UNIVERSITÀ DEGLI STUDI DI BERGAMO

Facoltà di Economia

Ph.D. Programme in Logistics and Supply Chain Management

- XXVI Cycle -

Delivering value in the food supply chain: organic food development in Italy.

Supervisor: Prof. Enzo Baglieri

Ph.D. Thesis by

Vitaliano Fiorillo

MAT. 1017592

Anno Accademico 2012/2013

To emme, for standing by...

Acknowledgements

I would like to express my sincere gratitude to Prof. Enzo Baglieri for his restless support and friendship throughout this long, challenging and rewarding experience.

Special thanks also to all my colleagues at SDA Bocconi School of Management for the collaboration in the Bio Management Lab project.

Introduction: the changing food supply chains

Whether it is frozen, packaged or fresh, cooked or raw, tasty or battered, food is always a matter of interest. It is our primary source of well-being, a tool to defend ourselves from disease, a hedonic pleasure for the five senses, the basis of social interaction around the table. For our ancestors, before, and many tribes that still live in close contact with nature, at least half of the waking hours have always been committed to research and preparation of food. In the "developed" world food is often given for granted, but for many individuals in other parts of the planet, feeding on a daily basis is not a certainty.

In many countries, television and media entertain a large audience on the culinary art and its typical, refined and exotic products or, more simply, on the simple knowledge bases to recognize a fresh egg or fish.

However, wherever we are and whatever our life style, we need a reliable and constant food supply.

We live in times and countries made of stores overflowing with stocks, shopping malls, hypermarkets and fast foods. Behind all this, there are countless intertwined and overlapping supply networks, a set of customer-supplier relationships from field crops to plate. These are the networks that deliver fresh produce, processed and packaged food every hour, every day, every week, in any season, virtually anywhere, giving us a seemingly inexhaustible supply of food at the lowest price, in the most convenient place.

The founding principle of the food industry, in facts, was to provide consumers with complex products, at reasonable prices, in large quantities,

and always immediately available. For industrial players, quality of the product and its value resides in the transformation processes, from procurement to production standardization, in order to ensure safety, performance and repeatability of the process itself and the organoleptic characteristics of the product (Dimara et al., 2003).

This philosophy, supported by strict regulations, still retains a number of undeniable advantages, first of all the quest for maximum process efficiency, but it has created a one-way relationship from producer to consumer, who is reduced to an almost completely passive background actor, poorly informed and scarcely involved if not through commercials (Morgan, 2000). Even today, consumer concerns mainly relate to price, safety, ease of retrieval and preparation of products, and the organoleptic quality, i.e. color, texture and flavor.

Value has been moved from the raw materials and human labor of agriculture to the transformative process and economies of scale, giving rise to large industrial and technological behemoths, leading to the devaluation of the "intrinsic value of food" with agriculture becoming more and more standardized and dependent on fertilizers and pesticides.

Such intensive agriculture relies heavily on electro-mechanical systems, irrigation, agro-chemicals, and basic raw materials that possess new traits such as genetically modified plants and animals. Under this century’s agricultural economy, these attributes of intensive farming created new challenges for sustainable production and processing practices that promote a balanced approach to the problems of food global supply, quality, safety, and good environmental stewardship.

Modern consumers demand food that is fresh, palatable, nutritious and safe. Furthermore, increasing number of consumers demand functional foods that offer specific health and nutraceutical benefits. With changing lifestyles and rising income in many parts of the world, increasing proportion of foods are prepared and eaten outside the home as convenience and restaurant meals. In larger areas of the planet instead, a meal a day is not a certainty, and with growing population and emerging new global powers, the demand for food is increasing at a tremendous pace. Today, food is one of the central themes in the quest for sustainability, and changes therein impose new challenges to supply chain management in the food industry. While one billion people suffer from hunger, one billion people suffer from overeating disorders and pathologies. These are the two challenges that food supply chains are facing and they are of opposite nature.

From the farming of basic raw materials to delivery of final products to the consumer, each different step in the entire production process is a link in the chain. Supply chain management (SCM), therefore, represents the management of the entire set of production, manufacturing, transformations, distribution and marketing activities by which a consumer is supplied with a desired product. Scholars also refer to this as demand chain management to emphasize the focus on meeting consumer expectations (Woods, 1999). The practice of SCM encompasses the disciplines of economics, marketing, logistics and organizational behavior to study how supply chains are organized and how institutional arrangements influence industry efficiency, competitions and profitability (Hobbs, 1996). As individual businesses and global markets become highly

efficient and cost-effective, competition has therefore shifted from ‘between businesses’ to within entire value chains. From the marketing and processing perspectives, SCM is an essential tool for integrating the activities of the various suppliers within the company’s operations in order to assure the consistent delivery of quality assured products and services to the consumer. For the consumer and other stakeholders, SCM focuses on improving the performance of the supply chain through the delivery of guaranteed safe, desirable and good quality food in a cost-effective way. In the food industry, where availability, speed, dependability and traceability are at the core of demand fulfillment, supply chain management holds the key to cost reduction, safety as well as service enhancement (Aertsens et al., 2009). In food supply chain management, all these objectives are met through efficient distribution logistics, which is in its downstream part the front end of consumers’ perceived value. Distribution Logistics is assigned "the task of transferring goods from the place of production to the place of consumption, thus providing the customer with a service consisting of various activities, at a satisfactory cost" (Balestri, 2009).

If on the one hand the major food manufacturers and retailers around the world seek to extend their supply chains in developing countries and emerging economies by seizing the opportunity of providing low cost food, on the other hand they are losing ground in many industrialized countries, where local and organic food are peeking out their niche, delivering new values to customers.

In the last ten to fifteen years, the number of food safety scares (BSE, N1H1, E. Coli, GMO, etc.) have eroded consumers’ confidence in regulators, distributors, manufacturers and scientists (Bromley, 2001;

McNaghten and Urry, 1998). Such news, and many other "scandals" about food safety, have drawn the attention of consumers and legislators. Globalization of markets has also meant that food supply chains stretched in such a way as to make it almost impossible to trace the exact origin of raw materials. Despite efforts to regulate and enforce laws, labeling, processes and procedures, global food supply chains have highlighted the fragility of the control systems and the urgent need to make food safer.

Considering implications for a growing global business such as organic and supply chains, this research will focus on investigating this latter issue, basing its foundations on a thriving marketing research, bridging towards operations and supply chain management research in the organic food sector.

The objective of the work is to explore how food SCs should be revised in order to meet a changing demand and better deliver the values consumers are looking for when buying organic. The thesis will first concentrate on understanding the changes taking place on the demand side, focusing on consumers' evolving needs based on new and rediscovered values, and how organic better embodies these values. An extensive description of the emergence of organic and its growing market will be given to frame the size of the phenomenon. The core of the research will then be concentrated on the key role of distribution in delivering value to customers, and how "value" is changing in consumers' perceptions. The aim will be to understand if distribution, especially on its retail side, is able of delivering the new values embodied, as it will be shown, by organic food. To achieve the objective, a framework, incorporating complementary methodologies, has been developed. Propositions will be derived from the results of an

actual scenario planning exercise carried out with representatives from the business community. Subsequently, propositions will be verified through exploratory surveys delivered to those considered to drive the change in the organic food supply chain, consumers on one side, and farmers on the other.

CHAPTER 1

1. The food new consumer and the crisis of the productivist model

In Europe and other industrialized countries food is taking a high public profile and consumers are becoming increasingly interested in understanding the who, where and how of the food they eat (Bell and Valentine, 1997; Gilg and Battershill, 1998). At the same time, new technologies push towards a reduction of distances between the different links of the value chain, and the consumer-citizen moves towards a greater involvement and informed participation in the events that affects his life.

The socio-cultural changes taking place today, show obvious signs of a potential demand turnaround, where the consumer is a live player of value creation. The active participation of customers in production processes (manufacturing and services) is a widespread and studied phenomenon (Baglieri, 2012; Chien & Chen, 2010; Droge et al., 2010; Auh et al., 2007).

It is demonstrated that the direct participation in the production process alters the way in which consumers perceive their level of satisfaction with a product (Lusch et al. 2007), but in the case of food, also implies a greater guarantee (at least perceived) of quality and wholesomeness.

As in many other areas (e.g. the spread of social networks) participation has a strong social and relational connotation. Consumers today tend to aggregate in buying groups and consult within forums, social networks and specialist websites before buying a product.

In the food industry we are experiencing the same trends, not surprisingly CSA (Consumer Supported Agriculture) groups, which guarantee a fair

price for the producer and for those freely take part in the group, have almost doubled (in Italy) in the last 2 years (Biobank , 2013) .

The signs of a rapidly changing and increasingly complex demand are evident and consumers want to go beyond the passive relationship with the supermarket shelf, personally knowing raw materials producers through farm stores, receiving information, and sometimes even becoming a financial resource for farmers through the afore mentioned “consumer supported agriculture”.

In other words, the new consumer is willing to change his consumption patterns in exchange for information and knowledge: the *know-who* becomes a matter as fundamental as the *know-how*. He reaffirms the value of food beyond its organoleptic characteristics and more as a tool of social and cultural enrichment.

Food demand becomes a complex and diverse combination of new values and needs that can hardly be satisfied by the conventional industrial approach that has led the industry since the last war to date. Many food manufacturers claim that it has become virtually impossible to understand, cluster and forecast demand in industrialized countries. Since choices of production and consumption have long been guided only by the economically rational choice, the behaviour of certain groups of consumers seems today irrational or even completely random.

What seems certain is that a growing number of conscious consumers ask for 'quality' products (Torgnon et al., 1999), and that quality is rarely associated with industrial process but rather with the concept of natural. This due to the fact that there is a widespread perception that the closer a product is to nature, the lower the chance that there has been vicious interference by man or machines (Nygard & Storstad, 1998). Although globalization of food supply chains has followed the same path as in other

industries, with a few large multinational corporations and transnational economic actors, they still have distinctive features, especially related to the role of nature in the procurement of raw materials. As a matter of fact, while the production of a mobile phone on where technological skills and lower labor costs are, for example, for food raw materials it is necessary to deal with geography, climate and seasons.

From the post-war period onwards, with the evolution of technology, the effort of producers, processors and researchers has focused on how to mitigate the effects of nature on the transformative processes and supplies. Goodman, Sorj and Wilkinson (1987) have described two processes that explain the evolution of the industrial system of food production. On the one hand, the process of *appropriation* is when man tries to carry out the task of nature of producing nutrients through industrial activities; on the other hand, the *substitution* process occurs when "manufactured" industrial products replace natural. An example of appropriation is GMOs, while the effects of the substitution process are well represented by the widespread lack of knowledge of the seasonal fruits and vegetables.

The food industry has been able to provide consumers with good quality products at affordable prices, in large quantities, always immediately available. The basic idea of the so called "productivist" model, dominating throughout the twentieth century, is that the quality of the product and its value resides in the transformation processes, from procurement to production standardization, in order to ensure safety, performance and repeatability of the process itself, and the organoleptic characteristics of the product.

The evident fallibility of global food supply chains in ensuring safety and health, the growing awareness towards healthy lifestyles and the ever-faster flow of knowledge, meant that many begun understanding quality in

different ways, as function of the naturalness of a product, its origin and the treatments that have applied to it. Of course, price and income are still strong drivers of the purchasing decision, as well as sensory and nutritional attributes and convenience, but quality is for many more and more related to the concept of "natural" and "local" (Nygard and Storstad 1998).

This increased sensitivity to local foods and minimally invasive food processing, exert pressure from the demand side, pushing producers to reallocate certain processes locally and reposition certain products on the perception of "local" as "safe" and genuine.

As already noted above, an ever growing part of consumers tends to evaluate food upon features beyond its organic properties and the narrow economic convenience. When we say that it is more appropriate to obtain supplies locally (independently of the lower environmental impact which will not be discussed here), we implicitly attach to food the value of being produced in a specific area that we imagine to be less polluted than a large city, more attractive than an industrial area and where a specific community based on non-industrial know-how lives. In other words, we affirm the existence of a social value intrinsic to food itself. The quality function then becomes what Murdoch, Marsden and Banks (2000) have called "*embeddedness*", i.e. the degree to which a product is related to the natural and social environment it comes from.

The concept of embeddedness, has been part of economic theory for a long time (Polanyi, 1944; Granovetter, 1985), but, in the light of the changes discussed above, in the context of food it takes on even more importance today.

In this perspective, farmers too have the opportunity to regain a central role in food value chains. Farmer's market, CSA, vegetable box schemes and other cooperative models of distribution and delivery, are rapidly

proliferating. This sort of direct distribution models fully express the concept of quality as embeddedness because they provide a point of contact between farmer and consumer, turning grocery shopping into an experience that the modern distribution is in no way able to offer (Hinrichs, 2000).

Looking, for example, at the performance of food retail globally, the signs of this trend reversal seem to emerge. According to Deloitte's Global Powers of Retailing (2013), many U.S. and European retailers are suffering from a decline in local markets and were able to maintain a moderate growth rate just by seizing the opportunities offered by emerging countries. The top 10 largest retailers in the world, in facts, have a geographic footprint equivalent to the remaining 240 included in the report; some operate in more than 30 countries and derive from foreign markets more than half of total sales despite fewer sales points (Table 1). Consumption crisis in the United States and Europe certainly affected internal markets, but, in the writer's opinion, the changing needs of demand have played a key role in this phenomenon. Retailers are faced with the challenge of engaging customers on more than just price. They must make shopping across all channels a more stimulating and satisfying experience, rather than simply a way to find the lowest price for a particular product.

Table 1: Top 10 retailers worldwide

Top 250 rank	Name of company	Country of origin	Retail revenue (US$mil)	Retail revenue growth	Net profit margin	Return on assets	# countries of operation	% retail revenue from foreign operations
1	Wal-Mart	U.S.	446,950	6.0%	3.7%	8.5%	28	28.4%
2	Carrefour	France	113,197	-9.8%	0.5%	0.8%	33	56.7%
3	Tesco	U.K.	101,574	5.8%	4.4%	5.5%	13	34.5%
4	Metro	Germany	92,905	-0.8%	1.1%	2.2%	33	61.1%
5	Kroger	U.S.	90,374	10.0%	0.7%	2.5%	1	0.0%
6	Costco	U.S.	88,915	14.1%	1.7%	5.8%	9	27.0%
7	Schwarz	Germany	87,841	5.8%	n/a	n/a	26	55.8%
8	Aldi	Germany	73,375[e]	3.7%	n/a	n/a	17	57.1%
9	Walgreen	U.S.	72,184	7.1%	3.8%	9.9%	2	1.5%
10	The Home Depot	U.S.	70,395	3.5%	5.5%	9.6%	5	11.4%
Top 10*			1,237,710	4.4%	2.9%	6.2%	16.7**	32.9%
Top 250*			4,271,171	5.1%	3.8%	5.9%	9.0**	23.8%
Top 10 share of Top 250			29.0%					

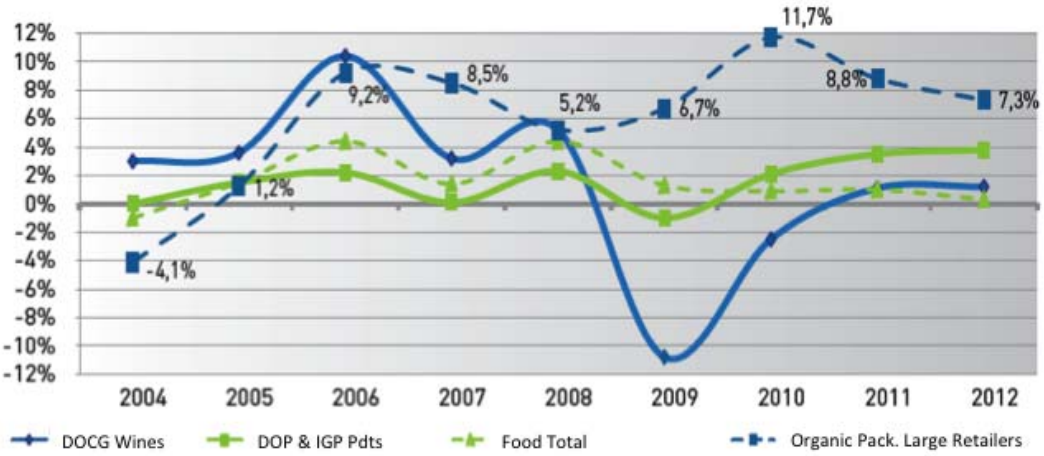
* Sales-weighed, currency-adjusted composites

** Average

Source: Deloitte Global Power of Reatail 2013

The global crisis actually had an adverse effect not only on retail in general, but especially on many premium products that have been removed from family's shopping list to compensate the lower income.

Chart 1: Premium products household consumption (year over year growth)



Source: ISMEA, Families Panel GFK-Eurisko

However, among price premium products, organic resulted unexpectedly anti-cyclical (Chart 1) and the reasons are, in my opinion, to be found exactly in the changing needs of demand. Organic seems to fully

incorporate the characteristics of safety, health and localism that the new consumer is looking for.

2. Organic food: market trends and perceptions

"Organic agriculture is a production system that sustains the health of soils, ecosystems and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than on the use of inputs with adverse effects. Organic agriculture combines tradition, innovation and science to favor benefits to the shared environment, promote fair relationships and a good quality of life for all those involved"

The above definition given by the International Federation of Agriculture Movements (IFOAM), can be considered as a good starting point to better understand this industry in constant and rapid rise all over the world. It does not only define a set of practices used to raise animals and grow crops in a healthy and natural way, but it refers to a real philosophy aimed at preserving pristine nature of life as a basis for mankind. The above can be seen also from the principles that the same organization defines:

- Principle of Health: organic agriculture should sustain the health of soil, plants, animals, man, the planet as a single, indivisible element. It emphasizes the overlap between the health of the individual (and community) and the health of the ecosystem.

- Principle of Ecology: organic farming has to work with the cycles and the biological ecosystems, so as to emulate them and support them.

- Principle of Fairness: organic agriculture should build a relationship marked by fairness about the common environment and life opportunities. All the actors of the system should help improving quality of life, promote food sovereignty and reduction of poverty.

- Principle of Care: organic agriculture should be managed carefully and responsibly, in order to protect the health and well-being of present (and future) generations and the environment.

The affirmation of organic, at a social and political level, dates back to the '70-'80 in Switzerland, although the first steps in this field came at the beginning of the twentieth century in relation to the so-called "alternatives" that can be considered the pioneers of the organic movement (Coop, 2013). At European level a first regulation of the sector came in 1991 with the EEC Regulation 2092, by which the method of production and processing of organic products was regulated, so as to define a unique and recognizable system for all European citizens. The great importance of this regulation is that it set an end to the 15 different types of organic farming that were established over time in Europe, and the existing different regulations for each one of them (Association of Consumers and Users, 2009).

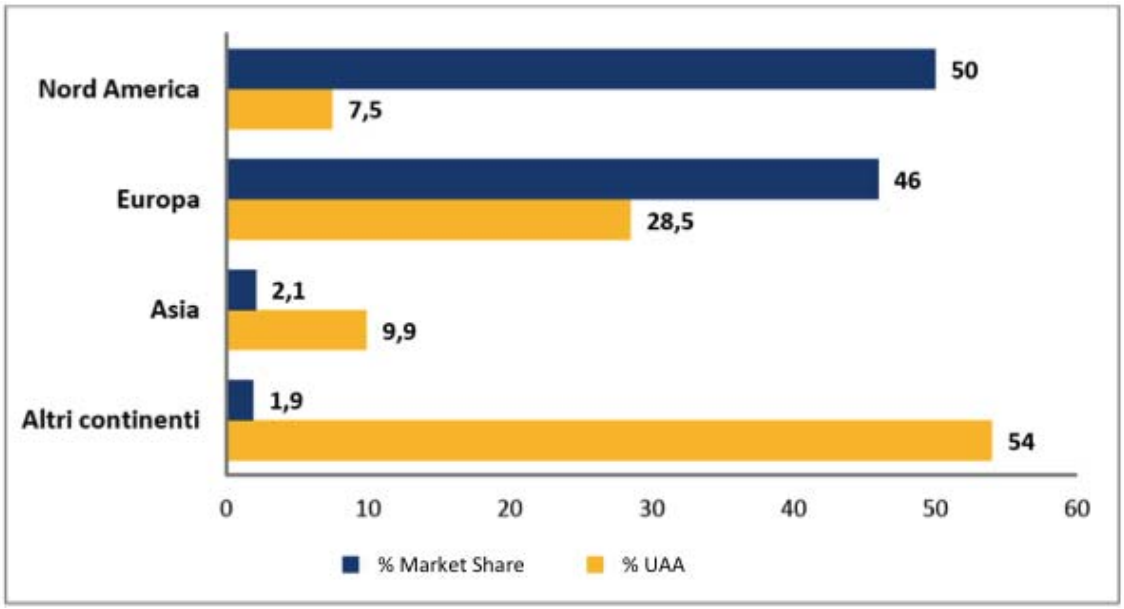
Due to the rapid growth of the industry, both in terms of demand and supply, the regulation has undergone several changes over the years, until

2009 when a new Regulation was introduced, the (EC) 834/07 together with the Implementing Rules reg. (EC) No 889/ 08 and 1235/ 08. Thanks to these standards, a range of issues relating to the methods of cultivation and livestock breeding, labeling, marketing, processing, control systems on production processes and finally to the guarantees of health organic products have been settled. The most innovative element of this law is probably the fact that organic farming also recognizes an important social function in terms of health protection and environmental protection (Pancotto & Bartolucci, 2011).

Taking into account FIBL-IFOAM data (BioReport 2013), in 2011, the areas destined to organic farming increased by 3% over the previous year, amounting to as many as 37.2 million hectares. From the geographical point of view, the growth was global, especially in Asia, where it was recorded an increase of 34.4 %, and except only for Latin America where there has been a decline of 9.1%, mostly due to the decrease of grassland in Argentina. ISMEA in its 2013 report, estimated that about 0.9% of the world's agricultural land is allocated to organic.

Regarding organic farmers, however, they increased a fair 14.3%, amounting to 1.8 million. In terms of sales, according to the consulting firm Organic Monitor, a total revenue of $63 billion was estimated in 2011, with a +6.3% over 2010, and 170% over 2002. North America and Europe alone account for 96% of the market (see Chart 2)

Chart 2: % weight of organic UAA and % organic market share in 2011



Source: ISMEA, Organic Products Report 2013

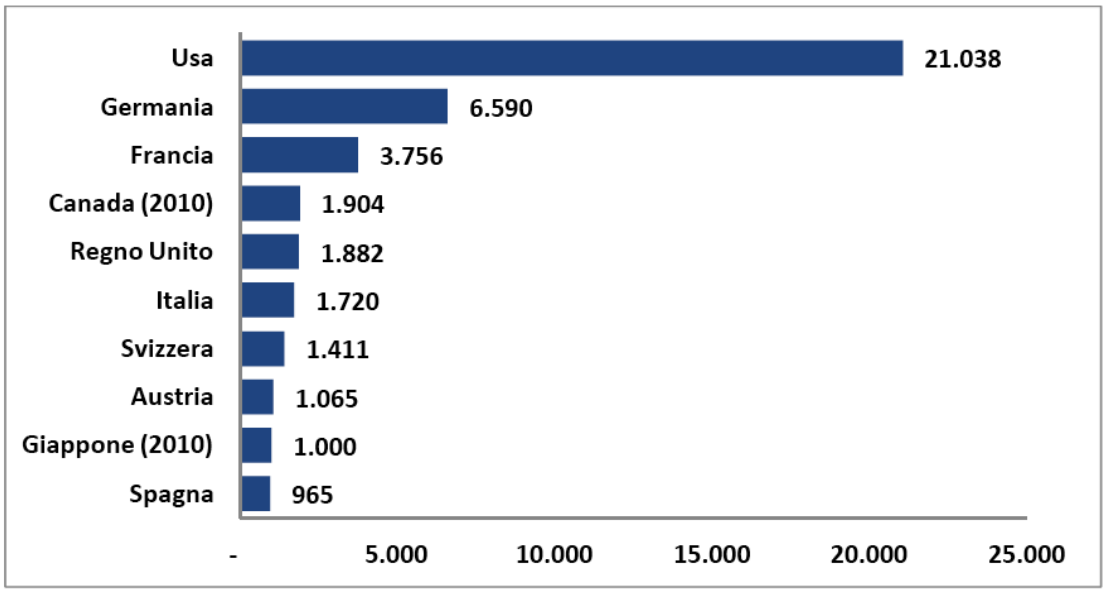
As the chart clearly shows, North America alone accounts for about 50% of the total market value, which corresponds to a small quantity of cultivated area, in contrast to other continents such as Asia or Oceania which have a greater share of surfaces and a limited market. The above can be explained by a concentration of demand in more advanced and sophisticated markets, while the larger needed land extensions are to be found in developing countries.

