

Package Label Redesign Spices Case-Study

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Abstract

The requirements towards new packaging and consumer expectations with food packages are systematically growing. Packaging is an essential element in modern trade in goods, which guarantees preserving the quality of food products, but simultaneously is an influential communicator in a dynamic market environment where consumers often only make their final purchasing decision when they are inside a retail setting. A Case-Based Learning (CBL) method was applied with students of Design and Marketing of New Products from the Marketing undergraduate degree of Leiria Polytechnic to develop the new package label for a company that operated in Food & Beverage (F&B) industry and needed to change its spice package label. The students achieved the goals proposed by the company and they reported to have had a useful experience, based on a real case study developed in the academia. However, no formal quality evaluation was performed by the professors, a recommendation for future scholars aiming to apply the CBL method in their classes.

Keywords: Packaging; Marketing communication; Redesign; Label; Case-based learning

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1. Introduction

Packaging plays a key role by protecting packed products against external conditions, affecting the quality and health safety of food products, making transportation, storage, and dispensing of products easier (Barska, 2017). It is also an essential element in marketing communication in relation to the customer. A package must communicate the content of the product and how it can be used, together with other required information. Proper labelling should include information about the content and other premium data (Wyrwa, 2012).

The choice of materials is an important issue for engineers and designers, as they need to balance the main functions of the packages (functional and communicational). Also, consumers have been increasingly more conscious regarding environmental issues and, after unpacking, waste is generated with a significant impact on the environment (Kozik, 2020). Being green and acting in an environmentally friendly way has become an inevitability and manufacturers have been pressured to adapt and they started to develop new packaging solutions (Culiberg & Elgaaied-Gambier, 2015). Packaging and innovation go hand in hand, as new packaging may support differentiation. Sometimes a moderate change in the design of the packaging may be a very good solution to draw attention and lead to a favourable perception of a product (Schoormans and Robben, 1997).

To test the impact of the redesign of a package in the context of a classroom and allow students to develop specific competencies and learn with a hands-on approach, we approached a specific company, called 100% Titular. The company was part of Food & Beverage (F&B) industry and needed to change its spice package label. Company representatives provided part of the requirements for the case and the professors added more requirements based on their academic knowledge.

We involved the students enrolled in the course of Design and Marketing of New Products, part of the Bachelor's in Marketing of Leiria Polytechnique and applied a Case-Based Learning (CBL) method to develop the new package label. CBL is a methodology that engages students in discussion of specific situations, typically real-world examples. It is learner-centred and involves intense interaction between the participants (Queen's University Centre for Teaching and Learning, 2023).

This paper is organized as follows. After a literature review focused on marketing communication, marketing strategy and packaging, we present the methodology used to implement CBL. Next, we present the results obtained, we discuss the results and end with conclusions.

2. Literature Review

2.1. Marketing Communication and Packaging

In today's competitive food retailing environment, consumers are exposed to thousands of messages on packages and merchandising (Nancarrow, Wright & Brace, 1998). Therefore, at the Point-of-Purchase (PoP), products available on the shop shelves compete to attract favourable attention and be selected by the clients (Tonder & Mulder, 2015).

Packaging is a powerful vehicle at the PoP and an important tool to communicate persuasive messages. For that reason, it is sometimes referred to as the 'silent salesman' that makes the final sales pitch, seals the commitment, and gets itself placed in the shopping trolley (Rettie and Brewer, 2000, Olaleye, 2017). Or, as Court, Elzinga, Mulder and Vetvik (2009) mention, the package has an important influence in a dynamic market environment where consumers often make their final purchasing decision when they are in front of the shelf.

Ksenia (2013) and Naidoo (2003) reinforce this idea and mention that approximately 70% of the purchasing decisions are made at the PoP, in a context of increased self-service at the point-of-sale. Boon and colleagues (2010) also refer that Front-of-Package (FoP) labels improve consumer understanding and perceptions and argues that concise nutritional information on a food product may influence purchase intentions (Khandpur et al, 2018). So, the role of packaging as a communication tool has increasingly become more important (Kotler & Keller, 2015).

