# **CHAPTER 9**

# Marketing Research on Fruit Branding: The Case of the Pear Club Variety "Angelys"

#### Maurizio Canavari

Alma Mater Studiorum-University of Bologna, Bologna, Italy

#### Contents

Introduction	239
Branding in the Fruit Industry	242
Consumer Science, Marketing Research, and Marketing Strategies	244
Materials and Methods	245
Characterization of the Product	247
Qualitative Exploration of Retailers' Opinions	248
Qualitative Exploration of Consumer Attitudes and Perception	248
Quantitative Survey, Consumer Test, and Choice Experiment	249
Conclusion	250
Acknowledgments	251
References	251
Further Reading	254
Methodological Appendix	254
Choice Experiment	254

## **INTRODUCTION**

Pears are an important product in the Emilia-Romagna region (Italy), which is the most important area of production for this fruit in Europe. However, the range of pear varieties marketed nowadays has been quite stable for many years, with a few well-established varieties and very little innovation. The main and most common varieties available in the food market

(e.g., "Kaiser," "William," "Abate Fetel," "Decana," etc.) have not changed in the last few decades. This lack of innovation reduced the chances to meet new consumer needs and expectations.

Probably also because of this situation, the demand for pears is showing a downward trend, which is worrying for the local agricultural businesses.

Therefore, there is the need to identify new varieties suitable for the Italian market environment and able to satisfy both producer and consumer needs. This research is motivated by the assumption that pear consumption could be boosted by introducing new varieties that might better address consumers' needs, wants, and expectations.

The subject of the study is a new pear cultivar developed by the Institut National de la Recherche Agronomique (INRA), resulting from the cross "Doyenné d'Hiver" X "Doyenné du Comice" (Le Lézec et al., 2002). This cultivar was registered under the brand name "Angelys" and its distribution has been developed under the "Club variety" trademark licence model and it has been recently introduced into the Italian food market.

The use of this trading model makes Angelys the first case of a branded pear widely sold in the European market.

Fruit branding has recently been shown growing interest by fruit businesses. Brands have been used for certain fruits for a very long time (e.g., banana, pineapple, apple), but in the last twenty years branding has been paired with the release of new fruit varieties, as a tool for protection and exclusive use of the results of plant breeding. Other cases of branded pears are the Dutch "Sweet Sensation," the Belgian "Corina," the Canadian "Cold Snap," and the French "Selena." Other cultivars have been recently registered and licensed as club varieties and will reach the market soon.

This study is aimed at illustrating a case of collaboration between a fruit marketing company and a team of academic food marketing researchers, who worked together to explore the

interest, perception, and preference of consumers for a new pear cultivar that has been branded with the registered name "Angelys."

"Angelys" is a registered trademark associated with a special pear variety that originated from the region of Angers in France. "Angelys" was developed in the 1990s by INRA and the Centre Expérimentation Pépinières (CEP Innovations) (France), which own the rights on the trademark in the European market. This pear is marketed under the so-called "club formula". The licensee for Italy and Germany is an Italian company (Spreafico SpA) that takes care of the entire cycle of production and distribution, from nursery up to the sale to supermarket chains.

The production of this new pear variety is performed by the company itself and by a number of partners who agree to comply with the production rules and standards set by the brand owner. Since it has been considered an opportunity for rural development of the area of Ferrara, where most of the production is obtained, the investment in this variety of pear by Spreafico has been partially supported by a contribution from the government of Emilia-Romagna, in the framework of the Rural Development Plan in the Emilia-Romagna Region.

The case is interesting because it shows how a fruit company can use marketing research and consumer science to develop its business.

This study is aimed at investigating sensory characteristics and their evolution during shelf life, as well as perceptions and attitudes towards the new club variety Angelys, considering both consumers and large retail buyers.

The remainder of this chapter is organized as follows. The next section provides a short discussion of fruit branding. This is followed by a section that briefly illustrates the aims, materials and methods, and the main results of the studies performed, while in penultimate section the marketing strategy

decisions made by the company and their results after 5 years from the study are discussed. In the final section conclusions are drawn.

