Business Model and Value Drivers of the Chocolate District

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Business Model and Value Drivers of the Chocolate District[1]

This chapter is the result of research carried out in the chocolate sector and its main aim is to illustrate the most important features of an area that is frequently described as "recession-proof". Products are characterised by the "lipstick" effect because consumers are prepared to give up most luxuries in an economic crisis, but not chocolate. In fact, chocolate sales have seen continual growth over the last few years.

This research aims to comprehensively outline the sector through analysis and study of the "chocolate industry". It will illustrate the industry's environmental prospectives and competitive trends both at international and national level, while rounding up the data with an in-depth look at the historical and traditional district in Piedmont.

With this in mind, we will use the framework interpretation represented by the business model Canvas to highlight the cocoa-chocolate value chain with its standard processes and relative incisive factors for success. These factors - key resources, key partners, key activities, etc. – allow the companies of this sector to create economic and social value for all their stakeholders.

We will conclude by illustrating some case studies of chocolate businesses that represent different parts of the chocolate value chain and therefore have distinct and specific degrees of vertical integration and horizontal concentration.

We hope that this chapter will contribute to the reader's knowledge of this apparently mature sector which has thousands of years of history and a value chain which has undergone fundamental changes in recent years and which has a strategic role in the global and local economic market.

1 The chapter is the result of a joint effort by the authors who share its formulation. The authors are Valter Cantino, Simona Alfiero, Massimo Cane, Paola De Bernardi.

4.1 The origin of chocolate

Chocolate means many things to different people: it can be a special treat, a guilty pleasure, a delicacy to be slowly tasted or a healthy and high-energy food.

Chocolate is a type of food made from roasted or ground cocoa beans which can be consumed in the form of blocks, paste or as an ingredient or flavouring agent in other foods.

Consumer chocolate is the final product of a processing and manufacturing sequence that begins with cocoa beans.

Cocoa beans are the seeds of a tree called Theobroma cacao, which literally translates as “food of the gods” (Katz, 2003). The cocoa tree flowers turn into pods that contain 30 to 40 bitter-tasting beans that, as a result of the fermentation process, develop the typical chocolate taste.

Cocoa first became popular among Meso-american people: Olmec, Aztec and Maya, who produced and consumed a spicy drink called *xocoatl*. This concoction was introduced in Europe in the early sixteenth century. The Spanish brought back chocolate at the end of the Conquest of Mexico (1519) and, even though chocolate drinking spread to the rest of Europe, it remained an aristocratic treat, becoming a common drink for the nobility during the first half of the seventeenth century.

The period of rapid innovation began in 1828 when a Dutch chemist transformed the chocolate industry, inventing the cocoa press, which allowed the separation of the cocoa butter from the cocoa beans. The remaining dry chocolate mass could then be pulverised and used as chocolate powder. A second invention, the Dutching process, paved the way for a boom of chocolate consumption. It allowed the processing of the cocoa cake with alkaline salts with the result that the product could mix well with water. About 20 years later, in the United Kingdom, a way was found to make good use of the cocoa butter: mixing the cocoa powder with cocoa butter, instead of water, enabled the production of solid chocolate (Coe and Coe, 1996). It was not until 1847 that a British company made the first chocolate bar, combining cocoa powder, sugar and melted cocoa butter (instead of water). Rodolphe Lindt invented the conching procedure in 1879, to make solid chocolate smoother, better tasting and less gritty. Processed chocolate caught on quickly on a larger scale. Meanwhile, in the USA, Pennsylvania, Milton Hershey had established a “chocolate town” centered around the production of chocolate which was organised following the Henry Ford’s mass production model with a totally mechanised assembly-line.

At the same time, in Europe, some Belgian chocolate manufacturers came up with a series of inventions (e.g. “pralines”) to improve the quality and marketing of the product, as well as with the development of “chocolate couverture”, which lowered the cost of producing and transporting intermediate chocolate products to use in various end products.

These innovations in products and processes, as well as the falling costs of transport and the reduced import taxes on cocoa beans, impacted on the lowering of the price of chocolate resulting in increasing sales. Clarence-Smith (2000) called the impact of these factors the first great chocolate boom (1880-1940).

Today, we can enjoy chocolate in many forms, and throughout the year.

4.2 The cocoa-chocolate value chain

The cocoa-chocolate value chain of the twenty-first century is characterised by a fragmented supply structure, high concentration in the intermediate industry and a mixed set of final producers.

The peculiarity of the chocolate industry is more easily understandable by describing and focusing on the long and complex processing and manufacturing sequence from cocoa beans to consumer chocolate products.

The global cocoa-chocolate value chain, which includes many different actors, can be easily described in five processes, starting from the cocoa beans to the finished chocolate products: 1) production, 2) trading, 3) processing, 4) manufacturing, 5) distribution.

Several characteristics of chocolate strongly depend on the processes performed at the very beginning of the supply chain. Below is a schematic representation of the cocoa-chocolate value chain[2].

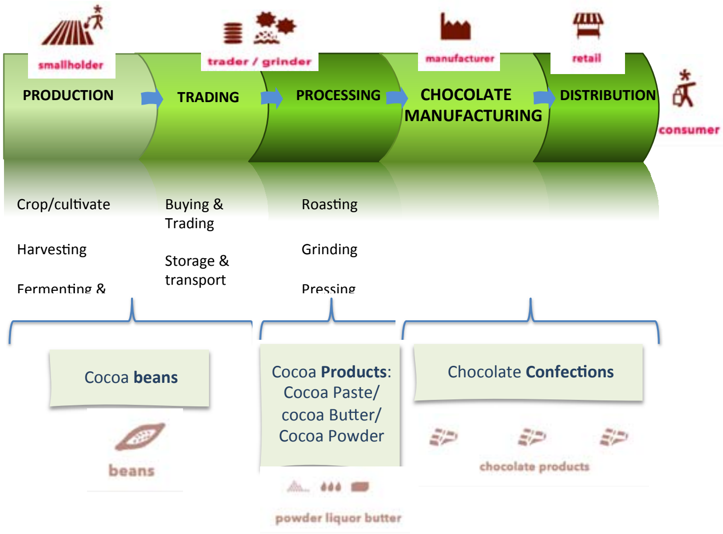

Figure 4.1 The cocoa-chocolate value chain. Source: our elaboration.

1) Production

Growing - Farmers grow cocoa trees on small farms in tropical environments, within 15-20 degrees north and south of the equator. Most cocoa trees begin to yield pods at peak production levels by the fifth year, which can continue for another 10 years with maintenance activities (pruning, phytosanitary treatment, etc.).

Harvesting - Firstly, bunches of beans, covered in a white pulp called mucilage, are extracted from the pods. Then, the pods are sorted and only the healthiest are kept. A farmer can expect 20-50 beans per pod, depending on the variety of cocoa.

Fermenting and Drying - Once the beans have been removed from the pods, the farmer packs them into boxes or heaps them into piles. The piles are covered with mats or banana leaves. The layer of pulp that naturally surrounds the beans heats up and ferments the beans. Fermentation is an important step, lasting three to seven days, in producing the chocolate flavour we know when the beans are roasted. Beans are subsequently dried in the sun and, after sorting, are conveyed in sacks to roasting and grinding plants (many of these are in consumer countries, but some are located in producing areas)[3].

2) Trading

Buying and trading - From the farm village cocoa is then transported to local collection points and cooperatives. Here, it is purchased by local traders or licensed buying companies, who transport the cocoa in larger quantities to ports, where the cocoa is stored until shipping to the major processing ports, where it is often cleaned, and finally warehoused.

Packing & Transporting - The exporting company inspects the cocoa and places it into burlap, sisal, or plastic bags. The cocoa is trucked to the exporter's warehouse near a port. The exporting company finalises the time and place for shipment and the beans are loaded onto ships. Once the ship reaches its destination, the cocoa is removed from the hold and taken to a pier warehouse.

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2 Compare: http://www.worldcocoafoundation.org/about-cocoa/cocoa-value-chain.

3 Compare: Musselli I., *Cocoa Study: Industry Structures and Competition*, United Nations Conference on Trade and Development, UNCTAD, 2008.

The buyer will conduct a quality check to accept delivery and the cocoa will be stored until requested by the processor or manufacturer.

3) Processing

Roasting & Grinding - Roasting is a key step essential for developing the taste of chocolate. The beans are traditionally roasted whole (bean roasting), de-shelled or crushed (nib roasting) in a "globe" with gas-heated air in order to develop the flavour precursors, dry the beans and detach the shell from the bean to make further separation easier.

The nibs are milled to obtain the "cocoa liquor" (also called cocoa "paste" or cocoa "mass") which is solid at room temperature.

Pressing - The cocoa liquor is fed into hydraulic presses that divide the liquor into cocoa butter and cocoa cakes. The cocoa cake can be sold into the generic cocoa cake market or be ground into a fine powder. The cocoa processor has the option of treating the cocoa liquor with an alkali solution (alkalising), which reduces the acidity. This treatment is also known as "dutching" and produces "Dutch -processed cocoa".

4) Manufacturing

Chocolate manufacturing: Mixing, Conching, Tempering & Moulding - To make chocolate, cocoa liquor is mixed with cocoa butter and other inputs (sugar, vanilla, milk, etc.). The mixture is then placed into a conching machine to produce couverture. The couverture could be used in-house, by vertically integrated manufacturers, for the consumer product or it could be sold to third parties. Cocoa paste, cocoa butter, sugar and powdered milk are the four basic ingredients that go into chocolate. By mixing them accordingly to certain key recipes, the three main types of chocolate are obtained, which also are the fundamental basis for all the other product development: dark chocolate, milk chocolate and white chocolate.