Luca (2006) states in her study that packaging presents elements with essentially informative and communicative power as well: words, images, colours, shapes, among others, which communicate to the consumer in various ways and places, before and after the shopping experience (see Table 1). Underwood and Klein (2002) argue that the package picture has a strong and positive effect on attitudes toward the package itself.

In the specific case of food, the packaging must be in line with food safety requirements to avoid serious health consequences for consumers. Food packaging makes use of a variety of substances, including dyes for printing colourful labels, and glues and adhesives for keeping packaging closed. Some materials e.g. plastic, polyethylene, or styrofoam, can become toxic when heated, irradiated or during the deterioration process or transfer unsafe non-food substances into the food. To protect consumers, relevant authorities certify all food packaging materials after submitting them to rigorous testing protocols (Gupta & Dudeja, 2016).

Table 1 – Informational features of packaging

Type of Elements	Main Characteristics	Attributes: First level	Attributes: Second level
Package	Shape	Size Manageability Storability Cleanability Reusability Dimensional Impression Service Portions	n.a.
	Materials	Durability Recyclability Pleasantness	
Labelling	Textual Elements	Names	Company Name Product Line Name of Market Sector Product Name Name of Variant
		Information	Instruction and Suggested Uses Ingredients Nutritional Information Preview of Contents History/Product Description Service Information
		Recall and Repetition	New Products Advertising Slogans Testimonials Line Extension Special Offers
		Information Required by Law	Alpha-Numeric Codes Production and Expiration Dates Weights and Measures Plant and Producer Specific Sectorial Information
	Iconic Elements	Lettering	Logos Functional Text Persuasive Text
		Background	Unvarying Colour Decorative Pattern Transparent
Images		Product Representations Secondary Images Informative and Graphic Images	

Source: Adapted from Luca (2006)

2.2. Packaging and Marketing Strategy

In marketing, the packaging functions can be grouped into two categories: 1) logistical, operative, or technical; and 2) marketing and communication. Packaging design needs to consider both categories.

The first packaging function protects the product during its movement through distribution channels, from production to disposal and the conservation and safe product (Mohamed, et al, 2021). Innovation has played a role in the design of many new packages that are re-sealable, tamperproof, and more convenient to use e.g., for take-away food. These improvements led to packages that are easy to hold, easy to open or more convenient for storage at home (Rundh, 2012).

For communication purposes, packaging is a facilitator of brand and product recognition, and it needs to attract and keep the customer's attention (Schoormans and Robben, 1997). It is a tool to differentiate products from others (Estiri et al., 2010) and it works better when improving both the aesthetic (i.e., shape and size, material, colour, text and graphics) and the functional

components of a package (Rundh, 2012).

Additionally, sustainability requirements need to be considered in order to meet consumers' green consciousness. Packages made of environmentally friendly materials, that are space saving (which subsequently reduces transporting costs and carbon emissions), or that include eco-conscious information may be perceived as more sustainable (Lee et al., 2020) and valued by consumers. To develop sustainable packaging, eight aspects should be considered (Sustainable Packaging Coalition, 2011):

- Being beneficial, safe & healthy for individuals and communities throughout its life cycle;
- Meeting market criteria for performance and cost;
- Being sourced, manufactured, transported, and recycled using renewable energy;
- Optimizing the use of renewable or recycled source materials;
- Being manufactured using clean production technologies and best practices;
- Being made from materials healthy throughout the life cycle;
- Being physically designed to optimize materials and energy; and finally,
- Being effectively recovered and utilized in biological and/or industrial closed loop cycles.

Aware of the fact that the package design has become increasingly important to a brand's success (Shimp and Andrews (2014), manufacturers have been pressured to adapt the industry. Packaging made of conventional materials, e.g. plastics, paper, glass, and metal, started to be used in novel ways to meet the sustainability requirements (Culiberg & Elgaaid-Gambier, 2015) after a process of life cycle analysis and improvement of the way they are produced, used or disposed (Kozik, 2020, Sustainable Packaging Coalition (2019)

Manufacturers may also go beyond the traditional packaging functions and adopt a multifaceted approach over packaging design, incorporating e.g., innovative biodegradable packaging materials and renewable raw materials, while focusing on the need to differentiate on the market and duly communicate with customers.