In Europe, the largest cultivated areas are located in Spain, with 1.6 million hectares, followed by Italy (1.1 million) and Germany (1 million). The market has been estimated at 21.5 billion euro. Germany has the highest turnover with € 6.5 million, while, in terms of expenditure per capita, Switzerland is in the first place with 177 euro, followed by Denmark and Luxembourg with €162 and €164 (Ismea, 2013). The graph below shows

the turnover of the top ten nations in the world among which there are also many European countries.

It is worth noting the position of Italy, which came in sixth place with a turnover of €1.7 billion and a weight percentage of about 8%. In addition, according to FIBL-IFOAM data, Italy is the fourth fastest growing market with 11% growth rate year over year, after Croatia (+20%) , the Netherlands (+15%) and Denmark (+13 %). These data show that the organic market in Italy is lively, both in terms of supply and demand, and worth deeper understanding as it will be in the following section.

Chart 3: Organic turnover Top 10 Countries (m€)



Source: ISMEA, Organic Products Report 2013

3. Organic market in Italy

As already noted in the previous paragraph, Italy is one of those countries in which organic does not seem to be affected by the crisis, which instead is showing its effects instead in many other areas of conventional products. To get a better idea, according to Nielsen data, total grocery registered -1.4% in value and -1.9% in volume in September 2013 5 . Specifically 6 :

- the beverage sector, which has a weight of about 14% on total grocery, declined 2.2 % in value and 3.8 % in volume;
- fresh produce, which has a weight of 27.2 %, declined 3,41 % in value and 2.8 % in volume;
- packaged food, account for 31.5 %, declined 0.9% in volume, but slightly increased in value (+0.4 %).

In terms of supply, in 2010, according to the sixth census of agriculture, organic farms were 2.7% of the national total and in terms of agricultural extension represented 6 % of the total, in addition, the average size is 18 hectares per farm, more than double the average farm is 7.9 (Ismea, 2013). According to the National Information System on Organic Farming (SINAB), organic operators were approximately 49709 with a growth of 3%, as shown in the following table.

Table 2: Organic certified operators in Italy

Anno	2009	2010	2011	2012
Certified Operators	***48487***	***47663***	***48269***	***49709***

Source: elaboration from SINAB

2011 as well has shown an increase in the number of organic operators equal to 1.3% , following a decrease of 1 .7% in 2010.

The regions with the highest number of operators are Sicily and Calabria, while Emilia Romagna is a leader in the number of processors, followed by Veneto and Lombardy. The utilized agricultural area (UAA) was equal to 1.167.362 hectares in 2012, an increase of 6.4% over the previous year (Bio Report, 2013).

Chart 4: Organic operators and UAA (.000)

Source: ISMEA

Despite the growth of the sector is not steady, Italy stands out in comparison with other nations thanks to important structural data; the explanation of erratic periods, however, stems from the fact that there is still a lack of market orientation of a part of the supply chain. Beyond these observations, it seems useful to consider the evolution of the market in terms of demand.

As already noted at the beginning of the paragraph, Italy seems not to be affected by the current crisis and this is probably because the consumer's

attention to issues such as the protection of health and the environment is growing (Ismea, 2013). As a whole, the Italian market is worth 3.1 billion euro, taking into consideration exports accounting for 45% of the total 8. Growth is witnessed in all channels, with sales increasing 25.5%, according Ismea

Distribution of consumption of organic products, finally, is strongly concentrated in the northern regions, while in the other areas, especially in the south, there is a much lower consumption. In terms of growth central Italy recorded the highest rates with 15%, while the North grew only 5.7%, but weighs 70% of the total. The south on the other hand recorded a sharp reduction equal to 7.1%.

Table 3: organic household consumption growth per area

	% Growth 11/10	% Growth 12/11	% Weight on total. 2012
Italy	8.8	7.3	100.0
North	7.9	5.7	70.8
Center	9.9	15	22.3
Sud	18.2	-7.1	6.9

Source: ISMEA, Families Panel GFK-Eurisko

This rapid growth is, most probably, due to a change in consumption habits, with a larger part of population increasingly interested in a healthier lifestyle and conscious respect for the environment (Chinnici, D'Amico, & Pecorino, 2002; Carverley & Wier, 2002). Being produced in a natural way, thus avoiding the use of any type of harmful or toxic substance, fully reflects the above mentioned needs of consumers. Several studies about the

reasons that lead a consumer to prefer organic, show that the reasons for the choice can be enclosed in two main categories: the first is related to the benefits to the environment and animal welfare, the second reflects personal ethics and the idea that consumers have of themselves (Guido, 2009). In other owrds, consumption of these products seems to be the result of an ideology connected to a set of values and beliefs (Schifferstein & Oude Ophuis, 1998).
Specifically, according to the empirical study carried out by Guido (ibid.), the intention to purchase organic products is influenced primarily by two factors: moral rules and self-identity.

The first element encloses all aspects such as environmental protection, natural products and care for personal health; the second refers to concerns for themselves, the awareness of benefits of organic products and the consequences of the purchase of these products for local development. Moral norms and self-identity have both a direct effect on intentions to buy organic products, and an indirect effect through attitude; they allow consumers to take into account the consequences of purchasing organic food, thus contributing to the propensity to buy. It is interesting to note, as the same study shows that the two elements do not have an equally significant role in the purchase of conventional products which, in contrast, is influenced by subjective norms and perceptions of control over the buying behavior. In the study of Arvola (2008) subjective norms are included, as a key factor that influences the purchase of organic products and are defined as the individual's perception of the pressure exerted by other parties about what is right or wrong, and this, in essence, can be translated as saying that the individual behavior is influenced by the context in which he lives (parents, relatives, friends).

Many other studies lead to divide consumers in two categories: regular and occasional consumers. In a recent study by Pino, Guido and Peluso (2012), ethics were identified as the main driver of purchase for consumers who regularly buy organic products, and health and food safety have been identified as drivers for inconstant consumers.

In 2011, Nielsen has conducted an interesting survey on a sample of 1031 organic consumers in Italy through CAWI (Computer Assisted Web Interviewing) interviews. The majority of the sample declares to buy organic products for individual consumption and has an average buying age of 3.5 years. Nevertheless, only 30 % said they had been loyal to the category for more than 5 years.

As regards the main reasons for the purchase of organic products, indicated by the sample , they are mostly personal and have been shown in :

- Health and attention to healthy eating
- Respect for nature
- Belief , identity value (an be seen in phrases such as " it is close to my style life")
- Simple curiosity
- Search for savory flavors and alternative

A minority of the sample, however, states that the reasons for the purchase of figures derived from a word of mouth reference or a simple fashion. These results are consistent with a thriving body of literature (visually synthetized in Figure 1), pointing out a multifaceted set of values and beliefs driving the purchase decision.

Figure 1: Synthesis of Literature on Organic Consumer reasons for buying

According to Nielsen, it is possible to identify three profiles of organic consumer:

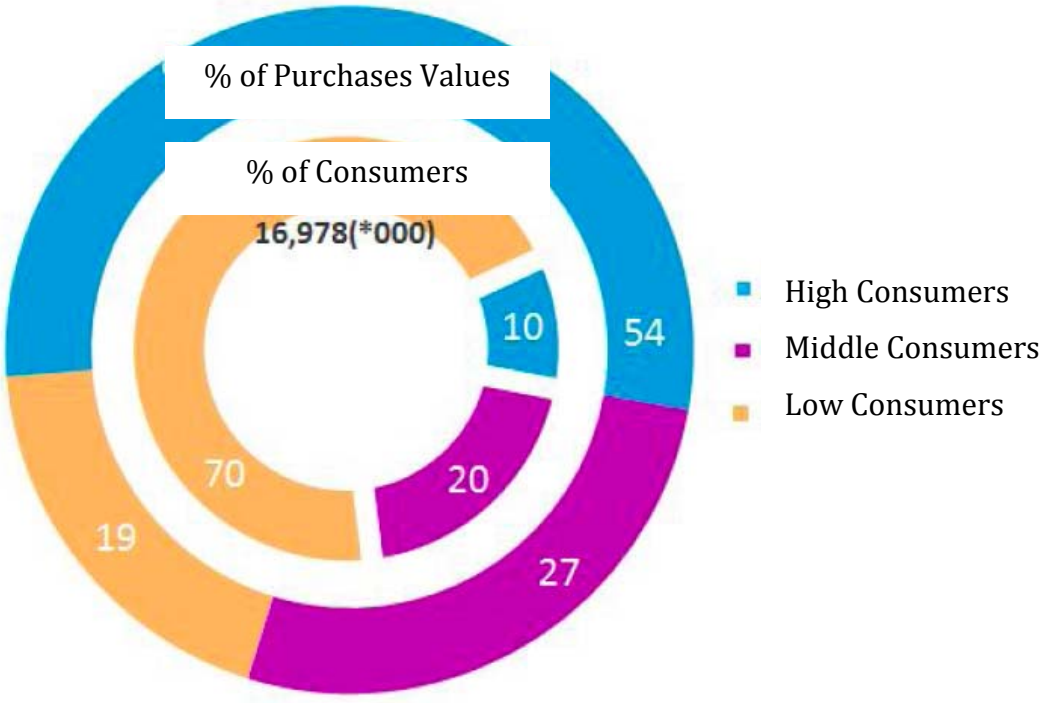
1) High consumers: people who buy organic products at least at least 3-4 once every 15 days;
2) Middle consumers: people who buy organic products at least 3-4 a once a month;
3) Occasional consumers: people who buy organic products at least 3-4 times once every 2-3 months.

From the top buyers who are those people who associate the purchase of organic and health care to healthy eating, to the occasional that are for the

most part of people who have approached organic for fashion or word of mouth.

Chart 5 shows the distribution of organic consumers from the Nielsen Consumer Panel. The penetration of the total households is 73%, in other words, more than seven out of 10 families have bought organic products at least 3-4 once every 2-3 months. Among these buyers, 70% are occasional buyers, 20% are medium buyers and only 10% falls in the high consumer profile. As can be seen from the graph, despite the high buyers have a numeric insignificant portion, they develop 54% of purchases in value.

Chart 5: distribution of purchases and consumer category



Source: Nielsen Consumers Panel 2013

In several surveys on purchase intentions, it is clear that the percentage of people who actually buy organic products is lower than the percentage of

individuals who claim to buy them. This could be due to external factors that hinder the purchase of organic products and, therefore, are preferred conventional products (Guido, 2009.). According to Bio Report 2013, main barriers to purchase are high price, lack of trust in organic products, lack of information (lack of knowledge) and limited availability. The prices have always been an object of study in this area by economists; As a matter of fact, organic products, in addition to being subject to the usual price components are affected by a peculiar structure at the level of primary production and market (Bio Report, 2013).

The factors contributing to premium price formation in the organic sector may be identified in:

1. Higher production costs resulting from the reduction of yields and costs related to certification;

2. national productive structure that, despite the increase of the producers, does not show a proportional increase in the share of marketed production as organic;

3. processing and production artisanal methods that do not allow economies of scale.

In 2006, the differential price between organic and conventional hovered around +66%, compared to 64.9% in 2005 (De Ruvo, 2007). In looking at the average figure, it must be considered that in the organic sector there are several product categories with different trends. As shown below (Table 4), the differential is high enough (above average) in the high added value and high service content categories, reaching slightly below 42%. Analyzing

dynamics of the individual products, two major considerations emerge (De Ruvo, 2007):

1. There are many products where the price differential is very low (e.g. fresh milk, soy beverages, infant cereals), and only five cases (pasta, eggs, fruit drinks, biscuits and honey) the differential is higher than the category average.

2. In terms of changes between 2006 and 2005, only fruit drinks showed a very high trend, unlike all the others who have minor changes.

Table 4: price differential between organic and conventional products by category

	2006	**2005**	**% Diff. 06%05**
Milk and Derivatives	40,2%	40,9%	-0,7
Diet Products	16,9%	16,7%	0,2
Baby products	-15,1%	-12,1%	-3,1
Pasta and Rice	33,4%	39,1%	-5,7
Bread and substitutes	98,0%	84,6%	13,5
Fruit and vegetables	62,2%	67,8%	-5,6
Cookies, snacks, etc	100,3%	85,7%	14,5
Honey	60,3%	57,7%	2,6
Oil	90,6%	93,8%	-3,2
Sausages and meat	79,8%	67,4%	12,5
Eggs	87,9	92,4%	-4,5
Condiments	113,8%	98,6%	15,2
Icecreams and frozen	29,6%	28,5%	1,1
Sugar, coffee and tea	91,3%	87,6%	3,7
Alcoolic beverages	59,2%	64,5%	-5,3
Non alcoolic beverages	73,6%	66,8%	6,8
Other products	114,0%	124,0%	-10
Total packaged organic	**65,9%**	**64,9%**	0.9

Source: ISMEA/AC Nielsen

Table 5: price differential between organi and conventional products by product

	2006	2005	% Diff. 06/05
Fresh milk	12%	18,4%	-6,4
Fresh Yogurt	29,7%	32,0%	-2,2
Baby food	-18,7%	-16,7%	-2,0
Kids cereals	0,3%	9,7%	-9,4
Pasta	74,4%	71,7%	2,7
Fresh vegetables	47,9%	81,1%	-33,2
Shortbread	61,8%	59,4%	2,4
Cereals	-12,4%	-13,0%	0,7
Honey	60,3%	57,7%	2,6
Olive Oil	53,4%	65,0%	-11,6
Eggs	87,9%	92,4%	-4,5
Fruit beverages	135,5%	119,6%	15,9
Soy beverages	11,6%	14,0%	-2,4

Source: ISMEA/AC Nielsen

4. At the other end of the chain: farmers and managers

At the opposite end of the chain producers have picked up the message from consumers and have triggered a change process. Farmers are taking a new look compared to what we are traditionally accustomed to. The term "farmer" is actually a misnomer, as it is more correct to speak today of "farm manager" or “agricultural entrepreneur”. The new face of farmers that is taking on in the popular imagination is a 35-40 years old, graduate, dynamic entrepreneur. The identity card and the curriculum of the new farmers is clear: businesses run by young people under the age of 35 increased by 4% in Italy last year (10,000). Many of these new farmers have a degree (over 30%) or a college degree (over 70%). An important fact, and at least uncommon for Italian agriculture, almost a third of new farmers are women.

What is striking is the vitality of the new companies: 33% of young entrepreneurs involved in this “return to the fields”, is in the process of business expansion (both in the North and the South), 40% declared they had increased their turnover and 13% has focused on exports.
It is true that, according to data released by the Italian Farmers Confederation, many of those who have succeeded in the business (8 of 10) are managing family owned land or at least rely on a family able to cover start-up costs. Not to mention that to start a farm has been calculated that about 23 kg of bureaucracy paper is needed. Maybe we are not facing an "agro-boom", but these issues seem common to any industry and belong to the bureaucratization of the country.

If we put these data in comparison with the diffusion of organic farms discussed above, it is easy to establish a direct correlation. Organic is speeding up the process of modernization of farms. In addition to being a choice in terms of ethics and responsibility, it is a market choice and a profitable production technique that allows reallocating the intrinsic value of products and the profit margins lost with the *productivist* model. Being one of the most advanced products with higher growth rates, it is clear that anyone starting a new business or innovating the business naturally tends to organic. On the other hand, if we think about technology start-ups, no one would ever think of launching one to market and market telegraph.

Innovation in this case also means recover excellence productions, strongly linked to micro-climates and traditions of the Peninsula, and that did not find any space in supermarkets but can be successful in niche markets and much more profitable. This is the case for example of the Piennolo

Vesuvian Tomato PDO organic brought back on the market by Bioitalia Srl this year by supporting local crops and creating an extremely refined and full of traditions product. The Slow Food Foundation has reevaluated the Cappone Morozzo, a breed of Italian high quality chickens but little appreciated by industrial production because of its slow weight gain.

Innovation extends then to distribution models as well. Since one of the basic needs expressed by consumers of organic farming is the need for information and contact with the producer, farms are gradually opening up and tend to establish direct relationships with end customers. You could say that organic, more than any other productions, is bringing farms from B2B to B2C, in a "short chain" logic, i.e. a supply chain where the marketing of products to the final consumer is not intermediated by the organized distribution. As in any other type of company in the industrial landscape, passing by the relationship with the distributor, or the consortium, in direct relationship with the consumer, involves the acquisition of new skills, as well as agricultural techniques. Analysis of the short and long chain determinants and characteristics will be extensively discussed further ahead.

In the "paradigm" of organic, managerial skills and in particular the management of the supply chain, are key drivers of development for farms and their shape. We are witnessing the emergence of different business models, new or re-discovered and revisited, imported from experience and studies in other fields, other than those that traditionally characterized the agriculture and food industry. With the emergence of these new experiences, also grows the idea that the farmer has a strong innovative drive, basics of marketing and communications, uses new technologies and

is able to influence the dynamics of the supply chain from field to consumer.

5. The key role of distribution in delivering value

Marketing and sociology literature helped in identifying demand changes according to new consumers needs and behaviors and the shift towards organic food the market has witnessed in recent years. Nevertheless, the findings of this body of literature point out that operations, and supply chain management from farm to the final customer especially, are still lagging behind, and traditional approaches may no longer be suitable for delivering organic intrinsic values.

In the food industry, where availability, speed, dependability and traceability are at the core of demand fulfillment, supply chain management holds the key in to cost reduction, safety as well as service enhancement (Van Huylenbroeck, 2009). In food supply chain management, all these objectives are met through efficient distribution logistics, which is in its downstream part the front end of consumers' perceived value. Distribution Logistics is assigned "the task of transferring goods from the place of production to the place of consumption, thus providing the customer with a service consisting of various activities, at a satisfactory cost" (Balestri, 2009).

Distribution represents the connection between upstream and downstream economic activities, so having a crucial role in the global economy. In downstream markets, retailers interact with consumers applying prices according to the delivered value. Since it conditions accessibility to an

incredibly large number of products and basic necessities, distribution has a direct influence on consumers' quality of life.
The retail industry accounts for over US$15 trillion in global revenue (Investment Business Insights, 2013), with the top 250 companies owing 25% of the market (Deloitte, 2013). Food retail is about 50%.

The design of the logistics system must be aimed at customer satisfaction, as well as at effectiveness and efficiency that can meet the manufacturing company's needs. The design choices of the logistics system are influenced by external as well as internal, the company will have to balance its own organizational needs and the external inputs coming from the final consumer and the surrounding environment (competitors, legislation, land, customer needs). In addition to the physical flow of goods, the flow of information should be guaranteed: the company must be able to transfer information, whether that information must be received by the final customer (feed-forward), or must travel backwards from the end customer to the company (feed-back).

Given these assumptions, the choice of the distribution channel is a strategic variable of enormous importance. It impacts not only on the ability to transfer the value of the product to the customer as the customer expects it, but also the physical layout of facilities and, therefore, investments in fixed capital. Literature is rich with contributions concerning the most appropriate distribution approach, and the most relevant contributions based the choice of the most suitable approach on the nature of the product distributed, *commodity approach*, and subsequently on the criteria that are favored by the purchasers' choice, *consumer approach*. The commodity approach is based on the objective

characteristics of the product, classifying the goods in categories. One of the first contributions was by Aspinwall (1962) who proposed a classification of goods according to distribution commonalities. According to this approach, products are divided into three categories: *yellow*, *orange* and *red* goods. The key criterion according to which products are allocated within each category is the frequency of repurchase; additional criteria inversely related to the frequency of repurchase are considered: gross margin, amount of services required, the time in which the product is consumed and the time required for finding information about it. The red goods show a high frequency of repurchase, and therefore low values for the other variables; these goods are characterized by a broad distribution. In contrast, yellow goods are characterized by low frequency of repurchase and high values for the other variables; for this category selective distribution is suggested. Orange goods are placed as intermediate category between the two.

In the same years, a classification of the products for which each category was associated with a different buying behavior based on the information needs of the buyers had already spread. According to this second theoretical approach, products were divided into *convenience goods*, *shopping goods* and *specialty goods*. Subsequently, the same distinction was applied to point of sales (Bucklin, 1963) and the interpretation of the joint between goods stores allowed an optimum combination of goods and type of service requested in the store. In general, convenience goods and stores are those for which customers do not require high specialization of the service/product. In specialty products and services the customer performs a comparison and then looks for a match based on his needs.

Shopping are those products and services for which the customer is influenced by specific sought characteristics.

Lastly, a final classification is done according to the purchaser's need of information (Nelson, 1970). The distinction is made in *experience goods*, *search goods* and *credence goods*. Experience goods are those for which the consumer does not have availability of information prior to purchase but only after purchase and consumption. In this case, distribution has the purpose of making sure that the customer trusts the seller. Search goods are those goods for which consumers have information about the product and distribution has the task to provide as much information as possible through the point of sale. Credence goods are all those goods for which the customer is not able to obtain information about the product before nor after purchase and consumption. Distribution in this case is of the utmost importance and has the role of guarantor trustee for the customer who prefers one or the other product for the trust placed in the dispenser.

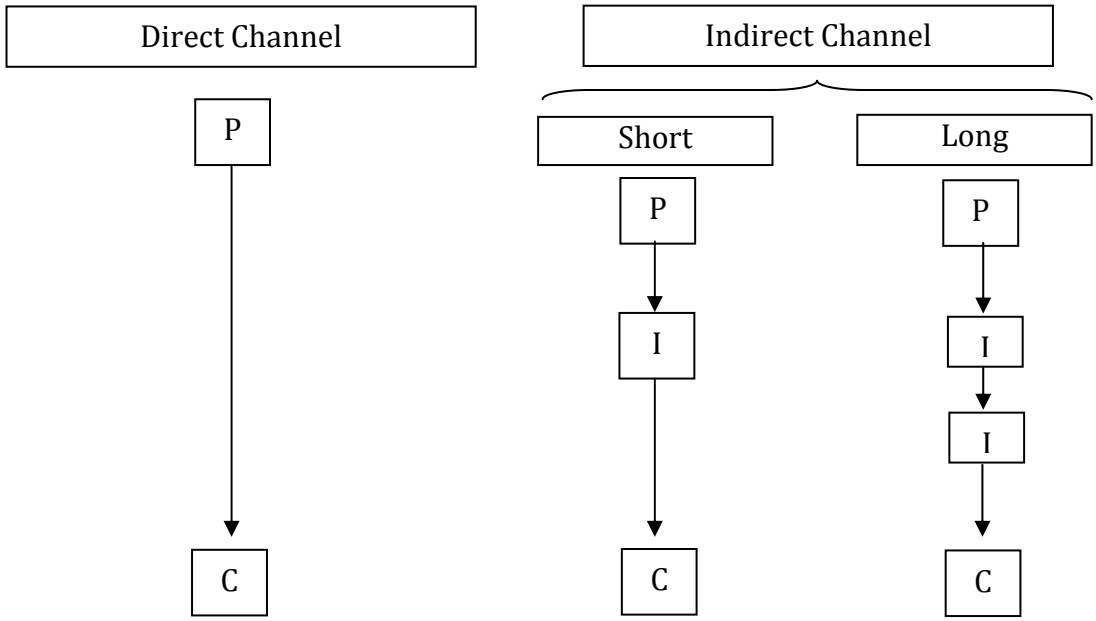
To date, in addition to these considerations, great importance is placed on the psychological involvement of consumers. Consumers will adopt a cognitive investment for each good based on the psychological involvement that has against the product itself. Considering the high values and beliefs attached to organic, the importance of the psychological involvement approach is even more relevant for this research. According to this approach, it is possible to classify purchasing situations in "Low" and "High" involvement. Furthermore, for each consumer, the same product can be considered in a different way and even for the same consumer product may be characterized by different psychological entanglements depending, for example, on the use occasion (Busacca, 1990). Based on

this classification, assets with a high psychological involvement will result in high consumer information needs and therefore the willingness of consumers to a greater cognitive effort in the search for information. In contrast, for those assets characterized by low psychological involvement, cognitive processes of the consumer are configured in a simplified manner and the gathering of information prior to purchase will be replaced by the testing of the product.