Starting from the three basic types, an almost endless variety of products are made by using very different production plants, through pouring, pressing, coating or moulding:

- chocolate bars of various weights, solid, with nuts, sultanas, etc. or with filling;
- "small format" chocolates such as Neapolitans;
- chocolate confectionery such as confectionery bars, sticks, bite-size sweets;
- assorted chocolates with a wide range of shapes and fillings;
- novelty and seasonal items such as Easter bunnies and Christmas tree decorations;
- couverture chocolate supplied in blocks to confectioners and pastry cooks as well as to industrial companies for further processing.

5) Distribution

Packaging, commercial marketing and retailing are the final steps in the value-chain process.

The value chain from the producer to the consumer usually includes such discrete intermediate companies as dealers, processors, manufacturers, and retailers. Companies that are part of the production chain are generally grouped into these categories:

- producers, i.e. cocoa plantation owners;
- local intermediaries, who transport the harvest to the large ports;
- exporters, who deal with large manufacturers;
- Western traders, who "manage" the cocoa market by regulating the quantities exchanged and automatically defining the price on the international stock exchanges;
- manufacturers, who start with cocoa beans and produce semi-finished goods which are then sold in the last part of the supply chain;
- manufacturers and packagers who prepare the finished product for the consumer market.

Unfortunately, the value creation process is not the same throughout the supply chain, but it is concentrated in the final phases as shown clearly in Figure 4.2.

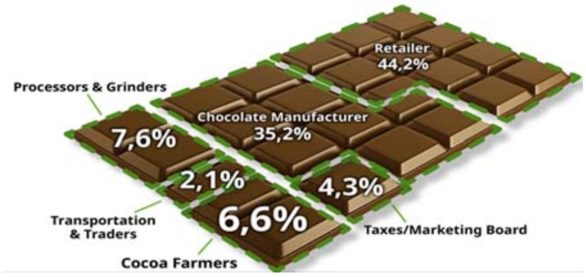

Figure 4.2 Shares in the value chain of chocolate production. Source: Cocoa Barometer 2015.

It is exactly the awareness of this unbalanced proportions of value along the supply chain that, in recent years, has generated increasing concentration in the global cocoa-chocolate supply chain, both on vertical (between different segments) as well as on horizontal levels (within the same "link" of the chain). Many of the cocoa and chocolate companies have seen mergers and takeovers by competitors. The global market is dominated by large multinational confectionery companies, which sell their brands in all major consumer countries.

Considering the global market, only two processors[4] produce about 70-80% of the world's couverture. Only eight traders and grinders control approximately three quarters of the worldwide cocoa trade and the market power of the six biggest chocolate companies is around 40%. This concentration weakens the position of farmers even further and the market asymmetry is in favour of buyers and traders. At the same time, most, if not all, major industry players claim that the "market" and cocoa price setting mechanisms are beyond their sphere of influence[5].

Consumers around the world enjoy chocolate in a wide variety of speciality chocolate products, consuming more than 3 million tons of cocoa beans annually, according to the World Cocoa Foundation. Each country still has its own preferences and distinctive blends for candy and desserts.

The cocoa, chocolate, and confectionery industry employs hundreds of thousands of people around the world and is a key user of other agricultural commodities such as sugar, dairy products, nuts, and fruit.

4.3 The international chocolate market

The overall chocolate market rose by 13% between 2010 and 2015 and in 2016 the global chocolate market was worth $98.3 billion, according to Euromonitor, a market research firm.

The table below shows the top ten global confectionery companies that manufacture some form of chocolate, ranked by net confectionery sales value in 2015.

Table 4.1 Top Ten chocolate manufactures[6].

Company	Net Sales 2015 (US$ millions)
Mars Inc. (USA)	18,4
Mondelēz International (USA)	16,691

4 Barry Callebaut (Switzerland) and Cargill (USA) after its merger with ADM.

5 Cocoa Barometer, 2015, www.cocoabarometer.org.

6 Candy Industry publishes an annual list of the top 100 global confectionery companies, ranking them by net sales (www.candyindustry.com).

Nestlé SA (Switzerland)	11,041
Ferrero Group (Luxembourg/Italy)[7]	9,757
Meiji Co Ltd (Japan)	8,461*
Hershey Co (USA)	7,422
Lindt & Sprüngli AG (Switzerland)	4,171
Arcor (Argentina)	3,000
Ezaki Glico Co Ltd (Japan)	2,611*
Yildiz Holding (Turkey)	2,144

Source: Candy Industry, January 2016. * This includes production of non-confectionery items.

It is estimated that the world produces about 4 million metric tonnes of cocoa every year. West Africa produces approximately two-thirds of the world's cocoa beans, and the three most important cocoa-producing countries, Ivory Coast, Ghana and Indonesia, are responsible for around 68% of the global harvest. The World Cocoa Foundation (WCF) reports that somewhere around 50 million individuals depend on cocoa production and the cocoa industry as the source of their livelihood. About 90% of the production is carried out on smallholdings of around three hectares, with barely standardised production methods (Saltini et al., 2013).

Growers and dealers distinguish between two basic varieties of cocoa: "Criollo" or flavour cocoa and "Forastero" or standard quality cocoa. The Criollo tree in its pure form is found in Central America and northern South America, especially in Ecuador and Venezuela where it originated. It is more sensitive to the effects of weather conditions, more difficult to cultivate, and produces a smaller harvest. But its seeds are finer than those of the Forastero trees, with a richer aroma and fragrance. Criollo cocoa is more expensive than standard quality cocoa, and it is therefore treated with great care and used only for high quality chocolate. However, Criollo accounts for less than 10% of the total harvest[8].

Table 4.2 Top cocoa producing countries worldwide.

Country	**Tonnes**	**%**
Ivory Coast	1.794.300	42,7
Ghana	739.900	17,6
Indonesia	320.000	7,6
Ecuador	250.000	6
Cameroon	232.300	5,5
Brazil	229.000	5,5
Nigeria	190.000	4,5
Papua New Guinea	42.000	1

7

In 2015, the *Ferrero Group*'s turnover was 10 billion euros, overtaking its rival *Nestlé* in the international chocolate rankings. Observers are now expecting *Ferrero* to move into the global merger and acquisition market. Its CEO announced a change of direction from the conservative line taken in the past and the group continues to stack up profits (889 million gross in 2015) which could finance new deals. Last year, *Ferrero* invested 646 million (100 million more than the previous year) in modernising its plants in China, Brazil, Germany, Italy and India, as well as clinching two takeovers. The first was the Turkish company Oltan in March "to strengthen its position on the nut market, guarantee the quality of the raw materials and unique taste of Nutella, Kinder and Rocher". Then August saw the takeover of the British company Thorntons, leader in the UK in the production and marketing of chocolate with profits of 300 million euros. Source: Corriere della Sera Economia, April 4th, 2016.

8

Chocology, ChocoSuisse, 2001.

Others	403.200	9,6
World harvest	4.200.700	100

Source: International Cocoa Organization (bulletin nr. 4, 2015).

The top four countries responsible for the production of chocolate are the United States, Germany, Switzerland, and Belgium[9]. According to the Chocolate Statista Dossier[10], Western Europe accounts for approximately 35% of the total world chocolate production, and the U.S. for an additional 28%. Interestingly, none of the major producers of chocolate are major sources of cocoa, and none of the major cocoa-producing countries are major chocolate manufacturing centres.

Thereis no real reason for European countries for being among the world's leading chocolate manufacturers beyond the popularity of chocolate in Europe upon its introduction. The U.S. inherited its love for chocolate through its European immigrants, and companies such as *Mars Inc.* and the *Hershey Foods Corporation* sprang up to take advantage of the increasing demand.

The U.S. is one of the top producers of high-quality chocolates, with U.S. chocolate manufacturers bringing in over $20 billion annually in retail sales. The largest chocolate company in North America, and one of the most recognised chocolate brands worldwide, is the *Hershey Foods Corporation*, more commonly known as *Hershey's*. The company is headquartered in Hershey, Pennsylvania, and it was founded in 1894 by Milton S. Hershey.

German chocolate manufacturers represent nearly a $10 billion per year industry. Cologne is often regarded as the chocolate capital of Germany. *Stollwerck Chocolates Company* is one of the most famous chocolate manufacturers in the country; it also has production plants in Belgium and Switzerland.

Switzerland is well-known for its chocolates and principal chocolate manufacturers. The production of chocolate is a primary source of wealth for the country. World-renowned chocolate brands that originated in Switzerland include *Nestle*, *Toblerone*, *Lindt* and *Sprungli*.

The Swiss are the largest consumers of the chocolate produced in their own country and also have the highest per capita rate of chocolate consumption in the world. The Swiss chocolate industry, as of 2015, produced gross revenues of approximately $1.5 billion.

Belgium is also world-renowned for its chocolates, and it is a major chocolate manufacturing centre. There are approximately 15 chocolate factories and more than 2,000 chocolate shops in Belgium. One of the most famous chocolate companies in the world, *Godiva*, makes its home in Brussels.

The American market is dominated by a few mass-market manufacturers like *Hershey Co.* and *Mars Inc.*, while a bigger share of the European market is premium, which is to say pricier chocolates.

At global level, an increase of chocolate confectionery is expected by a CAGR of 1% in value by 2020; however, it will continue to suffer from polarisation of consumption. In fact, there will be an increase of both premium quality products and lower priced ones.

The largest growth will be registered by emerging markets. Brazil, India, China and Arab Emirates will be the market drivers and, according to Euromonitor (2015) estimates, they will be present in the top five sector markets by 2020.