#### **BRANDING IN THE FRUIT INDUSTRY**

Usually, fruit produce is considered as undifferentiated products or commodities. As such, they suffer from typical problems such as oversupply and fierce competition on price. To cope with pressure on price and margins, fresh fruit producers tend to grow in bulk and to produce more at a lower cost. Therefore, innovation efforts focus on production efficiency, extended shelf-life, and product quality standards. The focus is rarely on quality differentiation, marketing, and valueenhancement of the product, because in this kind of market it is difficult to get remuneration for better quality. Thus, spot markets on one side, and tight partnerships based on quality assurance along the supply chain on the other side, largely dominate the relationships between producers and retailers (Trienekens et al., 2012; Young & Hobbs, 2002).

However, the evolution of consumer demand and food distribution that has occurred in recent decades is dramatically changing the market environment. As a result, the adaptation of companies' strategic orientation is determining a shift from a supply-driven to a demand-driven approach. According to many authors, a "chain reversal," that is, a shift towards a more marketing and consumer-oriented approach is increasingly necessary (Gellynck et al., 2012; Kohli & Jaworski, 1990; Linnemann et al., 2006). This chain reversal, though, would not be possible without branding, because companies selling commodities do not enjoy the possibility to differentiate their products and defend the competitive advantage acquired with product innovation.

Brand management is a key activity in the process of product innovation (Edwards & Shultz, 2005). A brand is defined as "...a complex symbol that represents a variety of ideas and attributes. It tells the consumer many things, not only the way its sounds but, more important, via the body of associations it has built up and acquired as a public object over a period of time" (Gardner & Levy, 1955). The value of a brand as a company asset (brand equity) depends on several factors, among which recognition and top-of-the mind awareness are usually directly linked to quality perceptions and customer loyalty (Beverland, 2001).

Developing a new food product and a brand is challenging in any business, but it is particularly hard in the fresh fruit industry, since it is first necessary to develop a product with unique features. Second, after many years of development, it is of paramount importance to be able to protect the innovation from unauthorized reproduction. Finally, in marketing the new product it is necessary to coordinate a large number of actors along the supply chain (Brown et al., 2009; Linnemann et al., 2006).

The development of marketing strategies promoting strong brands, unique selling propositions, and closer relationships along the supply chain requires a better understanding of specific consumer needs and wants regarding product and service quality. The assumption of this marketing paradigm is that consumer satisfaction is the main driver for success in the market.

Adding value to fruit and vegetables through brands capturing consumer attention and focusing on consumer preference is not a completely new approach and it has been adopted in the past. There are many cases of successful branding in the fresh produce industry, with famous examples of bananas, pineapples, kiwifruits, apples, just to mention a few.

However, among the different branding strategies in the fruit industry, the "Club formula" based on distinct cultivars

on which a careful management of intellectual property right is implemented is relatively new and increasingly popular. Fruit cultivars, whose reproduction is protected by a patent and can be marketed through a trademark license, are suitable to become Club varieties. Club varieties are already popular in the apple industry (e.g., "Pink Lady," "Ambrosia," "Jazz," "Modì," "Evelina," "Kanzi"), while in the pear industry the Dutch cultivar "Sweet Sensation" and "Angelys" were the only examples until a few years ago.

The main purposes of a Club variety are to allow creating, enhancing, and protecting the value of new cultivars. In common cultivars, royalties (when still required) are usually paid by the fruit nursery performing plant multiplication, while growers can freely plant them. Fruit growers interested in planting these protected cultivars, instead, must join a "club" of licensed growers that is not accessible to everyone. Growers negotiate with the patent holder (e.g., research institute, breeders, etc.) the quantity to be produced and marketing practices in terms of quality attributes and parameters and must comply with the rules set in the licensing contract. Members pay royalty fees to patent holders at planting, and support brandmarketing activities with annual fees, decided by the managers based on the need of investments in marketing and quality control. In this way, patent holders are able to control the quantity supplied, may invest in advertising and promotion activities to differentiate the product, and obtain price premia, which should allow both patent holders and growers to increase their margins (Asioli et al., 2016).

# CONSUMER SCIENCE, MARKETING RESEARCH, AND MARKETING STRATEGIES

The fruit company "F.lli Spreafico SPA" holds exclusive rights to produce and distribute "Angelys" pears in Italy. They started to produce and distribute this branded product especially in Northern Italy through large retail outlets. Market information about "Angelys" were scarce. Therefore, an analysis on the potential of the "Angelys" branded pear in distribution channels of Italy was deemed necessary to support the managers in their strategic decision-making process. They needed to know more about the particular features of the product and the key drivers affecting both customer procurement and consumer purchases, in order to make decisions on the viability of refocusing product positioning and distribution in Italy as a strategic marketing option.

