employed in the wholesale, retail trade and manufacturing industry, which are low in productivity. However, part of this variance cannot be explained with certainty, but the low level of digitalization of Italian SMEs could play a key role (European Investment Bank, 2021).

During the Covid-19 pandemic, SMEs, more so than other larger companies, embarked on a path towards increased digitalization to compensate for the crisis. It is necessary, however, that the acceleration stimulated by the advent of the pandemic is then translated into a long-term strategy and does not therefore remain confined to a short time horizon. The part of digitalization on which this paper will focus is the use of digital marketing and communications tools.

Although most SMEs in Italy claim to have their own website, there are few whose sites are actually efficient, mobile-friendly and frequently updated. Few small to medium-sized companies have a proprietary e-commerce through which they sell their products online. This is lower than in the segment of large Italian companies and compared to SMEs in other European countries. With reference to the use of ecommerce in SMEs, the annual survey by Istat shows no significant increase in the number of companies with ecommerce in 2022 compared to the previous year. However, an increase in the values exchanged is reported, since 13% of SMEs have online sales, corresponding to at least 1% of annual turnover, +0.3% compared to 2021, and 17.7% of SMEs with an active ecommerce attribute 13.5% of total revenues to the online channel, +4.1% compared to the previous year.

In the darkest period dictated by Covid-19, due to the restrictions applied to the movement of people and the consequent dramatic decrease in trade, SMEs were pushed towards greater use of e-commerce platforms, registering +50% (Redazione Osservatori Digital Innovation, 2021) growth compared to the pre-pandemic period. This means that companies have seen a chance to reach their target market faster by opening up to online trade, but all this without the development of proprietary platforms. The preference for already existing e-commerce platforms is mainly determined by two factors: the scarcity of economic resources, especially in times of crisis, needed to build them independently, and the lack of in-house digital skills, which makes it difficult to manage these tools in-house.

Another way through which digital communication can be done is through online advertising. Small and medium-sized enterprises (SMEs) do not invest sufficiently in this area, still preferring traditional and more territorial communication channels such as the press, TV and radio. However, the lack of consistent investment over time prevents companies from achieving even the tiniest goals.

The digital backwardness that Italian SMEs suffer compared to their peers across the border is not a disadvantage that cannot be remedied, according to the Digital Innovation Observatory promoted by the School of Management of the Polytechnic of Milano, so there is still a lot of potential that needs to be exploited. Symptoms of the lack of a real intention to innovate towards digital are elements such as (Redazione Osservatori Digital Innovation, 2021): investment forecasts unchanged compared to the previous year, short-term projects lacking temporal solidity, the perception of innovation-related costs as too

high, the lack of digital skills, limited support from institutions, and the lack of awareness of incentives available to SMEs.

2.4.1 WHAT HINDERS THE DIGITALIZATION OF SMES: CULTURE AND SKILLS

Digital transformation is such a disruptive and pervasive phenomenon that it cannot be generalized and applied indiscriminately to every type of enterprise. In this paper, the field is narrowed down to SMEs, which with their numbers represent the beating heart of the productive tissue in Italy.

The digital transformation is changing both the dynamics within the company and the relationship with customers. These new methods help to improve communication with customers, whether existing or only potential ones, enabling companies to better understand their needs in order to better meet them (Barnes et al., 2012). It is important to emphasize how this revolution has had a major impact on both traditionally technology-driven sectors and traditional sectors such as the food industry. Among the variety of modalities offered by digital marketing, the focus narrows to the use of websites, e-commerce and social media.

In order to be able to create value for its customers in a dynamic environment such as the one identified by digital technologies; it is necessary for SMEs to combine traditional capabilities with so-called dynamic capabilities. They are defined as 'higher-level competencies that determine the company's ability to integrate, build and reconfigure internal and external resources/competencies to address, and possibly shape, rapidly changing business environments' (Teece, 2012). Dynamic capabilities are crucial to ensure that the company's current capabilities remain up-to-date with their environment and thus continue to retain their value, support the company's evolution towards a direction that deviates from its usual operations. They are especially crucial for SMEs that often lack other resources such as economic and financial resources. The change towards digitalization can be seen as a factor that requires the activation of dynamic capacities by SMEs that are faced with a new and very often distant environment from their traditional operations.

The dynamic capabilities that emerge as necessary in order to achieve the redesign of a project can be divided into four segments, as elaborated by Pavlou and El Sawy (2011), which are:

- Sensing: identifying, developing and evaluating digitalization trends and digital opportunities to better meet customers' needs.
- Learning: transform existing capabilities with reference to new knowledge. After the path has been chosen, the company's internal structure must reorganize its available resources so that the new knowledge can be developed.
- Integrating: to blend the new knowledge, which resides in people, at a collective level so that it can then be spread to the business unit level.
- Coordinating: a more far-reaching step than integration, represents the ability to organize and distribute tasks, resources and activities consistently with the new capabilities available to the firm, involving also structures, practices and processes. This final transformation phase is crucial in order to fully exploit all the changes previously mentioned.

The way these four classes interact is unique and subjective to each company, which is why the resulting dynamic capabilities possess a high and distinctive value for both the company and its customers. Decisions concerning the management of capabilities are the responsibility of the company's management. What has just been said can therefore also be transposed to dynamic capabilities for which it is precisely the task of top management to build up, test and rearrange competences in order to adapt them to new requirements. Within SMEs, this process is even more concentrated towards the top management, often identified in the figure of the owner who coincides with a family, due to the lack of intermediate hierarchical levels within the company organization chart. As a direct consequence of this, the figure of the CEO, in the SME landscape, turns out to be key in the whole decision-making process concerning dynamic capabilities.
According to Garbellano and Da Veiga (2019), within SMEs, the dynamic capabilities that are the engine for digital transformation reside in the people, but more consistently in those who are endowed with the authority to manage corporate resources to create value. Some categories of capabilities reside exclusively in the entrepreneur, and his nearest employees, such as those of sensing, searching and selecting the most appropriate digital technologies. The remaining activities that refer to the integration and coordination of these technologies are present in the executive team or partially spread among several people (Matarazzo et al., 2021).

In the SME environment, 'entrepreneurs invested in new digital technologies more based on their intuition than on a detailed cost-benefit analysis' (Da Veiga & Garbellano, 2019). The people closest to the entrepreneur often play a key role in the decision to adopt new technologies in their company. Often younger employees or family members, usually the children of the same owner often involved in the company, adopt technologies in their daily lives and then propose them as a tool to improve business processes.
In conclusion, therefore, the heterogeneity and complementarities of the skills possessed by the management team are fundamental prerequisites for the identification and subsequent development of digital technologies opportunities.
The first step SMEs must take towards digitalization is to become attractive hubs for young resources, carrying varied skills, which are the engine of the whole transformation process (Hubschmid-Vierheilig et al., 2019).

2.4.2 DIGITAL COMMUNICATION IN THE OLIVE OIL SECTOR IN ITALY

The olive-oil sector represents a part of the entire agri-food sector that has also been, and still is, subject to the changes brought about by digital transformation. As mentioned in the first chapter, the sector is highly relevant in our country as Italy is among the top producers and consumers of olive oil in the world.
Consistent with the national agribusiness landscape, the segment related to olive oil production is also characterized by the large number of small to medium-sized enterprises populating it. This lack of attachment is exasperated when it comes to a product such as olive oil, which is subject to annual variations in production that can also affect the organoleptic characteristics themselves. Digital channels can therefore be the key for small oil companies to sincerely and directly communicate their story and values to the consumer in order to establish a bond with them that will transcend the passage of time.
Digital channels can be a useful tool for customer loyalty. This need is due to the fact that today's main buyers of olive oil, due to social issues, fall within the Millennial generation. One of the typical characteristics of these individuals is their lack of brand loyalty.
Among the broad scenario determined by the strategies that companies can pursue, the one driven by product differentiation, based on superior quality, emerges as the best. This choice makes it possible to cope with the emerging competition at global level, in terms

of new producing countries, and at national level with reference to the dominance of large bottling companies. Critical issues that characterize the supply chain have already been noted in the previous chapter and refer to the asymmetry that characterizes the distribution of power between the actors involved, resulting in a penalization of the multitude of SMEs that populate the sector. However, the problem can be tackled by the possibility of these small players operating and communicating directly and independently with the reference customer, thus operating in a short supply chain (Cicatiello & Franco, 2012). Today, this path is facilitated by digital technologies that allow SMEs with ease to communicate and sell directly, through electronic commerce, to the target market.

The effective use of social media is a solid basis on which to develop one's digital marketing strategy. Very often this tool is marginalized or not effectively exploited by small businesses in the olive oil sector due to a lack of interest or expertise.

What drives companies to use this type of channel may not be unique. Social media represent a contact point through which olive oil companies, as highlighted in the first chapter, often geographically dispersed and spread throughout the country, can easily reach their current and potential customers. In this way, social platforms can drive direct sales by companies, thus exploiting the phenomenon referred to as social commerce.

The second objective, with somewhat more abstract aims than purely economic ones, is to use social media as a vehicle to spread the company's know-how and history. Small companies that populate the olive-oil scene in Italy are unique and distinguishable from one another because of the values they carry, their history and the particularities of the territory in which they are located. This combination of unique factors gives these companies a substantial baggage with which to embark on their journey within the world of social media.

Finally, social media can be used as a 'spyhole' to keep an eye on the activities carried out and promoted by the main competitors. The attitude with which the companies considered confront each other has a character more aimed at continuous learning, learning from the behavior of others thanks to the spirit of solidarity and fraternity that characterizes the sector, with reference to the smaller companies.

Another key element of the digital strategy is the corporate website. Again, the purposes for which it is created by the company are the same as those already mentioned for social media. Often the website is the first point of contact between the user and the company,

and in this respect it is necessary that the website is user-friendly in order not to make a negative first impact. A website can be much more than just a showcase through which to disseminate corporate values, since it can include an ecommerce section and thus allow visitors to purchase products directly.
It is worth noting that, compared to other food products, olive oil is particularly suitable for online trade due to the ease with which it can be shipped and stored. Another factor that supports this is the wide variety that the final product can have, even if from the same farm, in terms of cultivar, place of origin, type of oil and whether or not it is protected by GIs. Thanks to the creation of an ecommerce, this wide choice can be encompassed within a single virtual space, making it easier for the consumer to browse the variety.
In order to be sure of reaching the desired customers, the mere construction of a website, even a well-structured one, is not enough. Complementary work is needed on the positioning of the website within the search engine to allow users easy access to it when browsing.

2.4.2.1 INBOUND DIGITAL MARKETING FOR OLIVE OIL

The new technologies that now dominate the world of communication have enabled the development not only of new means through which to communicate but also the emergence of new strategies and approaches through which to gain the attention of consumers, to pull them rather than push. Reference is made to the development of inbound marketing as a strategy whose ultimate goal is to attract potential customers and retain existing ones, through the creation of various types of content that are disseminated through as many digital channels[36].
This is necessary in a market such as that of quality olive oils, which is marked by the presence of many players within it, the low brand loyalty shown by consumers and the often scarce resources available to these companies to use them as profitably as possible. Inbound marketing intends to make judicious use of the resources a company devotes to communication, as it aims to attract the attention of the potential customer at the place where the customer searches for information. In contrast to outbound marketing[37], which aims at more indiscriminate communication in the hope that some user will be impressed,

[36] https://www.cru.agency/blog/principi-web-marketing-olio-extravergine-oliva
[37] *Ibid*

examples of which are television commercials and YouTube advertising videos. This requires the company to possess substantial resources because part of the efforts will be in vain, so it is not compatible with the prevailing structure that characterizes the olive-oil sector in Italy. Despite their opposition, inbound and outbound marketing must be carefully balanced to achieve the best possible result.