In its report, "*A taste of the future - the trends that could transform the chocolate industry*", KPMG (2014) describes the recovering global economy as one in which chocolate consumers have become more difficult to categorise. It singles out three core consumer groups: the value consumer, the luxury-seeker and the hybrid consumer.

9 The 4 Countries That Produce the Most Chocolate. Investopedia: http://www.investopedia.com/articles/investing/093015/4-countries-produce-most-chocolate.asp#ixzz4JS4Zj2jC.

10 Compares: www.statista.com.

Table 4.3 What is driving the chocolate consumer.

	The value consumer	The luxury seeker	The hybrid consumer
Customer segmentation	Value segment: the largest in the chocolate category.	Luxury: the fastest growing chocolate market segment.	Between the value consumer and luxury seeker.
Key value for the customer	Many consumers have changed their buying habits due to the economy, opting for cheaper products or switching to value lines.	Consumers are seeking more than "just a product". They're looking for "one minute of pure delight - a daily luxury".	Somewhat conflicted: wants to save on groceries, while simultaneously infusing life with pleasure via everyday luxuries such as premium chocolate.
Type of product	Small portions and private labels popular with this group. But theyare not necessarily prepared to accept a lower quality standard.	Single-origin chocolate becoming increasingly popular: perceived to represent "quality, naturalness and health".	Prediction: this shopper profile will become increasingly prevalent and influential as millennials increase their share of consumer spending.

Source: our elaboration on KPMG data.

The majority of the world's biggest chocolate eaters are in Europe[11].

When it comes to the league of chocoholics, Switzerland is out in front with annual per capita consumption amounting to an impressive 8.8 kg. Neighbouring Germany is in second position with the average person eating 8.4 kg of chocolate confectionery every year, while Russia rounds off the top three with 7.3 kg.

The United States cannot compete with Europe in chocolate consumption as the average American eats about 5.5 kg of chocolate each year. Italians eat about 2.85 kg per capita, with a lower position among European countries (Euromonitor international's per capita consumption data) and, in comparison, consumers in China are estimated to have eaten just 0.2 kg each in 2015.

4.4 The Italian chocolate market

In 2015, the Italian chocolate production was worth around 4.2 billion euros (nearly + 2% compared to 2014).

Table 4.4 The production of chocolate and other food preparations containing cocoa in Italy.

	2015		2014	
	Tons	**Euro million**	**Tons**	**Euro million**
Production (chocolate and other food preparations containing cocoa)	311,146	4,206.6	312,450	4,126.4
Total consumption	173,461		209,130	

11 http://www.mintel.com/press-centre/food-and-drink/chocolate-eaters-full-of-beans-consumers-around-the-world-value-the-psychological-benefits-of-the-treat.

Per capita consumption (kg)	2.85		3.5	

Source: our elaboration on AIDEPI data.

In 2015, Italy exported cocoa and cocoa preparations for a value of 1.48 billion euros, which was an increase of over 17% compared to 2013; whereas imports grew by just under 29% during the same period, reaching 1.1 billion euros.

In the same year, 97% of national cocoa and cocoa preparation exports (it was 96% in 2013) were represented by finished products, i.e. chocolate and other food preparations containing cocoa, and it was worth 1.43 billion euros (up by around 19% compared to 2013). Other types of exports using raw materials and semi-finished goods (e. g. cocoa powder and butter, fats and cocoa oil) only slightly affected the total sales abroad (see Table 4.5).

As far as imports are concerned, the purchase of chocolate and other cocoa preparations represented just 45% of the total in 2015 (52% in 2013 with an increase of nearly 11%). Items classified as raw materials and semi-finished were growing rapidly compared to 2013.

This fact is indispensable for boosting national production. The items in question are butter, fats and cocoa oil (15% of the total, +74%), cocoa paste (7%, +67%) and cocoa grains (26%, +52%).

As a whole, the cocoa and cocoa preparation sector generated a surplus of the trade balance equal to +373 million euros during 2015.

Table 4.5 Italian imports and exports of cocoa and cocoa preparations[12] (in Euro/000).

12 This national data on foreign chocolate trade has been published by ISTAT and refers to the economic rankings of goods known as *Sistema armonizzato (SH6)* made available worldwide by the Customs Co-operation Committee. This ranking is made up of goods categories in over 5,000 positions of six figures which can, even, reach eight figures. Additional details lead to the ranking known as *Nomenclatura combinata (NC8)* which is used in surveys on foreign trade in EU countries.

	2015				2013				% growth 2015/2013	
	Imp.	% of total imp.	Exp.	% of total exp.	Imp.	% of total imp.	Exp.	% of total exp.	Imp.	Exp.
Cocoa beans, whole or broken, raw or roasted	283,643	25.61%	296	0.02%	186,259	21.63%	1,645	0.13%	52.28%	-82.01%
Shells, husks, "skins" and other cocoa waste	578	0.05%	41	0.00%	1,336	0.16%	11	0.00%	-56.74%	272.73%
Cocoa paste, whether or not defatted	73,895	6.67%	5,214	0.35%	44,215	5.13%	16,069	1.27%	67.13%	-67.55%
Butter, fat and cocoa oil	170,578	15.40%	7,524	0.51%	98,285	11.41%	9,479	0.75%	73.55%	-20.62%
Cocoa powder (excluding sugar or other sweeteners)	74,565	6.73%	28,223	1.91%	77,511	9.00%	19,327	1.53%	-3.80%	46.03%
Chocolate and other food preparations containing cocoa	496,853	44.86%	1,436,034	97.01%	448,134	52.04%	1,211,347	96.04%	10.87%	18.55%
Goods of chapter 18	7,341	0.66%	3,019	0.20%	5,393	0.63%	3,357	0.27%	36.12%	-10.07%
Total	**1,107,453**	**100.00%**	**1,480,351**	**100.00%**	**861,133**	**100.00%**	**1,261,235**	**100.00%**	**28.60%**	**17.37%**

Source: our elaboration on ISTAT data.

The main countries of destination for Italian exports of chocolate and other food preparations containing cocoa (see Table 4.6) in 2015 were France (with 17% of the total), Germany (7%) and the UK (6%).

Some countries are showing a very high rate of growth in Italian imports of chocolate and preparations. These are Saudi Arabia (+116% since 2013), United Arab Emirates (+84%), Canada (+84%), Israel (+56%) and China (+48%).

Table 4.6 The first 10 countries by destination of Italian exports of chocolate and other food preparations containing cocoa (in Euro/000).

		2015		2013		
N.	Country	Exp.	% of total Italy exp.	Exp.	% of total Italy exp.	% growth 2015/2013
1	France	247,868	17.26%	227,743	18.80%	8.84%
2	Germany	98,242	6.84%	89,656	7.40%	9.58%
3	United Kingdom	91,960	6.40%	69,672	5.75%	31.99%
4	China	82,175	5.72%	55,488	4.58%	48.10%
5	Netherlands	66,434	4.63%	49,133	4.06%	35.21%
6	Belgium	63,012	4.39%	59,527	4.91%	5.85%
7	Hong Kong	59,525	4.15%	53,257	4.40%	11.77%
8	Poland	58,827	4.10%	49,696	4.10%	18.37%
9	United Arab Emirates	50,071	3.49%	27,247	2.25%	83.77%
10	Russia	49,972	3.48%	42,828	3.54%	16.68%

Source: our elaboration on ISTAT data.

In order to better understand the national entrepreneurial presence, we have analysed a sample of companies that were surveyed by AIDA and characterised by the ATECO code 2007 "10.82" which identifies cocoa and chocolate producers[13].

Altogether there are 262 companies. Geographically speaking, 46% of these companies are in the north, while 32% are in the south, with the remaining 22% in the centre.

Table 4.7 Geographical distribution of chocolate companies, surveyed by AIDA.

Distribution of chocolate companies	N.	%
Abruzzo	11	4%
Calabria	6	2%
Campania	40	15%
Emilia-Romagna	10	4%
Friuli-Venezia Giulia	4	2%
Lazio	14	5%
Liguria	5	2%
Lombardia	43	16%
Marche	6	2%
Molise	2	1%
Piemonte	53	20%
Puglia	14	5%
Sardegna	3	1%
Sicilia	18	7%
Toscana	12	5%
Trentino-Alto Adige	2	1%
Umbria	5	2%
Valle D'Aosta	1	0%
Veneto	13	5%
Totale	**262**	**100%**

Source: our elaboration on AIDA data.

As Table 4.8 shows, these 262 chocolate companies employ around 20,000 people and generate an overall turnover of 6,650 million euros.

Table 4.8 The companies surveyed by AIDA in the chocolate sector – Year 2104.

Number of companies	262
Number of personnel	19,65
Overall turnover	6.650 (million euro)
Global added value	1.624 (million euro)

Source: our elaboration on AIDA data.

The sector is characterised mostly by the presence of micro and small enterprises, which overall represent 87% of the sampled companies (Table 4.9).

Table 4.9 The companies surveyed by AIDA according to their size

Size of enterprise	N. of

13

The ATECO code reports not only chocolate and cocoa production, but also the production of sweets and confectionery, so the analysed data refers to both types of products.

	companies surveyed
Micro-enterprise (< 10 employees)	155
Small enterprise (from 11 to 50 employees)	73
Medium- sized enterprise (from 51 to 250 employees)	25
Large enterprise (> 250 employees)	9

Source: our elaboration on AIDA data.

Table 4.10 clearly shows the importance of companies with more than 250 employees in the Italian chocolate sector, in terms of contributing to the creation of added value (83%) and of number of employees (63%). However, even though micro-enterprises (with less than 10 employees) and small enterprises (between 11 and 50 employees) are broadly present nationwide, their contribution is minimal both in terms of creating added value (1% micro-enterprises and 5% small enterprises) as well as employment (4% micro-enterprises and 9% small enterprises).