# **Materials and Methods**

With the purpose of supporting the company's management in their decision-making, product, features like sensory characteristics and their evolution during shelf-life were investigated. In addition, an exploration of the factors affecting the adoption of new pear varieties in large retail chains was performed. Finally, the analysis of consumer perceptions and attitudes towards the new club variety Angelys completed the study.

The study agreed upon thus included (Fig. 9.1):

- A quantitative descriptive analysis (QDA) aimed at describing the sensory profile of the pear at different stages of its shelf-life (Canavari et al., 2012, 2013);
- A qualitative market research on distribution potential (Asioli et al., 2016);
- A qualitative market research with consumers;
- A survey-based quantitative market research (Caputo et al., 2012).

In addition to the studies agreed upon, a qualitative market research based on focus groups in Germany was also performed (Rombach, 2012; Rombach et al., 2015, 2016).

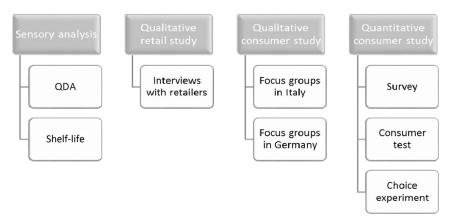


Figure 9.1 Structure of the research. From Author's own.

QDA is based on a professional panel of judges, and it has the aim of describing the taste profile of the pear and how these characteristics evolved during the main stages of the fruit's shelf-life. QDA was performed in the sensory laboratory using trained assessors according to international norms (ISO, 1988, 1993, 1994; Stone et al., 1974).

The analysis of market potential and the interest of large retail chains was based on face-to-face in-depth interviews with the main stakeholders, that is, buyers in large retail chains that were indicated by the company as the most likely partners in that marketing channel. Five in-depth, semistructured qualitative interviews with major Italian large-scale retail fruit purchase managers were administered.

In the analysis of consumer preference, we relied upon a multi-methods approach, combining sensory consumer tests with socioeconomic qualitative and quantitative market research methods, namely focus groups and surveys based on attitudinal questions and choice experiments. In this way, we were able to get information on emotional, affective, and cognitive appreciation, as well as on willingness to pay for the new variety, its branding, and the packaging solutions.

In the qualitative phase, we used the focus groups administered in Italy and in Germany, analyzing the transcribed discussions using qualitative content analysis, based on a thematic approach.

In the quantitative phase of the study a consumer survey was administered using a combination of sensory and economic experiments (Combris et al., 2009; Mueller & Szolnoki, 2010) to investigate the influence of product characteristics on consumers' preferences and willingness to pay (WTP). We designed a field choice experiment to analyze how sensory characteristics affect consumers' WTP for two different types of pears: Angelys and Kaiser. The sensory and choice experiment data were collected in supermarkets in Milan and Bologna. WTP measures were estimated across four treatments, comparing the preferences for two cultivars at three price levels.

The study was conducted in 2010 and 2011, mainly in northern Italy which was considered by the company the most suitable area for market entry.

The first step of the study, therefore, was an accurate analysis of sensory and shelf-life characteristics of the product. Then, the qualitative and quantitative phases followed, as described in the following sections.

## **Characterization of the Product**

"Angelys" is a large pear of approximately 300 g, with a short egg-like and sometimes irregular shape. Its marketing time range is from February to May, which is a period relatively less crowded on the shelves.

Descriptive attributes such as appearance, flavor, texture, and aftertaste were evaluated. A principal component analysis (PCA) of sensory data showed that "Angelys" is characterized by being slight external russet and white, highly aromatic, sweet flash, and juicy (Canavari et al., 2013). These evaluations were performed five times during 14 weeks to evaluate the evolution

of sensory characteristics during cold storage. Given its characteristics, a well-ripened "Angelys" was considered ideal for fresh consumption, while it was considered ideal for the preparation of specific recipes with cheese and meat products when less ripened. The long shelf-life was confirmed as the main advantage for this pear from a commercial point of view.