Three fundamental elements are now introduced that serve to develop a company's web marketing strategy and help it better understand the set of activities that the user performs before proceeding to the buying stage.

The first is the so-called Buyer's Journey, which describes the process through which the consumer goes from recognizing a need to making a final purchase decision by going through stages called Awareness, Consideration and Decision.

The second is the Customer Journey which consists of a total of four stages during which the user is transformed from stranger to customer, and finally into a loyal promoter of the brand itself. This journey begins with the Attract phase, capturing the attention of potential customers. Considering the specificities of olive oil, the most effective tools in this phase are an updated blog page within the company website, social channels and keywords and specific pages within the website[38].

The next step Convert[39], within the same phase, aims at transforming visitors obtained from the website into 'leads', a contact through the release of personal data by entering them into the website. This data is extremely important for companies as it is one of the ways through which they can study and understand their target market. The actual obtaining of data is possible through a Call to Action, a direct invitation to the user to perform an action, a Landing Page within the company website containing a form to be filled in or a simple form to be filled in with personal data. These tools are interconnected and must be understood by companies as essential elements to obtain the desired user data.

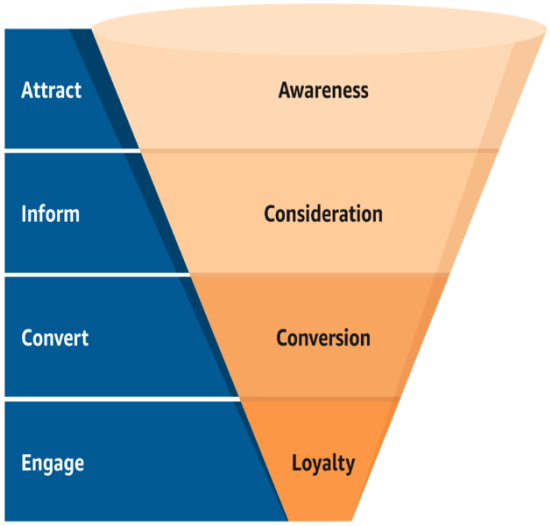
The Close phase aims at transforming the 'lead' into a customer. Email marketing presents itself as a valuable, yet delicate tool through which to achieve the goal of establishing one-to-one communication with customers. Making a sale is not the end of the process. There is a subsequent step that represents customer retention, the so-called Delight, since it is

[38] https://www.cru.agency/blog/principi-web-marketing-olio-extravergine-oliva
[39] *Ibid*

often more expensive to seek new customers than to keep existing ones[40]. For this phase, companies can again resort to email marketing, carefully distinguishing it from that used in the Close phase. Another useful means to strengthen the relationship with customers is the use of social media, which is still poor within the industry.

The last element that an SME must consider when devising its digital marketing strategy is what is known as the conversion funnel and represents the movement that takes place when users meet a given company.

Imagine 2.3 N. Funnel Marketing design



Source: Amazon Advertising

The goal of in-house marketers is to transport the user who encounters the company, at the top end of the funnel, to the last steps to make them a customer and a promoter. Today, digital technologies play a key function in allowing even the smallest companies to drag the greatest number of users into the funnel and thus democratize the competition and allow the competitive landscape to be populated with even the smallest players. The elaboration of the funnel is a subjective process, reflecting the characteristics of the individual company and following the choices that make up the company's marketing strategy.

[40] https://www.cru.agency/blog/principi-web-marketing-olio-extravergine-oliva

In order to optimize the funnel design, it is necessary for companies to separate the sales and marketing part of the strategy. The narrow dimensions that typify the SMEs operating in the olive oil sector channel both roles into a single figure, due to a lack of positions, thus precluding the development and implementation of an effective marketing strategy. The objective of marketing is in fact to lead to quality sales.

CHAPTER 3 – EMPIRICAL ANALYSIS

This chapter focuses on a concrete analysis of what constitutes the digital communication adopted by small-medium enterprises operating in the agrifood sector in the north-east part of Italy. This therefore includes those companies operating in the olive-oil sector, which is mainly composed of this type of company.

The sample of companies that will be considered is part of a broader project carried out by the Agrifood Management&Innovation Lab of the Ca' Foscari University of Venice, which has been studying and tracking these phenomena for some years now.

Data are collected via the companies' proprietary online spaces and refer to a time span from July to December 2022; time comparisons are always made with reference to these six months, but they refer to different years.

3.1 PRELIMINARY DESCRIPTION OF THE SAMPLE

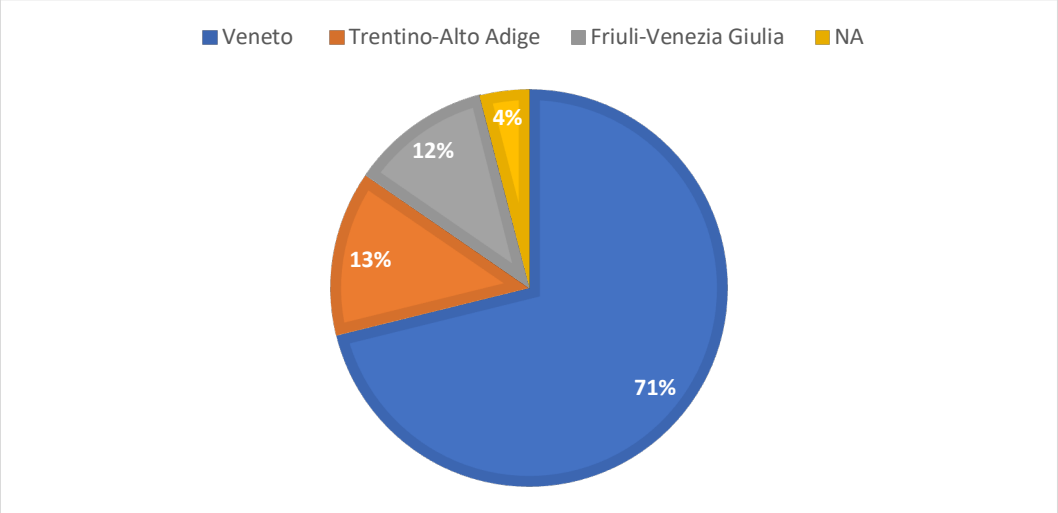
All of the surveyed companies fall into the small or medium-sized category, according to the criteria set out in the European Commission's Recommendation No. 2003/361/EC, and are all located within the territory identified by the Friuli-Venezia Giulia, Trentino-Alto Adige and Veneto regions.

One of the two classification criteria that can be met alternatively is based on the annual turnover that companies report in their annual accounts and to divide the companies into subgroups, we use as reference value classes those indicated in the Recommendation mentioned before. In 2021, the last year available at the time of the survey, 13.8% of the companies reported a turnover of less than EUR 2 million, 42.4% less than EUR 10 million and the remaining 43.8% less than EUR 50 million.

The average number of employees in each company is 40, a value obtained by considering only companies that report the number of employees and calculated using the most recent value available. The classification used previously for revenues is resumed, this time with reference to the number of employees. Of the companies for which the number of employees could be found, 77% have 50%, and would therefore fulfil one of the two criteria for classification as a small enterprise, while the remaining 23% have a number of employees greater than or equal to 50 but less than 250.

The target markets in which the brands owned by the companies operate can be broken down as follows: 89 brands operate in the B2C market, 151 in B2B, 84 operate in both segments (B2B/B2C) and for the remaining 149, this variable could not be recorded.
The sample size analyzed was reduced by 65 companies from the previous year to a total of 454 thus indicating a 14.3% reduction from 2021.
To better focus on the context in which the companies that are part of the sample operate, it is useful to analyze their distribution, with reference to the address of their registered office, within the three regions that are considered: the Veneto region hosts the largest number (323), followed by Trentino Alto-Adige (61) and Friuli Venezia-Giulia (52). For the remaining 18 companies that were not previously included, the information sought could not be known.

Graph 3.1. Geographical distribution of firms



It is relevant to note that each company can own more than one brand and that it is not necessary that they carry out their business related to the same economic activity. For this reason, in this research work, the analysis regarding the split between the various divisions is carried out by taking individual brands and not the whole company.
The 454 companies in the sample turn out to own a total of 473 brands. Most of them take the form of mono-brands, that is, the company turns out to own a single brand that may have its own name or coincide with that of the company itself. Only a small minority of 13 companies have developed a strategy based on the development of multiple brands.

The limited presence of multibrand company is a logical consequence of the size that the companies analyzed have, often synonymous with limited resources and lack of specialized personnel.

All the companies in the sample belong to the secondary sector, more precisely they carry out manufacturing activities through which they transform raw materials into finished goods. The classification that is used in this research refers to the one developed by ISTAT, the National Institute of Statistics, for the classification of economic activities called Ateco 2007, which was originally adopted in Italy as of the 1th of January 2008.

In contrast to the geographical location, the analysis unit that is now being considered is the brand. This choice was made because it would have been restrictive to analyze companies without paying attention to the fact that multibrand companies, although few compared to the size of the sample, can carry out their activities in different segments. It's given the opportunity to highlight a possible differentiation strategy adopted by companies.

In this area of analysis, we refer to section C of the Ateco 2007 classification, which refers to the section of manufacturing activities, food industries division (10). At a still more detailed level than the divisions are the groups, which in this analysis comprise numbers 1 to 8. For ease of understanding, the classes, i.e. the four-digit numbers, that make up each group are also shown in Table 3.2.

Graph 3.2. Ateco 2007 classification (nomenclature)

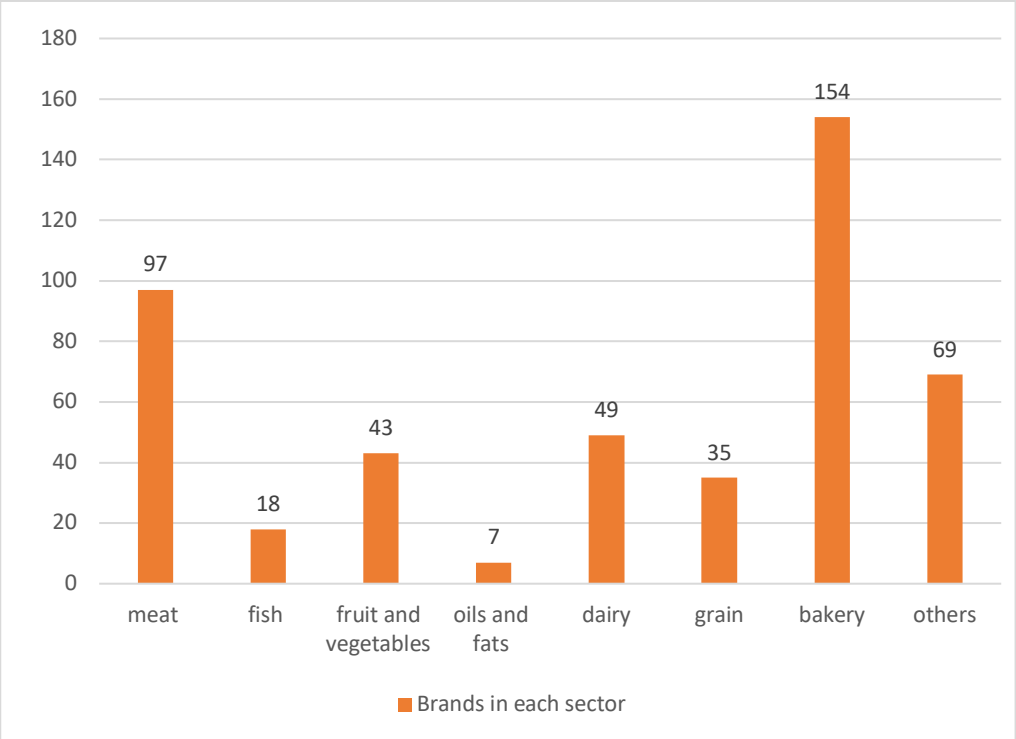
Ateco 2007 codes	Descriprions Ateco 2007
C	Manufacturing activities
10	Food industries
10.1	**Processing and preservation of meat and production of meat products**
10.11	Meat processing and preservation (excluding poultry)
10.12	Processing and preserving poultry meat
10.13	Production of meat products (including poultry meat)
10.2	**Processing and preservation of fish, crustaceans and molluscs**
10.20	Processing and preservation of fish, crustaceans and molluscs
10.3	**Processing and preserving of fruit and vegetables**
10.31	Potato processing and storage

10.32	Production of fruit and vegetable juices
10.39	Other Processing and preservation of fruit and vegetables
10.4	**Production of vegetable and animal oils and fats**
10.41	Production of oils and fats
10.42	Production of margarine and similar edible fats
10.5	**Dairy industry**
10.51	Dairy industry, hygienic treatment, milk storage
10.52	Production of ice cream
10.6	**Grain processing, production of starches and starch products**
10.61	Grain processing
10.62	Production of starches and starch products
10.7	**Production of bakery and flour products**
10.71	Bread production; fresh pastry products
10.72	Production of rusks and biscuits; production of
10.73	Production of pasta, couscous and similar farinaceous products
10.8	**Production of other food products**
10.81	Sugar production
10.82	Production of cocoa, chocolate, candies and confectionery
10.83	Tea and coffee processing
10.84	Production of seasonings and spices
10.85	Production of meals and prepared dishes
10.86	Production of homogenised preparations and dietetic foods
10.89	Production of other food products nca

Source: ISTAT

For simplicity during the chapter we will refer to the sectors using the name and not the category number.