In general, there is a shift in literature from a classification based on products' objective characteristics, towards a classification based on consumers' perceptions. These considerations will be helpful in defining organic distribution needs further ahead in this work.
Whatever the approach, the choice of the distribution channel must be strategically consistent, or companies face the risk of losing competitive advantage of offering the customer the expected value.

In the choice of distribution channels, two are the main alternatives among: the direct channel or the indirect channel or, in other words, a short distribution channel and a long one. A company, of course, may also choose to simultaneously activate different distribution channels to reach different demand segments.
The direct channels, relies on the direct transfer of ownership of goods from the producer to the end customer. The most common forms of direct channel are represented by proprietary stores, factory outlets, door-to-door sales, television sales, mail order sales and e-commerce. The direct channel therefore presupposes the absence of an intermediary carrying out the functions of distribution logistics, which are instead performed by the manufacturer itself.

Figure 2: Direct and Indirect Channels



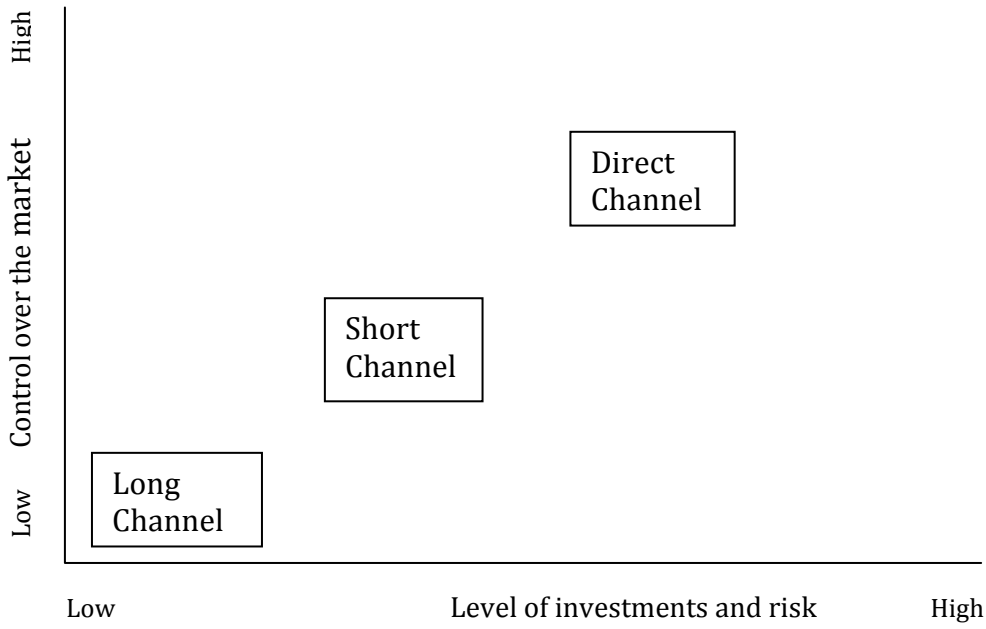
Source: elaborated by author

The choice of the direct channel involves high operating costs, investments and substantial costs for the company and do not always provide adequately diffused distribution. Companies that choose to manage the channel directly often sell complex goods, characterized by a high level of psychological involvement for customers who are willing to reach specialized retail outlets. The presence of the downstream producer in the sales process, however, allows, compared to the high cost, significant competitive advantages such as controlling distribution, image management, market positioning, and the knowledge of demand from direct observation.

Indirect channels are in turn characterized by commercial intermediaries; one intermediary in the case of short channels, and two or more

intermediaries in the case of long channels (intermediary is the chain player to which the ownership of the product is transferred). Short channels are often characterized by higher costs compared to long channels, but still lower than a direct channel. Examples of short channel can be represented by the sale to a retailer from selling to businesses ho.re.ca, or any other form of distribution consists of a single intermediary. Finally, the long channel is characterized by multiple levels of intermediation and lower costs. The most representative example of the long channel is represented by the large retail chains, typical of consumer products. The main disadvantage of the long channel is given by the risk involved, the manufacturer, to the difficulty in controlling the final product on the market. Very often, in the long channel, a manufacturer is not even aware of the geographical area in which it is distributed their product. The figure below represents the relationship between the economic risks and the investment levels of the producer and the levels of control of the market.

Figure 3: Market Control - Investments/risk relation according to channel



Distribution channels in food supply chains

The food supply chain is defined as "the sum of all transactions in the production and distribution of inputs to agriculture, farm operations, storage, processing and marketing of agricultural and agriculturally derived goods" (Zanlari, 2006). Therefore the term supply chain means, as a whole, all those individuals and companies that contribute to the generation of a specific good for the customer. Part of the agro-food chain are all the companies involved in the production, participating in all phases of the process of generation of the product, and ranging from the production of raw materials to the delivery of the goods to the final customer, sometimes passing through processing and distribution. Chains assume different qualifications in relation to the number and activity of enterprises that characterize them. Agribusiness companies are placed upstream of the supply chain and accomplish the strategic choice of choosing what type of downstream chain they should join. Supply chains are distinguished primarily in long or short depending on the number of operators who take part to the value creation process. The concept of long and short chains, however, does not refer to physical distances, but to the number of ownership transfers of the product before reaching the final customer.

Long Supply Chains

Long chains are generally represented by modern distribution (GDO) and retail. Large-scale distribution developed in Italy in the 60s (Castaldo, 2010) and consists of all the supply chains that distribute food through supermarkets, hypermarkets and discount stores. In its evolution over the years, the main goal of GDO was to reduce products price and provide

consumers with a single point of purchase where they could satisfy their supply needs. GDO has also provided the necessary means to distribution (Zanlari, 2006) for welding and foster the relationship between mass production and mass consumption. With the aim of reducing prices and provide consumers with a broad products portfolio, large retail chains have centralized purchasing, sometimes developing gigantic central purchasing departments and procurement activities carried out at the international level, sometimes carrying this function for several supply chains.

By so doing, GDO has been able to benefit from economies of scale that have allowed a greater bargaining power with suppliers. Increasing centralization of purchases was also the key to reduce logistical costs thanks through rationalization. Suppliers requirements have changed as well, less attention was given geographical proximity, and moved to the vendor's ability to adapt to schedules and to quickly respond to the needs of the distributor. In this way, distribution companies belonging to large retail chains have favored competing dynamics among manufacturers across several countries, therefore encouraging the process of globalization (Penco, 2008). This development was possible by the advancement of conservation of food products techniques, and it created globally disperse food supply chains. The incentive was also for agri-food companies to increase their size: by entering GDO-led chains, they were able to simplify internal management processes related to logistics, and to reduce uncertainty production allocation. On the other hand, however, the disadvantage of companies lies in lower revenues obtainable and impossible to arrive at an optimal size to become a part of the GDO. Modern distribution players introducing organic products on their shelves,

contributed to the growth of organic market (BioReport, 2013), as seen in previous paragraphs.

As consumers become more sophisticated in their consumer behavior towards organic food, companies are focusing on supply chain management to ensure traceability, high exterior quality, sufficient supply volumes and supply continuity (Aertsens, Mondelaers & Van Huylenbroeck, 2009).

Modern distribution private labels in Italy have contributed to the growth of the organic since 2006, but organic products on the shelves have primarily benefited from the convenience and process dimension.
The organic world is set up as multi-channel, and a study conducted by Ismea (2007) in Italy shows that 48% of the sales in the domestic market is likely to happen in department stores, 17% in specialty stores, while 9% in traditional retail stores (De Ruvo, 2007). Organic has, nevertheless, still a marginal role in the GDO why the availability is still a major barrier in our country, but despite this it is still the busiest channel. According to Nielsen's survey (2011), as much as 79 % of the sample declared to buy through mass distribution. The main reasons are to be found in a few elements:

- physical Convenience: intended as the comfort of having a selling point right outside the house door;
- convenience of shopping in one location for all groceries;
- price and promotions: the promotional pressure is growing in recent years, reaching about 23 % in the first eight months of 2012 (+3%

compared to the first eight months of 2011). This means that, on average, 23 percent of products are sold in promotions;

- assortment.

But despite the GDO has certainly understood the value of organic and its great revenues potential, organic does not seem to fit perfectly to current distribution models, both from the perspective of regular consumers who do not find the embeddedness they are looking for, and for farms which earn very small percentage of the distributed value.

Nevertheless, farms distributing through long chains, despite lower revenues from sales, benefit from a less complex distribution that is reflected in lower logistics costs in reaching the final customer. The consumer benefits from large organized distribution in the easy retrieval of goods, but he is deprived of the link with the product's origin as a place of production and manufacturing company. The long chain agribusiness can therefore be intended as an indirect channel characterized by a low level of downstream market control and a low investment and economic risk.

All considered, organic is still to be considered an emerging, innovative market for large retailers. As in any other fast evolving newborn markets, new technological competences and new customer knowledge are required. These skills are still to be developed in the conventional mass retail and, as much as 10 years ago, organic was still considered “pure exploration” (Danneels, 2002). Moreover, introducing organic products in the modern distribution channel, requires additional resources for purchasing and supply management. This is mostly due to the higher than conventional produce seasonal dependence and the multiplicity of small, disperse

upstream suppliers that have to be managed in order to ensure continuity and volumes.

Business models, logistics and the physical layout of stores itself, however, does not allow large retailers to fully transfer the intrinsic values of organic, as perceived by advanced consumers. Despite the investments in the shopping experience enhancement, the value of organic can not be fully conveyed through conventional distribution shelves, at least not under current conditions.

A thorough examination of the concept of organic values and the implications in terms of operations will be provided in the next chapter, and will be the starting point for the definition of the application and the research propositions.

Short Supply Chains

Unable to derive a fair income from modern distribution dominated chains, farms started differentiatiating their offer, mainly in two different ways (Renting , Marsden, & Banks , 2002):

- diversification of activities (management and maintenance of the landscape and nature, educational farms, etc.);
- adding value to agricultural products (quality production, organic farming, direct marketing , etc.).

Farmers, driven by the need to improve their profitability, have undertaken actions that allow them to move away from conventional forms of marketing and get more profits using alternative sales channels, among

which direct sales has taken a key role. Direct selling, without intermediation of other players, allows a direct relationship between farm and end-consumer market, which is becoming increasingly complex due to the changes in demand discussed afore.

Over the years, we witnessed the insurgence of AAFNs (Alternative Agro-Food Networks), namely networks of producers, consumers and other stakeholders, alternatives to standardized processes of conventional food processors and distributors, such as productivity pushed to the extreme, standardization and industrial organization (Higgins, Dibden, & Cocklin, 2008). AAFNs have been created to develop new links between agriculture and consumers, based on authentic relations and participation. The result of AAFNs and the need to undertake forms of direct sales, led to short food supply chains (SFSCs), characterized by the relations between the actors in the chain and the small number of intermediaries between the production system and the consumer market. The aim of shortening the chain is to give clear signals about the origin and quality of the food, creating supply transparent chains. In operational terms, direct contact with the final market allows production planning in relation to demand needs and adaptation of demand to the offer itself. The farmer who decides to pursue SFSCs assumes an autonomous decision-making role and becomes a testimonial of his own products.

The so-called alternative channels still account for a small market share, but they are rapidly growing (De Ruvo, 2007). Organic farmer's market, e-commerce, away from home channels (such as restaurants), direct selling and joint purchasing (CSAs). CSAs are the most dynamic and increased distributed organic products by 234% in the 2005-2010 period. According

to Bio Bank, CSAs were 742 in 2010, a 55% increase compared to 2008 (479). Geographically, 60% is located in the north, followed by 28% in the center and only 12% in the south and islands (AIAB; Coldiretti, Legambiente, 2011). Probably, the data is somehow underestimated because it takes into account only official registered CSA groups.

CHAPTER 2

6. Framing the research question: a bridge towards supply chain management

From the marketing standpoint, the value of a product can be defined by the comparison between what consumers give and what they get in return, in a ratio of costs and benefits. The most common definition, and commonly accepted in the literature, is that the value is the trade-off between quality and price (Monroe, 1990; DeSouza, 1989; Lichtenstein et al., 1990; Anderson and Fornell, 1991; Dodds, 1991). It is appropriate, however, to assess what this implies in operational terms, especially as regards distribution that, as discussed above, appears to be one of the rings of the chain that most influence the perception of customers on the value of products.

First of all, it is also necessary to distinguish between *value* and *value drivers*. According to Walters (1999), "*Value* is determined by the utility combination of price and non-price benefits offered. It is a relative measure i.e. it is determined by comparison with similar market offers by targeted customers group". As the value is one of the determinants of competitive advantage, it is essential to identify at all levels in the supply chain, what are the benefits, or attributes, which allow the supplier to improve its offer to the customer.

A *value driver* is instead an attribute that the client recognizes as a, or the, main reason for buying a particular product or service. The value driver is the one that will improve the life-style of the buyer or the value of its

output (in the case of an industrial customer or service provider). The same general definitions apply to purchases by a final consumer in which the value drivers mostly increase emotional components (non-price benefits) of the purchase rather than rational ones.

As Koetler (1997) pointed out, "the buyer will purchase from the seller who believes offering the highest customer delivered value", i.e. the difference between the total value and the total cost.
These considerations are particularly relevant if related to the value of organic in distribution. Though traditional retailers are able to offer the lowest cost (for the reasons stated in previous paragraphs), they are not able to deliver the expected value to a customer with complex needs, as it is the organic consumer. In other words, the lower cost is unable to compensate for the lower embeddednes sought by the consumer. Since each value driver is specific to a particular customer or cluster, the embeddeddness is one of the main drivers of organic purchases, along with the perceived greater health and safety. Koetler confirms this conceptual approach by stating that the customer satisfaction is given by comparing his/her expectations regarding a product (or service) and the perceived performance, *mutatis mutandis*, in our case, we could say the perceived embeddedness.

Given the specificity of the value drivers of organic and the intrinsic value associated to it, it takes a new value strategy, different from a conventional product that is normally distributed from a conventional retailer. This is partly explained by the contributions of Porter (1996) about operational excellence and strategy. He says that there is substantial misunderstanding between the one and the other and that "although the resulting operational

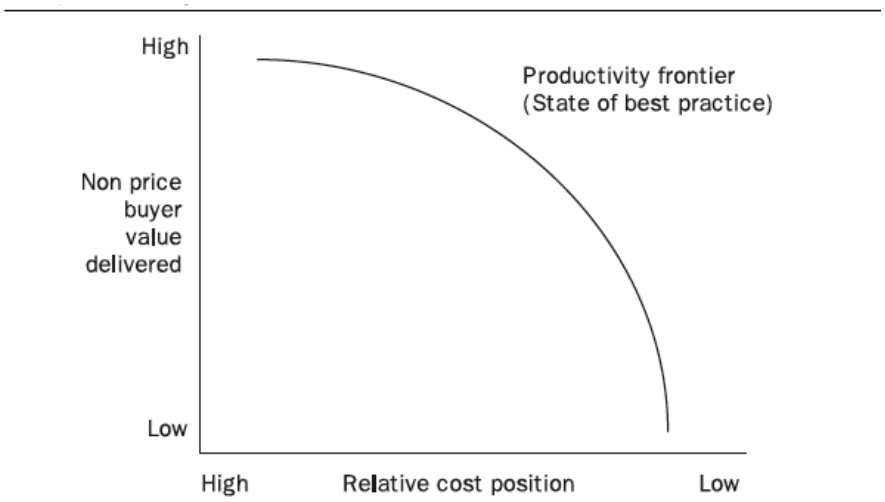
improvements have often been dramatic, many companies have been frustrated by their inability to translate these gains into sustainable profitability".

In order to achieve the exact research question of this study, it has been helpful examining the Theory of the Production Frontier as defined by Porter on the basis of the cited statements.
Porter defines the theory in these terms:

"[...] the sum of all existing best practices at any given time [...] the maximum value that a company delivering a particular product or service can create at a given cost, using the best available technologies, skills management techniques and purchased input. The productivity frontier can apply to individual activities to groups of linked activities such as order processing and manufacturing and to
an entire company's activities. The productivity frontier is constantly shifting outward as new techniques and management approaches are developed and as new inputs become available".

Simply put, this theory is based on the view that strategic effectiveness is "doing what it should be done", while the operational effectiveness is instead "do well what it should be done". Therefore, the creation of value is a process in which the value delivered to the customer is optimized within the limits of the need to obtain shareholder long-term value, and operational excellence is achieved through the extension of this process to the implementation of value distribution to the customer.

Figure 4: The productivity frontier



Source: Porter (1996), "What is strategy?", *Harvard Business Review.*

The value strategy therefore lies in the identification, production and distribution of the combination of price and non-price benefits that the consumer is looking for. Internally the strategy ensures that everyone is focused on customer needs, on the outside is reflected in the means by which the company positions itself in the perception of customers.

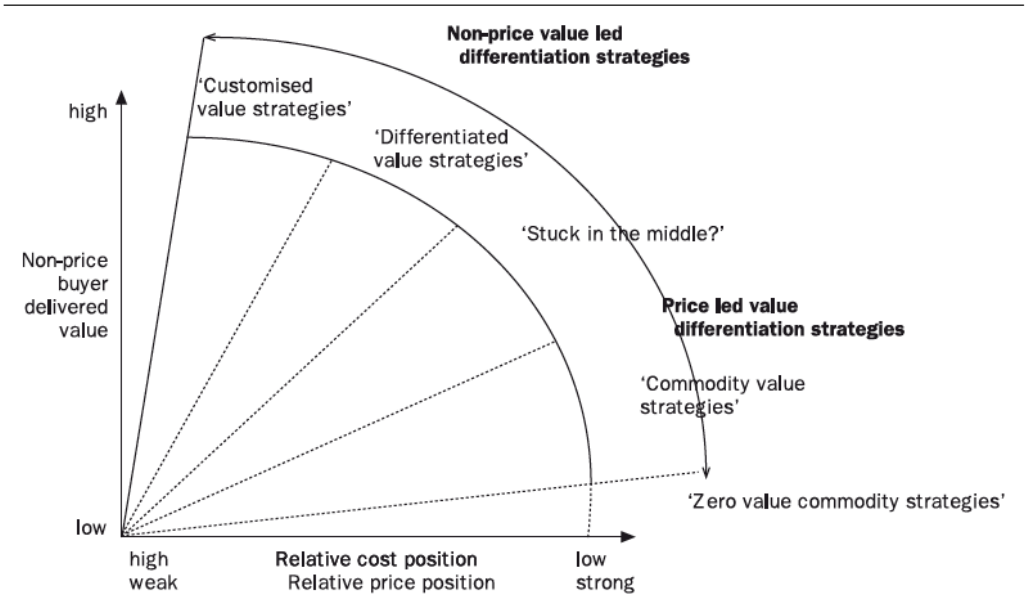
To bring the discussion to distribution, focus of this research, the choice of the type of distribution (direct or indirect, for example) is an emanation of the internal value strategy, the choice of the brand instead, is an emanation on the outside.

Walters (1999) developed the model of Porter's Production Frontier integrating the description of some possible value strategies (Figure 5). Within this enhanced framework, operational implications range from continuous flow processes and R&D limited to easing manufacturing processes, to rapid response distribution and advanced R&D.

So far, it has been shown that marketing and sociology about organic food consumers, and strategy literature about customer delivered value is abundant. I argue that the proven intrinsic values attached to organic food requires further research on how to operatively deal with this product category in order to fully deliver and exploit embeddedness as sought by consumers and demonstrated by an extensive marketing literature.

Operations research, did not focus on organic, assuming operations practices and theories to achieve operational excellence for conventional food would apply to any kind of food. From marketing, sociology and strategy, the research is bridging towards operations and supply chain management alternative models for organic food. Through this research I intend to identify possible operational strategies related to organic in order to open an evolutionary path to operational excellence and its strategic fit in the distribution sector.

Figure 5: A strategy option using Porter's productivity frontier concept



Source: Walters (1999)

Considering the recent development of organic food, the intrinsic characteristics that make it attractive to consumers regardless of the premium price, even in times of economic downturn, it is legitimate to ask whether the conventional retail and, more in general, distribution are able to effectively convey the value of organic or whether it is necessary to rethink and innovate processes or even business models to anticipate or meet the ongoing changes in demand dynamics.

While quality (in general terms), speed, flexibility, cost and dependability are main objectives of any food supply chain to deliver sensory, health, process and convenience attributes to consumers, organic food distribution should be able to convey a different concept of quality based on "embeddedness".
Setting ground on this statement, the general research question the present work is aimed at answering is:

What characteristics should the downstream supply chain have in order to effectively meet the changing demand in the near future?

In Italy, the geographic boundary of the present work, organic food is still quite new and an evolutionary adaptive process is unfolding at every level of the supply chain. Nevertheless, while it is quite clear about new consumers needs, it is still quite uncertain how to better meet these needs in operational terms, especially in terms of distribution which is, all considered, the front end of value delivery.

7. Methodological framework

In order to achieve the objective and answer the research question, examination is needed first of all in defining what the near future of organic will be. Organic in Italy is still seen as a controversial issue, both as an agricultural approach and as a market phenomenon. Since there is no agreement on the reliability of organic and on the fact that it could or could not develop into a full market out of the niche, it seemed reasonable starting by a common ground on the possible development scenarios of organic. It also seemed appropriate to concentrate the subsequent analysis on the two main players that are actively reshaping the rules of the conventional supply chain, consumers and farmers. In this paragraph a detailed description of the methodological framework will be given, articulating the selected mix of methodologies.

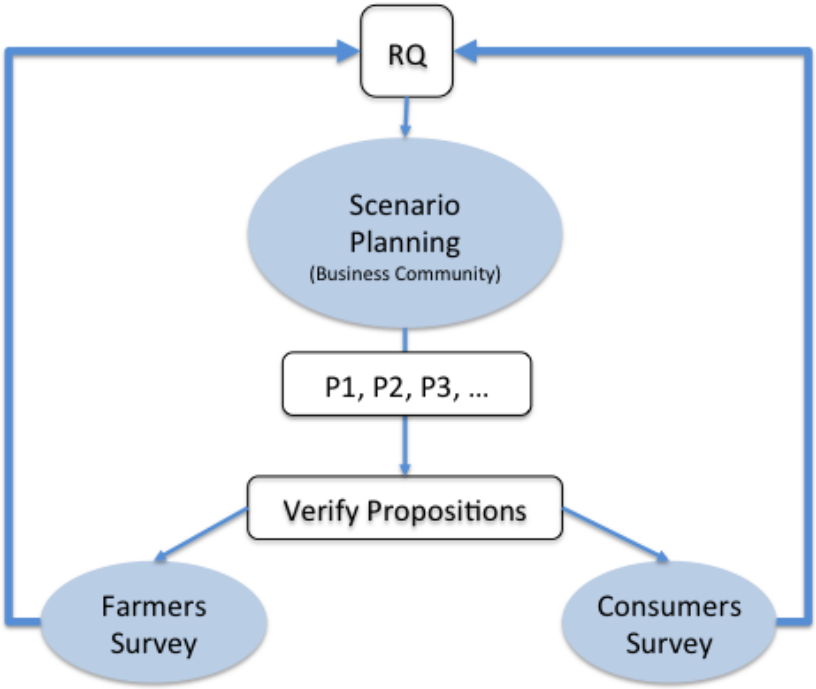
The first step consists of defining research propositions to be verified in order to answer the research question. Propositions mainly relate to a future development of the industry which is, at present time, still uncertain given the controversy over organic. A common ground could be established by directly investigating business community's perceptions about organic. According to available resources, research has been optimized through the application of a cooperative scenario planning tool, gathering exponents of the food industry informed about both the industry as a whole and organic most recent developments.

The applied scenario planning tool has been derived and adapted from the Royal Dutch Shell scenario planning methodology, considered as the founding, fastest and most reliable tool to create a common view of the future. Although scenario planning methodologies do not serve as forecasting, it was useful to apply such tool in this case to develop

consistent research propositions. Full details of scenario planning methodologies (and the other methodologies applied in the research) will be given in the dedicated sessions. Here in this paragraph, the aim is to provide a comprehensive vision of the founding methodological framework.