# Qualitative Exploration of Retailers' Opinions

This part of the study aimed to evaluate factors triggering a potential interest in Italian large-scale retail regarding the marketing of "Angelys" and how large-scale retailers would exploit it to enhance their market potential. Respondents confirmed that the pear sector seeks and needs new varieties, which should address the innovation in terms of both food product characteristics and marketing aspects. Results showed that professional customers highly appreciated the sensory properties, handling features, and Italian origin of this pear. However, the main hindering factors were price, unsuitable packaging, and nonuniform appearance. Especially, the strategy to position this pear at a high price level strongly limited the interest of retailers for this new variety, since many were not confident that consumers were actually ready to pay a premium price.

Finally, respondents suggested that if producers wanted to develop in-store strong brand positioning and make consumers aware of "Angelys," they would have to place more effort and financial resources in marketing activities such as promotion, advertising, and tasting experiences. The "Club formula" was appreciated by Italian large retail chains, especially if it was well supported by producers (Asioli et al., 2016).

# **Qualitative Exploration of Consumer Attitudes and** Perception

Research on consumers was performed with the objective of investigating consumer perceptions of taste and value. Results of the qualitative analysis show that quality perception plays an essential role for consumers. Reactions to "Angelys" expressed both appreciation and rejection, a wide range of adjectives such as "compact," "baroque," "misshaped," and "old" were used to describe the pear characteristics. Participants also evaluated the brand concept and expressed their opinion on packaging. Overall, the evaluations were mixed and allowed to address some specific issues, like the use of sealing wax on the stalk and the black stylish box. Also, the claims and communication materials were critically evaluated, comparing the original claim used in the French market, focused on the long shelf-life and good taste, and modified claims deemed more suitable to the Italian and German markets. An important finding was that the Club concept was accepted as an extension of the range of traditional cultivars and perceived as a promise of higher quality.

# **Quantitative Survey, Consumer Test, and Choice Experiment**

The results of the survey suggested that the role of sensory aspects of fruits such as visual inspection and taste were important and affected consumer preferences and WTP for the two pears.

The perceived value of the Angelys pear was sensibly lower in the hypothetical treatment (only verbal description and picture); this is understandable because a new product was compared to a well-known pear variety like Kaiser. Tasting the pears significantly increased the value perceived by the consumer for both Kaiser and Angelys. With visual inspection and tasting, the difference between the two pears was much smaller and barely significant.

The results suggest that the role of sensory aspects of fruits is crucial in terms of satisfaction and appreciation, and they may represent a major issue in case the product quality is not properly managed in order to guarantee that a branded pear is distinguished, compared to the competing common pears.

This information was useful to suggest a more refined and targeted marketing strategy, suggesting price ranges and promotion practices to retailers.

### CONCLUSION

The aim of this work is to outline how research conducted in the area of consumer science (CS) and consumer behavior (CB) can support decision-makers in shaping appropriate marketing strategies in a small-medium enterprise operating in the fruit industry.

The Spreafico company was committed to positioning its new product, a new pear variety marketed as a branded "Club variety," in a competitive environment where this product category has always been characterized by tradition and continuity with the past.

The results of this study helped the company management to evaluate potential and hindrance factors for a successful introduction of the Angelys pear into the Italian market and to reflect about appropriate marketing strategies for the new pear variety, taking into account the need of partners and customers.

The new pear variety is now marketed in several large retail and traditional retail channels, so the company is able to evaluate the results of its marketing strategy for this product and to assess the impact of the implementation of its strategy on company performance. When asked about the current performance of this product, one of the managers stated that this has become one of the key products for the company. The need to escape from markets based on commodities has become more stringent in the meanwhile and investing in a differentiated and exclusive product like Angelys has been a very positive managerial choice.

According to this experience, therefore, we argue that the Club variety could be a new tool to improve the business model in the fruit industry. It could certainly offer advantages to fruit producers, such as a premium price, but it mainly benefits the fruit marketing companies, offering them higher returns and improved company image.

However, it must be taken into account that managing a Club variety requires large investments in research and development, since the creation and registration of a new variety may take decades. In addition, strict product quality control (e.g., maintaining standardized and high-level quality attributes) is necessary, in order to be able to offer a consistent level of quality to consumers who are attached to the fruit brand. Furthermore, a very effective and comprehensive marketing control is required (e.g., quality monitoring for fruits sold under the "Club variety" brand) and investments in communication are essential for creating brand awareness and recognition, which are the main source of the value of a brand.