Graph 3.3. Distribution of brands among sectors (number)



The brands owned by the companies analyzed are concentrated in predominantly three sectors, followed by five others characterized by medium or low presence.

The manufacturing sector segment with the highest concentration of brands in the sample is bakery, which refers to the production of bakery and flour products, with 154 appearances representing 32.7% of the total. This is followed by brands operating in the meat processing and preservation meat products production sector (10.1) with 97 recorded entries within the survey sample. The last segment that differs in populousness, with 69 brands operating within it, is 10.8 to which belong those involved in the production of other food products including the production of cocoa, chocolate and confectionery, sugar, tea, coffee, spices and seasonings.

The remaining four components are evidently smaller in size than those mentioned above. In descending order of size we find the dairy industry with 49 brands, fruit and vegetable processing with 43 presences, grain processing, starch and starch products production with 35. The classes in which the least number of brands reside by far with those of processing and preservation of fish, crustaceans and molluscs with 18 presences and productions of vegetable and animal oils and fats with only 7 brands.

3.2 ANALYSIS OF THE WEBSITES

After an overview of the companies analyzed, which allows us to characterize the context in which the research is carried out, we now move to the part of the investigation that wants to investigate the digital presence of the latter.

The first factor that is considered to assess the digital presence of SMEs considered is the presence or not of a website. Websites appeared about a decade before social media, so their spread has more distant origins and this has allowed their adoption by a greater number of companies.

Considering the brands, 425 present a website in 2022, while 48 are not yet provided one. It is relevant to note that the presence of a website, with its URL (Uniform Resource Locator), does not necessarily imply that the latter functions and is able to provide the end user with the services for which it was designed. Despite this possibility, however, a high percentage (97.8%) of companies that own a website on it working.

The numbers relating to the presence of websites collected in 2022 are the highest compared to historical data collected in previous years. The difference is minimal, even if synonymous with a positive trend, compared to the previous year (2021) in which the brand owners of a website were 424 while those without were 49, the deviation is therefore only one unit.

Data for the year 2020 are missing, which is why the second historical comparison is carried out by considering when collected in 2019, the first year of collection. Before indicating the values, it is necessary to make two clarifications in order to better contextualize what will now be presented: firstly, in this case, the time interval between data collection comprises two years and thus lasts twice as long as the other surveys; secondly, the covid-19 pandemic had its most acute development during this time period, which played an accelerating role with regard to digital technologies in all their declinations. In 2019, 406 brands had a website, and 67 had no website at all.

The agri-food sector in Italy has always been characterized by a strong propensity to market beyond national borders, the record recorded for the export of food made in Italy in 2021 with a value for the first time of more than EUR 50 billion[41] being an example of this magnitude.

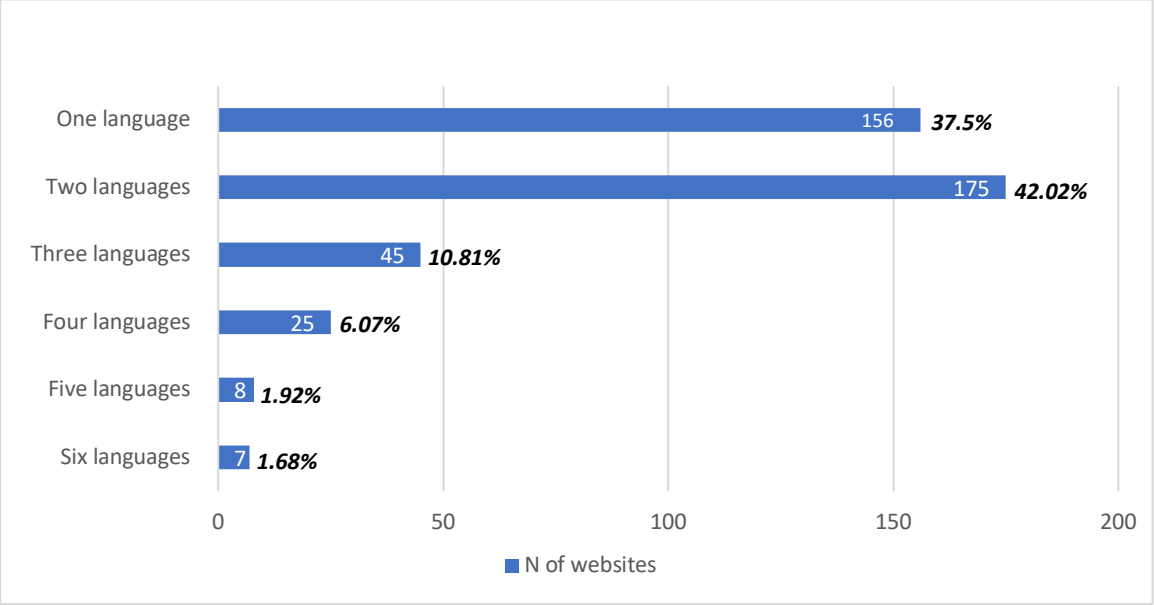
[41] https://www.crea.gov.it/en/-/commercio-con-l-estero-2021-anno-record-per-l-agroalimentare-italiano-con-l-export-che-supera-i-50-miliardi-di-euro

For this reason, companies operating in the sector, and especially small to medium-sized ones that frequently operate in niche markets, cannot ignore these opportunities offered by foreign customers. One way of intercepting this potential is to structure company websites with languages that differ from that of the country of origin.

As we can see from the graph below, the highest percentage of websites, calculated out of the total number of functioning websites, is only available in two languages. Those with three or more languages represent a small minority. Only 7 websites, out of the 416 that are running, have translated pages in a total of six languages.

Within the analyzed sample, 35.3% of the sites among those that are working are only available in Italian.

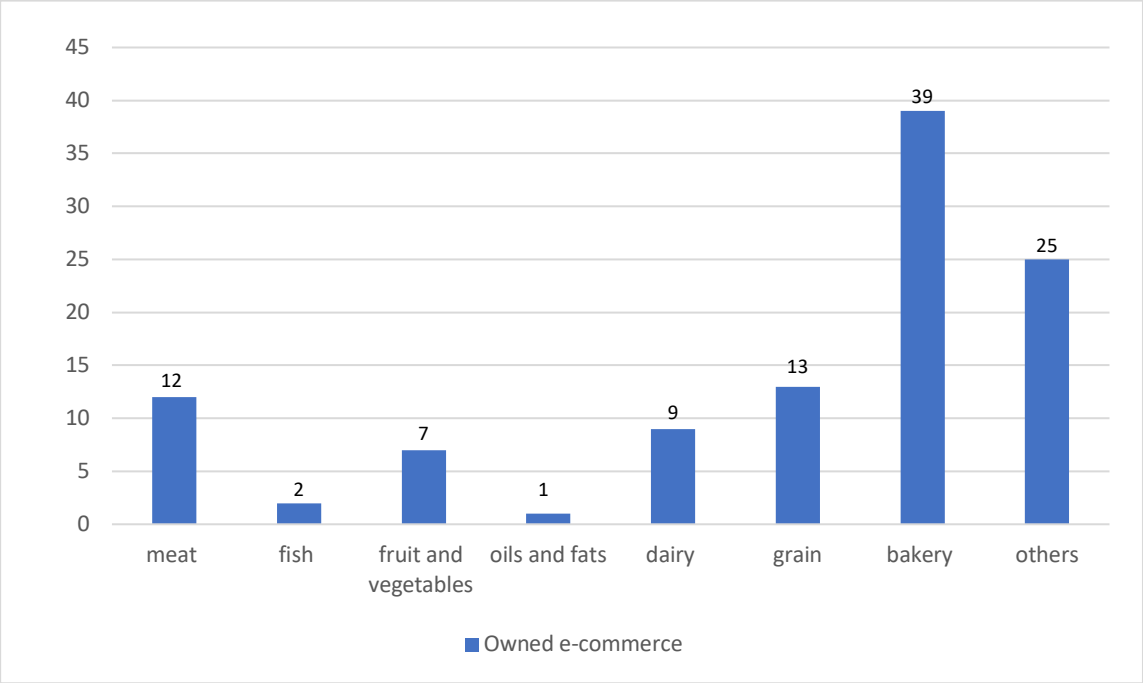
Graph 3.3. Distribution of languages among websites



The 35.34% of functioning sites are only available in Italian, a limiting factor for a possible approach to markets beyond the border. It is interesting to note that within the class of monolingual sites there are not only those referring to Italian, there are in fact 8 sites available only in a foreign language.

Websites can fulfil other functions beyond that of a simple showcase in which to display products and tell the story, mission and vision of the brand or company. In fact, there may be a section inside that links to a proprietary e-shop through which companies sell their products to consumers directly. There are 108 brands whose respective companies have their own e-commerce, equivalent to only 25.4%. Companies are given another chance to reach their target market and sell their products through digital channels.

Graph 3.4. Distribution of owned e-commerce among sectors



The spread of owned e-commerce is varied across the different product segments considered. This distribution is partly dictated not only by the number of companies present but also by the specific characteristics that the products in each category possess and which may influence the possibility and convenience of selling and subsequently delivering them to the customer without altering their characteristics. There is therefore the possibility of relying on e-commerce managed by a third party to which they can delegate the sales process. Only 16 brands refer and direct the user directly to the online shop operated by other actors within their own site.

The time course of the development of owned e-commerce was characterised by a similar movement as the previously mentioned websites. Surveys in 2019, in the period before

the outbreak of the pandemic, report the presence of 75 e-commerce. In 2021, the number grew to 102 presences: an increase that represents the emergence of new commercial strategies by food SMEs, created to initially cope with an emergency context.