Through a step by step process in building future organic scenario from (almost) "green field", the output of the scenario has been subsequently translated into research propositions, each to be validated on the target groups, consumers and farmers at the two extremes of the supply chain. Target groups were examined by using a survey methodology, disseminated with the cooperation of the two main Italian reference organization for consumers and farmers, ADICONSUM and Confagricoltura. Evaluating propositions returned then the answer to the overall research question. The methodological framework can be visually explained in the following scheme.

Figure 6: Methodological Framework visualization



CHAPTER 3

8. The future scenario of organic food: methodology

Scenario planning tools help in strategic decision by reconciling contradictions and uncertainties of future outcomes of current phenomena. By exploring plausible or probable effects of situations described by reality, scenarios defy conventional knowledge. Organizations using scenario planning techniques are faster in recognizing imminent discontinuities in their operational environment, and more resilient unexpected crisis or extreme events.

Since organic food is still quite new and the changes it is bringing in the supply chain still may have uncertain outcomes, and the future might be different from what it is expected. The application of scenario planning methodology is aimed at understanding what future changes may occur and which actions should be undertaken at a distribution level, directly engaging practitioners, opinion leaders and scholars in a focus group. The resulting scenario/s will be the foundation of research propositions to be verified to answer the general research question.

The methodology has been derived from the methodology Royal Dutch Shell has been using for more than 40 years. The adaptation only implied reducing time for participants' answers while keeping the fundamental three steps process. Shell has used scenario planning since the early 70s to explore the future of oil and energy. Scenario outcomes are based on "*what if*" stories. While forecast is usually based on probabilistic calculation, scenarios consider a wide range of plausible futures and how these futures

may emerge from actual situation. While forecasts are usually based on the calculation of probabilities, scenarios consider a wide range of plausible futures and consider how these futures could emerge from current reality. They are in fact based on the idea that people have opinions (beliefs), and according to these they make choices and that these choices produce consequences that determine the future itself.

Figure 7: Items on the board

This approach is extending to more and more sectors, but in a young industry, often characterized by uncertainty and volatility, as the organic food industry, competitive advantage comes also the ability to anticipate changes in demand. Developing new capabilities requires a lot of time though, while consumer behavior is constantly changing and growing rapidly. The contribution of scenarios is being an enabling tool for such capabilities.

Step 1: Divergence

The first phase of the scenario building process is called " Divergent Stage". In this phase, participants are encouraged to think freely, with a global and long-term vision, free from preconceptions.

Participants are asked to imagine the near future, indicating the events and trends that will change the world and society with a time horizon of 5 to 10 years (between 2018 and 2023 in this case). Participants are left free to indicate any element that, according to their own opinions and perceptions, may emerge from the current situation or representing a complete cut with the present. Proceeding by *statements*, participants work individually to identify the *item* (driving forces of change, criticalities, relevant information). The *statements* are collected on post-it notes, then posted in no particular order on a panel.

Step 2: Convergence

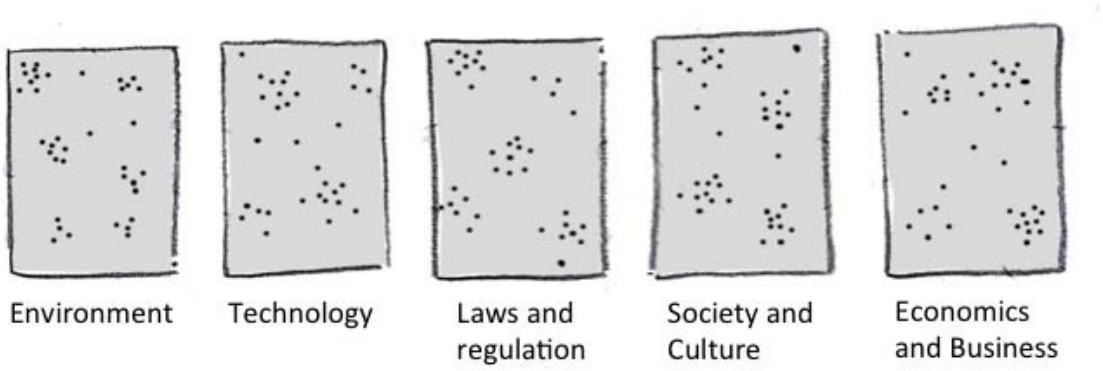
Analyzing the items emerged from participants during the divergence phase, facilitators create some macro-categories. These categories pertain to areas of the future that will be mostly affected by the changes and events mentioned by the participants in their statements.

5 main categories were identified:

- Economics and Business
- Society and Culture
- Technology
- Ecology
- Laws and Regulation

For each category, a panel is prepared (Figure 7).

Figure 8: Category panels



Subsequently, participants are required to move their post-its, reorganizing them on the panels corresponding to different categories. In this phase, participants also have the possibility to change the contents of the post-its and/or add to clarify some aspects.

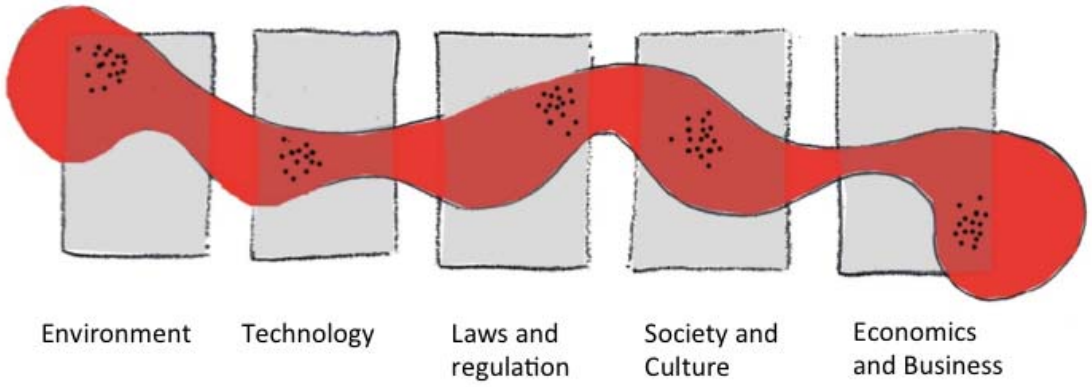
Step 3: Story Telling

In the narrative stage, participants are required to write a "story" based on post-it notes affixed on the various panels.

Many of the factors that will influence the future shown by the participants, while being vertically consistent within a category (economy, society, etc.), they will probably be contradictory to each other among different categories. This happens because some factors represent an element of continuity with the present, that is to say that they are natural and predictable consequence of current reality, others are elements of discontinuity, i.e. elements that can only emerge as a result of a plausible, but currently less likely, change.

The elements of continuity and discontinuity, mutually opposed in the vertical categories, however, are consistent with each other in horizontal *clusters* (Figure 4).

Figure 9: Definition of horizontal clusters



Horizontal coherence between the various elements is what we call *key driving forces*, i.e. the forces driving change in a specific direction. The presence of opposing key driving forces indicates alternative potential scenarios. In our exercise, we have identified two scenarios: a scenario of continuity with the present, and a discontinuity one.

Participants are then asked to move to the top of panels the items corresponding to the scenario of continuity driving forces, and to the bottom part the others.

At the end of this operation, two separate groups (one for continuity, one for discontinuity) work to create two short stories that represent the future of the subject topic (in this case organic), consistent with the emerged elements. Facilitators at this stage, provide guidelines for the creation of stories, focusing on the critical aspects that are considered for investigation,

for example, the composition of demand and supply, a particular subject / actor of a supply chain, a market, etc.

Guidelines for story telling provided for the future scenario of organic were focusing on critical research aspects of interest:

- Consumer segmentation
- Distribution models
- Players in the supply chain

The "stories" created by participants thus represent the output of the exercise, so being the scenarios. It is then desirable that facilitators make some analysis and a general rationalization of the results retrospectively according to homogeneity and heterogeneity of the emerged concepts, highlighting the most meaningful aspects to the business.

Participants

To ensure validity of the results of a scenario planning exercise concerning a whole economic sector, it is necessary that participants belong to the widest possible range of stakeholders in the sector itself. Due to the number of players in the sector, organizations and services involved in the exercise, it was possible to neutralize any “side-taking” that could affect the results. The following table provides a summary of the participants who consented to the publication of their name, role and company affiliation.

COGNOME	NOME	POSIZIONE	AZIENDA	TIPOLOGIA
Bassetti	Marcello	Marketing Manager	**Molino Spadoni SpA**	Organic Processor
Biagini	Stefania	Account Manager	**Cohn & Wolfe**	Communication
Bormetti	Carlo	CEO	**Superpolo**	Distributor
Carnemolla	Paolo	President	**Federbio**	Supply Chain Federation
Fumagalli	Casimiro	Owner	**Mondo Biologico Italiano**	Communication
Gelisio	Tessa	Journalist	**---**	Media
Govoni	Massimo	Owner	**Bioqualità SG Srl**	Consultancy and Services
Maffini	Nicoletta	Marketing Manager	**Alcenero & Mielizia SpA**	Organic Processor
Missiaia	Nicola	Sales Manager	**Ballarini SpA**	Household Goods Manufacturer
Pambianco	Simone	Private Label Product Manager	**Despar Servizi**	Distributor
Pinton	Roberto	Secretary	**Assobio**	Organic Processors and Distributors Ass.
Piva	Fabrizio	CEO	**CCPB Srl**	Certification Body
Potenza	Massimo	Senior Advisor	**---**	Consultancy
Rimondini	Luca	Marketing & Business Dev. Manager	**Granarolo SpA**	Dairy Processor
Saccardo	Annalisa	Environment and Territory Officer	**Coldiretti**	Farmers' Organization
Salvucci	Sandra	Marketing Manager HORECA	**Gruppo Sole 24 Ore Business Media**	Media
Santini	Stefania	Communication Manager	**Saporbio**	Communication
Siller	Martin	CEO	**BioExpress**	Distributor
Spadoni	Leonardo	CEO	**Molino Spadoni SpA**	Organic Processor
Tummolo	Andreina	General Manager	**Hornet Consulting**	Consultancy

9. The future scenario of organic food: outcomes

Ideas that emerged from the divergent stage show a strong bias towards some key issues (the gradual shift towards greater sustainability, technological change, the emergence of a new civic consciousness, the continuing economic crisis, etc.). Not a few statements though represented a distinct break with the present, real elements of discontinuity. At the end of Step 1, statements have been moved to the appropriate macro-category panels, and vertically rationalized. Full list of items is attached as Appendix 1, for the sake of readability of the present document.

Figure 10: Participants move items to category boards

Economics and Business

At a glance, some of the factors that will determine the economic future (in Italy at least) are evident, according to participants. There are several references to the emerging economies but, by the use of keywords, are seen more as a threat than an opportunity. This setting is obviously conditioned by the situation in the Country and the perception of excessive weakness of institutions and the economic system in protecting companies from "raids" of foreign operators. The perceived risk is the protracted impoverishment of the Country's industrial tissue, resulting in a suffocation of small businesses. No less significant doubts appear on the European single currency: the disintegration of the European Monetary System or, on the contrary, his persistence, are some of elements that participants perceive as a determinant of the future.

However, if this interpretation comes from a general pessimism due to the current situation, it is also true that many other statements show, on the same subject, more optimism and hope of changes that more and more are instance of citizens and entrepreneurs. The issue of the excellence of Made in Italy is in this case referred to as a tool to emerge from the crisis and regain a leading position in the global economy. Among the keywords, there was also a great deal of attention to e-commerce as an economic factor of change. Certainly the spread of technologies for e-commerce and the increased security achieved by online sales, is an element that will lead to a modification of both the consumption habits (of any good, but especially of food) and the dynamics of the supply chain and the costs associated with them (uncertainty about the role of the GDO). The keywords concerning a growing servitization, or dematerialization of

products, also point in this direction. What, in general, distinguishes the economic change in recent years, is the shift to a service-dominated economy. Conventional manufacturers, the dominant industry of the last century, began to expand their product and service, and often have transformed the nature of their businesses in a mix of tangible and intangible in which much more than just the product is transferred to the customer, but a feature and a response to its needs. The world's agricultural production has instead maintained a cultural "castling" on production competence, thus shifting the axis of the skills of service downstream, to processors and distributors. In a world of services, however, commodities end up competing on price alone, while the added value for the customer is generated by the intangible benefits for which they are willing to pay higher prices (e.g. market values of the so-called "fourth range" compared to "raw material"). Organic creates (and is justified because of) distribution chains are shorter and requires a revolution from farmers, especially in managerial terms.

Culture and Society

The elements of change moved to the "Culture and Society" panel are, at first sight, closely linked to the facts set out above in the economy. Some of the factors mentioned are the determinants of a future social order that will influence consumption: the progressive impoverishment of a segment of the population, awareness of the need for healthy lifestyles, social integration and a greater weight of women in politics and business. The widening of the social scissors and the need for a "healthy" life style, seem to combine in a radical change in consumption. The consumer, bearer of instances of fairness and driven by the needs of subsistence, increasingly

becomes an active player and undermines the traditional system characterized by the (perceived) contrast between business and consumers. More than one participant expects a return to the country side and / or at least a shorter and shorter supply chain in which consumers and producers are in direct contact, also favored by technological development.

In contrast to the role of technology as a human growth positive factor, some perceive the risk that the information society will be a society of alienated individuals, informed anytime and anywhere but increasingly dependent on the omnipresence of digital connectivity and sharing. Finally, a general need for social interaction was recognized by participants, the need for integration with other cultures and the presence of women in decision-making roles. Together, these factors have in common the underlying concept of a more equitable society, paying more attention to human values.

Technology

The key words on the "Technology" panel clearly show the importance attributed to a more sustainable world (7 of 16 comments in total) and how sustainability is perceived as achievable, mainly, through technological innovation.

In particular, the greatest potential for technological renewal shall be allocated to sustainable individual mobility and, in this context, the perception of the participants is that the future will be dominated by electric cars. According to the current trends, it is unlikely that in the near future the market for electric vehicles will extend beyond 10/15 % of the total, but the high frequency of the keywords listed in the exercise reveals the importance of the issue. In the same direction, the technological

innovations specified for the materials used in the production of goods ("all recyclable") and renewable energy sources.

The development of digital information and technology in favor of servitization, is equally perceived as influential and an element of change that is already largely acknowledged in the economic sphere.

Environment

Since several of the post-it notes affixed by the participants in the divergent phase were referring to ecological and environmental factors of change of a general nature and not closely linked to technological innovation, one of the panels of the second phase has been specifically dedicated to this type of elements. In this panel the need for sustainable change is also stressed, but emerges by contrast, namely participants perceive a number of emerging issues derived from the misuse of resources that led to the current situation.

Laws and Regulations

The weight of European legislation that takes into little account the needs of individual Countries, the lack of a solid government and the need for greater food security, all point to the need to support the change with a different regulatory system. However, the lack of change factors forming explicit reference to the legislation, is perhaps the result of perceptions that has been more evident in other category panels, and suggests a general distrust of institutions, seen as an obstacle to change, rather than an engine of innovation.

Story telling

The participants, divided into two groups, have therefore drawn up two synthetic stories to imagine the future of organic, taking into account the statements with the higher frequency and the key driving forces. Since, as already emerged from the literature and the observations available on the organic market, the sector is characterized by some distinguishing features compared to conventional agri-food sector, both scenarios were intended to represent three basic elements:

• How organic farmers (and processors) will be in the near future;
• how the customers will be and how they will shape demand;
• the dominant distribution structure in the market.

After a brief consultation phase the two groups have told two stories with some contact points but also significant differences.

In retrospect, the statements have been rationalized in the keywords for simplification and in order to visually represent the two opposing clusters. Using an appropriate software it was possible to construct two “word-clouds” in which the size of the words is directly proportional to the frequency of the items rationalized. These images allow to identify at a glance the key driving forces for each scenario. Both scenarios will be presented as they were written by the two groups, while further analysis leading to research propositions definition will be discussed in the next paragraph.

Continuity Scenario: A future without retailers

Organic farmers unable to expand enough to defend themselves from the importation of foreign products, are under pressure from abroad to the point that some may be acquired by Chinese multinationals in search of "Made in Italy" food brands. Clearly, in an event of this type, the risk of homogenization of the product and loss of Italian localness (also in the organoleptic properties) in a global market is high.

Customers, however, looking for "safe" food and demanding more organic and, although on average younger, they are much more mature consumers, especially with the increased awareness and availability of information. Technology facilitates the matching of supply and demand (consumer needs) through e-commerce. The chance of buy everything online, however, if for some fills the continued erosion of leisure time in, does not fully meet the need for sociality of many others.

Large-scale distribution, once unable to meet the needs of a consumer with such complex needs, innovates by developing partnerships with farmers

and becoming the meeting physical shopping and meeting point that e-commerce cannot be. Supermarkets and hypermarkets disappear almost completely as we know them and, taking advantage of real estate properties, they become a hub for CSAs' orders and a space for direct sale. The GDO then gets even closer to the consumer by satisfying a need that goes far beyond the product and its shelf availability.

In this way, e-commerce and "distributors that are no longer distributors" are complementary to each other, the first providing speed, the latter providing social relations, in a world where the opportunities for interaction and relationship out of the web are increasingly rare.

Discontinuity Scenario: Organic, direct and digital

Although the elements characterizing this second scenario are more than plausible, they represent a break with the present and outline a future in

which phenomena considered today marginal or temporary, become the main driver for development.

In the near future, sustainability will be the main driver for development in any field because of a growing awareness of environmental issues. Economic and social implications of environmental depletion will become a reality and an inescapable priority for anyone. Nevertheless, the income polarization of population will create a stream of young, aware and educated people back to the countryside. Small farms will multiply and, with increasingly scarce resources, especially water, the main driver will be sustainability and innovation. Extensive crops will be the rule, resilient and adaptable to climate change, and organic (and all its variations) will be the only way in agriculture.

United by sense of urgency, small farmers many of which will be young women will be motivated to create a system operatively connecting them, making “Made in Italy” a benchmark of quality food at a global level. With a tighter credit crunch, CSA will turn into a financing entity for farmers; consumers will thus capitalize their food consumption and will ensure themselves what they need as they need it. In this scenario, large retail will have a marginal role with respect to the direct sale. At the same time, technological advances will definitely dematerialize money transactions and e-commerce will be the dominant model of the encounter between supply and demand.

10. Research Propositions

Although differing in essence, both scenarios converge on a common ground. These commonalities are to be considered the most plausible features of a 5 to 10 years scenario for organic consumers, producers and distributors.

Based on the two stories participants have told, commonalities can be resumed as follows:

- There is a growing interest in the food-health relationship and it will be a key driver in purchases;

- technology and digitalization will play a decisive role in creating a future of increasingly direct distribution and e-commerce as the dominant model;

- there are signs of a return to ethical values, more rooted in the behavior of firms and consumers;

- natural resources will grow scarce and the principles of sustainability will soon become a mankind surviving imperative;

- complex and more abundant information will have to be properly conveyed through multiple channels, especially to consumers;

- “Made-in-Italy” will be of capital importance, both as an asset for competitiveness, and quality trademark;

– distribution, intended as all forms of retail, can not circumvent the need for renewal and will undergo a complete reshaping.

In order to develop a set of research propositions about future distribution strategies to deliver organic food value to consumers, the items were rearranged according to distribution's main attributes which, building from Grando (2000) and other relevant literature discussed further down, were identified in:

- information attributes,
- logistics attributes,
- after-sales service attributes

While obviously after-sales attributes poorly apply to food, except for take back and substitution of battered goods or corrupted packaging, evident issues emerging from scenarios undoubtedly pertain to information and logistics attributes (Table 6).

Informative attributes of a supply chain have been thoroughly exposed by a vast literature. The new-found ease of information acquisition and transmission has contributed to the high importance of information as a business resource. In 1988 the definition of Logistics of the Council of Logistics Management integrated the flow of information with the flows of raw materials, work-in-process, and finished goods (Bowersox et al., 1996).

Table 6: Scenario Items according to distribution attributes

Informative Attributes		Logistics Attributes				After-Sales
C	D	C	D	C	D	
Informed Consumer		New Distribution	Return to Agriculture	Climate Change	Ethics based economy	
Information Complexity		E-commerce	E-commerce	Healthy Food	End of Consumerism	
Servitization	Digitalization	Consumer/ Farmer relation	Social Economy		Scarce water resources	X
Food Safety		Socialization	De-urbanization		Sustainability	
		Alienating technologies				

Source: Elaborated by the author

The development and diffusion of information and communication technologies, bearing traits of a disruptive innovation at the beginning of the century, spurt unusual acceleration to the change of the very way we do business, presenting companies with the dilemma of how to redefine their strategies for creating value.

In the case of organic, where the information component about the origin and characteristics of the product has a preponderant importance in creating value for the consumer (embeddedness), distribution's value strategy must be rethought so that it can not only pursue typical goals of supply chain management as described above, but also convey such information. Part of the items identified during the scenario exercise, are therefore attributable to the informational attributes that the distribution of organic will have in the near future, such as food safety, digitization and servitization.

There are also many items that refer instead, more or less explicitly, to the logistic attributes distribution should have to deal with organic. For example, the need for a consumer-farmer relation indicates that the distribution should be far more direct and that farmers should be more present in the downstream part of the chain, which, at least from the point of view of conventional retailers, perhaps implies a reorganization also in the very point of sale. De-urbanization implies that the layout of the distribution network must be redesigned to achieve an increasingly customer segment who leaves big cities. Climate change will also have an effect on transport and better use of local products.

This last example in particular, opens a second thought about the logistics attributes to which item relate. On the one hand some of them relate to the "social" part of embeddedness that consumers are looking for, others relate instead to the physical environment, in other words, the "local" component. The ethics-based economy (one of the most urgent issues according to the discontinuity scenario), for example, refers to obviously to the social component, but perhaps more to the local component if we understand it as an economy in which ethics require an revaluation of local resources and the work of man.

As expected from the literature review, according to these latter considerations, we can state that organic distribution attributes in the near future will essentially be the following:

- information
- directness
- localness

Table 7: Organi distribution attributes in the near future

Informative Attributes		Logistics Attributes			
C	D	C	D	C	D
Informed Consumer		New Distribution	Return to Agriculture	Climate Change	Ethics based economy
Information Complexity		E-commerce	E-commerce	Healthy Food	End of Consumerism
Servitization	Digitalization	Consumer/ Farmer relation	Social Economy		Scarce water resources
Food Safety		Socialization	De-urbanization		Sustainability
		Alienating technologies			
Informative		Direct		Local	

Source: Elaborated by the author

These expected attributes of future organic distribution, allowed drawing of two sets of concurring propositions, one for each of the actors in the supply chain that are driving the change: famers and consumers.

The propositions developed and explained in the next pages, represent the starting point in the creation of a theoretical model. The validation of propositions will be based on a qualitative analysis of the results of two surveys disseminated with the collaboration of ADICONSUM, leading consumers association in Italy, and Confagricoltura, leading organization of farmers affiliating 2/3 of Italian UAA. The aim of the analysis, especially on the farmers' side, is purely explorative, according to a limited

size sample of companies and consumers. Methodology of both surveys will be discussed in the following dedicated chapters.

The first propositions address farmers. The aim is to understand if organic farmers are more prone to implementing strategies towards local and direct distribution than conventional farmers. The focus on farmers is mainly aimed at understanding the logistics perspectives of organic. The first proposition assumes that organic farms are distributing in direct and/or short channels and that they are doing it more decisively than conventional farmers, both in terms of channel addressed and volumes distributed through the channel.

P1: organic farms engage in direct channels for distributing their produce more than conventional farmers.

The second proposition addresses instead the localness attribute of future distribution from the farmers' side. The aim is to understand if organic farms, compared to conventional ones, are distributing their produce mainly at a local level. Considering all forms of direct channels bringing farmers to move more frequently, regional distribution is assumed to be a fair proxy of localness for the purpose of the research.

P2: organic farmers mainly distribute their produce locally.