### **ACKNOWLEDGMENTS**

This research was conducted by the Department of Agricultural Economics and Engineering, Alma Mater Studiorum-University of Bologna and by CIAS—Centro Italiano di Analisi Sensoriale, with the contribution of many researchers, managers, and students: Daniele Asioli, Lucia Bailetti, Claudia Bazzani, Vincenzina Caputo, Matteo Caravita, Alessandra Castellini, Maurizio Cotti, Luca Malaguti, Chiara Mignani, Rodolfo M. Nayga, Erika Pignatti, and Meike Rombach. We acknowledge and thank the Emilia-Romagna Regional Government and "Elli Spreafico SPA" for financial support provided in the framework of the Project "New product development of new variety of pear: Angelys."

## REFERENCES

Asioli, D., Canavari, M., Malaguti, L., Mignani, C., 2016. Fruit branding: exploring factors affecting adoption of the new pear cultivar "Angelys" in Italian large retail. Int. J. Fruit Sci. 16 (3), 284–300. Available from: http://dx.doi.org/10.1080/15538362.2015.1108894.

- Beverland, M., 2001. Creating value through brands: the ZESPRI kiwi fruit case. Br. Food J. 103 (6), 383-399. Available from: http://dx. doi.org/10.1108/00070700110400389.
- Brown, S.K., Maloney, K.E., York, N., Ag, S., Station, E., 2009. Making sense of new apple varieties, trademarks and clubs: current status. N. Y. Fruit Q. 17 (3), 9–12.
- Canavari, M., Castellini, A., Bailetti, L., 2012. Angelys®: analisi di marketing e valutazioni sensoriali. Riv. Fruttic. Ortofloric. 10, 40-44.
- Canavari, M., Castellini, A., Bailetti, L., 2013. Pera ANGELYS®: analisi di marketing e valutazioni sensoriali. In: IV Convegno della Società Italiana di Scienze Sensoriali, Trieste, Novembre 22-23, 2012. Cues Cooperativa Universitaria Editrice Studi, Fisciano, Italy, pp. 125-130.
- Caputo, V., Canavari, M., Nayga, R.M., 2012. Role of sensory evaluation of pears in consumer choice: evidence from a field choice experiment in Italy (Poster). In: 2012 AAEA Annual Meeting, Seattle, WA, August 12–14, 2012. Retrieved from: <a href="http://purl.umn.edu/124926">http://purl.umn.edu/124926</a>>.
- Combris, P., Bazoche, P., Giraud-Héraud, E., Issanchou, S., 2009. Food choices: what do we learn from combining sensory and economic experiments? Food Qual. Prefer. 20 (8), 550-557. Available from: http://dx.doi.org/10.1016/j.foodqual.2009.05.003.
- Edwards, M.R., Shultz II, C.J., 2005. Reframing agribusiness: moving from farm to market centric. J. Agribus. 23 (1), 57–73.
- Gardner, B.B., Levy, S.J., 1955. The product and the brand. Harv. Bus. Rev. March-April, 33-39, Retrieved from: <a href="http://search.ebsco-">http://search.ebsco-</a> host.com/login.aspx?direct = true&AuthType = ip,shib&db = buh&AN = 6774387&site = ehost-live >.
- Gellynck, X., Banterle, A., Kühne, B., Carraresi, L., Stranieri, S., 2012. Market orientation and marketing management of traditional food producers in the EU. Br. Food J. 114 (4), 481-499. Available from: http://dx.doi.org/10.1108/00070701211219513.
- ISO, 1988. Sensory Analysis: General Guidance for the Design of Test Rooms. ISO 8598:1988. ISO, Geneva.
- ISO, 1993. Sensory Analysis: General Guidance for Selection, Training and Monitoring of Assessors. ISO, Geneva.
- ISO, 1994. Sensory Analysis: General Guidance for Selection, Training and Monitoring of Assessors. ISO 8586-2:1994. ISO, Geneva.
- Kohli, A.K., Jaworski, B.J., 1990. Market orientation: the construct, research propositions, and managerial implications. J. Mark. 54 (2), 1-19.
- Le Lézec, M., Belouin, A., Guérif, P., Lespinasse, Y., 2002. "Angelys", a new winter pear to replace "Passe Crassane". Acta Hortic. (ISHS) 596, 265-269.