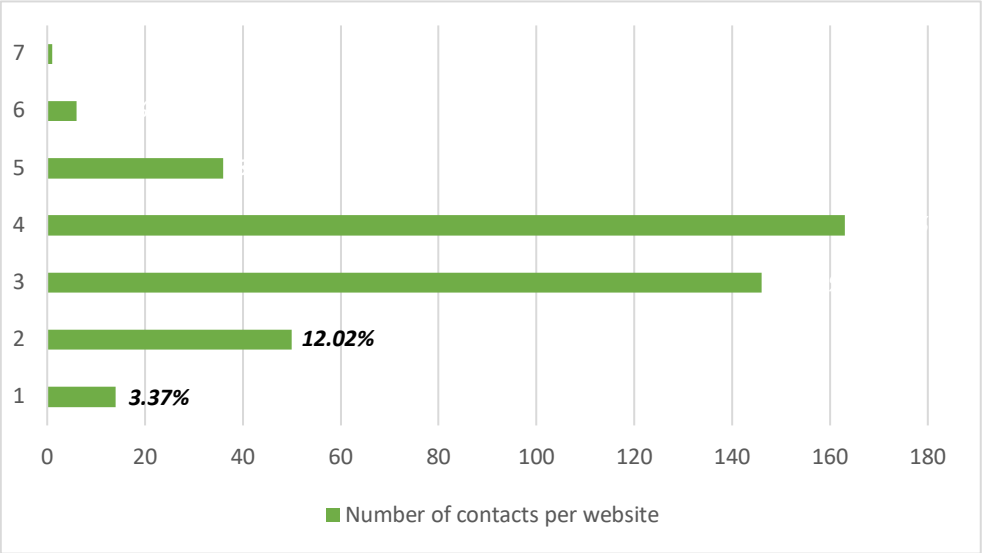
Regarding the olive oil sector in the 2022 survey, only 14% of the companies (1 in 7) have a proprietary e-commerce through which they directly market their products through this digital channel. This figure shows that there is still considerable scope for expansion in this sector. The preservation characteristics of olive oil make the marketing of this product through the online channel easily feasible. In fact, oil can be stored in warehouses at room temperature, without the need for refrigeration, which facilitates the entire logistical process, as it does not have the rapid perishability typical of fresh products. These facilitating factors should place the relevant sector among the first in the ratio between the number of detected ecommerces and companies. On the other hand, it occupies the third-last position, reporting a better result only than the fish (11%) and meat (12%) sectors. Fruit and vegetables (16 per cent), dairy (18 per cent), bakery (25 per cent), others (36 per cent) and grain (37 per cent) scored better in relative terms.

Within the web pages that make up the sites, there is additional information that enables direct contact between a company and the target customer.

In some cases, what is written within the pages of the website may not be sufficient to satisfy the information needs of the target customers. In fact, there is additional contact information within them that may allow direct, two-way contact with the company under consideration. Reference is made to elements such as a telephone and fax number, an e-mail address, a form to be filled in and through which to submit an enquiry to the company, a subscription to the newsletter and the possibility of starting a chat with the company directly from the site. In recent times, it has also become popular to include a contact number for WhatsApp business in the contact section. The telephone number appears to be the most common with 404 out of 416 websites in operation, followed by the e-mail address and the possibility to fill in an enquiry form.

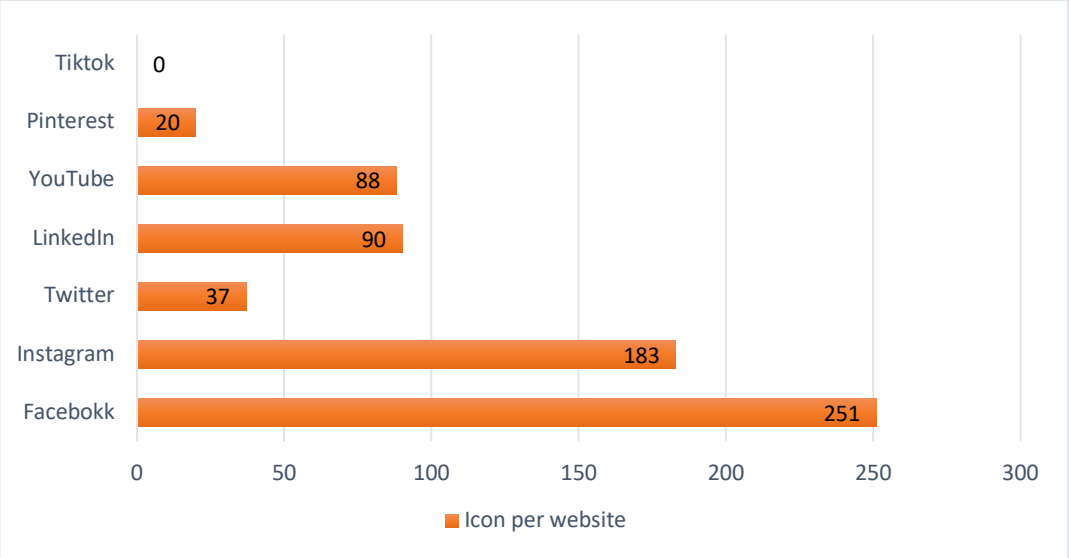
The highest percentage of SMEs include four pieces of contact information on their website. Unique within the sample is the company that highlights seven contact methods on its website.

Graph 3.5. Number of contacts per website



In addition to traditional modes of contact, many of which were available to customers even before the advent of digital, other strictly more modern ones have appeared. The reference is to the inclusion of interactive icons on which the website visitor can click to be redirected directly to one of the proprietary social networks, making digital communication as omnichannel as possible. It is noteworthy that in some cases the icons do not lead back to the hoped-for channels, probably due to a programming error of the site in the social media link or due to the actual lack of a landing page.

Graph 3.6. Density of social media icons in websites



It is noteworthy that in some cases the icons do not lead back to the hoped-for channels, probably due to a programming error of the site in the social media link or due to the actual lack of a landing page. The density of icons signals that among the most popular are those related to Facebook and Instagram. It will then be possible to note how the distribution assumed by the icons mirrors that detected by the social media themselves.

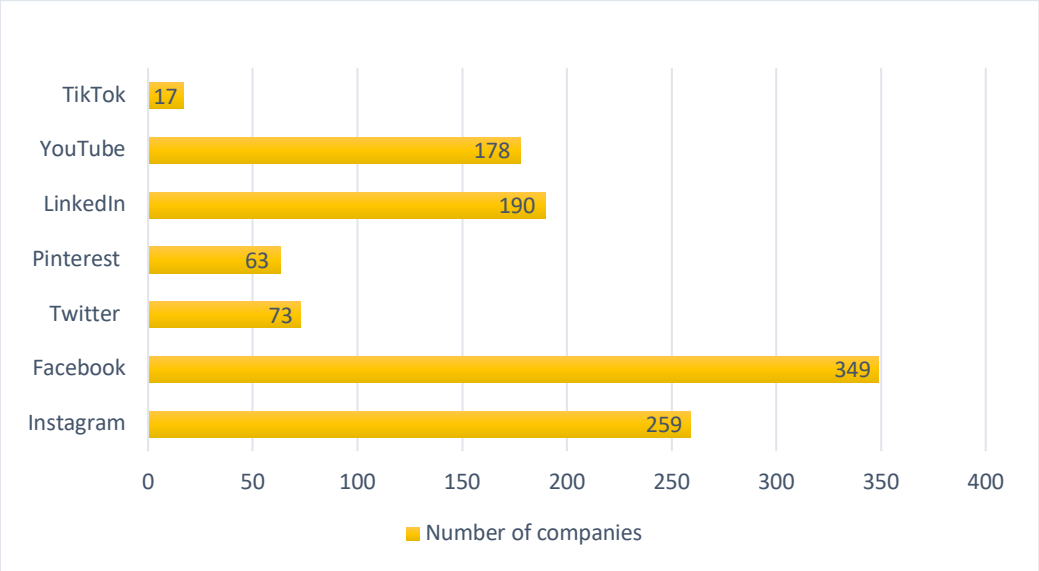
3.3 SOCIAL MEDIA

Over the years, social media have become the co-protagonists, together with websites, of the digital communication adopted by companies. They are an important tool within the reach of small companies. What makes them attractive in the eyes of these businesses is the ease with which they can participate and very often the fact that they are free to access basic services. In fact, if the company does not have the economic resources, and not only that, necessary to undertake a substantial marketing campaign, the use of social media allows them to access a showcase that is potentially under the eyes of all those who use them. The social media scenario available today is very diverse, there are many of them and they differ from each other in the various functionalities they offer.

The potential offered by social media is supported by a large number of users they can reach, in 2022 in Italy they amounted to 43.2 million, an increase of 5.4% compared to the previous year[42].

The data collected focuses on the presence of SMEs in a few prevalent social media, which are: Facebook, Instagram, Twitter, Pinterest, LinkedIn, and TikTok.

Graph 3.7. Number of companies present in social media

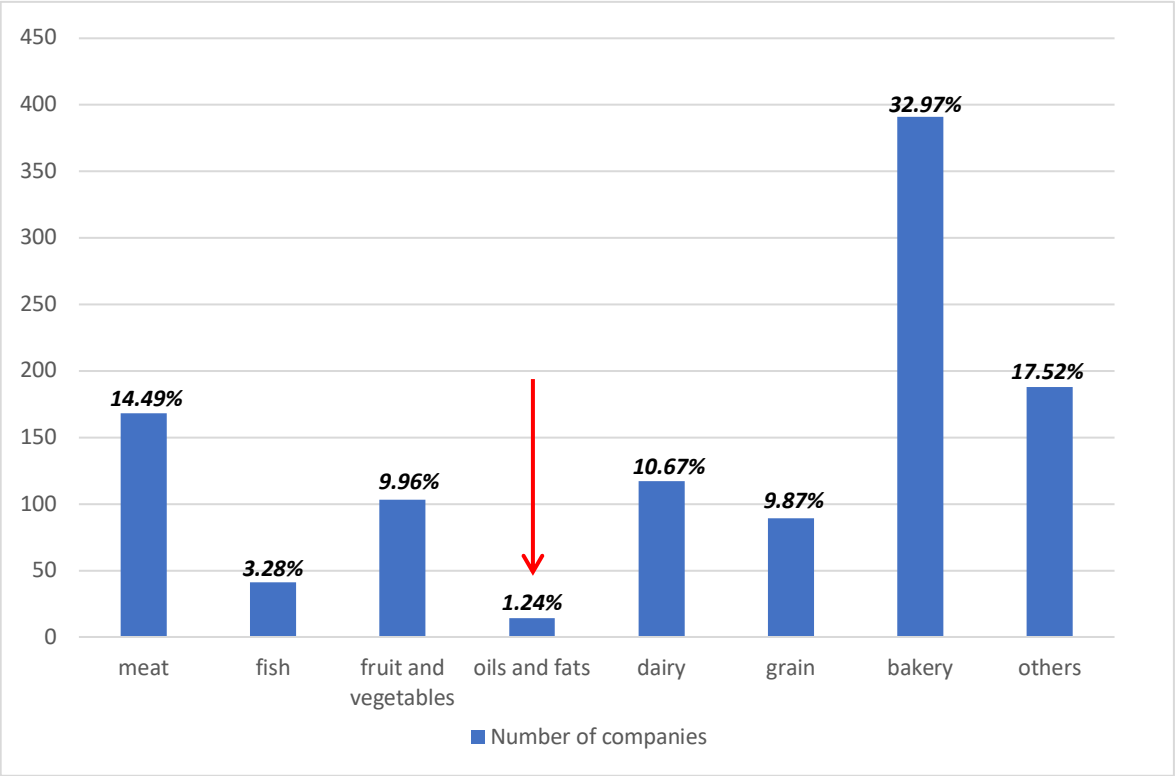


Facebook represents the social media with the largest number of brands, belonging to companies, present. This popularity is also because it is one of the oldest social media available in the world. On the other hand, TikTok occupies the last position in terms of the number of companies, mainly due to its recent development and spread some companies still do not fully grasp its potential.