A third non-core proposition was developed in order to understand the innovation ratio between organic and conventional farms. Should propositions P1 and P2 be verified, than we can assume that organic farmers are rapidly developing uncommon marketing skills (for the

agricultural sector) and thus be more prone to innovation. Proxys for innovation is assumed to be a higher confidence with the internet as a distribution channel and a higher number of new products marketed recently.

P3: organic farms have a higher degree of innovation.

The second set of propositions pertains to consumer perceptions on logistic and informative attributes of the near future organic distribution. The propositions assume that consumers have expectations about organic favoring products bearing more information and are distributed through the shortest available channel.

The first proposition (P4) assumes that consumers perceive a different value according to the channel the product is distributed through. Consumers' should reveal an interest in direct channels and a connection between quality and direct channels.

P4: consumers perceive a higher quality of products if they are distributed trough direct channels.

The second proposition in the set (P5) requires further discussion. From previous surveys carried out by the afore cited organizations and from the data available on organic market, inconstant consumers find organic products in large retail chains. It is common knowledge that only food producers and distributors with a considerable size are today able of addressing this channel. Carrying information about the product and delivering the embeddedness that is bringing organic out of its niche is no easy task when placing products on the shelf of a supermarket. Once on the

shelf, the product can only bear information through its looks (information about organoleptic quality) and mostly its brand (information about origin and the firm) (Papadopoulos, 1993; Johansson, 1993). In its quest for delivering the value of organic, modern distribution made huge investments in developing its own brands and even more to develop organic brands. EU regulations, essentially, provided a baseline, which many organic brands have long been using to set themselves apart, touting their 'superior' credentials, values, product composition, etc. Retailers had to employ the same strategies for their private label offerings in order to retain value. Besides ingredients, other viable routes for retailers wanting to differentiate their products from 'rock bottom' organic products is by emphasizing ethical credentials, such as fair trade and animal welfare. Wherever feasible, they can also try to capitalize on the 'local' trend.

According to these assumptions the propositions is that consumers will attribute great importance to brands from which they expect to have information about who made the product, food safety, geographic origin, etc. The resulting proposition is as follows:

P5: brand is a valuable vector for the information organic consumers are looking for.

The following chapters will concentrate on the analysis of surveys. Both surveys were disseminated within the wider research work of the BIO Management Lab, SDA Bocconi's research lab on organic food. The questions aimed at verifying the exposed propositions were specifically introduced in the questionnaires for this purpose.

CHAPTER 4

11. Verifying propositions: survey on farmers

In order to answer the related research proposition, a questionnaire has been developed to be submitted to a number of Italian farms, both organic and conventional. The survey is composed of 32 questions, ranging from the size of the farm to the distribution channels, and it was structured to return mainly descriptive statistics. Correlations and indexes were developed for a better understanding of results and more reliable proposition verification. The questionnaire was constructed by dividing the questions into three main areas in order to obtain information about:

- Farm size, revenues and general information
- Distribution channels and features associated with them
- Demographic profile of the farmer

The first set of questions is designed to detect the distinctive elements of the farms that participated in the analysis: type of production and farm size, where size of the farm means both data relating to the physical size of the farm, and therefore the size in terms of UAA, and the data related to the economic size of the farm, and therefore revenue and expense ratio. The second set of questions investigates the distribution channels used by the farms interviewed: type of channel used and the proportion of produce distributed through these channels. Finally, the third part of the questionnaire investigates the profile of the farmer: personal data and level of education. This set of questions in the final section of the questionnaire because it was felt that these questions did not need the maximum

concentration of the respondent, which was assumed to be decreasing with the increasing time taken to answer questions.

The questionnaire (Appendix 2) was administered to farms in collaboration with Confagricoltura; surveys were delivered both as online questionnaires and in paper forms. Confagricoltura is one of the two organizations representing and safeguarding Italian agricultural enterprises, active in Italy since 1910 with the aim of promoting the development of the "primary sector" of the national economy for the benefit of the community, the environment and the Country. Farms associated with Confagricoltura account for two-thirds of the companies in the sector, with a UAA equal to 38.5% of the utilized agricultural area in Italy (13 million hectares). The administration of the questionnaire took place within the larger researche project of the SDA Bocconi's BIO Management Lab on organic agriculture.

The sample

The sample being analyzed for the research consists of 49 farms operating in Italy out of 64 answering the survey (15 survey returned inconsistent data).

Given the four segments of the production methods through which it is possible to classify the farms that make up the sample, it was decided to rationalize the analysis, with two main clusters:

- Organic farms
- Mixed or conventional farms

Table 8: Sample Composition

Production Method	N. of Farms	% on Total
Organic	21	42,85%
Organic and Conventional	21	42,85%
Conventional	4	8,16%
Conversion	3	6,14%
Total	*49*	*100%*

The underlying assumption is that farms being under the conversion regime and mixed farms, therefore those farms that produce both organic and conventional, are united by a modus operandi comparable to conventional farms. This assumption stems from the consideration that farms shifting their attention to the organic production method are, however, still influenced by all those operating characteristics typical of conventional farming.

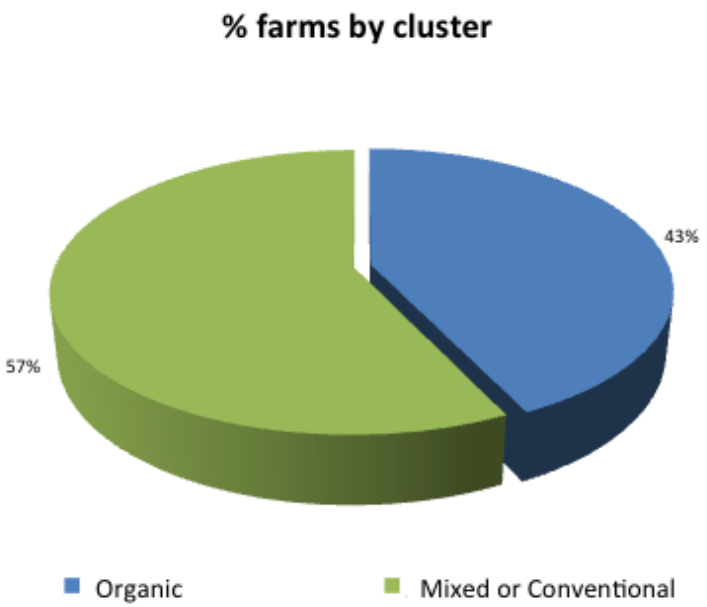


Table 9: Clusters average

	Organic	Mixed
Main Product	Crops	Crops
UAA	12,5 - 30	30 - 100
Revenues	51 – 250.000	tra 51 e 250.000
Cost/Revenue Ratio	31% - 40%	31% - 40%
Localization of Production	North East / South	Center
Localization of Sales	North East	Center
Distribution Channels		
Farm Store	x	x
Agriturismo	x	x
Farmer's Market	x	x
CSA Groups	x	x
Canteens		
Restaurants	x	x
Specialized Retail	x	x
Modern Distribution	x	x
Internet	x	x
Broker or Wholesaler	x	x
Farmer Profile		
Function	Entrepreneur	Entrepreneur
Gender	Male	Male

In addition, it was considered appropriate not to cluster farms using as the variable main production because the data emerged from the sample indicated that 80% of the farms being analyzed mainly carry out crop production, or that otherwise, the crop production is that which characterizes the sample farms by revenue and/or volume. A much higher number than the percentage of farms for which the main production is represented by livestock production (12%) and mixed production (8%).

Dimensional Analysis

The analysis was carried out considering the utilized agricultural area (UAA), measured in hectares, and the turnover, measured in Euros. From these data it was possible to delineate dimensions of inequality between the organic farms and the mixed farms in the sample analyzed.

The data for the utilized agricultural area (UAA) show a surface on average lower for organic farms compared to mixed farms. Approximately 33% of organic farms has an UAA smaller than 12.5 acres, as opposed to mixed farms, of which only less than 7% has a surface area smaller than 12.5 hectares. About 38% of organic farms have an area of between 12.5 and 30 hectares; in contrast to the mixed farms, for which more than 35% have a surface area of between 12.5 and 30 acres and 42% an area of between 30 and 100 hectares.

Table 10: Clusters according to UAA

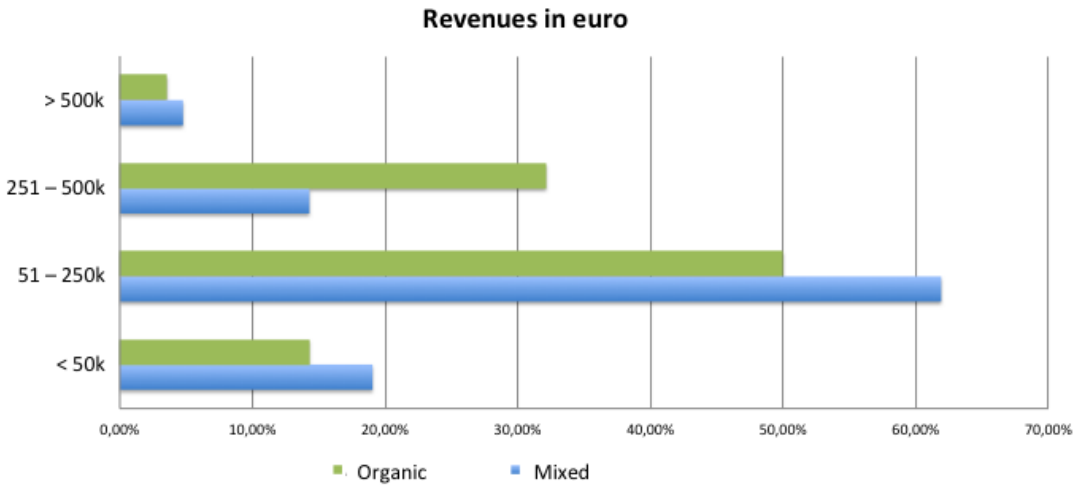
UAA	Organic Farms	Mixed Farms
< 4 ha	9,52%	0,00%
4 - 12,5 ha	23,81%	7,14%
12,5 – 30 ha	38,10%	35,71%
30 – 100 ha	19,05%	42,86%
> 100 ha	9,52%	14,29%

Revenues of organic farms is averagely in the range between 51.000 and 250.000 Euros (61.90%). As for mixed farms, the data show revenues on average higher than the revenues of organic farms, amounting to 50% with revenues of between 51,000 and 250,000 Euros and 32.14% with revenues between 251,000 and 500,000 Euros.

Table 11: Revenues by cluster

Revenues	Organic Farms	Mixed Farms
> 50k	19,05%	14,29%
51 – 250k	61,90%	50,00%
251 – 500k	14,29%	32,14%
> 500k	4,76%	3,57%

Chart 6: Revenues by cluster



As for the revenues/cost ratio, organic and conventional farms seem comparable: apparently, despite higher absolute costs, organic farms are able of generating more than proportional revenues. Data show a similar percentage of farms for each interval of incidence of the costs to revenues.

Table 12: Cost/Revenues Ratio

Cost/Revnues Ratio	Organic	Mixed
< 20%	4,76%	0,00%
21 - 30%	28,57%	17,86%
31 - 40%	28,57%	28,57%
41 - 50%	19,05%	14,29%
51 - 60%	0,00%	14,29%
> 60%	19,05%	25,00%

Analysis on the use of distribution channels

The analysis about the use of distribution channels was made by considering first the "localization of production" and the "location of the sale," and later were considered both the distribution channels used by farms and the amount of produce sold through each channel. Finally, it provides a general framework obtained through the judgments of the respondents to define the capacity of each channel to generate revenues, the cost associated with each channel and the complexity of operations for running the channel.

For the localization analysis criterion, regional areas were divided in: northeast, northwest, central, south and islands.

As for the distribution channels, enterprises in the sample were asked in the first place to select which distribution channels were being used from within a set of channels provided, and then the volumes of produce distributed through these channels. The set of channels provided is composed of the previously analyzed channels: modern distribution chains (GDO), retail, farm stores, agri-tourism, restaurants, canteens, CSA Groups, brokers or wholesalers and online sales.

Use of distribution channels

In this section analysis of the distribution channels will lead to P1 “Organic farmers mainly distribute through direct channels”. The first questions were aimed at determining the number of channel used to assess multi-channel approaches in organic and conventional farms, the result is the percentage

of farms that use a specific channel. Regarding the weight of the production distributed through each channel, the farms were asked to provide a percentage of the produce distributed. The question assumed the total amount of distributed produce by each farm, across all channels used, should be equal to 100.

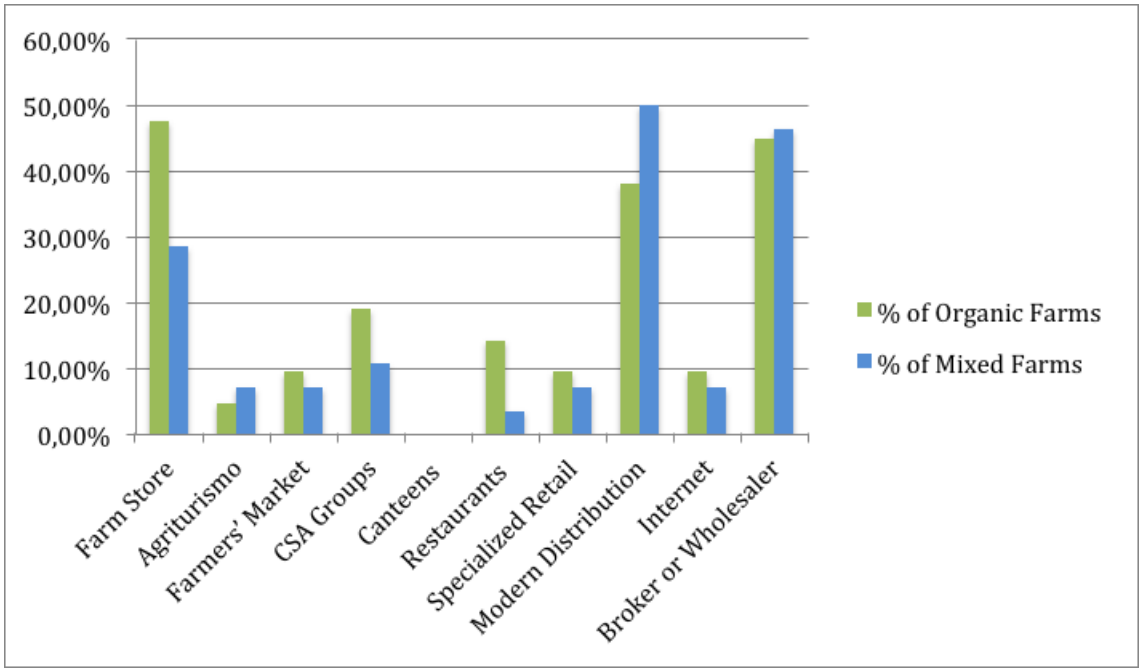
Table 13 shows the percentage of farms addressing each channel and the volumes distributed through. The distribution channel used by the largest number of organic farms is the farm store. Apparently, 47.62% of the organic farms are using this channel, followed brokers or wholesalers (45.00%), modern distribution (38.10%) and finally CSA Groups (19.05%). With regard to mixed farms, the most common distribution channel is modern distribution (50.00%) followed by the sales to wholesalers or brokers (46.43%) and direct sales at the farm (28.57%).

Table 13: Level of utilization of distribution channels

Distribution Channel	% of Organic Farms	*% of Production Distributed through the Channel*	% of Mixed Farms	*% of Production Distributed through the Channel*
Farm Store	47,62%	*19,75%*	28,57%	*10,65%*
Agriturismo	4,76%	*1,50%*	7,14%	*0,58%*
Farmers' Market	9,52%	*1,75%*	7,14%	*0,96%*
CSA Groups	19,05%	*6,50%*	10,71%	*4,23%*
Canteens	0,00%	*0,00%*	0,00%	*0,00%*
Restaurants	14,29%	*3,25%*	3,57%	*0,38%*
Specialized Retail	9,52%	*2,00%*	7,14%	*1,15%*
Modern Distribution	38,10%	*29,25%*	50,00%	*47,23%*
Internet	9,52%	*0,75%*	7,14%	*0,46%*
Broker or Wholesaler	45,00%	*35,25%*	46,43%	*34,35%*

In terms of weight of the channel, organic farms distribute 35.25% of their produce through brokers or wholesalers, followed by modern distribution with 29.25% and direct sales at the farm with 19.75% of the total produce.

Chart 7: Level of utilization of distribution channels



Mixed farms instead distribute 47.23% of their produce through modern distribution, 34.35% through brokers or wholesalers, and only 10.65% through direct sales at the farm. Special attention is only given to CSA Groups, which, although a relatively low percentage of produce distribution (6.50% for organic farms and 4.23% for mixed farms), still play a significant role compared to all other channels.

For the purposes of analysis, in order to assign relative weight to each channel, and hence determine the relevance in the distribution process, a Channel Utilization Index was developed:

According to this index, the weight attributed to each channel can be defined as the product of the percentage of farms that employ the channel and the percentage of total produce distributed through the same channel. This calculation method is independent from obtaining an effectively quantifiable numerical result but offers a numerical weighted result of the magnitude, so as to distinguish the importance of one channel from another and verify P1. The calculation of this index has been performed only for more meaningful for the research distribution channels, that is direct sales at the farm, CSA Groups, modern distribution and brokers or wholesalers. The data obtained from the application of this index are shown in Table 14 below:

Table 14: Channel Utilization Index

Distribution Channels	Organic Farms	Mixed Farms
Farm Stores	9,40%	3,04%
CSA Groups	1,24%	0,45%
Modern Distribution	11,14%	23,62%
Broker or Wholesalers	16,79%	15,95%

The results obtained by applying the index claim that the channel with the higher relative weight is "wholesalers or brokers" for organic farms and "Modern Distribution" for mixed farms. Organic farms are also characterized by the use of this latter channel, which assumes a lower index than wholesalers or brokers, followed in third place by "direct sales at the farm". As for mixed farms, "wholesalers or brokers" represents the second most used channel, while CSA Groups and Farm Stores convey a negligible part of the total production.

While each cluster is characterized by a comparable distribution pattern with long channels with the highest indexes, comparison between the two

farms typologies highlights significant difference in the distribution behavior. While still low, as a matter of fact, CSA and Farm Store indexes are three times higher in organic farms, and conversely Mixed Farms show a more than twofold index for Modern Distribution.

The question to which this research hopes to answer lies in the possibility of investigating whether organic farms and mixed farms are characterized by different distribution methods. Assuming that the more direct the shorter is the channel and *vice versa,* it is reasonable to divide distribution channels in:

- Short channels:
    - Direct sales at the farm
    - Agrotourism
    - Direct sales to local markets
    - Direct sales by buying group solidarity
    - Canteens
    - Restaurants
    - Sales online

- Long channels:
    - Sales to large retail chains
    - Sales to retailers
    - Sales through brokers or wholesalers

The subdivision of channels within the two sets is based on the number of intermediaries between the producer and the end customer, as in literature (see Paragraph 1.5). It is assumed that for the short channels the number of

intermediaries is minimal, at best one that could be called "necessary", and it also requires a knowledge contribution from the consumer about the counterparty that produces the goods purchased. "knowledge" is about the origin of the produce, in geographical, cultural and social terms. For long channels, a greater number of intermediaries is assumed, along with a much more complex structuring and distribution process that assigns a lower value to the embeddedness in favor of cost-effectiveness, as thoroughly discussed in previous chapters.

Through data processing, a qualitative value has been assigned to the set of values consisting of "production distributed through each channel", a value which expresses the type of channel in terms of the number of intermediaries and then divides the different channels into "Long Channel" and "Short Channel". Through this processing of the data we obtained a percentage of farms, for each of the two clusters, which use the short channel and long channel. The results obtained are expressed in Table 15 as follows:

Table 15: % of Farms using Short and Long Channels

	Organic Farms	Mixed Farms
Short Channel	65,00%	42,31%
Long Channel	70,00%	92,31%

According to this data, for which it is assumed that each farm can use a portfolio consisting of different marketing channels, a discrepancy in the use of each channel becomes apparent. It can be seen that organic farms use both the short and long channels almost to the same extent. In fact, the percentage of farms that use the short channel (65%) is very similar to the percentage of farms that use the long channel (70%). As for mixed farms,

we see instead a marked difference in the percentage of farms using each channel. We observes that only 42.31% of mixed farms use the short channel as a channel of distribution, and that as many as 92.31% of them use the long channel. We can conclude that in relation to the observed sample, the percentage of farms that use the short channel is higher for organic farm than for mixed farms. We can therefore confirm a difference in the distribution between organic farms and mixed farms, in the use of the short channel, thus confirming the proposition that organic farms are unbalanced towards the direct channel.

Considering data emerged from the survey and the Channel Utilization Index, the analysis sustains P1 “Organic farmers engage in direct distribution channels more than conventional farmers”.

Corroborating the proposition is also the perception of respondents about the capacity of the channel of generating revenues and the costs associated with it. Farmers were asked to qualitatively judge the performance of the channel (from low to high): its capacity to generate revenues, the costs associated with and the overall management complexity. To be underlined is that the answer to this question was not conditional on whether or not the channel was used.

It is observable how both organic and mixed farms consider short supply chains the most suitable for generating revenues, although differences in revenues estimate are wide between the clusters, especially considering the two extremes (farm store and modern distribution). In terms of costs it is also noticeable how mixed farms “perceive” generally higher costs than organic farms in all channels. Nevertheless, in some cases differences are

slight, especially considering that this analysis is purely based on perceptions.

With regard to the complexity of channel management, wholesalers or brokers, again sets the common ground for both organic and mixed farms, representing the "less complex" channel, thus confirming data on the choice of the channel (Chart 10). Greater complexity is instead associated to canteens and restaurants for mixed farms, and modern distribution chains and restaurants for organic farms.