Table 4.10 The contribution in terms of employment and added value by size of the enterprise.

	% of the number of employees	% of added value
Micro-enterprise	4%	1%
Small enterprise	9%	5%
Medium -sized enterprise	24%	12%
Large enterprise	63%	83%

Source: our elaboration on AIDA data.

One important characteristic of the Italian companies in the sector is that most of them are extremely small. They also have a very similar format and a broad presence nationwide. Another peculiarity is the type of investment that characterises this business sector. In particular, investment in assets represents on average 20% of the invested capital, but in micro and small enterprises this percentage is higher, reaching respectively 30% and 31%. This demonstrates that very small companies producing handmade goods implement production phases by purchasing machinery and plant. This is increasingly believed to be fundamental for a higher quality end product.

Performance analysis of the Italian Chocolate Industry

We are currently witnessing a progressive change in the economic and social environment where chocolate companies operate. Consequently, this results in significant changes in these companies' performance as factors for success change and the focus moves from a series of traditional activities to a growing awareness of new aspects of the business. This all greatly affects both the structural characteristics and economic-financial performance recorded in the last three-year period of companies in the chocolate sector.

In order to understand such a change, we used the sample of companies surveyed by AIDA and highlighted by the ATECO code 2007 "10.82" (which measures both cocoa and chocolate production as well as sweets and confectionery production). This was done to assess variations registered by some parameters considered significant and based on four distinct drivers: growth, profitability, productivity and financial structure. These variables were analysed over a period of three years (from 2013 to 2105) and, as well as determining the simple percentage variation, we also determined the average annual growth rate by using the CAGR formula (Compound Annual Growth Rate).

This , in fact, often represents a predictable factor for companies during their life cycle. In fact, competitive pressure prompts companies to find new opportunities for development although the market itself pushes them to grow in order to acquire a competitive position and achieve significant results in terms of profitability and productivity.
We used the following performance indicators: revenues, people employed and Earnings before interest, taxes, depreciation, and amortization – EBITDA.
In 2015, the 292 companies in the sector and surveyed by AIDA recorded average earnings of 64,739.70 thousand euros and continued to grow and maintain positive revenue variation rate. In the same year, the growth rate was the highest in the last three years with much better results than in 2013 and a CAGR equal to 12.8%. There was an average of 90 people employed, which was a significant increase compared to 2014 and 2013 when the average was 75 and 72 people employed. The compound annual growth rate regarding employees was equal to 3.1%. Lastly, EBITDA or gross operating margin also recorded a significant increase in 2015 reaching an average of 8,602.43 thousand euros, with CARG equal to 7.7%. EBITDA's positive trend was mainly linked to the strong increase in sales, which counterbalanced the significant increase in production costs, for example personnel costs and the rise in purchasing costs for higher quality raw materials. Assessment of the economic situation was carried out by determining indexes selected, which allowed us to make a judgement on the company's profitability.
The performance indicators used to illustrate this were: ROI, ROE and ROS.
ROI represents a company's predisposition to make its capital investment suitably profitable. In 2015, the average ROI for companies in the sector was equal to 4.79%, a slight decrease compared to 2014 (4.93%) and 2013 (5.03%). ROE also followed the same downward trend as ROI, stopping at an average value of 0.15% in 2015. The reduction was equal to a percentage point, compared to previous years.
Lastly, the return on sales (ROS) witnessed an increase in 2015, with a value equal to 3.4%, compared to 3.05% in 2014 and 2.04% in 2013. This highlights the capacity of companies in the sector to sell "well" i.e. profitably. In fact, it indicates the average operating income per unit of net revenue.
As far as productivity is concerned, the selected indicator is based on the relationship between revenue and number of employees. In 2015, this indicator reached its maximum value of circa 309 thousand euros, with a CARG of 36.3%.
By analysing the data concerning the financial structure, it comes to light that companies in the sector are, on average, characterised by a good degree of capitalisation. The degree of those companies going into debt reached its lowest value in 2015, reaching 1.64. Most capital in the form of loans was for over a short period and the rate of going into debt over a short period was equal to 0.79 in 2015. (la prima parte della frase non è chiara)

.... in Piedmont
53 companies based in Piedmont were surveyed by AIDA, in 2015. They recorded average revenues of 99,356.24 thousand euros; moreover, they continued to grow and maintained a positive revenue variation rate.
In the same year, the growth rate was the highest in the last three years with much better results than in 2013 and a CAGR equal to 16.4%. On average, there were 310 people employed which is a significant increase compared to 2014 and 2013, when the average was respectively equal to 255 and 242 people employed. The compound annual growth rate regarding employees was equal to 2.8%. Lastly, EBITDA, or gross operating margin, also recorded a significant increase in 2015 reaching an average of 22,038.00 thousand euros, with CARG equal to 9,7%.
In 2015, the average ROI for companies in the sector was 4.28%, which was a significant increase compared to 2014 (2.78%), but a slight decrease compared to 2013 (5.71%). ROE also followed the same increasing trend as ROI, reaching an average value of 5.05%, in 2015. Compared to previous years, the increase was equal to four percentage points.
Finally, the return on sales (ROS) witnessed an increase in 2015 with a value equal to 3.4%, compared to 2.38% in 2014 and 0.56% in 2013.
As far as productivity is concerned, the relationship between revenue and number of employees in 2015 reached its maximum value of circa 400 thousand euros, with a CARG of 2.6%.
As regards the financial structure, the level of those companies going into debt in 2015, reached 1.89. Most capital in the form of loans was over a short period and the rate reached its lowest value of going into debt over a short period was equal to 0.72 in 2015. (frase non chiara)

4.5 The chocolate market in Piedmont

In the region of Piedmont, chocolate industries represent a productive cluster of excellence deeply rooted in the area and, in particular, those operating in the province of Turin constitute the main Italian chocolate district (together with Perugia in Umbria and Modica in Sicily). Its volume of production is currently equal to around 40% of the national production[14]. In 2015, Piedmont was confirmed as Italy's leading region in exports of coffee, tea, cocoa, spices and derivatives[15] with 48% of the national total (+14% compared to 2013), followed by Lombardy (16%, +10%), Emilia Romagna (11%, +46%) and Friuli-Venezia Giulia (7%, +27%).

14 www.comune.torino.it/torinoplus/gusto/cioccolato/index.shtml.

15 The *Nomenclatura combinata (NC8)*, *Sistema armonizzato (SH6)* does not include local data on foreign trade. So data on regional trends in foreign trade was found under the overall category of Coffee, tea, cocoa, spices and derivatives, based on (*Classificazione tipo del commercio internazionale) International trade classification (CTCI)*.

Table 4.11 Exports of coffee, tea, cocoa, spices and derivatives for the first 5 Italian regions (In Euro/000).

		2015		2013		
N.	Italian regions	Exp.	% of total exp.	Exp.	% of total exp.	% growth 2015/2013
1	Piemonte	1,354,042	47.77%	1,192,398	49.94%	13.56%
2	Lombardia	448,356	15.82%	406,923	17.04%	10.18%
3	Emilia-Romagna	308,140	10.87%	210,772	8.83%	46.20%
4	Friuli-Venezia Giulia	200,387	7.07%	158,385	6.63%	26.52%
5	Veneto	172,386	6.08%	134,172	5.62%	28.48%

Source: our elaboration on ISTAT data.

As regards Piedmont, exports of coffee, tea, cocoa, spices and derivatives in 2015 reached a value of 1.35 billion euros, with an increase of nearly 14% compared to 2013. Imports also grew (+ 35%), being equal to 951 million euros. So, even at a regional level, there was a notably positive effect on the trade balance worth 403 million euros (Table 4.12).

Table 4.12 Imports and exports from Piedmont by province, as regards coffee, tea, cocoa, spices and derivatives (In Euro/000).

	2015				2013				% growth 2015/2013	
Piedmont districts	Imp.	% of total imp.	Exp.	% of total exp.	Imp.	% of total imp.	Exp.	% of total exp.	Imp.	Exp.
Torino	579,360	60.92%	327,262	24.17%	389,364	55.13%	286,247	24.01%	48.80%	14.33%
Vercelli	4,636	0.49%	6,348	0.47%	3,406	0.48%	4,762	0.40%	36.11%	33.31%
Novara	4,001	0.42%	201,264	14.86%	14,359	2.03%	162,520	13.63%	-72.14%	23.84%
Cuneo	282,478	29.70%	775,145	57.25%	234,455	33.20%	707,146	59.30%	20.48%	9.62%
Asti	246	0.03%	1,604	0.12%	200	0.03%	912	0.08%	23.00%	75.88%
Alessandria	44,445	4.67%	26,357	1.95%	33,577	4.75%	17,014	1.43%	32.37%	54.91%
Biella	232	0.02%	412	0.03%	891	0.13%	854	0.07%	-73.96%	-51.76%
Verbano-Cusio-Ossola	35,630	3.75%	15,649	1.16%	29,996	4.25%	12,944	1.09%	18.78%	20.90%
Total	**951,028**	**100.00%**	**1,354,041**	**100.00%**	**706,248**	**100.00%**	**1,192,399**	**100.00%**	**34.66%**	**13.56%**

Source: our elaboration on ISTAT data.

Such exports (see Table 4.12) were led, among the provinces of Piedmont, by Cuneo (57% of the total in 2015), followed by Turin (24%) and Novara (15%). The best results, however, in terms of growth over the three -year period 2013-2015, were recorded by Asti (+76%), Alessandria (+55%) and Vercelli (+33%). In 2015, Piedmont's exports of coffee, tea, cocoa, spices and derivatives (see Table 4.13) were mostly headed towards France (19% of the total), Germany (7%) and the United Kingdom (6%). On the other hand, countries showing the highest increase in imports from Piedmont since 2013 were: Saudia Arabia (+120%), the United Arab Emirates (+74%), the United States (+69%) and Spain (+58%). This data is closely in line with national figures.