A clarification is necessary regarding how company profiles are counted on LinkedIn. The above chart represents only those profiles opened and administered by the companies themselves, without counting all those phantom company profiles that are somehow present on the social networking site but lack recognition by the company, the inclusion of which would have brought the total number of LinkedIn profiles to 361.

[42] Hootsuite, We Are Social, "Digital 2022, Global Overview Report", 2022.

Graph 3.8. Social media presence across Ateco sectors



As can be seen, the segment of brands dealing with bakery and flour products represents the one with the highest social media presence (32.97%). This is followed by the segment dealing with the production of other food products, with the dairy industry close behind. The vegetable and animal oils and fats industry takes last place. However, these measurements need clarification, the number of social media in each sector is also a direct consequence of the number of companies, and their respective brands, that populate the sample analyzed in this study. It is therefore of greater interest to analyze the ratio resulting from the division between the number of socials in the sector and the number of companies in it. In fact, the report reveals that the sector with the highest social media concentration per brand is fruit and vegetables with a value of 3.12, followed by others (2.74), grain (2.54), bakery (2.54), cheese (2.39) and fish (2.27).

The olive oil sector again occupies the position of tail-end, with an index value of (2.0), together with the meat sector (1.73). The sector therefore also occupies the last positions here.

Before moving on to a closer analysis of the individual social media, we present as the last figure the average value of the social media in which each brand appears, which corresponds to 2.4.

3.3.2 MOST POPULAR SOCIAL MEDIA

According to Graph 3.7, the most popular social media among the companies in the sample are Facebook and Instagram.

The presence of companies on Facebook has more distant origins than on other social networking sites, given its early emergence. The oldest Facebook pages were created in 2008, while the year with the newest pages was 2014 with 55 new entries. The presence of brands on Facebook was certainly also affected by the outbreak of the Covid-19 Pandemic. In fact, 319 pages were recorded in 2019, compared to 342 in 2021 when the Pandemic was already underway.

We can calculate the ratio of Facebook profiles to the number of brands and obtain a density index with a value of 0.74, meaning that for each brand there is less than one corresponding Facebook page and considering that this is the most popular social within the sample, it is possible to show that there is a lot of room for improvement.

Table 3.1. Facebook pages by sector (number)

meat	fish	fruit and vegetables	oils and fats	dairy	grain	bakery	others
60	13	37	4	35	27	117	56

Still speaking in relative terms of profile density on the brands analysed, the olive oil sector comes last with a Facebook profile density of 0.57. Better than it are meat (0.62), dairy (0.71), fish (0.72), bakery (0.76), grain (0.77), others (0.81) and fruit (0.86).

The follower count was done by considering all pages whose number of followers was available and greater than or equal to one, the result corresponds to 9320 average followers per page, thus including any outliers. The range between which values range is very wide, from a minimum of 1 follower, present on only three pages, to a maximum of 379 487, which refers to Cesarin Spa operating in the fruit and vegetable processing and preservation sector. The average number of posts per month that can be found on

Facebook pages is 3.91, i.e. slightly less than one post per week. As can be seen from the numbers just presented, the companies analysed are missing opportunities about the development of communication via social media. In order to solidly engage a relationship with one's target audience, it is necessary for communication activities, such as the publication of posts, to be constant over time with a higher frequency. Most pages present their logo as their profile image, which is the most profitable choice to make the brand easily recognizable by user-consumers.

Another element of analysis that can be applied and verified to the Facebook presence is whether paid to advertise is used to create customized advertising campaigns. There are 55 pages that also make use of this paid advertising functionality offered by social media. The peak in the use of this tool is recorded by Dalla Costa Alimentare Srl, with its page referring to the brand DallaCosta, which deals with the production of bakery and flour products, with 59 paid advertisements active on the date of the data report.

In order to better contextualize the results presented on the use of Facebook by companies and to highlight the huge, even unexplored potential, some data are presented below. Meta reports that the potential audience of an ad on Facebook in Italy reaches 28.55 million users, corresponding to 53% of the population over 13 years old[43].

The second social media detected by presence is Instagram. The second social media detected by presence is Instagram. This social media belongs to the same group as Facebook, Meta Platforms Inc., which makes connections and interactions between the two possible.

Instagram is the second most popular social network, with 259 profiles referring to brands owned by the companies in the sample. The density index calculated for the previous social shows its intensity for Instagram corresponding to 0.55, synonym that just over half of the brands in the sample have a profile.

Today's number of companies on Instagram (259) is the result of a temporal progression that begins in 2019, the first year of data collection, with 227 companies and continues with the 2021 figure of 242. As was the case with Facebook, the bakery and flour production segment recorded the highest number of profiles, accounting for 37.5% of the total.

[43] Hootsuite, We Are Social, "Digital 2022, Global Overview Report", 2022.

Table 3.2. Instagram profiles by sector (number)

meat	fish	fruit and vegetables	oils and fats	dairy	grain	bakery	others
36	9	23	2	27	23	97	42

Here again, the olive sector is shown to be the tail end (0.26) in terms of brands with an Instagram profile. Worse than this is only the fish sector with a value of 0.2 and not far behind is the meat sector with 0.37. All other segments show density values of an order of magnitude more than double that (fruit and vegetables 0.53, dairy 0.55, others 0.61, bakery 0.63. and grain 0.65).

The lower overall and compartmental density values are the result of the greater youthfulness in terms of time of this social media compared to Facebook.

The profiles are functioning correctly, except for two that present themselves as private, so it is not possible to follow the page directly because the approval of the profile holder is first required. Of the profiles, 85% have the website link in the margin of the biography, or an explicit reference to it.

Regarding publication activity on Instagram, five profiles were found to have no posts, while the average of those that did publish was 295 each. The most active profile is that of the Cipriani brand, belonging to bakery segment, and coordinated by the company Cipriani Industria S.p.a. with 1794 published posts.

In the first survey, dated 2019, the total number of followers collected from the profiles of the brands in the sample was 304 240. Over the years, thanks to the increase in followers of existing profiles and the creation of new pages, the number reached 732 019, meaning that the total number of followers has more than doubled in the space of four years. The average value for the individual profile in the 2022 survey, on the other hand, was 2826. It is noteworthy that the same profile that holds the record for posts published also holds the first position for number of followers held, with 164 215.

3.3.3 FRINGE SOCIAL MEDIA

Besides the two social media most frequented by companies, which form the starting point, there is a whole range of other social platforms that can help increase their online presence, first out of the two most popular is LinkedIn.

All social media that are considered in this analysis play a similar role, allowing companies to promote textual or visual content such as images and videos. LinkedIn, too, allows companies and individual users who open a profile on it to do this, but the ultimate goal of this platform is to allow job supply and demand to meet. In this analysis we focus on the typical characteristics of business profiles, related to brands owned by companies.

Within the sample, there are 190 such LinkedIn profiles, thus voluntarily created by the company and administered by it. There is also a large set of detected profiles (170 units) that correspond to unofficial and therefore unclaimed company pages. These 'ghost' profiles are the work of the platform itself, which creates them when users enter the name of the company, they work for in their profile without being able to find it among those already present.

The official profiles are 33 more compared to 2021 and the 91.5% display in the corporate information section the relevant link to access the website directly. The average number of followers per page is just under 1,000. Approximately 30% of the profiles considered have no posts, of any kind, in them but in contrast the 62% published at least one post in 2021-2022.

Table 3.3. LinkedIn profiles by sector (number)

meat	fish	Fruit and vegetables	oils and fats	dairy	grain	bakery	others
35	5	24	3	21	21	46	35

For the olive sector in relative terms, the situation regarding LinkedIn, as a marginal social media, is less catastrophic. It thus occupies the fourth position (0.42), above fish (0.28), bakery (0.3) and meat (0.36). The highest value is reached by grain with (0.6). This less

critical position is indicative of an improbable situation in the entire food manufacturing sector.

YouTube is the fourth most popular with 178 channels referring to the brands owned by the surveyed companies active in 2022, an increase of 20 compared to the previous year's survey. In 45% of these channels, a link to the company website is provided in the profile information section, thus making it easier to consult the latter later.

About 31% of the channels published at least one video in 2022, thus keeping communication up to date. As in the previous cases of Facebook and Instagram, the Ateco code for the bakery segment is the most populous.

Table 3.4. YouTube channels by sector (number)

meat	fish	fruit and vegetables	oils and fats	dairy	grain	bakery	others
25	3	21	3	20	21	48	33

In relative terms, the critical situation reported so far of the olive oil sector improves slightly if YouTube channels are taken into account. With a density value of 0.43, it ranks within the most populous half along with fruit and vegetables (0.49), others (0.49) and grain (0.60). The lowest values are recorded by fish (0.17), meat (0.25), bakery (0.31) and dairy (0.41).

The oldest channels were created in 2008, corresponding to three units, while there are four newer ones created in 2022. The average views per individual channel, including extreme values, amounted to 137,000. There are two channels with no views, a direct consequence of the lack of published videos. Paluani 1921, belonging to the bakery and farinaceous products segment is the channel with the highest number of views, with more than twice as many as the second most populous, registering 8.2 million.

Twitter reports a presence of 73 brand-related pages in the sample. There is no increase in the number with reference to the different years in which data were collected.

Table 3.5. Twitter profiles across sector (number)

meat	fish	fruit and vegetables	oils and fats	dairy	grain	bakery	others
4	3	2	1	13	8	26	16

In terms of presence on Twitter, the olive-oil sector also comes towards the bottom of the ranking, with a relative density ratio of 0.14. However, no significant presence values were recorded in the other sectors either, with a value of only 0.27 for cheese.

The first registrations on social date back to 2009 with two brands, so they are dated and similar in age to YouTube channels. Between 2012 and 2013 there were the most entries, while the most recent ones date back to 2018. The average number of followers each page has is 351, ranging from 2 to 5947. A small number of profiles were found to have no Tweets, while the average number of those with some in them was 674. Since the peak period of use of this social media seems to be outdated, many profiles appear to be outdated or even dismissed. As proof of this, about 80% of the analyzed profiles created the last Tweet on the page in 2020 or in previous years.

Pinterest also deserves a quick mention given the 63 entries in the sample. The profiles increased by 8 compared to the previous survey. The type of use that companies have made of this social network over time mainly falls into two categories. There are profiles in which pins have been actively created, this is the name given to content that is published on Pinterest, and therefore considered active. profiles, thus playing a more passive role. The other portion, on the other hand, is limited to the re-sharing of pins created by other profiles, thus playing a more passive role, and is represented by 23.8% of the total number of profiles considered. There are eight profiles with no followers, while the average among those with followers is 66 each. It is emphasized that a lack of followers does not necessarily imply a lack of activity in the profile.

Table 3.6. Pinterest profiles by sector (number)

meat	fish	fruit and vegetables	oils and fats	dairy	grain	bakery	others
2	4	5	1	4	8	25	14

The situation is better for the oil sector with regard to presence on Pinterest, a single brand present out of the seven brands analysed gives it a relative density index of 0.14. Worse are meat (0.02), dairy (0.08), and fruit and vegetables (0.11). While the highest value is reached by grain with 0.23.

TikTok is the least popular social media mainly because of its recent development, in fact it only arrived on Italian territory in 2018. In the 2022 data collection, 17 profiles were recorded, an increase of 7 over the previous year. Today TikTok represents opportunities for the development of digital communication for companies that go far beyond the recorded attendance rate of only 3.5% of the surveyed companies. These opportunities are supported by the ever-increasing number of users that the social gather. Audiweb reports, as the last month in which data is available, that in November 2022 there were 18.3 million monthly users on the platform, an increase of 7.1% compared to the same month of the previous year. The 18.3 million represent 42%[44] of all those who used internal in Italy in November, highlighting how the flow of users through the platform is consistent nationwide.