Chart 8: Perception on channel's revenues generation potential

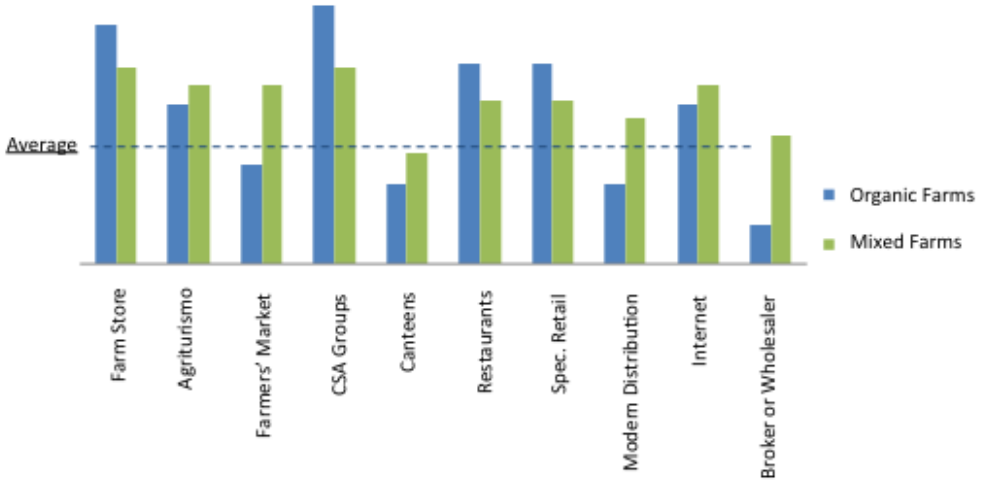


Chart 9: Perception on channel management costs

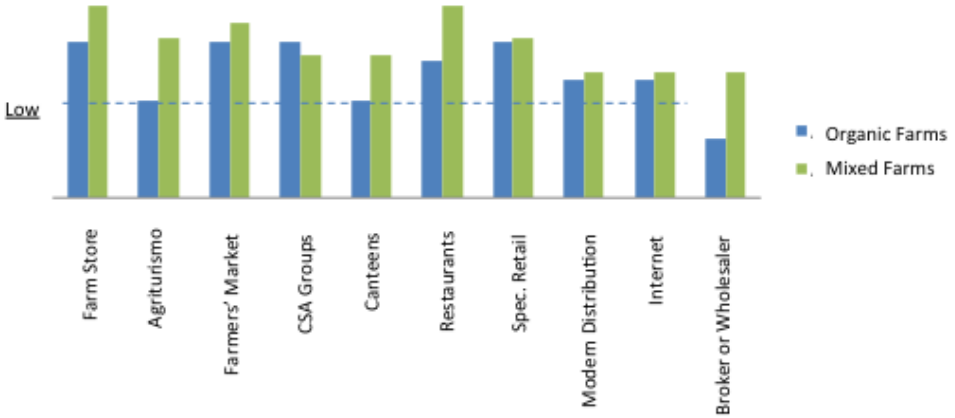
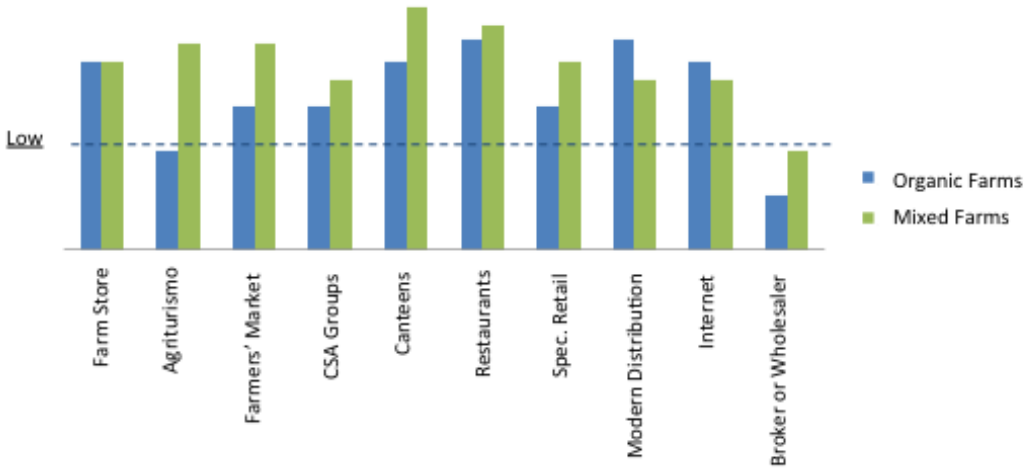


Chart 10: Perception on channel management complexity



Localization

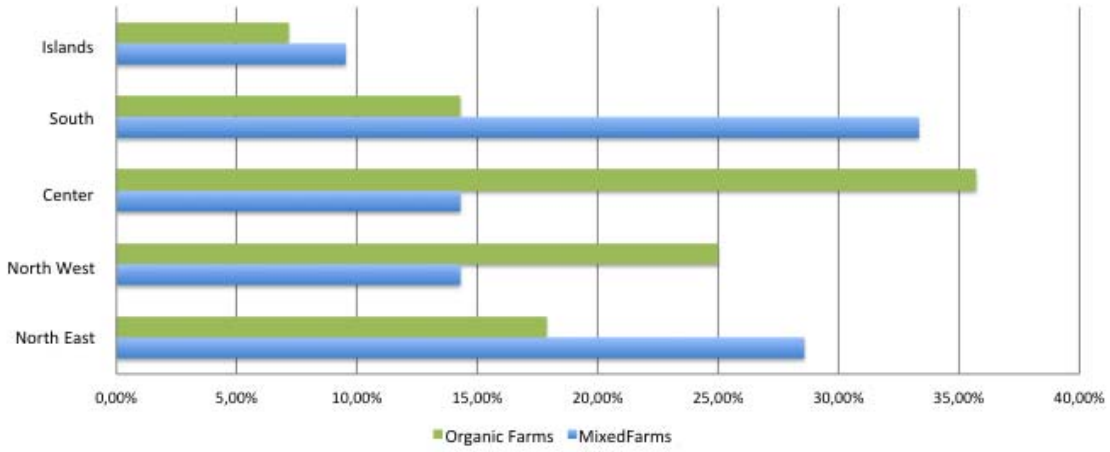
The second part of the analysis on farmers was aimed at identifying areas where farms belonging to the two clusters carry out their production activities.

Table 16: Production areas by cluster

Production area	Organic Farms	Mixed Farms
North East	28,57%	17,86%
North West	14,29%	25,00%
Center	14,29%	35,71%
South	33,33%	14,29%
Islands	9,52%	7,14%

The analysis of the location of production has shown a difference between organic farms, for which the production is localized to a greater number of farms in the south (33.33%) and the north east (28.57%), and mixed farms, for which the production is mainly located in central (35.71%) and northwestern Italy (25%).

Table 17: Production area by cluster

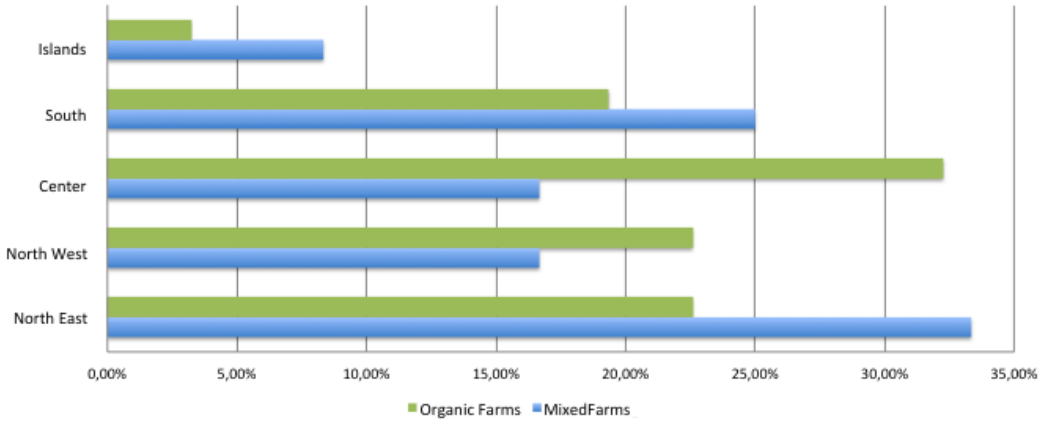


As important has been the criterion for identifying the location of sale where farms belonging to the two clusters commercialize their produce.

Table 18: Sales destination area

Sales Destination Area	Organic Farms	Mixed Farms
North East	33,33%	22,58%
North West	16,67%	22,58%
Center	16,67%	32,26%
South	25,00%	19,35%
Islands	8,33%	3,23%

Chart 11: Sales destination area by cluster



In order to investigate the relationship between the points of sale and places of production, correlation between the observed values for each of the two clusters has been calculated using the SPSS correlation tool.
Quite surprisingly, the correlation factor for organic farms is lower than the mixed farms' one, meaning that organic is not consumed locally.

- Organic Farms have a correlation coefficient between the places of production and sales of **0.87**.

- Mixed Farms have a correlation coefficient between the places of production and sales of **0.91**.

Although not dramatically different, the lower correlation factor between localization of production and localization of sales for organic farms is reflected in the data shown in the latest BioReport 2013 (MIPAAF, INEA, ISMEA, SINAB, 2013). The data confirms the findings from this study, that more than 70% of organic household purchases are made overall in the northern regions (36.8% in the northwest and 34% in the northeast). In the south, on the contrary, in addition to registering a negative change (-7.1%) in the purchase of organic produce over the previous year, amounting only to 6.9%. The survey supports the idea that there is a substantial geographic decoupling between production and demand, thus bringing the conclusion that P2 "Organic farmers mainly distribute their produce locally" must be discharged.

Degree of innovation

The third non-core proposition about the compared propensity to innovation has been carried out both in reference to distribution channels, to determine whether and how farms are changing their distribution channels to reach consumers, and to the agricultural produce sold, to determine if and how farms are changing their offer to consumers.

With regard to distribution channels, respondents were asked which commercial channels had been opened in the last three years to have an estimate about the trends of the new channels and to have an additional tool for the assessment of such channels. We also believe that there is a possibility that "new" channels for farms are still developing in terms of produce sold because they are not yet used at full capacity.

We can observe that organic farms in the last three years have opened the marketing of their produce mainly for sale to CSA Groups (10.26% of farms have opened this channel) and direct sales at the farm (7.69%).

These data are in line with what has been observed by the above analysis about the ability of the distribution channel to generate revenue, and the registered growth of CSA Groups in Italy. Not surprisingly, organic farms, as already present in these channels, are consolidating their position, and especially in the case of the sale to CSAs are strengthening their presence, as this channel is not yet used fully (see Table 14). As for mixed farms, as many as 23.81% opened farm stores, while 9.52% have grown probably enough to address modern distribution. Surely even these data are based on convenience attributed to these channels by mixed farms, in relation to their perceived ability to generate revenues.

Table 19: Degree of innovation on distribution channels

Recently opened channel	% of Organic Farms	% of Mixed Farms
Farm Store	7,69%	23,81%
Agriturismo	0,00%	4,76%
Farmers' Market	5,13%	0,00%
CSA Groups	10,26%	4,76%
Canteens	2,56%	4,76%
Restaurants	5,13%	4,76%
Specialized Retail	2,56%	0,00%
Modern Distributio	0,00%	9,52%

The move towards direct sales at the farm, embodies a strong desire of mixed farms to preside such a channel in the future. This outcome also confirms the shift in consumer's behavior: whether or not consuming organic, they still look for embeddedness shopping directly at the farm. At the same time, data should be read as a follower's innovation degree, since mixed farms are actually catching up on the multi-channel approach, which is on the organic farms side embedded in their DNA.

As for the launching of new products, respondents were asked for the amount of agricultural produce marketed by the farm, for the first time, in the past three years. The question was aimed at highlighting the shift from intensive monocultures, typical of the old productivist paradigm, to a wider production mix in the quest for marginality. This figure was obtained through an average of responses for each cluster.

Table 20: New products launched in the last 3 years and products in development phase

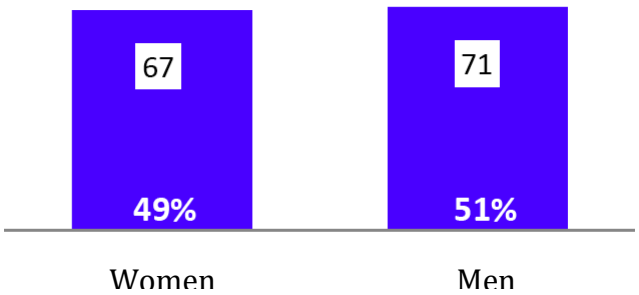
New products	Organic Farms	Mixed Farms
Launched	2,17	0,67
Developing	1,22	1,1

According to this analysis, organic farms prove to be more "innovative": for every three new products marketed by organic farms, only one is marketed by mixed farms. This could also mean, given the marketing data, that organic farms are more efficient in the planning phase. However, this statement cannot be confirmed because the question addressed to farms referred to planning in the current period and not in the last three years.

In general, we can conclude that mixed farms are bringing their innovation focus on the definition of new distribution channels as opposed to organic farms, which, having addressed all channels, are currently focused on product innovation. According to these observations, P3 must be accepted.

12. Verifying propositions: survey on consumers

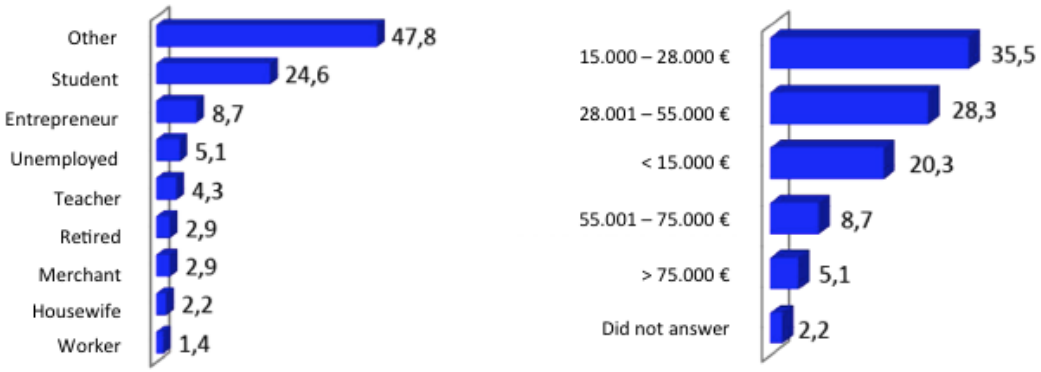
214 questionnaires were received, of which only 138 were taken into account in the analysis by presenting a positive response a first filter question about whether the consumer had bought at least one organic labeled product in the previous month. The response rate, therefore, was 64% and the sample was divided equally according to gender, with a percentage of 49% of women and 51% men.



The 68,8% of respondents reported an age under 35 years, 13% between 35 and 44 years, 8,7% between 45 and 54 years, the rest over 55 years. The majority of the sample is composed of highly educated people, in fact, over 73% have a college degree, 21,7% have a high school diploma and the rest states to have lower qualification.

Half of the respondents did not declare their job, about 25% are students and there is a rather significant percentage of entrepreneurs, with 8,7%. On the basis of annual income, then 70% is distributed in the center sections that are from 15.000 € to 28.000 € (35,5 %) and from € 28.001 to € 55.000 (28,3 %) while 8% claim an annual household income between € 55.000 and € 75.000, 5,1% more than € 75.000, and 2.2 % preferred not to answer the question.

Chart 12: Education and year household income in the sample



Consumer analysis: perceptions and behavior

In understanding consumer behavior the first step was to identify most addressed product categories.

In order to collect data about categories, the survey included a Likert scale question in which each respondent had rank the products from 1 to 5,

where 1 corresponded to “buying with low frequency” and 5 “buying with high frequency”.

Table 20 shows the ranking of categories of organic products purchased by respondents. Fruits and vegetables unsurprisingly turns out to be the most purchased with an average rating of 3.2, followed by jam and jelly with milk and dairy products with 2.6 and 2.4 respectively.

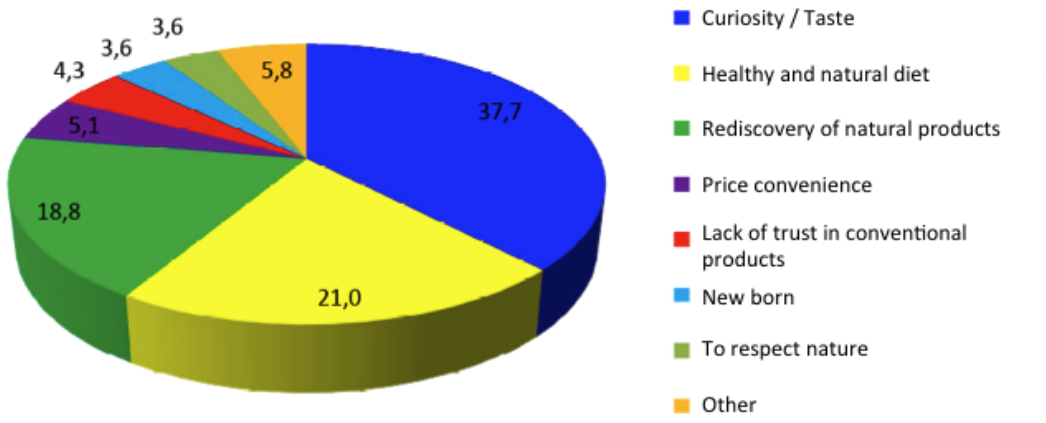
Table 21: purchasing frequency of product in the sample

Product Category	Average score
Fruits and vegetables	3,2
Marmalade and Jams	2,6
Milk and dairys	2,4
Pasta, rice and bread substitutes	2,0
Oil	2,0
Biscuits, sweets and snack	1,8
Juices	1,7
Meat and sausages	1,7
Sugar, coffee and tea	1,4
Non-alcoholic beverages	1,0
Ready meals	0,8
Other	1,3

The chart below is a representation of the responses to the multiple choice question on most important reasons that prompted the respondents to choose organic products for the first time. The main driver is, as is evident, curiosity (37%), followed by motivations that reflect the values of organic

product: healthy eating and natural (21%) and the rediscovery of the natural product (18,8%). Noteworthy is also the birth of a child as a motivation for turning to organic (3,6%).

Chart 13: reasons for buying organic



In this regard, it is significant that, from the analysis, there is a difference in attitude between men and women, in particular, women tend to have a more fundamentalist attitude towards organic farming, while men tend to be more opportunistic. The following table summarizes the output of the function obtained by SPSS crosstabs and it is clear that the relationship is not strong, but it remains significant as shown by the index of Cramer's V.

Table 22: Bivariate analysis between gender and purchasing habits

Gender	Purchasing habits		
	Aware	Fundamentalist	Opportunist
Women	23	16	28
	41,1%	**72,7%**	46,7%
Men	33	6	32
	58,9%	27,3%	**53,3%**

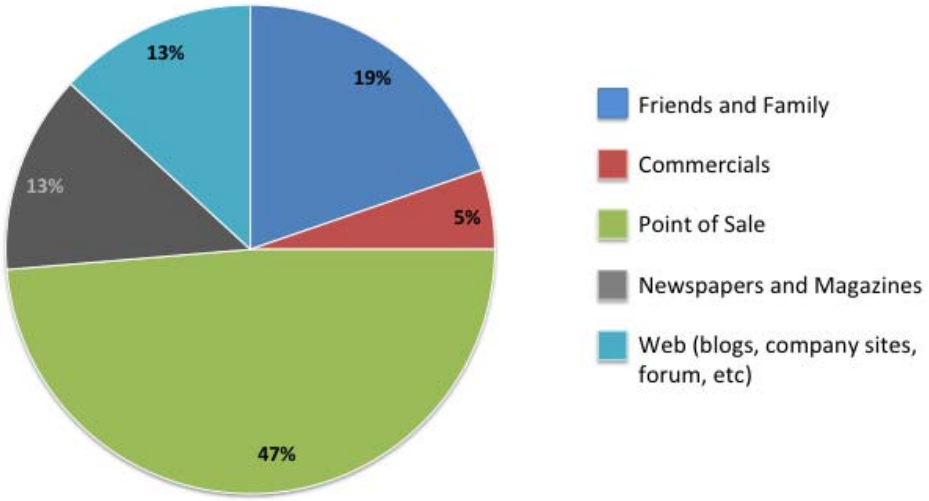
Table 23: Cramer's Index for gender/habit bivariate analysis

	Value	Significance
Cramer V	.217	.039

Curiosity as a main driver shows how most people are more occasional than truly loyal organic consumers. This trend is confirmed by the attitude of consumption of interviewees, by which 43% of people stated they are buying organic but if they cannot find the product as such they turn to conventional (aware consumer); 39% is buying organic depending on the convenience of the moment in terms of promotions (opportunistic), and only 18% say they consume, so organic products (fundamentalist).

As for organic awareness sources, the point of sale is the primary source with 47% of the sample claiming to have become aware of organic products at the store. The media, which consists of articles in newspapers/magazines (19%) and advertising (5%), is the secondary channel indicated by 24% of the people, while “personal advice” was the third channel identified by 21% of respondents, indicating advice from friends and relatives or from the doctor/nutritionist (19%).
Relevant, is also the web channel, indicated by 13% of the sample as a source of knowledge about organic. These findings prove how the presence in the store is the first form of communication with the end customer and thus, as expected in the formulation of research proposition P5, the brand.

Chart 14: "How did you first know about organic food?"



Analysis on perceptions of distributions channels.

This analysis aims at understanding if consumers perceive a different quality of products according to the distribution channel. Quality is here defined generally as cost/benefit ratio, assuming the expected benefits will correspond to the motivation of purchasing highlighted in the previous paragraph. Should P4 be verified, it will not only give a clear indication about the changes in terms of distribution needed at all levels to better convey values of organic, but it will also confirm the underlying assumption that quality depends, once again, on embeddedness.

To verify proposition P4, a set of two simple multiple choice questions was developed in the survey. The first question collected information about the distribution currently addressed for buying organic, the second asked where higher quality organic products should be found. If answers returned a significant discrepancy between the two, it would mean that the supply

chain should undergo considerable change. If the discrepancy were in favor of direct distribution, P4 would be verified.

Modern distribution stores (supermarket, hypermarkets and malls) appear to be the most popular, as is evident from the pie chart 15, as they have bee indicated by 75% of the sample as the main source for organic supply. Following are specialized channels with 36%, divided into specialized chains (18%) and small specialty stores (18%). CSAs represent only 4% of the currently addressed channels, while farm stores account for 16% and fairtrade shops for 10%. Interesting to observe is that only 1% of respondents buy through the internet (despite as seen in the ages, income, education analysis the sample is in the range of internet users).

By answering the following question (Chart 16), respondents dramatically changed the above statistics. Hypermarkets and supermarkets are perceived to be the channel with the highest quality products only by 19%, while 59% declared best quality is to be found at the source, meaning buying directly at the farm. 41% believes small specialized shops would deliver the best quality organic products, comparably with specialized chains which would be addressed by 34% of the people.

The difference between the two sets of answers, largely confirms P4 and can be explained by several reasons. The fact that 75% uses modern distribution channels to find organic food depends mostly on convenience, in terms of price, availability, number of references and easiness of shopping everything quickly in the same store.

Chart 15: Currently addressed channels for buying organic

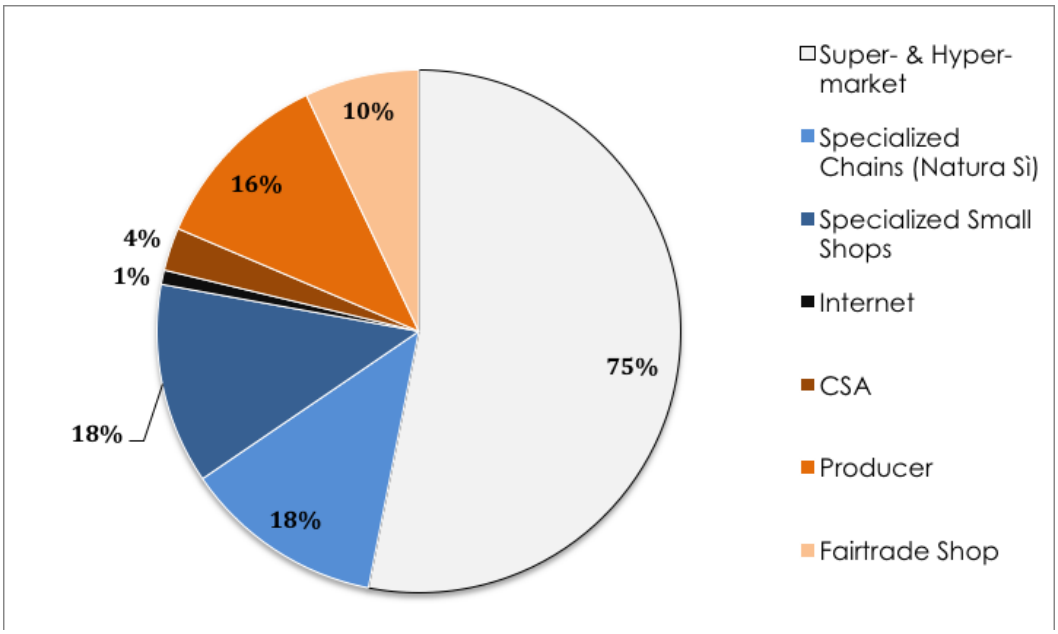
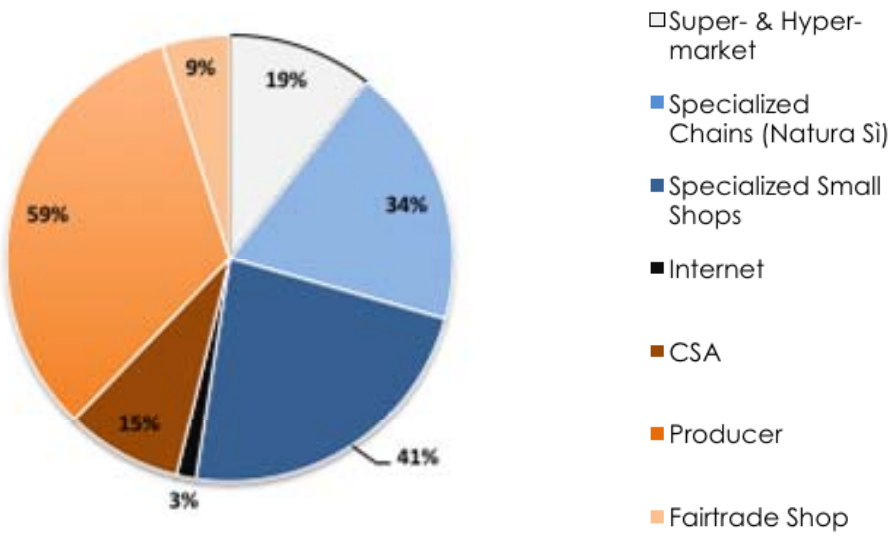


Chart 16: Channels perceived to deliver the highest quality organic products

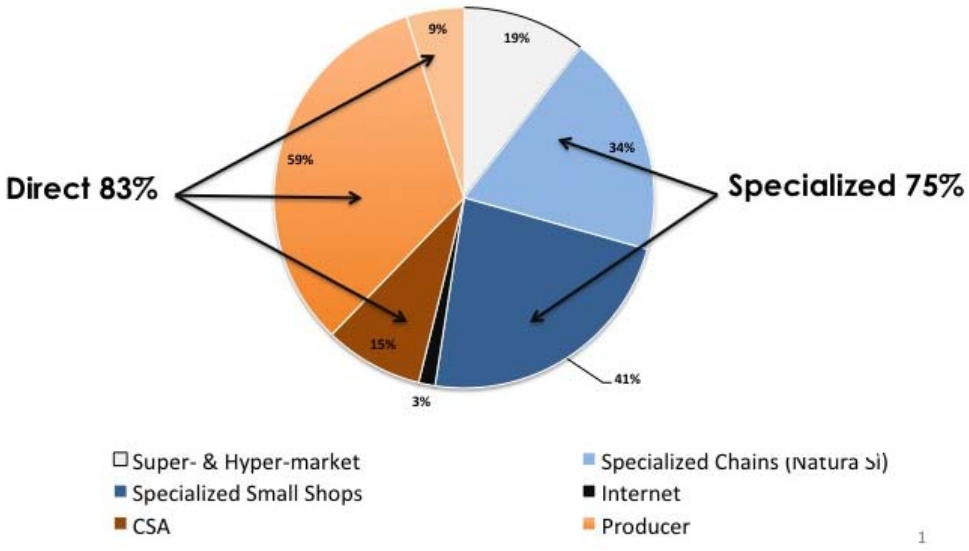


Nevertheless, this 75% dramatically decreases to 19% in the following question, should the choice be based only on quality. The same reasons move the percentages to direct channels in the second answer. While, in

facts, only 18% of consumers addresses specialized chains at present, in the quality based choice 34% of interviewees would turn to this channel. This is also explained by price convenience, with specialized chains perceived as the a good compromise between embeddedness and modern distribution but, at present, too expensive. Small specialized shops success in the second question, relies on the (perceived) direct contact with producers and, at least, a close selection of products by the retailer himself.
The most evident turnaround between the two questions is represented by farm stores (59% in the second answer) which are the full expression of embeddedness: the majority of consumers perceive that buying at the farm is an assurance of best possible quality. CSA groups are perceived as high quality for comparable reasons since they are perceived to have control over quality and a direct influence the offer from the farm.