Table 4.13 The top 10 destination countries for Piedmont's exports of coffee, tea, cocoa, spices and derivatives (In Euro/000).

		2015		2013		
N.	Country	Exp.	% of total Piedmont exp.	Exp.	% of total Piedmont exp.	% growth 2015/2013
1	France	262,738	19.40%	258,477	21.68%	1.65%
2	Germany	116,961	8.64%	118,253	9.92%	-1.09%
3	United Kingdom	74,699	5.52%	49,690	4.17%	50.33%
4	Netherlands	61,593	4.55%	49,032	4.11%	25.62%
5	Belgium	59,848	4.42%	52,887	4.44%	13.16%
6	Russia	54,421	4.02%	43,834	3.68%	24.15%
7	China	49,028	3.62%	54,162	4.54%	-9.48%
8	USA	47,672	3.52%	28,268	2.37%	68.64%
9	Poland	44,294	3.27%	34,568	2.90%	28.14%
10	Spain	43,823	3.24%	27,734	2.33%	58.01%

Source: our elaboration on ISTAT data.

4.6 Structural characteristics and processes, according to the business model Canvas

The necessity of adopting new strategic and organisational business models and paying more attention to product and process innovation means managing differentiated competition, but without neglecting fundamental aspects like environmental sustainability, customer satisfaction and attention towards personnel. These actions represent some steps a chocolate company should take in order to respond to a multitude of environmental changes.

Strategic management means determining the fundamental aspects of the company's process when interacting with the environment, as well as providing the material and organisational structure suitable for giving support to such a process. In fact, it is fair to underline how strategic management is based on a process of change that involves not only the company's position on the market, but also its internal organisational structure and, consequently, those management tools used to satisfy the new demands. Identifying and understanding those "extra added value" processes and taking them on board thanks to suitable techniques, like the business model Canvas, increasingly represent valid management tools, able to guarantee long lasting conditions.

We have already highlighted the fact that some companies play multiple roles in the elaborate process of chocolate manufacturing while others do not, so it is difficult to predict the exact configuration of the supply chain for any particular final product. There are, however, similarities among the supply chains of most chocolate products.

Few chocolate makers have complete control over every step of the value chain, from the selection of the finest cocoa beans through to the finished product. This is one of the strategic choices for a sustainable, transparent, and traceable cocoa supply chain, which ensures the traceability and verification of the cocoa beans and also helps support cocoa farmers and their local communities. However, the economies of scale afforded by the international resources of these leading firms make it increasingly difficult for smaller national players to compete in terms of price, distribution, range of products and marketing spend.

The majority of chocolate manufacturers purchase the intermediate products, such as cocoa butter, powder, cake, and liquor, and create the finished product that will be sold to the consumer.

In more recent years, many chocolate manufacturers - especially in the premium segment - have started to produce varieties of chocolate from selected, prestigious and well defined cocoa bean plantations. The aim is to link the end product (pralines, chocolate bars, etc.) with the value associated to the origins of the area, by maximising the product's quality with systems that track raw materials and further methods of working semi-finished products, similarly to what has been happening in wine and coffee processes for some time (Greenwood and Walker, 2005).

Small businesses can capitalise on their ability to thoughtfully produce an item in accordance with their own values (as distinguished from the mass production of industry giants driven by the bottom-line), then creatively tell their story through committed personal interaction in order to compellingly deliver a holistically appealing package to the consumer. Chocolate "boutiques" are mostly the ones which have come out best - whether they are medium size or local workshops – in their careful selection of cocoa bean varieties, as well as in their ability to track production phases (Rusconi and Conti, 2010). These key resources (for example, raw materials or intangible assets) and key partners (for example, traders and processors) in the value chain's semi-finished production processes certainly influence the structure of the production costs of the chocolate end products. However, they also allow companies that adopt such policies to distance themselves from the "mass-market", by offering the client a product of premium quality (chocolate as a luxury food).

A product quality, however, is perceived and appreciated by different client segments with significant influence on respective consumer models, with reference to packaging and labelling processes as well as effective policies of marketing and communication. Packaging is a very important and sensitive part of the production chain, in fact, apart from being appealing to the consumer and detailing the contents, it has the essential function to protect the valuable chocolate inside.

To explain the value a chocolate company offers to its customers, we will use the Osterwalder's business model Canvas[16]. The framework is a description of the value a company offers to one or several segments of customers and the architecture of the firm and its network of partners for creating, marketing and delivering this value and relationship capital, in order to generate profitable and sustainable revenue streams.

Nowadays the term "business model" is often used in many ways, but it is seldom defined explicitly. In the academic literature, some authors have found emerging common themes that converge on a holistic approach: the model must link the activities inside the firm to outside elements including the customer side, explaining how value is created and how is captured and monetised (Baden-Fuller and Magemantin, 2013).

With his business model design, Osterwalder identified nine elements or blocks:

1) *value propositions*: the reason why customers turn to one company over another. Each value proposition consists of a selected bundle of products and services that caters to the requirements of a specific customer segment;

2) *key resources*: the most important assets required to make a business model work; these resources can be physical, financial, intellectual, or human;

3) *key activities*: related to some strategic processes like designing, making, and delivering a product in substantial quantities and of superior quality;

4) *key partners*: to optimise the company's business models, to reduce risk, or to acquire resources. The authors distinguish between different types of partnerships, for example, strategic alliances between non-competitors, strategic partnerships between competitors, joint ventures to develop new businesses, buyer-supplier relationships to assure reliable supplies, etc..

5) *customer segments*: the different groups of people or organisations a company aims to reach and serve;

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The business model Canvas was originally introduced by Alexander Osterwalder in his first work entitled "Business Model Ontology" (2004) and later developed by Osterwalder, Yves Pigneur and Alan Smith during the publication of the book "The business model Canvas from the Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers" (2010).

6) *customer relationships*: the relationships that a company should establish with each customer segment to acquire and retain it;

7) *channels*: the interface with customers that are reached by communication, distribution, and sales processes; *cost structure and revenue streams*: we must distinguish cost-driven and value-driven cost structure to analyse how revenues can create value in term of earnings.

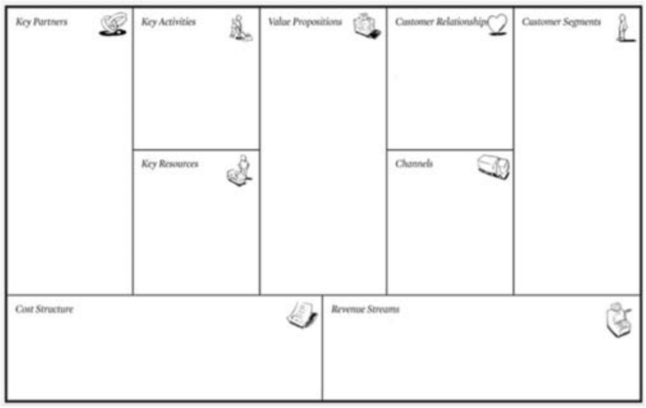

Figure 4.3 The business model Canvas. Source: The Business Model Generation (2010).

4.7 Case studies

In this section, we will analyse the business models of some companies operating in the chocolate sector. They are completely distinct and different in their sizes, organisation structures and production processes and clearly show the scenario of the chocolate industry.

We interviewed internal actors, marketing and managing directors, to better understand current business models and identify key challenges, opportunities and best practices in chocolate manufacturing.

The study and analysis of the cases were carried out using the framework of the business model Canvas and identifying the nine blocks that fall into four general areas:

- the value a company offers (the products or services);
- one or several segments of customers (the customer interface);
- the architecture of the firm and its network of partners (process management and key value drivers);
- profitable and sustainable revenue streams (financial balance).

Below, we present two case studies considered particularly significant among all those analysed: *Pastiglie Leone* and *Venchi*.

4.7.1 Pastiglie Leone

Pastiglie Leone began its history in the Alba area in1857 when Luigi Leone opened a sweets factory with a laboratory for the production of small pastilles to be consumed as delicacies after meals. The very first flavours were mint and the “digestive” flavours: cinnamon, Fernet, rhubarb, and gentian, just to name a few; the pastilles were kneaded and moulded by hand and, then, left to dry by the oven door.

Once it moved to Turin, this small workshop grew over the next few years, thanks to the product very high quality. It expanded its production beyond pastilles, by adding sweets, gelatins, gumdrops, licorice and, eventually, chocolate.

Following his success, Luigi Leone had decided to move the company to Turin in the search for a broader and more sophisticated clientele, such as the bourgeoisie and nobility of Savoy and even the Royal Family, for whom he became the official supplier. This is also the reason why the packaging bears the Savoy coat of arms.

In 1889, Luigi Leone founded a company with Piero Querio with the joint name, *Querio e Leone*, to open and run a sweets and liquor shop in the centre of Turin. The company closed in 1899, when Querio gave up his share.

In 1900, Luigi Leone opened a new sweet shop in Turin and patented his work, characterised by a letter *L* on each pastille. This was a distinctive sign of his brand and the product style, which was then redefined and reapplied ten years later.

In 1928, the Calasso family took over the business from Luigi Leone's heirs and called it *Ditta L. Leone*, which they then sold in 1934 to the siblings Celso and Giselda Balla. The sister, Gisleda, married Innocenzo Monero that same year. In fact, it is from this moment that the company's events started to take shape into a line of continuity regarding property and business management. For half a century, the spearhead and leader in *Leone's* considerable development was Giselda Balla Monero, a tenacious and lively woman with acute managerial skills.