Table 3.7. TikTok profiles by sector (number)

meat	fish	fruit and vegetables	oils and fats	dairy	grain	bakery	others
1	0	0	0	0	3	12	1

Since the distribution of TikTok profiles is fragmented and uneven, half of the sectors are completely lacking them, while those that do have a presence do so with significant values.

[44] https://www.repubblica.it/tecnologia/blog/esplorazioni-digitali/2023/01/23/news/quasi_la_meta_degli_italiani_che_usano_internet_utilizzano_tiktok-384710413/

The olive-oil sector, like three other sectors, has no TikTok profile. In this case, therefore, it is not relevant to calculate any density ratio.

The average amount of published content, calculated by considering only those profiles with some, is 16 with two peaks of 48 and a minimum of 1 at the time of the survey. Most followed profile has 2528 followers, clearly detaching itself in size from all others, and as for the other socials the “best in class” belongs to the bakery and flour segments.

In order not to leave all the potential unexplored, TikTok offers companies the opportunity to undertake training through a dedicated platform, the TikTok Academy, to enable them to better understand the dynamics of social networking in order to make its use as profitable as possible.

CHAPTER 4 – CASE STUDIES IN THE OLIVE OIL SECTOR

The companies chosen for the interview all operate within the olive-oil sector. One of them part of the sample analyzed in the previous chapter, while others vary in terms of territorial location and the main activity carried out by the company.

4.1 FRATELLI TURRI SRL

Turri Fratelli Srl is based in Cavaion Veronese (VR) near the Veneto shore of Lake Garda. The company was founded in 1951, as an oil mill, by Giancarlo Turri. Founding favored by the special territory on which it stands, since the lake is surrounded by a particular microclimate that favor's the prosperity of the olive tree. In its first phase of activity, Turri Fratelli Srl exclusively carried out the olive milling phase and then, at the end of the 1950s, began bottling and marketing the oil under its own name.

In the national context of high quality olive oils, the company is known on the national scene for its production of Extra Virgin Olive Oil DOP Garda Orientale. Fratelli Turri Srl is actively involved in the protection of Italy's cultural and gastronomic heritage. Proof of this is the fact that its president, Laura Turri, holds the same position in the Consortium for the protection of the extra virgin olive oil Garda DOP.

The company has no specific target market but sells its products with various players. In fact, it enters into commercial relations with large organized distribution, with restaurants, with small local shops but also with the end consumer.

Table 4.1. Economic data about Fratelli Turri

	2019	2020	2021
Revenues	€ 4 327 001	€ 5 374 938	€ 4 361 378
ROE[45]	3.61	9.22	1.75
Net income	€ 120 660	€ 535 560	€ 102 325
Employees	17	20	14

Source: Aida – Bureau van Dijk

[45] Return On Equity: Rate of return on equity. A summary measure of the profit made by the shareholders of a company. It is calculated as the ratio of net profit to equity capital. https://www.treccani.it/enciclopedia/roe_%28Dizionario-di-Economia-e-Finanza%29/#:~:text=ROE%20(Return%20On%20Equity)%20Saggio,income)%20per%20il%20capitale%20proprio.

4.1.1 THE DIGITAL COMMUNICATION OF FRATELLI TURRI

Fratelli Turri, unlike the other two companies interviewed, is already part of the broader analysis carried out in Chapter 3, being one of the seven companies belonging to sector 10.4. Within this small sample, the company was the most digitised in terms of communication.

Laura Turri, in the interview, reports that the company's presence on these modern communication channels is rooted in time. This is evident when looking at the years in which the various social profiles were created.

The company does not deal directly with the creation of the content that is published on the social pages, but relies on an external communication agency, with which it has maintained this relationship for some time and therefore does not seem to be willing to internalize this function. Main motivation behind the outsourcing of this activity is the limited size of the company which does not make it profitable, or possible, to employ a person to deal with social content in a specialized manner. During the interview, it was reported that the collaboration with the external communication agency proved fruitful despite an initial moment of difficulty due to the latter's lack of knowledge of the peculiarities of the olive-oil sector.

There is, however, a part of marketing that is managed internally within the company, by one of the titles with the support of two employees.

Table 4.2. Digital Presence Sensing of Fratelli Turri

	Description
Instagram	Since 2017, 352 posts, 634 followers
Facebook	Since 2010, 2213 followers, 28 posts July/December 2022, no ads
Twitter	Since 2012, 248 followers, 472 Tweet, four years ago latest Tweet
Pinterest	7 followers, 30 created Pin
LinkedIn	Official page, 73 follower, four year of the latest post
YouTube	Since 2014, 21 053 views, three year of the latest video
TikTok	/
Website	2 languages, owned e-commerce, 5 social media contacts

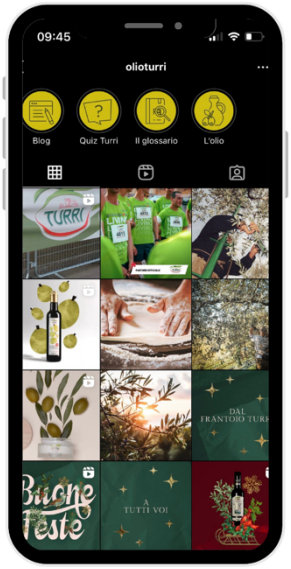
Of all the social media in which the company is present, it focuses its efforts mainly on Instagram and Facebook, which have the most activity compared to the others. More marginal social media are Twitter, LinkedIn, Pinterest and YouTube given the absence of content creation within them for at least two years.

The company has a website where you can find an ecommerce section. This purchase method, mediated by digital tools, was implemented by Fratelli Turri later than the opening of the site itself. The most recent birth of ecommerce dates back to 2021. Its creation was a corporate reaction to the Covid-19 pandemic, even though the initial aim of its development was to use it as a marketing tool rather than for commerce itself. Although the birth of ecommerce is recent in time, the company states that the project had been present in the company for about ten years and that the main obstacle that led to this delay was the difficulty in finding a consultant prepared to perform this role. The proprietary online shop is not the only digital sales channel in which the company is present; products can also be purchased on platforms operated by third parties. According to the company, it keeps track of its online activities through the use of statistical tools.

The profiles of the main social networks used by the company, Instagram and Facebook, are analysed below. Starting with the Instagram profile and the posts published there, one can see that there is no clearly prevailing thematic strand. The three macro areas in which corporate communication is focused concern:

- the promotion of products, as the company does not only produce quality olive oil but also cosmetic products such as creams and other personal care products. In these posts, the salient features of the products being advertised are explained, without going too far by including overly technical features that are often difficult for the social user to understand. Such posts are marked by the relevant presence of the product in question within the image;
- the promotion of cultural activities related to the Verona and Lake Garda area. The firm seems to be actively engaged in the local area through sponsoring events and demonstrations, documented on social media;
- “general knowledge”, in whose posts are shared anecdotes about popular culture, such as anniversaries and traditions, recipes involving olive oil, and basics on olive growing and the oil production process;

Image 4.1. Twelve most recent posts on Fratelli Turri's Intagram profile

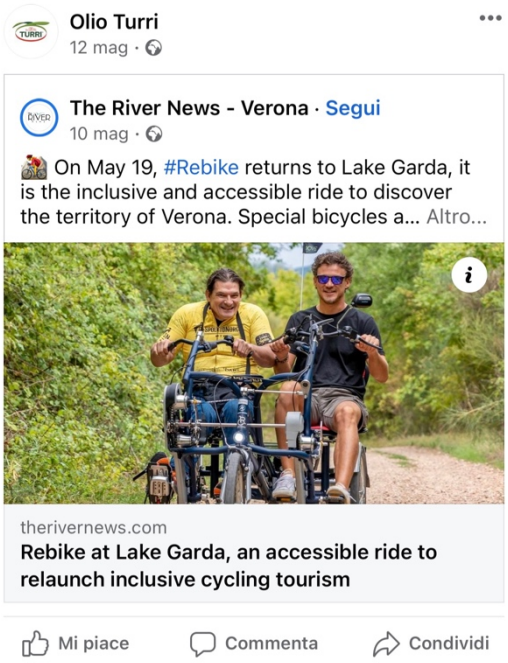


As can be seen from image 4.1, corporate communicators often resort to the use of short videos and the use of the stop motion technique as post content. This allows the profile as a whole to appear more dynamic and attractive to the user, who may be captivated by the videos even though they may not be interested in the subject matter.

The graphic coherence of the posts, both in terms of style and color, makes the profile look harmonious and neat. The company's collaboration with an external communication agency is evident given the complexity required to realize some of the content.

As far as Facebook is concerned, on the other hand, the posts published are the same as those on the Instagram page, which makes it possible to maintain a communicative coherence that facilitates consumer recognition of the brand. The only significant difference between profiles lies in the features of the social network itself. In fact, Facebook offers the possibility for profiles to share posts created by others in their feed and to add an attached comment. The use of re-sharing is mainly used to disseminate posts created by bodies or associations holding events in the area.

Images 4.2 and 4.3. Examples of the use of re-sharing in Fratelli Turri's Facebook profile



4.2 FRANTOIO FRANCI

Frantoio Franci is a small business based in Montenero, in the province of Grosseto (Tuscany). Its history started in the 1950s by the brothers Fernando and Franco Franci following their purchase of a historic olive grove called Villa Magra and an old barn, from the renovation of which they obtained an oil mill. In 1995, an important event in the company's history occurred: Fernando and his son Giorgio began working together, thus combining the experience of the father with the enthusiasm of the youngest. In order to achieve its goal, i.e. to make its extra virgin oils known away from the place where they are produced, the company needs a major change that will gradually lead to a decrease in direct sales. Since then, Frantoi Franci has focused on the pursuit of quality. This decision was also dictated by the fact that the company found itself unable to compete against the olive oils promoted by large retailers due to their small size, which made production costs too high to maintain competitive prices.

Table 4.3. Economic data about Frantoio Franci

	2019	2020	2021
Revenues	€ 2 457 249	€ 2 658 619	€ 2 476 722
ROE	13.09	13.70	8.88
Net income	€ 82 002	€ 99 535	€ 71 042
Employees	15	15	14

Source: Aida – Bureau van Dijk

4.2.1 THE DIGITAL COMMUNICATION OF FRANTOIO FRANCI

Frantoio Franci shows a discrete digital presence, both through the possession of accounts in major social media and through its own website. However, there is no e-commerce section inside, nor does the company have its own e-commerce elsewhere. The only way through which it is possible to buy online directly is via the WhatsApp contact on the website. It is still possible to find Frantoio Franci's products online as they are present and sold by other online platforms, which in turn are direct customers of the company itself. The outlook, at least not in the immediate future, of opening its own e-commerce space is not a priority for the company, which thus wants to maintain the balance it has created so far with the platforms themselves.

As far as the opening of social media accounts is concerned, this is not a recent occurrence and according to the company, it has been used since the early days. The management of social media and the creation of the content published in them is carried out by the company itself, except in special cases such as rebranding operations in which the contribution of an external marketing agency is requested.

The marketing function is represented by a single employee who is in charge of social media management and content creation together with the owner who plays a proactive role in digital communication. No internal training has been developed by the company to promote the use of digital communication tools, and due to its small size, it does not have a person specifically trained in this area.

Instagram and Facebook are the two channels on which the company focuses most of its efforts, but Twitter also enjoys a certain relevance. The official LinkedIn page is newly created, so the number of followers it enjoys is minimal. Previously, however, the

company had a presence on this social channel, a presence that was manifested through the use of the entrepreneur's personal profile.