- Linnemann, A.R., Benner, M., Verkerk, R., van Boekel, M.A.J.S., 2006. Consumer-driven food product development. Trends Food Sci. Technol. 17 (4), 184–190. Available from: http://dx.doi.org/10.1016/j.tifs.2005.11.015.
- Mueller, S., Szolnoki, G., 2010. The relative influence of packaging, labelling, branding and sensory attributes on liking and purchase intent: consumers differ in their responsiveness. Food Qual. Prefer. 21 (7), 774–783. Available from: http://dx.doi.org/10.1016/j.foodqual.2010.07.011.
- Rombach, M., 2012. Exploration of German Consumers Attitude and Perception of the New Pear Club Variety "Angelys". Alma Mater Studiorum-Università di Bologna/Technische Universität München/Universität für Bodenkultur Wien, Bologna, Munich, Vienna.
- Rombach, M., Pignatti, E., Canavari, M., 2015. Fokusgruppen mit deutschen Verbrauchern zur Klubbirne Angelys. In: Dirksmeyer, W., Theuvsen, L., Kayser, M. (Eds.), Aktuelle Forschung in der Gartenbauökonomie. Tagungsband zum 1. Symposium für Ökonomie im Gartenbau am 27. November 2013 in der Paulinerkirche Göttingen. Thünen Report 22. Johann Heinrich von Thünen-Institut, Braunschweig, Germany, pp. 45–58. Available from: http://dx.doi.org/10.3220/REP\_22\_2015.
- Rombach, M., Pignatti, E., Canavari, M., 2016. Branded pears? An exploration of German consumers' perceptions of the new club cultivar "Angelys" (R). In: Golding, J.B., Heyes, J.A., Toivonen, P.M.A., Avanzato, D., Erner, Y., Harker, R. (Eds.), Acta Horticulturae—XXIX International Horticultural Congress: IHC2014, Brisbane (Australia), August 17–22, 2014, vol. 1120. ISHS, Leuven, Belgium, pp. 447–454. Available from: http://dx.doi.org/10.17660/ActaHortic.2016.1120.69.
- Stone, H., Sidel, J., Oliver, S., Woolsey, A., Singleton, R.C., 1974. Sensory evaluation by quantitative descriptive analysis. Food Technol. 28, 24–34.
- Trienekens, J.H., Wognum, P.M., Beulens, A.J.M., van der Vorst, J.G.A. J., 2012. Transparency in complex dynamic food supply chains. Adv. Eng. Inf. 26 (1), 55–65. Available from: http://dx.doi.org/10.1016/j.aei.2011.07.007.
- Young, L.M., Hobbs, J.E., 2002. Vertical linkages in agri-food supply chains: changing roles for producers, commodity groups, and government policy. Rev. Agric. Econ. 24 (2), 428–441.

#### **FURTHER READING**

Hensher, D.A., Rose, J.M., Greene, W.H., 2015. Applied Choice Analysis: A Primer, second ed. Cambridge University Press, Cambridge, UK.

Train, K.E., 2009. Discrete Choice Methods With Simulation, second ed. Cambridge University Press, Cambridge, UK, Retrieved from: <a href="http://elsa.berkeley.edu/books/choice2.html">http://elsa.berkeley.edu/books/choice2.html</a>.

# **METHODOLOGICAL APPENDIX**

# **Choice Experiment**

Choice experiment (also known Choice as Discrete Experiment or Choice Based Conjoint Analysis) is a method for the analysis of individual preferences based on choices. It derives from the economic principle that consumers make choices based on product characteristics, choosing the product whose characteristics provide them with the highest utility. Rather than asking individuals to rate product characteristics directly, it allows to infer preferences from the choice made among goods with different characteristics; this makes the method closer to the actual purchasing behavior of consumers. It uses data collected through questionnaires containing an "experiment" section in which respondents are presented with a choice situation (task) with two or more alternatives (product profiles) and they must choose one of them. Each respondent must perform a series of choice tasks with different choice situations (choice set). It is an experiment in the sense that the alternatives and the choice tasks are designed in order to allow the identification of the effects of various product characteristics (attributes and levels) based on the responses. The method can use hypothetical choices (stated preferences) or real choices (revealed preferences), in the second case respondents may be required to buy one of the chosen product profiles. Choices are analyzed using the statistical tools developed for the analysis of qualitative choice, also known as Choice Models.