As a whole, answers to the perceptions question highlight that 83% of respondents perceive the short (mainly direct) channel is delivering best quality for organic products, and 75% believe a specialized channel on organic. All of this considering, it seems reasonable to confirm proposition P4, “Consumers perceive a higher quality of products if they are distributed trough direct channels”.

Chart 17: Attributes of distribution channels perceived to deliver the highest quality organic products



Analysis of brand value as an information vector on organic products

Verification of P5 was possible through questions about brand perceptions. Questions are used to measure several variables, using Likert scale from 1 to 9 in two separate questions (see Annex 1). In this section we will develop a linear regression model, using the "Brand equity" as the dependent variable and the "brand awareness", "specialization", "Price", "availability" and "quality" as the independent variables. Before carrying out analysis, the Factor Analysis was carried out on all the items used in the questionnaire to see if they reflect correctly the variables used for the Regression. A Factor Analysis was carried out on all the items used in the questionnaire to identify which items were explaining most of the variance among them. It 'was launched with the Factor Analysis Methodology Equimax in SPSS. The analysis returned five factors explaining 88% of the variance. Through a rotated matrix of components, the factors could be resumed as:

- Brand equity (BE)
- Specialization (SPEC)
- Awareness (BK)
- Quality (generally intended) (Q)
- Convenience (price) (PR)

Table 24: Rotated Component Matrix

Fattori	Componenti				
	1	2	3	4	5
BE1	,811				
BE2	,811				
BE3	,807				
BE4	,786				
BE5	,767				
BE6	,716				
BE7	,697				
BK1		,802			
BK2		,759			
BK3		,732			
SPEC1			,809		
SPEC2			,736		
SPEC3			,600		
Q1				,802	
Q2				,678	
Q3				,620	
PR1					,956
PR2					,896

Through a reliability analysis the correlation between items constituting the factors analyzed is confirmed (Table 25). In particular, the Cronbach's Alpha shows a strong relationship between the items of each variable.

Table 25: Cronbach's Alpha

Fattori	Cronbach's Alpha	Nr. di item
Brand equity	0,973	7
Brand knowledge	0,948	3
Specializzazione	0,908	3
Prezzo	0,869	2
Qualità	0,919	4

Individual parameters of the model, all independent variables have a positive relationship with brand equity, except for the price, as expected. The Beta represents the value of coefficient of each variable. The factor that has the greater coefficient is specialization that, in percentage terms, impacts for 55.9%, followed by the knowledge of the brand with a share of 36.3%, the quality (11.9%), availability (5.7%) and the price (-9.9%). In terms of the significance of each variable, it is clear that only specialization and brand knowledge (awareness) are significant, and the price, the quality, availability have a p-value greater than 5% and, for this reason, it is not possible generalize the model to include these variables.

Table 26: Variable coefficients as a percentage

	Coefficienti standardizzati	
Rquadro=0.55	Beta	%
Qualità	,091	11,9%
Brand Knowledge	,277	36,3%
Prezzo	-,075	-9,9%
Specializzazione	,427	55,9%
Reperibilità	,044	5,7%
Totale		100%

Brand awareness and specialization are the factors that have greater influence on the value of the brand and the only ones to be statistically

significant, while the consumer does not recognize a strong bond with the brand equity for the others.

In other words, an organic brand is valuable as long as it is reputable and specialized on organic. These two characteristics appear to be reasonably close to an idea of “knowledge” or else “information” that can be conveyed through a brand. According to this analysis, it is possible to state that the brand is at least partially responsible of delivering information to customers, thus a valuable vector for the information organic consumers are looking for.

Conclusions

The analysis conducted through the building of propositions regarding organic food distribution in the near future, and their validation through surveys, allowed coming to some significant conclusions.

Conclusions drawn in this paragraph, although only representing a starting point for further hypothesis based research, represent both a bridge head in operations research on organic food and a valuable guideline for future business development in producing and delivering organic.

Supported by a consistent literature background, the analysis was based on the assumption that farmers and consumers are bringing considerable change in the food supply chain, and this change in manifesting through the continuous growth of organic food market.

Verifying propositions on a double parallel track on farmers and consumers, has been considered to be the most suitable approach for evaluating the changes occurring and their reciprocal consistency.

Since emphasis was put on distribution as a tool for delivering value to final customers, the propositions aimed at highlighting the attributes for an hypothetical “new” distribution, capable of transferring new intangible values commonly attached to organic by consumers. By interviewing a representative sample of the business community it has been possible to identify what the characteristics of the future distribution approach would be. With evolving needs on the consumers side, largely reported and confirmed by a vast literature in marketing and sociology, the main attributes of future distribution of organic foods should be essentially three: the capability of delivering information, a short path between the “field and the fork” and both in terms of players involved in the chain and in spatial terms.

Both, the propositions addressing consumers’ perceptions and farmers’ strategies, were conceived as complementary. If a decoupling had been found in their validation, it would have probably meant that farmers directly engaging in distribution to consumers were not correctly picking up the changes on the demand side and, eventually, would have failed in gaining back a decisive role in the supply chain.

On the farmers side, the survey results confirmed that organic farmers are naturally prone to engage in direct distribution, thus re-introducing a short supply chain approach, abandoned with the industrialization of the primary sector.

Short supply chains can be considered today an established distribution model in Italy and, as previously discussed, it can be assumed that this model will become increasingly popular within the current context of the distribution of agricultural produce. The short supply chain allows the

stakeholders involved to achieve different objectives that can be summarized as follows:

1. Skipping brokering steps in such a way as to have a direct contact between farmer and consumer, which can be defined as a purely economic objective, bringing advantages for both subjects. The farmer can rely on the re-appropriation of added value in the sales process, without allocating more value to the industrial and commercial links of the conventional chain. Consumers can enjoy a fair price through the reduction of the number of steps that separates them from raw materials production.
2. Reducing cultural and geographical distances between the world of production and the world of consumption, facilitates communication between these two worlds and increases efficiency in the processes of production, exchange and consumption. We are witnessing a reciprocal education between the two worlds that had been kept apart by the previous distribution models.

3. Re-appropriation of a key role in the supply chain from farmers and consumers: the starring role to date was, in fact, almost exclusively taken by large industrial players that had full control of both production and consumption. The logic of production was based not on what the food system could actually offer, but on increasing exasperation of production or, alternatively, through a relocation of the same.

The concept of the short supply chain is far from new. The conventional long chain model, has been imposed by industrialization. Today, we can

therefore believe that a return to a more direct relationship is possible, along with a less complex exchange, in terms of financial intermediaries. In addition to a return, we can imagine an evolution of these forms of marketing thanks to the advent of new technologies, which are becoming more and more a part of everyday life for all of us.

Organic farms have better understood the new short supply chain distribution model. At the base of the close relationship between organic farms and the short supply chain, there are common principles such as respect for the environment and respect for natural cycles, and also the knowledge that a farmer who adopts all of these will be able to reap the benefits, in terms of profitability and efficiency.

Contrarily to what had been assumed through proposition P2 on organic farms local distribution, the survey disprove the assumption. This result is also the umpteenth signal that local distribution approaches such as “Km-0” are poorly applicable on a large scale, at least in the short and medium term, representing an almost impossible turnaround in consumers diet and behavior. Moreover, since there is a geographic decoupling between organic products demand and production, distributing locally would result in lost sales and a subsequent loss of organic dedicated UAA. This would eventually hamper the diffusion of organic threatening the chance for a more sustainable production method.

The survey has also shown a marked difference in the opinions expressed by the respondents about the ability of short chains to generate revenues: while organic farmers recognize a higher management complexity, they strongly engage in direct distribution channels. The reduced use of short chain by mixed farms is probably due to their inability to manage the short chain, and to the complexity of changing an historically conditioned

distribution system. This complexity is generated by the high cost of switching channel and the lack of operational skills for the management of the supply chain itself.
It should be noted, however, that mixed farms are interested in the prospects offered by the short chain and that in the future this will be one of the channels through which they will distribute the produce they offer. It will probably not be the predominant channel, but it will be an alternative and additional channel to the long chain.

Organic farms, by their nature, promote a sales method more in line with the short chain. The principles of rural development, the general well-being of the soil and of consumers are somewhat consistent with those promoted by the short chain. In fact, a relationship must be established between consumers and sellers, based on trust and on the information about the final produce and the production method applied.

On the consumers side, the survey results show that the distribution strategies put in place by organic farmers have a strong demand pull.
According to the survey, consumers today largely rely on modern distribution supply of organic products. If on one side this result confirms the fundamental role of large retail chains in spreading awareness and enlarging the market of organic products, it is not representative of other hidden actual needs of demand. In consumers' perceptions, modern distribution is a forced choice. Apparently, as confirmed by the answer to the other questions in the survey, only supply convenience justifies the choice, while direct distribution channels are by far considered the most desirables for delivering high quality organic products.

This perception, not only validates the key proposition, it also confirms the assumption that quality today is extremely dependent on the embeddedness of a product.

The survey on consumers was also based on the assumption that large retail private labels are making the largest part of the organic market (at least for packaged food). The factor analysis conducted on the answers about organic brands confirmed the importance of brands under specific conditions. In particular, specialization of the brand and awareness explain the most part of the brand equity. This result is suggesting that, while on one side private labels are worth the investment for modern distribution, on the other side, once again, there is an enormous potential competitive advantage for organic farmers distributing their products directly. In facts, awareness can easily be fostered by direct contact with producers through short channels, while specialization of organic farms is by definition. Should farmers be able to acquire managerial knowledge and capabilities to develop their own brands, private labels might be suffering a fierce competition on the market.

In this perspective, farmers take back their central role in business models originating from organic, but can not be valued and get to the bottom of the value chain if the distribution models themselves are not properly changed. Innovation is therefore required along the entire value chain and originates from the development of skills and know-how in farms, and the evolution, or rediscovery, of forgotten distribution models, that stimulate aggregation and enhance the place where the purchase is transformed from a mere economic transaction into a relational model.

If organoleptic qualities of the product will become as important as the knowledge of the know-how of the manufacturer and a fair price for both, the traditional production-distribution model may be at risk and there could be an opportunity for renewing the agro-food chain.

In the probable future, if organic farms are able to provide the correct information through short chains, a new model of Italian agriculture can be envisaged. The short supply chain per se will aim to meet the needs of both producers and consumers. These goals will only be achieved if the supply chain is efficient in terms of logistics, value distribution, and information.

Managerial Implications

As this is a first qualitative exploratory research in operations management that will require further quantitative research, the results shed new light on some aspects, with no doubt destined to change the landscape of the organic sector and the agri-food industry in general. The work has highlighted aspects of change that, starting from organic, have not a few implications for the entire industry. The change in consumption habits, servitization, technological innovations are, among others, issues that affect the current way of meeting of supply and demand. Organic of course, if properly monitored and regulated, seems to offer a solution to the great demand of food security and transparency, but because of its founding principles (sustainability, equity, health, etc.) it is also able to respond to moral and social needs of the consumers who are increasingly evident in a transition phase, from a consumption based economy to a future "alternative" economy.

If distribution players can not circumvent the need for renewal in the face of market pressure and a more informed and aware consumer demand, even farmers seem to be faced with a dilemma: create an efficient system or become larger. These are recurring themes in the Italian economy and the agri-food sector in general, heavily hampered in its development for the inability of creating efficiency among a large number of small players. Organic, because of its intrinsic characteristics and the perceived social importance, may perhaps be a facilitator of these processes. Farmers engaging in innovative forms of distribution should be seeking an efficiency strategy on the *porterian* productivity frontier by creating new organizations, sharing burdens and optimizing both production and distribution of organic products, while delivering the values the consumer is expecting.

On the modern distribution side, the analysis has shown the need for a significant overhauling in the next few years, at least in the organic market. For the players in the sector, there are some trends which reflect the process of defining strategies for the medium-term investment. The future, in fact, is what with their decisions and their actions they will determine themselves, affecting the economic development towards one of two poles from us prefigured in the scenario planning exercise.
Investing in Organic Private Labels is still a viable option for conventional distribution as long as other investments are destined to specialization and direct distribution. Specialization and Information create trust and they are better conveyed along the chain to customers through brand and an explicit direct contact with farmers. Investment in technology will be needed especially on the information delivery side, while, despite scenarios point out e-commerce technology is a main driver for near future organic

development, consumers seem to favor human and social contact in the shopping. On the other side, investments could be diverted to creating this social contact, leveraging on real estate capital and logistics assets to create efficient farmer's market, complementing with e-commerce.

Limits of the work and impact on Literature

Originating from a thriving marketing knowledge base in literature, the research is bridging towards operations and supply chain management alternative models for organic food. Nevertheless, as a bridging research, limits of the work are to be found in the absence of simulations of alternative models for distribution. Quantitative hypotheses based research is needed to further complement and test results and to develop reference models for organic food distribution in operational terms. Moreover, hypotheses drawn from the founding propositions of this work, should be tested on much wider samples and dedicated surveys.

Bibliography

Aertsens, J., Mondelaers, K., and Van Huylenbroeck, G., 2009. *Differences in retail strategies on the emerging organic market*. British Food Journal, 111 (2): 138-154.

Aertsens, J., Verbeke, W., Mondelaers, K. and Van Huylenbroeck, G., 2009. *Personal determinants of organic food consumption: a review*. Br. Food J. 111 (10): 1140–1167.

AIAB, Coldiretti, Legambiente, 2011. *I valori del biologico. Sociali, economici e ambientale*. Roma, Italia.

Anderson E.W., Fornell C., Mazvancheryl, S., 2004. *Customer satisfaction and shareholder value*. Journal of Marketing 68(4): 172–185.

Arvola, A., Vassallo, M., Dean, M., Lampila, P., Saba, A., Lähteenmäki, L. and Shepherd, R., 2008. *Predicting intentions to purchase organic food: The role of affective and moral attitudes in the Theory of Planned Behaviour*. Appetite, 50 (2–3): 443-454

Aspinwall, L., 1962. *The Characteristics of Goods and Parallel System Theories, in Managerial Marketing: Perspectives and Viewpoints*. Irwin.

Associazione Consumatori Utenti, 2009. *Agricoltura Biologica e consumatori*. Retrieved Dec. 2013 from Federbio: http://www.federbio.it/files/373.pdf

Auh S., Bell S.J., McLeod C.S., Shih E., 2007. *Co-production and customer loyalty in financial services*. Journal of Retailing 83(3): 359–370.

Baglieri, E., Zambolin, E., 2012. *Industrializzare i servizi*. Egea, Milano

Balestri, G., 2009. *Le basi della logistica*. Hoepli, Milano.

Bauman, Z., 1993. *Postmodern Ethics*. Blackwell, Oxford.

Bell, D. and Valentine, G., 1997, *Consuming Geographies: We Are Where We Eat*. Routledge, London.

Biobank, 2013. *Tutto Bio 2013*. Egaf Edizioni, Forlì-Cesena.

Bowersox, D.J., Closs, D.J., 1996. *Logistical Management: the integrated supply chain process*. McGraw Hill, New York.

Bromley, D., 2001, *Mad cows, drugged cows, and juggled genes*. Choices, 2nd quarter: 6-9.

Bucklin, L., 1963. Retail Strategy and the Classification of Consumer Goods. Journal of Marketing , 27 (1): 50-58.

Busacca, B., 1990. *L'analisi del consumatore: sviluppi concettuali e implicazioni di marketing*. Egea, Milano.

Castaldo, S., 2010. *Go to market*. Il Mulino, Bologna.

Chien S.H., Chen J.J., 2010. *Supplier involvement and customer involvement effect on new product development success in the financial service industry*. Service Industries Journal 30(2): 185–201.

Chinnici, G., D'amico, M., and Pecorino, B., 2002. *A multivariate statistical analysis on the consumers of organic products*. British Food Journal, 104 (3,4,5): 187-199.

Coop., 2013. *Storia dell'agricoltura biologica*. www.coop.it. Retrieved Aug. 2012

Danneels, E., 2002. *The dynamics of product innovation and firm competences*. Strategic Management Journal, 23: 1095-121.

De Ruvo, E., 2007. *Il mercato dei prodotti biologici: tendenze generali nelle principali filiere*. ISMEA, Roma.

Deloitte, LLP, 2013. *Global Powers of Retailing: Retail Beyond.* Deloitte Touche Tohmatsu Limited, Canberra.

Demeritt, L., 2002. *All Things Organic 2002: A Look at the Organic Consumer*. The Hartman Group, Bellevue.

DeSouza, G,. 1989. *Now service businesses must manage quality*. Journal of Business Strategy, 10: 21-25.

Dimara, E., Petrou, A., and Skuras, D., 2003, *The socio-economics of niche market creation. A social ecology paradigm for the adoption of organic cultivation in Greece.* International Journal of Social Economics 30 (3): 219-235

Dodds, W.B., Monroe, K.B. and Grewal, D., 1991. *Effects of Price, Brand and Store Information on Buyers' Product Evaluations*. Journal of Marketing Research. 28: 307-319.

Droge C., Stanko M.A., Pollitte W.A., 2010. *Lead users and early adopters on the web: the role of new technology product blogs*. Journal of Product Innovation Management 27(1): 66–82.

Giannakas, K., 2002. *Information Asymmetries and Consumption Decisions in Organic Food Product Markets*. Canadian Journal of Consumer Studies, 50(1): 35-50.

Giddens, A., 1991. *Modernity and Self-Identity: Self and Society in the Late Modern Age*. Polity Press, Cambridge.

Gilg, A. and Battershill, M., 1998, *Quality farm food in Europe: a possible alternative to the industrialised food market and to current agri-environmental policies: lessons from France*. Food Policy, 23: 25-40.

Goodman, D., Sorj, B., and Wilkinson, J., 1987. *From farming to biotechnology*. Oxford: Blackwell.

Grando, A., 2000. *Commercio Elettronico e Porgettazione Logistica.* Egea, Milano.

Granovetter, M., 1985. *Economic action and social structure: The problem of embeddedness*. American Journal of Sociology 91:481–510.

Grunert, S.C. an Juhl, H.J., 1995. *Values, environmental attitudes, and buying of organic foods*. Journal of Economic Psychology, 16: 39-62

Guido, G. (2009). *Behind Ethical Consumption*. Peter Lang AG, Bern.

Harper, G.C. and Makatouni, A., 2002. *Consumer perception of organic food production and farm animal welfare*. British Food Journal, 104 (3/4/5): 287-299

Higgins, V., Dibden, J., & Cocklin, C., 2008. *Building alternative food networks: certification, embeddeness and agri-environmental governance*. Journal of Rural Studies, 24.

Hinrichs, C.C., 2000. *Embeddedness and Local Food Systems: Notes on Two Types of Direct Agricultural Market.* Journal of Rural Studies 16, (3): 295-303.

Hobbs, J.E., 1996. *A transaction cost approach to supply chain management*. Supply Chain Mgt 1(2): 15-17.

ISMEA, 2012. *Prodotti biologici - Focus sulla domanda internazionale e nazionale.*

ISMEA, 2013. *Prodotti biologici - Focus sulla domanda internazionale e nazionale.*

ISMEA, MIPAAF, 2011. *Guida al quadro normativo e fiscale per la vendita diretta di prodotti agroalimentari*.

Johansson, J.K., 1993. *Missing a strategic opportunity: managers' denial of country-of-orgin effects*. In Papadopoulos, N. and Heslop, L., *Product and Country Images*, Haworth Press, New York.

Kotler, P., 1997. *Marketing Management: Analysis, Planning, Implementation and Control*. 9th ed., Prentice-Hall International, Englewood Cliffs, NJ.

Kouba, M., 2003. *Quality of organic animal products*. Livestock Production Science, 80, (1–2): 33-40

Lacey, R.W., 1994. *Mad cow disease: the history of BSE in Britain*. Cypsela Publications, St. Helier.

Lichtenstein, D.R., Netemeyer, R.G. and Burton, S., 1990. *Distinguishing coupon proneness from value consciousness: an acquisition-transaction utility*. Journal of Marketing, 54 (3): 54.

Lusch R.F., Vargo S.L., O'Brien M., 2007. *Competing through service: insights from service-dominant logic*. Journal of Retailing 83(1): 5–18.

Magnusson MK, Arvola A, Hursti U, Aberg L, Sjoden P., 2003. *Choice of organic food is related to perceived consequences for human health and to environmentally friendly behaviour*. Appetite 40(2): 109–117.

McNaghten, P. and Urry, J., 1998, *Contested Natures*. Sage, London.

MIPAAF, INEA, ISMEA, SINAB, 2013. *BioReport 2013. L'agricoltura biologica in Italia*. Roma.

Monroe, K.B., 1990. *Pricing, Making Profitable Decisions*. McGraw-Hill, New York.

Morgan, K., and Murdoch, J., 2000. *Organic versus conventional agriculture: Knowledge power and innovation in the food chain*. Geoforum, 31: 159-173.

Murdoch, J., Marsden, T., Banks, J., 2000. *Quality, Nature, and embeddedness: Some Theoretical Considerations in the Context of the Food Sector*. Economic Geography 76, (2): 107-127

Nelson, P. (1970). *Information and Consumer Behavior*. Journal of Political Economy, Jul-Aug: 311-329.

Nygard, B., and Storstad, O., 1998. *De-globalisation of food markets? Consumer perceptions of safe food: The case of Norway*. Sociologia Ruralis 38:35–53.