Table 4.4. Digital Presence Sensing of Frantoio Franci

	Description
Instagram	Since 2015, 434 post, 3992 followers
Facebook	Since 2017, 7945 followers, 38 posts July/December 2022, no ads
Twitter	Since 2012, 305 followers, 235 Tweet, four months ago latest Tweet
Pinterest	/
LinkedIn	Official page, 7 follower, six months ago latest post
YouTube	Since 2017, 6024 views, two years ago latest video
TikTok	/
Website	1 language, no owned e-commerce, 5 social media contacts

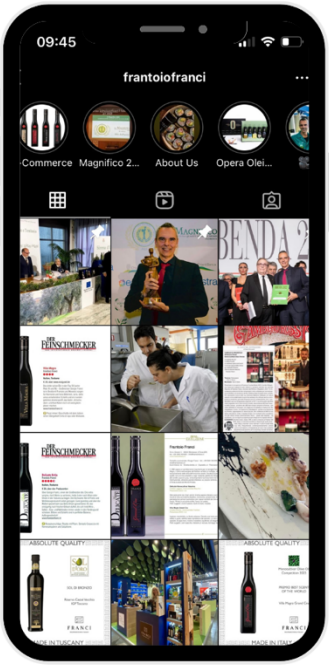
As in the previous business case, the Instagram and Facebook profiles of Frantoio Franci are analyzed below, as they are the most used.

The purpose for which the company seems to publish its posts is to spread and publicize the awards that Franci-branded products receive in Italy and abroad. It is not through the creation of actual branded content but using printed screenshots from sites where the company itself is mentioned. This is evidenced by the fact that in some cases posts with these characteristics have low image quality and the text contained therein is sometimes grainy.

Within the feed there are also posts depicting dishes from the restaurant industry. In some, the connection between the photo of a course and Frantoio Franci is evident, and is represented by the branded oil bottle often present in the background of the photo; understanding in these cases is also aided by the textual description below the post.

In other cases, the link between the photos depicting a dish and the company is more difficult. There are posts in which there appears to be no connection with the company's products. Thus, it is difficult for the social user, should he be confronted with such posts, to trace the image back to the company and its profile through a logical process.

Image 4.4. Twelve most recent posts on Frantoio Franci's Intagram profile



The use of videos as communication tools is very rare, with only around 20 videos among the total number of posts. The aesthetics of the posts created at home are very simple, in fact they are simple photos with no graphics or other adjustments.

Facebook's profile is consistent with Instagram's, as most of the posts within it are also present in the previously investigated profile. Like the case of Fratelli Turri, Frantoio Franci's Facebook profile is more 'populous' due to the possibility of re-sharing posts created by others.

This series of elements is consistent with what Serena, from Frantoio Franci, stated during the interview regarding the company's digital communication. As a matter of fact, communication is routinely managed completely internally by a dedicated employee and the entrepreneur himself, and some features of it refer to a personal use of profiles.

Images 4.5 and 4.6. Examples of the use of re-sharing in Frantoio Franci's Facebook profile

Frantoio Franci's socials lack an explicit information component that is easy to understand for any user, even those far from the olive oil world. This prevents the capture of a part of the public that might be interested in the products and history of the Frantoio Franci but is unable to grasp the more technical aspects.

4.3 OLIVYOU

Massimo Boraso is, today CEO and Founder of OlivYou, an entrepreneur in the field of digital innovation when he approaches the world of olive oil by which he is fascinated. As time goes by, he deepens his knowledge on the subject through which he understands the lack of appreciation the sector enjoys, compared to similar products such as wine. Hence, Massimo's desire to revolutionize the system and find a way to select real extra virgin oils, doing justice to the work of small millers, protecting the consumer and simultaneously innovating the sales process using digital. Thanks to the meeting with Michele Debernardi, then founder and owner of an e-commerce specializing in the sale of French

wines, and other collaborators in 2017, the construction of OlivYou as an innovative startup began.

The result is an e-commerce and logistics platform that can bring together the best producers of quality olive oil to offer consumers the products at the prices provided directly by the mill, and then deliver them to homes around the world. Initially launching the platform and running in the system was made possible by an initial selection of innovative millers, a group of 50, and by entering into a partnership agreement with a logistics company whose dark, constant-temperature storage warehouses made it possible for the oil to be stored properly. The oils stored in the warehouses are purchased by OlivYou directly from the mills, with immediate payment, establishing a direct and sincere relationship with them.

In 2020, the number of mills within the platform became 100 and the following year, the ecommerce sales also opened up to foreign markets with as many as 27 countries. Also in 2021, the company team is enlarged to include new professional figures: this company growth is also supported by the inclusion of new shareholders and a capital increase. The range of available product categories is also expanded with the inclusion of other products, again based on the excellence of production and their link with extra virgin olive oil, such as pasta, sauces, pickles and preserves.

Table 4.5. Economic data about OlivYou

	2019	2020	2021
Revenues	€ 133.528	€ 262.977	€ 396.595
ROE	-84.52	-17.75	-43.11
Net income	€ -122 189	€ -127 923	€ -449 184
Employees	1	1	1

Source: Aida – Bureau van Dijk

The economic data for OlivYou shown in Table 4.5 have less relevance in explaining the company's current economic situation than the other two examples of companies analyzed above, but are nevertheless presented for consistency. The values are in fact typical of the growth and development process to which start-ups are subjected, by their

very definition. In order to explain the negative value found in all ROE cells, the net profit value is also presented for the years considered, the main reason for the negative value of the index.

The prevailing market OlivYou addresses is the end consumer, the Ho.re.ca. channel remains marginal and occasional, and has its own catalogue and price list.

Despite the innovative character of the analysed company, it is also subject to competition in the traditional market. The main competitors include the producers themselves, who can directly access the market without the intermediation of the platform, and other online shops specialising in the commercialisation of extra virgin olive oil such as Olico and Sapord'Olio.

4.3.1 DIGITAL INNOVATION IN THE OLIVE OIL COMMUNICATION

The essence of OlivYou's mission is to radically change the distribution and culture of extra virgin olive oil. The process to achieve this goal includes the massive use of digital technologies. Examples of this are the use of e-commerce as the sole sales channel and the active communication that the company carries out, both within the platform itself and on social channels. Reflecting the effectiveness of the strategy followed is the achievement of more than 85,000[46] users on the platform in 2021.

OlivYou, as the first e-commerce in the world dedicated to the sale of quality extra virgin olive oils, seeks to sweep away the dynamics of the sector dominated by large bottling companies that have little to do with the innovative craftsmanship promoted by small millers, closely linked to the territory and bearers of a unique knowledge and culture.

This company was chosen for its innovative model of structure, even though it does not directly produce oil but exclusively markets it, and for its strong focus on niche producers and thus perfectly consistent with the company size that is the subject of the analysis in this paper.

The fact that it is a platform and uses digital channels as an environment of existence and also as a means of communication and promotion makes it a great innovation within the olive oil sector. Often, in fact, the SMEs belonging to the sector, also due to their history

[46] https://www.agrifood.tech/made-in-italy/continua-la-crescita-di-olivyou-la-startup-che-punta-sullextravergine-italiano-di-alta-qualita-ad-un-prezzo-equo/

and deep roots in the territory, are not able to grasp and understand the opportunities related to the exploitation of digital channels.

Although OlivYou does not present the typical criticalities of traditional SMEs, the platform, in its launch and creation phase, was subject to structural difficulties and slowdowns caused by the technology on which it was based. The main problems associated with running this proprietary open source platform are due to the difficulty of implementing new developments, reaching the market with them quickly and the costs generated by them, consistent with the nature of its business.

When we talk about marketing with reference to OlivYou, we mainly refer to digital marketing. The company outsourced the management of paid advertising on Google and Meta channels (Instagram and Facebook) to a specific company. Internally, on the other hand, 'traditional' communication, organic social media management and mail marketing are realized and managed. Michele Debernardi argues that digital channels today are so many in number and varied that some digital-related services need to be outsourced.

Table 4.6. Digital Presence Sensing of OlivYou

	Description
Instagram	Since 2017, 748 posts, 4 194 followers
Facebook	Since 2017, 7378 followers, 50 posts July-December 2022, 5 active ads – April 2023
Twitter	/
Pinterest	/
LinkedIn	Official page, 1007 follower, one year ago latest post.
YouTube	/
TikTok	/

Thanks to the structural peculiarities that characterise OlivYou, the company was not adversely affected in any way by the Covid-19 pandemic, even benefiting from it since olive oil is part of the basket of goods that Italian consumers have never stopped buying.

Still considering the digital sphere, it is interesting to consider OlivYou's approach to small producers contacted and then included in the platform. According to Michele Debernandi, some companies have been reluctant to rely on the platform, not because of a lack of confidence in the technology, but more out of a business choice to rely on a own e-commerce to increase sales.

4.3.2 INTERVIEW TO MICHELE DEBERNARDI FROM OLIVYOU

An interview with Mr. Debernanrdi, co-founder of the platform, was carried out for the OlivYou paragraphs. During the interview, in addition to details about the company, the subject of this article was explored in depth, namely how SMEs in the olive-oil sector in Italy are working with digital communication. Thanks to his extensive knowledge of the sector, gained over time and an indispensable tool for the wise management of OlivYou, Michele argues that the industry today is still very backward in many respects, the most serious position being that of digital communication. This backwardness is very often caused by the lack of economic resources to invest or a corporate marketing department due to the limited number of employees that characterize these companies.

The investments that companies considered, being manufacturers, prefer are those concerning production very often dedicated to the acquisition of more modern machinery. Nevertheless, it is possible to observe some movement towards change, a phenomenon accelerated by the emergence of the Covid-19 pandemic. Indeed, at a time when customers could not physically go to the shop or mill, companies realized the need to implement branding activities, especially through digital channels. Nowadays, it is no longer enough to produce a high quality oil to attract sales in the market, but the creation of a complementary brand is necessary.

However, it is not possible to generalize on this phenomenon, as it occurs today across the country in a patchy manner. It strongly depends on certain triggering factors such as the mentality of the entrepreneur, his or her age, the presence of the new generation in the company.

Part of the delay according to Debernardi is attributable to the overall performance of the olive oil sector in Italy. Today, olive oil is still perceived by most as a commodity according to the notion that many consumers have that 'oil is all the same'. Large-scale organized distribution does nothing to improve this situation, using olive oil as a flirtation product and getting consumers used to buying it at very low, evidently underpriced prices.

As mentioned on the webpage where the birth of the platform is mentioned, the wine sector with its similarities is in a completely different and more advanced state, not least because of the methanol wine scandal that emerged in Italy in the 1980s.

4.4 FRANTOIO MURAGLIA

Frantoio Muraglia is an oil producer based in Andria, in the Puglia region. Its story begins five generations ago when Savino Muraglia Senior bought 40 hectares of olive groves in the Murgia Plateau, with the intention of turning the olive trees and their fruit into a source of economic livelihood, going against those who claimed that this type of cultivation does not generate a fortune. Since 2010 the company is led by Savino Muraglia Jr, namesake of his ancestor and representative of the latest generation of the family. Over the years, the land parcels have expanded to 60 hectares for olive oil production.

Today, the company markets its products in more than 54 countries and enjoys a reputation beyond national borders.

In contrast to the three previous companies analysed, Frantoio Muraglia has the name of an agricultural company and therefore its balance sheet is not available on the Aida - Bureau van Dijk database. In 2018, it recorded a turnover of close to €4 million, a growth of +20% compared to the previous year. This growth, according to the authors of the article, marks the beginning of a positive trend that is destined to last.

As far as the number of employees is concerned, the data available at the local Chamber of Commerce where the company is registered, show 7 employees in 2022.

Frantoio Muraglia is a small medium-sized enterprise operating in the olive-oil sector that has managed to stand out from its competitors thanks to the marketing policies adopted in recent years. Its marketing strategy is based on building a strong brand identity through the massive use of digital communication channels. This avant-garde vision, always supported by Savino Muraglia Jr, has been and still is the company's strong point. Hence the desire to include this company in the chapter on case studies, in order to consider it as 'best in class' in the SME landscape.