After the First World War, she and her brother founded *La Vittoria*, a wholesale confectionery business of various companies, such as *Dora Biscuit* (where she had worked as a clerk), *Venchi* and *Leone*, which had then become the largest distributor in Turin and its province.

With the intent of turning a laboratory with a confectionery shop into a company producing and distributing on a larger scale, in 1935, *Leone* moved to a factory on Corso Regina Margherita, in Turin. It launched new packaging and invested in advertising. During the '30s and '40s, the Balla siblings succeeded in consolidating and increasing production of the classic pastilles, definitively confirming a unique and unmistakable "Marca Leone" style of taste.

The factory was severely damaged by bombings in 1944, but after the Second World War, it was rebuilt and extended with the opening of a new sweets sector that allowed the firm to increase its varieties and flavours. At the same time, *Leone*'s market also grew beyond Piedmont, by means of agents for other Italian regions with a similar sweets culture, such as Liguria, Lombardy, Lazio and Veneto. However, even though the Turin manufacturer (since 1966, *Ditta Pastiglie Leone*, company owned by both Giselda Balla and Innocenzo Monero) was growing in quantity and selection, it continued to maintain an exquisitely artisan character focused on very high quality. Therefore, it recorded constant growth, without specific expansive peaks or extensive crises, not even during the 1970s, and avoiding the fluctuations that instead hit the bigger industrial sweets companies.

In 1977, Giselda's son, Guido Monero, became partner of *Pastiglie Leone*, after years of apprenticeship at *Floris* (another sweets company owned by his father), and started working side by side with his mother.

Nonetheless, Giselda continued to have a solid and absolute leadership almost until her death in 1988.

Pastiglie Leone was still under the control of the Monero family when it became a company with limited responsibility in 1988. It started a phase of progressive innovation in the late 1980s and early '1990s, which involved various aspects of the company's strategy and structure, essential for acquiring growing market share.

The implemented strategies were overall directed at introducing additional professional and structured management, focused on processes considered crucial, such as:

- *marketing*, where there is no organised support to sales, to be based on an efficient network and attention to new distribution channels. For example, in 1986, the new marketing manager - first manager outside the Monero family - introduced less practical procedures and rebuilt a sales network that was based on agents and better structured in areas that had previously been uncovered;
- *promotion*, even less traditional. In the late '80s, first Giudo's wife and then their children started "rejuvenating" and "refreshing" the company's image. For example, they designed the first real "modern" catalogue of products (taking advantage of graphics and

photography, together with specialist agencies), and replaced the white and anonymous packages with ones characterised by colours and illustrations;
- *production*, for example, by employing specialised laboratory technicians.

In 2007, year of its 150th birthday, *Pastiglie Leone* moved to a new and very modern factory in Collegno, close to Turin.

In a time span of nearly thirty years, from 1986 to 2015, t *Pastiglie Leone* succeeded in its relaunch, increasing its turnover by approximately five times (from 1.9 to 10 million euros) and becoming one ofthe 150 biggest Italian sweets companies.

Today, *Pastiglie Leone* is a company of independent capital, with strictly family-run management, with Guido Monero as president and production director, his wife Gigliola as CEO and his daughter Daniela as marketing director. As a matter of fact, there are no external managers in the company who help with administrative or organisational issues. *Leone* has around 70 employees (mostly women) with permanent contracts, in addition to tens of seasonal workers (especially in production during the Christmas and Easter periods) employed thanks to temporary staff agencies. The production of chocolate represents 10% of the turnover (data referred to the fiscal year, 2015).

Below, the analysis of the case study *Pastiglie Leone* is presented according to the business model Canvas.

1. Value propositions

Leone's value proposition is mainly based on its ability to:
- improve the product's performance (intrinsic value);
- use its brand to transmit a clear identity to the clientele (intangible value).

As far as the *product* is concerned, *Leone* has focused on its chocolate's intrinsic and flavour characteristics. 80% of its production is made up of chocolate bars and the company is careful about particular demands and food issues - for example chocolate with no sugar, no palm oil, no gluten, no lactose or especially for vegan customers. Consequently, it can tap into a continuously growing target of consumers. The most significant examples of diversity of the *Leone* chocolate production are:
- stone-ground chocolate, so called because a traditional mixer machine, rollers and bowls only made of porphyry and granite are used in the production process. This product only contains a prestigious selection of cocoa beans, raw cane sugar, Mexican vanilla sticks and no trace of cocoa butter, so it has absolutely no gluten (suitable for coeliac sufferers and those with lactose intolerance). It is also rich in fibre so that it can be distributed in herbalist's shops;
- fresh cream chocolate, with only top quality fresh milk and cream from the valleys of Piedmont. This is how we get such a unique product on the world stage, besides the fact that no other producer makes milk chocolate without using powdered milk;
- chocolate with no sugar, sweetened with a natural sweetener called maltitol.

Leone also produces personalised goods for private consumers, for example company gifts and gadgets for special occasions.

The *brand* is strong thanks to the reputation and authority it has acquired since its origin. It has been the means of carrying and qualifying the product's innovation – also achieved by rediscovering the past – as well as "food safety" in the production of chocolate.

Accordingly to these choices, *Leone's* position in the domestic market is in an area that could be defined as "niche", intending it as characterised by a high level of differentiation in its products and a medium marketing spend. In fact, there are other niche products in such a market that are sold exclusively via specialised channels and rarely marketed through the mass media, but that are themselves the main communication tools.

2. Key resources

Leone considers the resources that are strategic in creating its own specific value for its clientele to be *material* and *intellectual by* nature.

From the point of view of *material resources*, the most consistent investments are those represented by *production plants* and other *technologies of an operative nature.*

Leone represents an important entity from an industrial standpoint, a real and unique piece in the national and international sweets market and not only for its history. At the end of 2006, the remarkable and varied production (over 300 items) needed to be transferred from the historic headquarters in Turin, to a bigger and more cutting-edge environment just outside the city, which cost 8 million euros. Because of a growing turnover, the new factory accommodated the relocation of the entire production and allowed the launch of "The Chocolate Factory" product line, guaranteeing further and necessary increases at the threshold of production. This evolution allowed the company to develop its international market penetration (14% of the 2015 turnover, of which chocolate alone represented 18%), which had ,up until then, been slowed down by the modest company size.

Over the last three years, investments for developing the production plants (for example, commissioning the historic machinery safety) have produced and continue to produce an important drive even on the domestic market (considered as reference). This has allowed it to increase its turnover (equal to 10 million euros in 2015) and invent new types of products. Over the last decade, such gradual and strategic expansion has furthermore led to the Company's acquisition of some prestigious and historic brands in the sector, including *De Coster*, *Moré*, *Razzano Minoli*, *Beata & Perrone*.

Furthermore, *Leone* has also invested in information technologies to improve operational management in terms of efficiency. Furthermore, the constant pursuit of quality has led to an increased use of software applications:

- orders. In particular, this has taken place with reference to some unusual sector-specific problems, such as the management of batches and their traceability in entering and leaving the company;
- accounting. The administrative offices need particular care; in fact, except for specific contexts, the process is completely managed in-house, including part of the declarations and collection of credit. In particular, the latter aspect is interconnected in perfect synergy with an especially articulated sales force, with over 70 agents in the field (not only nationally), who deal with different types of clientele - from the small shopkeepers to MMR .

With regard to *intellectual resources*, the main elements are the brand, the product quality, considered the most important driver of the competitive company strategy, and the expertise, represented by the heritage of recipes and methods of manufacturing inspired by the artisan tradition owned by the Monero family.

3. Key activities

Leone believes that the strategic activities which are crucial for its competitive advantage are represented by the *processes of innovation and production* that allow them to offer their products on the market.

As regards *innovation*, this concentrates on the product, such as how to adjust the offer to the market's new needs, in response to consumers' changes in taste. Notably, the strategy of innovation of the product undertaken for the last few years has been focusing on what could be defined as a "healthy" chocolate (for example, without sugar or milk). Such creation and development are continuous, leading to an extension of the range of many new products every year (new bars with particular blends and/or unusual ingredients).

The factory has five productive cycles in the *production process*:

- pastilles;
- sweets;
- gelatins;
- gumdrops;
- chocolate ("The Chocolate Factory").

As for the last one, the productive processes are particularly complex, starting directly with the transformation of the main raw material (cocoa beans), without the use of semi-finished products (cocoa mass) and utilising both modern and traditional machinery (like a toaster or cylinder-refiner). This process is divided into the following phases:

- selection of the cocoa beans;

- toasting. Like few others in Italy, *Leone* carries out the toasting of the beans in a hot -air toaster, and not directly over the flame, in order to prevent the product from burning;
- chipping and mixing. The seed is peeled and successively crushed. The obtained cocoa crumbs are mixed with other ingredients in the mixers with stone rollers. Instead of metal ball mills, porphyry stone is preferred, in order not to excessively stress the products;
- refinement. This step is indispensable for eliminating possible solid or granular residuals. The raw chocolate goes through a series of cylinders that considerably reduce the hard parts, rendering the refinement homogeneous;
- conching. For at least 60 hours, the chocolate is kneaded in flat basins of porphyry as to render it soft and velvety. The friction, the heat, the air and the time eliminate the acidity and the tannins, to enhance the sweet aromatic component;
- shaping. At the end of the other work phases, the chocolate is ready to be poured into the moulds. Once cold, the bars will be removed from the moulds and packaged.

As previously stated, the entire manufacturing process is completely carried out at the factory in Collegno.

Leone does not work for third parties.