Pancotto, D. and Bartolucci, S., 2011. *Agricoltura Biologica. Un'attività produttiva in armonia con le esigenze dell'uomo e dell'ambiente*. Marche, Italia.

Papadopoulos, N., 1993. *What product and country images are and are not*. In Papadopoulos, N. and Heslop, L., *Product and Country Images*, Haworth Press, New York.

Penco, L., 2008. *La logistica nella grande distribuzione organizzata*. FrancoAngeli, Milano.

Pino, G., Peluso, A., & Guido, G., 2012. *Determinants of regular and occasional consumers' intention to buy Organic Food*. The Journal of conusumer Affairs, 46 (1): 157-169.

Polanyi, K., 1944. *The great transformation: The political and economic origins of our time*. Rineheart and Co., New York.

Porter, M., 1996. *What is strategy?* Harvard Business Review, November/December.

Renting, H., Marsden, T. K., & Banks, J., 2002. *Understanding alternative food networks: exploring the role of short food supply chains in rural development*. Environment and Planning, 35: 393-411.

Schifferstein, H., and Ophuis, O.P., 1998. *Health-related Determinants of Organic Food Consumption in the Netherlands*. Food Quality and Preference, 9 (3): 119-133.

SINAB, 2013. *L'agricoltura biologica in cifre al 31/12/2012: operatori, superfici e colture.*

The Nielsen Company, 2011. *Mercato del biologico. La categoria del biologico alimentare*. The Nielsen Company, Milano.

Torgnon, L., Bousset, J., Brannigan, J., and Lagrange, L., 1999. *Consumers' attitudes towards regional food products: A comparison between five different European countries.* Paper prepared for the Socio-Economics of Origin Labelled Products in Agri-Food Supply Chains Conference. INRA, Le Mans.

Walters, D., 1999. *Marketing and operations management: an integrated approach to new ways of delivering value*. Management Decision, 37 (3): 248-258

Wier, M., and Carverley, C., 2002. *Market Potential for Organic Food in Europe*. British Food Journal, 104 (1): 45-62.

Woods, E., 1999. *Supply chain management*. ACIAR Postharvest Technology Internal Workshop, No. 20, Canberra, 1-2 December.

Zanlari, A., 2006. *Commercio elettronico e settore alimentare*. Maggioli Editore, Bologna.

Zanoli, R. and Naspetti, S., 2004. *Consumer motivations in the pruchase of organic food. A means-end approach*. British Food Journal, 104 (8): 643-653.

List of Tables, Figures and Charts

Annexes

1. Consumers Survey

The survey was distributed in collaboration with ADICONSUM (Associazione Difesa del Consumatore e dell'Ambiente) as part of SDA Bocconi's "Bio Management Lab" research on organic and natural food.

QUESTIONARIO

Hai comprato almeno un prodotto alimentare biologico nell'ultimo mese?	SI	NO

Se hai risposto No a questa domanda il questionario finisce qui. Grazie per la collaborazione.
Se invece ha risposto Si, continua pure il questionario.

Come sei venuto a conoscenza dei prodotti biologici? (*possibili più risposte*)

1. Ho letto informazioni su internet (blog, forum, sito produttore..)
2. Li ho visti nel punto vendita
3. Ho letto articoli su giornali/riviste
4. Me ne hanno parlato amici e pareti
5. Me ne ha parlato il medico/nutrizionista
6. Ho visto la pubblicità
7. Altro

Indica per quale motivo hai comprato, la prima volta, prodotti alimentari biologici indipendentemente dal tipo di prodotto (*possibili più risposte*).

1. Per curiosità/provare
2. Per la riscoperta del prodotto naturale
3. Per seguire un'alimentazione sana e naturale
4. Per rispettare la natura
5. Per regola e disciplina di vita che mi sono dato
6. Perché non mi fido dei prodotti tradizionali
7. Perché va di moda
8. Per la convenienza di prezzo
9. Per la comodità di avere un punto vendita specializzato vicino casa
10. Perché in famiglia li usano altre persone
11. Per consiglio del medico
12. A seguito della nascita di mio figlio/figlia

Dove acquisti i prodotti alimentari biologici?(*possibili più risposte*)

1. Supermercati/ipermercati
2. Catene specializzate (es. NaturaSi)
3. Piccoli negozi specializzati
4. Internet

5. G.A.S. (Gruppo di acquisto solidali)
6. Direttamente dal produttore
7. Negozi equosolidali (es. Altromercato)

Dove secondo te si trova il biologico di miglior qualità?(*una risposta*)

1. Supermercati/ipermercati
2. Catene specializzate (es. NaturaSi)
3. Piccoli negozi specializzati
4. Internet
5. G.A.S. (Gruppo di acquisto solidali)
6. Direttamente dal produttore
7. Negozi equosolidali (es. Altromercato)

Quali sono le categorie di biologico che acquisti? (*possibili più risposta*)

1. Frutta e verdura fresca
2. Latte e derivati
3. Succhi di frutta
4. Confettura e marmellata
5. Biscotti, dolciumi, snack
6. Zucchero, caffè, tè
7. Bevande analcoliche
8. Carne e salumi
9. Oli
10. Piatti pronti
11. Pasta, riso e sost. del pane
12. altro

Pensando alla categoria che hai indicato come quella che acquisti maggiormente , indica quali tra le seguenti affermazioni ti rappresenta maggiormente (*una risposta*):

1. Acquisto solo prodotti biologici rinunciando ai prodotti tradizionali.
2. Acquisto in via prioritaria prodotti biologici, ma se non li trovo prendo i tradizionali.
3. Non acquisto in via prioritaria i prodotti biologici, ma dipende dalla convenienza del momento, in termini di prezzo e promozioni .

Indica la marca di prodotti alimentari biologici che compri più spesso. (*risposta aperta*)

Pensando alla marca di prodotti biologici che hai indicato nella domanda precedente, indica il tuo livello di accordo/disaccordo con le seguenti affermazioni. Considera 1=completamente in disaccordo, 9=completamente d'accordo.

1. Ricordo il nome della marca	1	2	3	4	5	6	7	8	9
2. Riesco a riconoscere facilmente la mia marca tra altre marche	1	2	3	4	5	6	7	8	9
3. Riesco a ricordare facilmente alcune caratteristiche della marca	1	2	3	4	5	6	7	8	9
4. Riesco a ricordare il logo o il simbolo	1	2	3	4	5	6	7	8	9
5. I prodotti della marca sono di qualità	1	2	3	4	5	6	7	8	9
6. Sento che la marca è affidabile	1	2	3	4	5	6	7	8	9
7. La marca offre un'ampia varietà di prodotti	1	2	3	4	5	6	7	8	9
8. La marca offre per prima le novità	1	2	3	4	5	6	7	8	9
9. E ' facilmente reperibile	1	2	3	4	5	6	7	8	9
10. La considero la marca degli intenditori	1	2	3	4	5	6	7	8	9
11. Mi ricorda il legame con gli agricoltori	1	2	3	4	5	6	7	8	9
12. E' specializzata nel biologico	1	2	3	4	5	6	7	8	9
13. Dallo stile ricercato	1	2	3	4	5	6	7	8	9
14. Buon rapporto qualità prezzo	1	2	3	4	5	6	7	8	9
15. Economica/conveniente	1	2	3	4	5	6	7	8	9
16.Mi fido dell'ente che certifica la marca	1	2	3	4	5	6	7	8	9

Tenendo in considerazione che la "tua marca di bio" è intesa come la marca che hai indicato essere quella che acquisti più spesso, indica il livello di probabilità/improbabilità delle seguenti affermazioni. Considera 1=sicuramente no, 9=sicuramente si.

16. Anche se un'altra marca bio ha le stesse caratteristiche della mia, io preferirei comprare la mia.	1	2	3	4	5	6	7	8	9
17. Se dovessi scegliere tra diverse marche biologiche, la mia sarebbe sicuramente la scelta che farei	1	2	3	4	5	6	7	8	9
18. Se devo comprare un prodotto biologico, io programmo di comprare il prodotto della mia marca anche se ci sono marche buone quanto la mia.	1	2	3	4	5	6	7	8	9
19. Anche se un'altra marca ha lo stesso prezzo della mia, io continuerei a comprare la mia marca di biologico	1	2	3	4	5	6	7	8	9
20. Se c'è un' altra marca biologica buona quanto la mia, io preferirei comprare la mia.	1	2	3	4	5	6	7	8	9
21. Se altre marche di biologico non sono differenti dalla mia, in ogni caso sembra più intelligente comprare la mia.	1	2	3	4	5	6	7	8	9
22. Ha più senso comprare la mia marca di biologico piuttosto che altre marche bio, anche se esse sono identiche.	1	2	3	4	5	6	7	8	9

Completa i seguenti campi con le informazioni richieste:

Sesso:

M	F

Età:

Fino a 34 anni
Da 35 a 44 anni
Da 45 a 54 anni
Da 55 a 64 anni
Oltre 65 anni

Provenienza geografica:

Nord-Ovest
Nord-Est
Sud
Centro

Livello d'istruzione

Laurea
Diploma di scuola superiore
Diploma di scuola media inferiore
Licenza elementare

Professione:

Studente
Imprenditore
Insegnante
Commerciante
Operaio
pensionato
Casalinga
Disoccupato
Altro

Fascia di reddito familiare annua *(domanda facoltativa)*

Fino a 36.152
Da 36.153 a 70.000
Da 70.000 a 100.000
Oltre 100.001

2. Farmers Survey

The survey was distributed in collaboration with Confagricoltura (Confederazione Generale dell'Agricoltura Italiana) as part of SDA Bocconi's "Bio Management Lab" research on organic and natural food.

Questionario Aziende Agricole

Il seguente questionario anonimo ha l'obiettivo di definire un profilo generale delle aziende agricole italiane, Le chiederemo quindi di rispondere a delle semplici domande inerenti la sua azienda. Non ci sono risposte giuste o sbagliate quindi Le chiediamo di rispondere con la massima sincerità.

LE INFORMAZIONI RICAVATE SARANNO UTILIZZATE ESCLUSIVAMENTE PER LO SVOLGIMENTO DELLA RICERCA E SARANNO DIFFUSE SOLO IN FORMA AGGREGATA COSI' CHE NON SE NE POSSA TRARRE ALCUN RIFERIMENTO ALL'INTERVISTATO.

Per rispondere alle domande sarà necessario compilare gli spazi evidenziati in giallo, salvare il file e inviarlo nuovamente al mittente.

Grazie per la collaborazione!

Domanda 1

1) Quale metodo produttivo utilizza la sua azienda?	
Tutta la produzione viene effettuata con il "metodo biologico"	
La produzione viene effettuata in parte con il metodo biologico e in parte con il metodo tradizionale	
Tutta la produzione viene effettuata con il "metodo tradizionale"	
Una parte o tutta la produzione rientra nel regime di "conversione"	

Domanda 2

2) Indicare la percentuale di produzione biologica, tradizionale o in conversione nella sua azienda:	
Produzione biologica	
Produzione in conversione	
Produzione tradizionale	
TOTALE	**100**

Domanda 3

3) In percentuale, quanto prodotto venduto è marchiato come:	
Prodotto biologico	
Prodotto tradizionale	
TOTALE	**100**

Domanda 4

4) A quanto ammonta la superficie agricola utilizzata (SAU) dell' azienda?	
Meno di 4 ettari	
Tra 4 e 12,5 ettari	
Tra 12,5 e 30 ettari	
Tra 30 e 100 ettari	
Maggiore di 100 ettari	

Domanda 5

5) In quale intervallo rientra il fatturato dell'azienda?	
Meno 50 mila euro	
Tra 51 e 250 mila euro	
Tra 251 e 500 mila euro	
Maggiore 500 mila euro	

Domanda 6

6) A quanto ammontano indicativamente i costi dell'azienda, in percentuale, sul fatturato?	
Meno del 20%	
Tra il 21% e il 30%	
Tra 31% e il 40%	
Tra il 41% e il 50%	
Tra il 51% e il 60%	
Oltre il 60%	

Domanda 7

7) In quale/i area geografica è localizzata la produzione?	
Nord est	
Nord ovest	
Centro	
Sud	
Isole	

Domanda 8

8) Qual è la produzione <u>principale</u> (per fatturato e/o volumi) della sua azienda? *Indicare una categoria di prodotto con una X . Indicare il nome di un prodotto rappresentativo al fianco.*	
AZIENDE SPECIALIZZATE - PRODUZIONE VEGETALE	
• Aziende specializzate nella coltivazione di cereali e di piante oleaginose e proteaginose	
• Aziende specializzate in altre colture	
• Aziende specializzate in ortofloricoltura di serra	
• Aziende specializzate in ortofloricoltura all'aperto	
• Aziende specializzate in altri tipi di ortofloricoltura	
• Aziende specializzate in viticoltura	
• Aziende specializzate in frutticoltura e agrumicoltura	
• Aziende specializzate in olivicoltura	
• Aziende con diverse combinazioni di colture permanenti	
AZIENDE SPECIALIZZATE - PRODUZIONE ANIMALE	
• Aziende bovine specializzate - orientamento latte	
• Aziende bovine specializzate – orientamento allevamento e ingrasso	
• Aziende bovine - latte, allevamento e ingrasso combinati	
• Aziende con ovini, caprini ed altri erbivori	
• Aziende suinicole specializzate	
• Aziende specializzate in pollame	
• Aziende con vari granivori combinati	
AZIENDE MISTE	
• Aziende con policoltura	
• Aziende con poliallevamento ad orientamento erbivori	
• Aziende con poliallevamento ad orientamento granivori	
• Aziende miste seminativi ed erbivori	
• Aziende con colture diverse e allevamenti misti	

Domanda 9

9) In quale/i area geografica vende il suo prodotto principale?	
Nord est	
Nord ovest	
Centro	
Sud	
Isole	

Domanda 10

10) Se ne è a conoscenza, in quale/i area geografica il cliente finale acquista il suo prodotto principale?	
Nord est	
Nord ovest	
Centro	
Sud	
Isole	

Domanda 11

11) Indicare la percentuale di produzione che l'azienda distribuisce attraverso i seguenti canali distributivi: *(esempio se distribuisce il 30% del suo prodotto attraverso il canale "vendita in azienda" e il 70% attraverso la GDO, dovrà inserire il numero "30" nella casella corrispondente la vendita diretta e il numero "70" nella casella corrispondente la GDO)*	
Vendita diretta in azienda	
Agriturismo	
Vendita diretta al mercato rionale	
Vendita diretta mediante un Gruppo d'Acquisto Solidale (GAS) con acquisto diretto o mediante piattaforma	
Mense	
Ristoranti	
Vendita al dettaglio, fra cui quello organizzato in forma di franchising	
Vendita alla grande distribuzione organizzata (GDO, supermercati…)	
Vendita mediante internet	
Vendita a grossista o broker	

Domanda 12

12) Da 1 a 10 quale canale di vendita è più profittevole per la sua azienda e quale è meno profittevole? (1= il più profittevole e 10= il meno profittevole)	
Vendita diretta in azienda	
Agriturismo	
Vendita diretta al mercato rionale	
Vendita diretta mediante un Gruppo d'Acquisto Solidale (GAS) con acquisto diretto o mediante piattaforma	
Mense	
Ristoranti	
Vendita al dettaglio, fra cui quello organizzato in forma di franchising	
Vendita alla grande distribuzione organizzata (GDO, supermercati…)	
Vendita mediante internet	
Vendita a grossista o broker	

Domanda 13

Ora la preghiamo di indicarci con una "X" per ciascuno dei canali distributivi:

Vendita diretta in azienda	Basso	Medio	Alto
Ricavi			
Costi			
Complessità di gestione			

Agriturismo	Basso	Medio	Alto
Ricavi			
Costi			
Complessità di gestione			

Vendita diretta al mercato rionale	Basso	Medio	Alto
Ricavi			
Costi			
Complessità di gestione			

Vendita diretta mediante un Gruppo d'Acquisto Solidale (GAS)	Basso	Medio	Alto
Ricavi			
Costi			
Complessità di gestione			

Mense	Basso	Medio	Alto
Ricavi			
Costi			
Complessità di gestione			

Ristoranti	Basso	Medio	Alto
Ricavi			
Costi			
Complessità di gestione			

Vendita al dettaglio	Basso	Medio	Alto
Ricavi			
Costi			
Complessità di gestione			

Vendita alla GDO	Basso	Medio	Alto
Ricavi			
Costi			
Complessità di gestione			

Vendita mediante internet	Basso	Medio	Alto
Ricavi			
Costi			
Complessità di gestione			

Vendita a grossista o broker	Basso	Medio	Alto
Ricavi			
Costi			
Complessità di gestione			

Domanda 14

14) Negli ultimi 3 anni sono stati aperti nuovi canali distributivi? Quali?	
Vendita diretta in azienda	
Agriturismo	
Vendita diretta al mercato rionale	
Vendita diretta mediante un Gruppo d'Acquisto Solidale (GAS) con acquisto diretto o mediante piattaforma	
Mense	
Ristoranti	
Vendita al dettaglio, fra cui quello organizzato in forma di franchising	
Vendita alla grande distribuzione organizzata (GDO, supermercati…)	
Vendita mediante internet	
Vendita a grossista o broker	
NESSUNO	

Domanda 15

15) Quanti nuovi prodotti sono stati commercializzati negli ultimi 3 anni? *(indicare un numero)*	

Domanda 16

16) Di quanti prodotti è stata interrotta la produzione negli ultimi 3 anni? *(indicare un numero)*	

Domanda 17

17) Quale ruolo svolge in azienda?	
Sono un imprenditore agricolo	
Sono un dipendente dell'azienda agricola	
Altro: *(scrivere la posizione ricoperta)*	

Domanda 18

18) Sesso	
Uomo	
Donna	

Domanda 19

19) Età:	
Da 20 a 30 anni	
Da 31 a 40 anni	
Da 41 a 50 anni	
Da 51 a 60 anni	
Oltre 60 anni	

Domanda 20

20) Titolo d'istruzione:	
Licenza elementare	
Licenza media	
Licenza superiore	
Laurea	
Dottorato o master	

Domanda 21

21) Numero dipendenti azienda:	
È una ditta individuale	
Tra 1 e 5	
Tra 5 e 10	
Tra 11 e 20	
Tra 21 e 40	
Tra 41 e 60	
Tra 61 e 100	
Oltre 100	

Domanda 22

22) In azienda si svolge attività turistica o attività di fattoria didattica? *(Scrivere si o no)*	

Domanda 23

25) Quali sistemi informatici vengono utilizzati in azienda?	
Excel	
Word	
SAP	
Software per la gestione degli ordini	
Software per la gestione delle email	
Software per la programmazione della produzione	
Software per la gestione dei registri	

Software per la gestione della logistica	
Software per la previsione della domanda	
Altro	
Nessuno	

3. Statements from Scenario Planning Exercise

The following statements are reported as written by participants in the Scenario Planning Exercise "Il Futuro del Biologico" held on July 2nd 2013 at SDA Bocconi School of Management as part of the research of SDA Bocconi School of Management's "Bio Management Lab".

- Sfruttamento delle risorse del Paese: Terra, Arte e Turismo
- Aumento degli imprenditori agricoli
- Fine della vendita al dettaglio tradizionale (GDO): solo "vetrine" e vendita online.
- Disintegrazione colossi industriali
- Ripresa economica a seguito del verificarsi di un evento rivoluzionario/innovativo (non il biologico)
- Aumento delle piccole imprese
- La percentuale di spesa per i consumi alimentari privati aumenterà sensibilmente
- Nuovi format distributivi: negozi monomarca, distributori automatici h24, e-commerce
- E-commerce
- Bio per tutti (accessibile)
- Spostamento del baricentro economico verso est (India, Cina, Corea)
- Il mercato elettronico crescerà a dismisura, anche nell'alimentare
- Aumenta l'alimentazione fuori casa, aumentano anche le tipologie nell'offerta
- Dipendenza dai paesi emergenti
- Ritorno al made in Italy
- Forte concentrazione della GDO
- Scompare la maggior parte delle piccole aziende in Italia
- Aumento potere delle multinazionali
- Dal rischio default alla ripresa economica
- Europa in depressione economica causata dall'euro
- Più domanda di servizi e meno di prodotti
- Il paese comincerà a pensare a come uscire dalla crisi solo a partire dal 2018
- Boom di iniziative e progetti a contenuto sociale (non solo bio, ma equo-solidale, piccole realtà socialmente utili)
- Cambiamento dei modelli colturali agricoli per adattamento al cambiamento climatico in Italia ed Europa
- Conflitti per il possesso delle risorse ambientali e alimentari
- Risorse idriche saranno scarse
- Maggiore sicurezza alimentare

- Governo più solido
- Aumento della normativa
- Più rispetto per la natura
- Il bio Made in Italy soddisferà la domanda delle nuove generazione sempre maggiore ritorno all'agricoltura
- Abbandono del consumismo e gestione intelligente del denaro
- Donne sempre più ago della bilancia anche nei consumi (presidente donna)
- Giovani madri protagoniste dei futuri consumi
- Salute al primo posto per le scelte alimentari
- Socializzazione reale e autentica
- Espansione delle aree geografiche prevalentemente islamiche
- Sempre più alienazione attraverso la tecnologia di comunicazione
- Fuga di cervelli
- Polarizzazione del paese: ricchi/poveri, cultura/ignoranza
- Saremo tutti più sportivi
- Le persone cercheranno cibi sempre più sani
- Interattività tra produttori e consumatori
- Relazione orizzontale tra brand e consumatori
- Contenuti informativi legati ai prodotti e feedback dai consumatori
- Larghissima diffusione delle malattie dovute a stili alimentari sbagliati
- Crescente tensione tra occidente e aree di influenza islamica
- Più individualismo ma più attenzione alla qualità della vita
- Cambiamento degli stili alimentari (nutraceutica/sostenibilità)
- Il digitale rivoluzionerà in modo ancora le abitudini per la fruizione dei servizi
- Solo veicoli elettrici
- La ricerca sconfigge i tumori
- Produzione personalizzata stampanti 3d
- Automobili ecocompatibili
- Auto elettriche
- Crescita del mercato delle auto elettriche
- Solo moneta elettronica
- Canali distributivi prevalentemente online
- Ritorno al locale non omologato
- Più consumo consapevole
- Scelte più informate
- Estremizzazione delle differenze economico-sociali
- Ritorneremo a lavorare la terra
- L'Italia punta sulla formazione per aumentare l'efficienza in tutti i settori
- Complessità delle fonti di informazione: autorevolezza vs. tempo
- Frammentazione degli stili di vita
- Consumatore sempre più informato e competente
- Crescita del consumo critico
- Giovani ritornano all'agricoltura alla ricerca di un diverso stile di vita
- Invecchiamento e impoverimento della popolazione
- Saremo un po' più poveri

- Sviluppo dei mezzi di trasporto sostenibili
- Tutto riciclabile
- Sviluppo delle fonti rinnovabili
- Maggiore dipendenza dell'individuo dalla tecnologia
- Informazioni richieste e disponibili sempre, ovunque e immediatamente
- Sviluppo delle reti tecnologiche a supporto dell'attuale movimentazione di merci
- Innovazioni tecnologiche per liberare tempo individuale
- Più attenzione alla qualità del cibo e dell'ambiente (mangiare meno ma meglio)
- Presidente usa donna
- Papa nero
- Più donne al potere e più giovani
- Il bio Made in Italy sarà l'unica scelta "sana"
- Riscoperta della sobrietà (consumi scandinavi)
- Le nazioni europee si ribellano all'euro e riconquistano la sovranità monetaria
- Economia basata sui valori prima ancora del profitto
- L'euro crolla e viene completamente riformato
- Alleanze tra produttori e distributori
- Europa e Italia non saranno più in grado di creare valore in ragione di un sistema economico vecchio
- Nuovo sistema: vendita di valori, innovazione, creatività
- Sostenibilità come driver dello sviluppo
- Aumento delle patologie legate all'inquinamento ambientale
- Maggiori danni economici collegati ai cambiamenti climatici
- Aumento del costo energetico
- Normativa europea a scapito di quella degli stati membri
- Le piccole aziende imparano a fare sistema
- Maggiore peso dell'agricoltura
- Bio Made in Italy è benchmark di riferimento, eccellenza globale