Like the others considered, the company operates in the quality extra virgin olive oil segment and has direct consumers as its main target market, although it is still present in

the Ho.re.ca. sector. Its presence at the top end of the market allows the company to be economically sustainable in its operations.
The company has an in-house marketing department, although not everything is done in-house. Some of the marketing activities are outsourced through collaboration with an external communications agency.

4.4.1 THE DIGITAL COMMUNICATION OF FRANTOIO MURAGLIA

Savino Muraglia Jr is rightfully one of those members, belonging to the moving generations within the family business mentioned in Chapter 3, who are able to embrace the modernities of today's world in order to drive the company's work towards new and more prosperous results. His career path belonged to the world of finance based in Milan, until he decided to re-embrace his Apulian origins to cultivate the family tradition of quality olive oil production. His background gives him an innovative approach to the world of oil and allows him to deviate from the fate that befalls many small family-run Italian olive oil companies. Today, he is the president of Coldiretti for the Puglia region, a sign of the company's commitment and dedication to the agri-food sector.
This new leadership has made the digital world its cornerstone. The generational change in the leadership of the company has been a proponent of what Michele Debernardi in section 4.3.2 considers essential for olive oil companies today, namely the creation of a perhaps recognizable brand supported by consistent communication through digital channels.
There are early company profiles in all major social media, as shown in Table 4.6, as well as a user-friendly and up-to-date proprietary website with an online shop section within it. It is emphasized that Frantoio Muraglia products are not only available on the web on the company website but also on other platforms, the same OlivYou mentioned in the previous subchapter markets their products.
Social media was used as a tool for creating brand awareness among users and had as a direct consequence a considerable increase in revenue, almost doubling what was generated through the online store alone.

Table 4.6. Digital Presence Sensing of Frantoio Muraglia

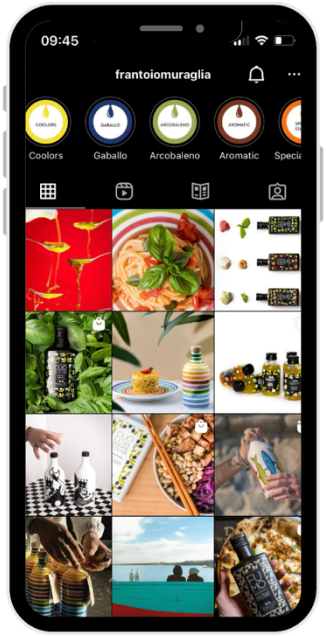
	Description
Instagram	Since 2014, 1 596 posts, 37 800 followers
Facebook	Since 2010, 34 876 followers, 69 posts July-December 2022, 6 active ads – April 2023
Twitter	Since 2013, 655 followers, 1 308 Tweet, four years ago latest Tweet
Pinterest	165 followers, 265 created Pin
LinkedIn	Official page, 1321 follower, one month ago latest post.
YouTube	Since 2013, 36 261 views, one year ago latest video
TikTok	/
Website	4 language, owned e-commerce, 3 social media contacts

Frantoio Muraglia has made great use of the possibilities provided by social media under the management of Meta Platforms Inc. i.e. Facebook and Instagram, achieving consistent results, which can already be observed in a more superficial way by the high number of followers and the number of contents published on the relevant pages. Thanks to the use of paid advertisements within the social pages, the frequent and curated publication of content, not only using posts but also through stories, and the possibility offered by Meta's social media to personalize its online target audience, the company was able to benefit financially.

Savino Jr Muraglia was able to target the essence of the quality olive oil market in Italy through the use of digital. The main problem this market faces today is related to name recognition. Consumers, especially those loyal to the online shop, have little knowledge of the producers, the mills and the products themselves. Instead, the company did not let the brand building process be driven by instinct or the emotional bonds that companies often try to establish with customers. Instead, Frantoio Muraglia gave weight to market analysis, customer loyalty and positioning within the searches made by web users.

The situation created by the Covid-19 pandemic was fertile ground for the development of Frantoio Muraglia's business as the company was already active on social media and owned its website and ecommerce and was thus not unprepared.

Image 4.7. Twelve most recent posts on Frantoio Muraglia's Intagram profile



Instagram, as for the other companies considered, is the social media where Frantoio Muraglia focuses most of its efforts in terms of digital communication.

The focus of the posts is on the main company products. The appeal is often explicit through the positioning of the product in the foreground. In other cases the product recall is less obvious but still easy to understand. When the posts depict dishes, such as pasta or pizza, it is possible to see the container of oil in the background, or the accompanying description lends itself to easy understanding, which is sometimes the case in Frantoio Franci's profile.

Pictures are edited and presented in high definition, which is maintained even when enlarged. There is no dominant colour that acts as a common thread between the various posts, yet they blend well together aesthetically.

A massive use is made of the figure of the ceramic jar, which over the years has been one of the most powerful and effective branding tools adopted by the company.

However, there is no shortage of posts dedicated to olive growing in general terms and to the territory in which the company is located. The presence of this type of post integrates perfectly with the corporate communication thread and, being easy and quick to understand, they help the user scrolling through the profile posts to get an organic overview of the company.

In terms of graphics and design, the similarities between this profile and the one held by Fratelli Turri are obvious, and the differences with the one held by Frantoio Franci are equally obvious. This means that the contribution of external agency or personnel specifically trained in digital communication is recognizable.

Frantoio Muraglia's Facebook profile is the same as its Instagram profile. The company does not use re-posting for its communication, so everything on the profile is of its own creation.

In order to improve the visibility and performance of the Facebook page, the company makes use of the possibility that the social network offers to purchase paid advertising, the so-called Facebook Ads. Of the traditional companies analysed, it is the only one, with the exception of OlivYou, to make use of this tool.

The benefits obtained through the use of paid advertising are obvious, the company in fact has the possibility of targeting the audience to whom the posts appear, increasing the possibility of obtaining and retaining new customers. Concretely, the number of followers the Frantoio Muraglia page has on Facebook is almost five times that of Frantoio Franci, although in this case there is a considerable time discrepancy in the creation of these. More evident is the fact that, with equal seniority in fact they were both created in 2010, the page of the Apulian oil mill has almost fifteen times the followers that Fratelli Turri has: clear evidence of how an effective digital strategy pays off in terms of visibility.

Another element that elevates Frantoio Muraglia for its digital strategy compared to other ordinary case studies is the use of LinkedIn.

The company profile is well maintained and active, with a frequency of posts of around 2-3 per month., this has led to a number of followers of around one and a half thousand. Today, LinkedIn is an indispensable tool for companies to gain visibility both vis-à-vis competitors, i.e. other companies, and professionals and new talent.

CONCLUSIONS

The aim of the recently concluded paper was to understand the current state of digital communication in the olive-oil sector in Italy.

An overview of the sector in Italy began the analysis. Its deep historical roots in the country in fact make olive oil and olive growing an integral part of Italian culture. Very often they are family businesses, with a long history behind them and deeply rooted in the territory in which they operate; it is of these small producers that a more in-depth analysis is made in Chapter 4.

National production is subject to geographical, region-to-region and annual variability, which is a typical peculiarity of the sector. The alternation of production is nowadays also cogitated by the advent of Xylella Fastidiosa and the destruction caused by it. Over the years, alternative supply chains to the one considered traditional have emerged, namely those related to organic production and those intended to obtain Geographical Indications such as PDOs and PGIs.

Although Italy is one of the countries that rank among both the world's largest consumers and producers of olive oil, the international context cannot be ignored. In fact, the country is in the Mediterranean basin and thanks to other states such as Spain, Greece, Portugal, Tunisia and Turkey, it identifies the largest olive oil production area in the world. Despite significant production worldwide, Italy imports large quantities to meet national demand, the trade balance therefore between imports and exports is characterised by an unbalanced trend towards the former.

After this general overview, the analysis shifts and widens its scope. Since the paper deals with digital communication, it was necessary to introduce the key concepts of this topic in Chapter 2. The arrival and development of digital marketing has its origins in what is considered conventional marketing. Change has been driven mainly by technological development, through digitization and then digitalization, which has led to an evolution of communication media by developing new ones. Communication techniques also had to undergo a change to fit with the medium used to disseminate them.

Communication is too vast to be generalized and treated in its entirety. For this reason, consistent with the theme investigated, that sector of communication dedicated to the world of food is examined. Food marketing therefore has its own marketing mix that includes the definition of product, price, promotion and place.

Even this branch of marketing has not been immune to digital transformation and therefore this aspect is also considered.

Narrowing the scope of analysis further, we come to focus on quality olive oil, after an explanation of the broader context.

The national production landscape is characterized by the presence of a multitude of family-run SMEs that find themselves occupying several stages within the olive oil supply chain, very often being producers and then dealing with packaging and marketing. Digital's impact has also reached these players who are often unable to grasp and fully exploit its potential to grow their business. In these small companies, most of the decisions are taken by the entrepreneur himself, who often must perform several functions due to the lack of a real internal organizational structure.

An entrepreneur's own age is a key factor in a company's ability to innovate and embrace the digital world. Generational issues are relevant because often only the new generations in the company can understand the need to be open to change. In fact, the deep-rooted history that characterizes small oil companies often acts as a ballast to company development and progress.

In order to support the thesis that SMEs operating in the olive oil sector are poorly digitized with regard to the communication aspect, empirical, historical and current data provided by the Agrifood Management & Innovation lab operated by Ca' Foscari University were used. Data refer to a sample of companies located in the regions of Veneto, Trentino Alto-Adige and Friuli Venezia-Giulia that are not only involved in olive production but in the broader food production. The information used for the analysis retains a strong relevance, despite the broader spectrum, because the oil production segment is part of the broader food industry and the reference is always to small and medium-sized enterprises.

Research conducted in Chapter 3 showed that the digital communication, in terms of social media use and proprietary websites, of SMEs in the agri-food sector is far from its maximum potential.

In order to gain a deeper understanding of the underlying reasons for the current state of digitalisation, four companies across the country were analyzed. In order to gain a deeper understanding of the underlying reasons for the current state of digitalisation, four companies across the country were examined. First two, Fratelli Turri, from Veneto, and Frantoio Franci, from Tuscany, showed a discrete level of digital presence, mainly

conditioned by the limited availability of both economic and human resources that characterizes these small and medium-sized enterprises. The entrepreneurs, in both cases representing the latest business generation, showed interest in new technologies. They recognized the need to rely on professionals outside the company in order to obtain the necessary know-how to move in the digital world in a coherent and effective manner. Then OlivYou, the first fully digital platform dedicated to the marketing of quality olive oils, was selected. Its digital nature and focus on small producers makes it a lighthouse of innovation within the olive-oil sector. In fact, it can represent for small producers who are unfamiliar with digital a first approach to the possibilities that technology offers.

During the interview with Michele Debernardi, co-founder of OlivYou, the name of the company Frantoio Muraglia emerged as an industry case study on the digitisation of oil-producing SMEs. Hence the decision to consider Frantoio Muraglia as the last business case in Chapter 4.

The company is an exception and an example to follow in the industry. Similar to the first two case studies analysed, the strength of use lies once again in the mindset of the entrepreneur, who in this case comes from a different background.

In conclusion, the olive oil sector in Italy, with a majority of small and medium-sized enterprises, is today in a state far from its maximum potential as far as the exploitation of digital communication is concerned. The main obstacles limiting its development can be found in the backward mentality and still very much tied to manual work and past history that typifies many entrepreneurs who, having limited digital knowledge, are not even in a position to understand its potential.

Secondary, but crucially important remains the question of the economic resources available, both in purely monetary terms and in terms of personnel to be devoted, to the often scarce enterprise whose main focus remains the production side and not communication.

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