4. Key partners

The history of the *Leone* company started with pastilles and initially included a department dedicated to chocolate, which stayed active until the end of the '70s, when it had to be closed for logistical problems. It was only in 2006 that the decision was made to resume chocolate manufacturing.

For the production of chocolate - as for the other products in the range - the selection of raw materials of high quality is considered strategic:

- refined variety of cocoa from Central America;
- unrefined brown sugar;
- natural sweeteners;
- hazelnuts of the round and sweet IGP variety from the Langhe;
- Sicilian pistachios;
- vanilla beans from Mexico;
- fresh milk and cream;
- natural essential oils.

Vegetable oils such as palm or rapeseed oil or soy-bean lecithin must not be used, if not in a small percentage for spreadable creams.

The great attention paid to the choice of natural and healthy ingredients and to the different food-related needs allows *Leone* products to discover new distribution channels and clientele with changing tastes. In fact, the *Leone* chocolate is not only supplied to cafes and shops, but also to herbalist's shops, where sugar-free or essential oil varieties are particularly popular.

For these reasons, the most important suppliers for *Leone* are precisely those of raw materials, represented by intermediaries (for example, for cocoa beans) or directly the same producers (for example, for dried fruit and milk), who are predominantly located in Italy. These relationships are of a purely commercial nature, characterised by an average level of strategy, as they are easily replaceable. In order to guarantee the required level of quality, supplies of raw materials inside the national market are all traceable.

5. Customer segments

The production of *Leone* chocolate is aimed at a mainly female target, between the ages of 30 and 70, mostly residing in the central-northern Italy and with a medium orhigh level of education and income. This target of *Leone* clientele distinguishes itself for being particularly well-informed and independent in the phases of assessment and purchase of the product.

6. Customer relationships

Apart from understanding and appreciating the skills that guarantee the uniqueness and quality of the product, the mix of factors which have led to *Leone's* success are continually keeping up to date on marketing practices and paying particular attention to *communication.*

Leone has adopted an emotional communication strategy in order to acquire new clients, consolidate existing ones and increase sales. It employs:

- packaging and wrappings which are unique and personalised;
- its web site (in Italian and English), that represents the main channel for presenting the company, in particular its history and products;all main social networks, mostly *Facebook*, with around 20,000 followers ,and *Instagram*, with nearly 22,000 followers;
- partnerships with some food bloggers.

More traditional media like television, radio and the printed press are less used forms of communication and promotion.

7. Channels

Leone distributes its products through a multitude of distribution channels:

- retail outlets, like bars, cake shops, herbalist's shops, grocery stores and specialised confectionery shops (53% of total distribution);
- wholesalers (9%);
- supermarket chains (8%);
- direct sales to companies and e-commerce (13.7%);
- abroad and duty free (14.3%);
- Ho.Re.Ca (2%).

The distribution channel that has seen the greatest development in the last few years has been the online sales through the company websites, with an increase of 24% between 2014 and 2015.

The main sales areas are in Northern and Central Italy, but there is no shortage of exports, which are mostly directed to Germany and the United States and which are worth 18% of the 2015 turnover abroad, just for chocolate, and still growing (+25% compared to 2013). This is thanks to a progressive strategy of conquering international markets and taking part in important confectionery and quality food fairs in Europe e.g. *ISM* in Cologne, *SIAL* in Paris, *Cibus* in Parma, the *Salone del Gusto* in Turin and *TuttoFood* in Milan.

8. Cost structure and revenue streams

Leone's business model can be defined as "guided by value", and its most important element is the use of prestigious and expensive raw materials that need exclusive elaboration in order to convey a proposition of high level to the client.

The structure of the costs, based on data from the balance sheet of the financial year 2015, is shown in Table 4.14.

Table 4.14 Structure of the costs of *Pastiglie Leone* for the financial year 2015 (in Euro).

Type of cost	Euro	% of total costs
Raw materials	2,882,365	29.05%
Services	2,943,884	29.67%
Cost of employees	2,862,577	28.85%
Depreciation and amortization	560,749	5.65%
Provisions for risks	134,316	1.35%
Change in stocks	-79,673	-0.80%
Other operating expenses	266,962	2.69%
Interest and other financial charges	68,514	0.69%
No operating expenses	48,465	0.49%
Income tax	232,411	2.34%
Total	**9,920,570**	**100%**

Source: our elaboration on Pastiglie Leone 2015 Financial Report.

Leone's revenue flows originated exclusively from the sale of products with a value of just over 10 million euros in 2015.

4.7.2 Venchi

Venchi's history goes back to the beginning of the 1800s when the young Silviano Venchi began developing an interest and passion for chocolate. He had been deeply impressed by his experience living in the city of Turin, which was already the famous headquarters of the first master chocolatiers and was considered the home of Gianduja.

At age 16, he started his working life by helping in a confectionery lab where his passion for chocolate grew as he could experiment different combinations and be stimulated by the expressions of satisfaction of clients and friends after tasting his creations.

In 1878, he opened his own chocolate shop which was to grow from a tiny lab to a well-known and renowned *atelier* throughout Piedmont. Right from the start, the *Venchi* chocolate shop teemed with experiments. In fact, besides the traditional chocolate products, he created a unique and special recipe for chopped and caramelised hazelnuts covered in extra dark chocolate, which is still known today by the name "nougatine".

In 1934, *Venchi* bought the *Società Anonima Unica*, a confectionery group which included the factories of *Michele Talmone*, *Moriondo & Gariglio*, *Cioccolato Bonatti* and *Gallettine & Dora Biscuits*. Its premises in Turin covered 100,000 m , employed 1,500 manual workers and 300 office staff, had a daily production of 40,000 kilos of chocolate, 15,000 kilos of cocoa, 20,000 kilos of sweets and *sugared* almonds and 25,000 kilos of biscuits. The company grew to employ 3,000 (mostly female) staff and used highly modernised systems, aimed at launching new products on the market for the "every day" consumer and no longer, just elites.

Production started again successfully after the war, with the introduction of new machinery for processing the chocolate, which came to represent 70% of the company's turnover.

Unfortunately, the production was interrupted in the 1970s and the factory eventually closed down in 1978.

The company started again in 1997 when the *Venchi* brand was relaunched thanks to a group of private investors and their rebranding of Cuba, which was famous for its rum- filled chocolates from Cuneo and chocolate cigars. Cuba was a traditional chocolate company founded by master chocolatier Pietro Cussino, who was the grandfather of one of the new partners.

The partners' objective was to bring back to life the philosophy of a company that had always worked with the sound principles of product quality, attention to consumer demands and preferences and continual innovation in the variety of products in increasingly large markets.

Today, *Venchi*'s factory and offices are in Castelletto Stura, just outside Cuneo. The company is the perfect blend of the art found in handmade quality of "Made in Italy" chocolate and the technological innovation used in the most recent machinery.

Below, the analysis of the case study *Venchi* is presented according to the business model Canvas.

1. Value propositions

The company's basic philosophy is to make *Venchi*'s clients "fall in love" with its chocolate, in all its forms (hot, cold, solid, liquid) and with all the consuming experience it represents. By working with passion, this philosophy creates "value proposition", which can be identified with the aim of offering products that guarantee the utmost authenticity, delicacy and natural preservation. No chemical products are used and innovative and functional technology both helps protect and maintain the "modern artisan" status.

The medium to long term objectives that determine strategic choices encourage the continuous growth in demand for *Venchi* products through an expansion which is "governed" in turn by new and especially foreign markets. These are characterised by a strong demand for Italian products, with the country's characteristic respect for traditional recipes and "slow" and careful production. At the same time, however, they can blend product innovation with new tastes, formats and distribution channels.

The product range is very varied. In fact, *Venchi* offers a wide selection of chocolate products to satisfy any occasion or personal taste. There is the classic range of presents available in various formats and sizes, the Pick & Mix loose chocolates from which the customer can choose. Moreover, there are chocolate bars, chocolate squares, loose chocolates and spreads available in different versions of dark and milk chocolate, gianduja and hazelnut. There are also snacks (including chocolate covered bon-bons, chocolate bars and cocoa beans), chocolate cigars, sweets, gelées and cocoa butter to use in the kitchen. *Venchi* has also produced ice-cream since 2006 and created its choco-ice-cream parlours nationally and abroad. In 2015 alone, nine new points of sale were opened in cities like Milan, Florence, Bologna, Siena, as well as London and Munich.

The number of reference reached in 2015 was equal to 1,000 types of product, and 85%-90% of the turnover was generated by what is considered, without a shadow of a doubt, the company's core business, i.e. the manufacture and production of chocolate.

Continuous creativity and innovation allow the company to aim beyond the appeal of a product's taste by including healthy aspects and creating specific and dedicated product lines. These are created following the logic of the philosophy "good chocolate is good for everyone" , anexample being thechocolate with no extra sugar, "Chocolight". This line of chocolate is sweetened with maltitol, which is a natural sweetener and extract of corn maltose that has fewer calories compared to traditional sugars. On top of this, it is important to guarantee that all chocolate produced by the company is "gluten free" and therefore compatible with allergies and gluten intolerances.

The market where the company operates can be seen in two different ways. From the point of view of taste, its "colleagues" are *Gobino*, *Amedei* and *Domori;* while from a turnover point of view and nationally, it competes with companies like *Lintd*, *Caffarel*, *Maiani*. On the international scene, it competes against *Godiva*, *Maison du Chocolate* and *Valhona*.

2. Key resources

Choices for the company are important when it comes to raw materials as they represent the first key resource that allows *Venchi* to stay in a premium market and differentiate itself from its main competitors. These include cocoa beans that are blended with the most prestigious hazelnuts from Piemonte IGP, pistachios from Bronte, extra virgin oil, cocoa butter and other materials that are carefully selected as part of a Mediterranean diet and that unite healthy with good. Together with top quality raw materials, the company also deals with the problem of the product packaging, which has to reach retail points of sale intact, both nationally as well as abroad. These issues have been studied to ensure that the product's ideal preservation conditions are maintained, thanks to the use of isothermal containers and 100% recyclable gel packs that are certified for food contact.

Together with raw materials, the other key resource is personnel. At any level, the personnel is considered part of a unique and large family and as such the company makes annual financial investments towards improving managerial skills in all areas, from production to distribution, communication and R&D. In 2015, there were 1,574 hours of staff training with outside consultants.

In the same year, there were 347 employees and personnel costs represented 20.7% of the turnover.

3. Key activities

Venchi is positioned along the value chain with key activities ranging from phases of manufacturing raw materials to manufacturing semi-finished products. The raw materials are not produced directly as the company does not have its own cocoa plantation, but cocoa beans are sourced from producers who have a very high level of expertise and respect the standards and regulations agreed on and formalised with the company.

The main phases of the productive process are; refining, that is the elimination of solid residues and impurities; Cconching, which consists in turning the chocolate into a soft and velvety cream by working it in flat basins for at least 60 hours; moulding, which permits to create the desired formats (praline, chocolate bars, etc.), which are packed once cool. Bookings are the most common types of orders at *Venchi*. Small lots of fresh products are produced every day and 70% of the process is done by hand.

To guarantee that the products live up to the *Venchi* Ethical Code, the company has appropriate internal and external quality control mechanisms in place. This quality control includes stringent testing processes, conducted on different levels from raw materials to the finished product. Before shipping a product, *Venchi* needs to be sure that the product lives up to its high standards and is in impeccable condition.

But just producing is not enough. Concerted research and development activities result in maintaining and consolidating those innovation and continuous improvement processes that systematically feed the trends concerning growth and renewal of what the market offers.

The lines of chocolate and ice-cream products have been the subject of projects regarding expanding the range as much as improving the quality. These and other projects have taken shape in:

- designing new products and relative production and marketing processes as well as tests and experiments, necessary to obtain approval before being marketed;
- creating prototypes and samples, demos, setting up pilot products, tests and approval for products and processes, as well as the necessary plant and equipment;
- creating and planning the design of the product, packaging, exhibitors and, of course, the shop image;
- coming up with new ideas, designing and creating the brand's distinctive signs.

There are two organisational units that specifically and continually deal with such tasks. The first is the research and development department that creates and develops the recipes and production processes together with dedicated staff. The second is the marketing department that deals with developing the brand and managing the shops, as well as the communication towards the segments of clientele.

Projects started in previous years have been supplemented with new projects and the company's scientific technical profile has been of significant value in involving internationally recognised partners.

This action has been guided by the necessity to keep the products relevant to increasingly demanding market requirements in terms of taste appeal and food safety. Out of all of *Venchi*'s projects, the new social model of integrated supply chain stands out. It is governed by five main foundations: passion, respect, trust, ethics and sustainability. It is called "Progetto bio" and produces biological chocolate by investing in and sharing techniques with Ecuador's Comunità Kichwa. These techniques include elaborating and manufacturing the seeds by following an antique method that results in the best cocoa blends *Fino Aromatico* (cacao *Criollo Blanco* and cacao *Nacional Amendolado*). These are the ingredients of a range of extra dark chocolate bars which are unique and 100% biological.

By following this production technique, the best cocoa beans *Fino Aromatico* are extracted from their pods and immediately fermented using a method that has been perfected thanks to the experience of the company's master chocolatiers. The seeds are then selected on the basis of quality and variety and then mostly forwarded to be toasted and manufactured into prestigious cocoa mass/liquor, which is the indispensable ingredient for an excellent blend of chocolate.

Cultivating this type of cocoa only permits biological fertilisers and traditional agricultural techniques to respect the environment and safeguard the tree's yield, so there is only the bare minimum trace of pesticides. To strengthen the value chain and limit pollution, working the cocoa beans, as cleaning, toasting and transforming them *en masse,* takes place locally. This is to ensure that only the best products that contribute overall are shipped, thus to avoid deliveries which would otherwise add costs, pollution and reduce the quality of the end product. The company buys the processed product directly from the Kichwa community, having established a fair trade price which, on average, is around five times more than what would be paid for the raw materials. This is useful to stimulate productivity and development of the plantations. The company is committed to contributing to generating basic sustainability for the local producer and satisfying the demands and expectations of a "gourmet" consumer. This consumer now wants both quality and to play a part in social, civil and environmental aspects that are closely connected to the product and its supply chain.

4. Key partners

Key partner relationships play a fundamental part in maintaining a portfolio of suppliers considered strategic for the desired and agreed standards of quality and healthiness. Working closely with cocoa bean producers and sharing product quality control systems allow the company to consolidate long-lasting relationships and constantly monitor the product's traceability.

Employees are also considered key partners and, in fact, *Venchi* is very aware of the importance of human labour and the wealth of skills that develop along the production and distribution chains.

Retail stores, whether traditional or specialised, naturally represent key partners as *Venchi* products are distributed and appreciated thanks to them. One example, in particular, could be the *Eataly* platform which distributes to countries which are relatively new to chocolate consumption like Dubai and Seoul Pangyo (South Korea), but also in consolidated markets like Chicago, New York and Istanbul. Another example regarding distribution could be the relationships with management systems of outlets at airports and railway stations, where there are around 20 *Venchi* shops.

An important partnership that has been enhanced over time is represented by the relationship with university research, through exploratory work about the suitability of innovative creations which consequently added new products to the company catalogue. This partnership has been developed with the University of Turin, the Medicine School and Veronesi Foundation which have been tasked with studying production systems that result in the preservation of the largest number of anti-oxidants (now widely recognised as important nutraceutical elements) throughout chocolate production processes.

5. Customer segments and relationships

The marketing department handles the company's relationships with clients including extensive use of communication towards segments of clientele that are increasingly diversified and demanding. In fact, with the company's increased presence abroad, the communication processes have become increasingly sophisticated and critical, especially in Asia where new forms of partnerships have been set up in China, Hong Kong and Singapore.

In fact, an office dedicated to digital communications has been created to handle the main social networks with the objective of communicating the company's values and the distinct elements of its products. The main aim is to reach and consolidate new markets.

6. Channels

Venchi distributes its products almost exclusively through traditional or specialised retail channels (90%) and by utilising online sales via e-commerce platforms for the rest.

Venchi's products are distributed in over 6,500 confectionery shops throughout Italy as well as in 65 countries abroad (including the most important international department stores). It also has around 30 international *Venchi* shops. Over the course of the years, the concept of shops has changed. These have now the objective of distinguishing themselves with factors regarding a customer's senses and emotions, and such environment can be recreated in different shops anywhere in the world. This allows the customer to live a unique experience that only that brand can repeat and to enjoy products made for the specific moment and not mass produced.

7. Cost structure and revenue streams

Venchi's cost structure, based on the 2015 financial report in Table 4.15, clearly shows how procurement costs of raw materials and services weigh heavily on the company's total costs. Secondly, personnel costs allow us to appreciate the extensive use of manpower in the main processes of manufacturing and packaging.

Table 4.15 Structure of the costs of *Venchi* for the financial year 2015 (in Euros).

Type of cost	Euro	% of total costs
Raw materials	14,248,279	28.61%
Services	14,666,495	29.45%
Cost of employees	10,974,619	22.04%
Depreciation and amortisation	3,559,024	7.15%
Provisions for risks	264,466	0.53%
Change in stocks	-877,998	-1.76%

Other operating expenses	1,908,510	3.83%
Interest and other financial charges	2,169,160	4.36%
No operating expenses	91,451	0.18%
Income tax	2,789,523	5.60%
Total	**49,793,529**	**100%**

Source: our elaboration on Venchi 2015 Financial Report.

In 2015, by selling the industrial production of "chocolate" and "ice-cream" that was mainly spread by agent networks and retail, the turnover showed an increase of around 15.6%, reaching circa 53 million euros. A breakdown by category shows that the retail sector reached 40%, leaving the remaining 60% of sales of chocolate and semi-finished products to ice-cream parlours. An analysis of the revenue per geographic areas shows that 15% was invoiced abroad (with a significant growth compared to the previous year), while the remaining 85% was generated in Italy.

Summary

Its characteristics of being a popular product nationwide and the peculiarities of its companies, make the chocolate sector a worthy subject for research and analysis aimed at highlighting evolving trends and understanding the distinctive factors for success, through business case studies.

In the first part of this study, evolving trends concerning supply and demand have been analysed. This brought to light how the dynamics of the chocolate market and the relative companies have been characterised by a continual evolution over the last ten years.

Up until 2000, chocolate consumption and manufacturing were mostly concentrated in Europe and North America. In the last ten years, however, a new trend in consumer and production models has been recorded. As far as demand is concerned, new consumer markets have developed in South America, Asia and Arab countries, which represent the new frontiers of chocolate-manufacturers, able to counterbalance the slowing down of traditional markets like Europe and North America.

Selling abroad and consequently being present on rapidly developing foreign markets therefore represents one of the first factors of success for companies in the sector. Another factor for success is represented by the size of the company and its position in the complex chocolate value chain.

Depending on size, companies position themselves differently along the value chain. Large companies who address the public *en masse* are not normally present in the raw materials sector, but they are present in semi-finished products. Small to medium sized enterprises concentrate on the selection and safeguarding of top rate raw materials. In fact, this sometimes happens following their purchase of a cocoa plantation, so they can offer a first class product with a premium price policy. Traceability, sustainability and use of new communication tools and product sales online also represent factors able to influence the company's chances of long-lasting success.

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