3. Methodology

We used the CBL methodology. This approach is learner-centred and involves intense interaction between participants as they build their knowledge and work together in groups to examine the case. The instructor plays the role of a facilitator, while the students collaboratively analyse, address problems and solve questions that have more than one correct answer (Queen's University Centre for Teaching and Learning, 2023).

The case was developed in the context of the course of Design and Marketing of New Products, part of the Bachelor's in Marketing of Leiria Polytechnique and supervised by two professors. The main goal was to solve a specific case challenge related to the F&B market, presented by the company 100% Titular.

The company had its headquarters in Aruil, Portugal, was created in 2008 and operated in F&B industry, with a focus on trading food products. The main clients are big retailers, e.g., Auchan, Aldi, El Corte Inglés, E.Leclerc, Spar, Suporcel, Pomar da Rosa, Mini Preço and Pingo Doce.

The company wanted to redesign their spices packages labels (see Figure 1) and provided students and professors the following instructions:

- Change the design of spice package label and align with the new package of cherry tomato (see Figure 2).
- The label had to respect specific dimensions (see Figure 3).
- The label should communicate firstly the brand.
- The label should communicate secondly the product (name and image).
- All line of spices should be consistent in terms of packages label.

The professors added two new instructions:

- Use sustainable materials.
- Design the exhibitor to show the products in the point of sale.

4. Results

The students worked for two months (March and April of 2022) to design a new package label (Figure 4), according to the requirements of the client and the sustainability issues. The brand identity was guaranteed, and the logo emphasised it. The white space was covered, and other changes that were made the package more attractive to the consumer.

According to the students, the inspiration for the new label, with a classic design came from the "old times, when the seeds of the plants were saved in paper to the next harvest". In terms of sustainability, the material used is kraft instead of plastic.

About the colours, the CMYK system was chosen. Each label has five colours: light green for brand logo, dark green for slogan or tagline, black for name of the product or other text, colour spot – space for graphics and texts about the product and dark brown for the sketches in the wallpaper (Figure 5).



Figure 1 – Old package
Source: 100% Titular



Figure 2 – Actual package for cherry tomato with new communication strategy
Source: 100% Titular

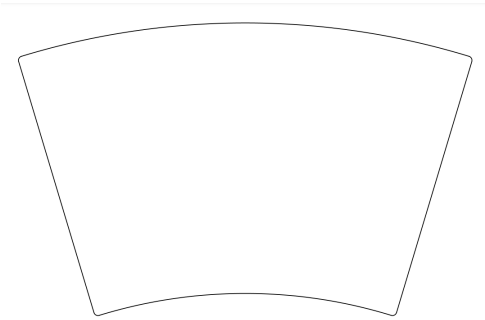


Figure 3 – Cherry tomato cutting shape
Source: 100% Titular



Figure 4 – New package label cutting shape
Source: Authors elaboration



Figure 5 – Package design: before and after
Source: Authors elaboration

The graphics (texts and images) show a classical and craftsmanship visual. The type of letter Nexa Rust Sans Black was selected to write the name of the product in order to increase readability at a bigger distance. Each spice was associated to a specific colour to identify the product, ensuring the design was consistent (Figure 6).

The cap was prepared to be produced in paper. Its design was aligned with the package label in terms of colours, graphics, and texts, so as to better identify the product (Figure 7).

The exhibitor created for the retail shop proposed is illustrated in Figure 8. The simulation of the display and the communication was innovative and contrasted with the classic inspiration of the new packaging for the product.



Figure 6 – Line of new proposed labels for spices packages

Source: Authors elaboration



Figure 7 – Line of new proposed caps for spices packages

Source: Authors elaboration

Students created a new package considering the several requirements imposed by the client and the professors. They agreed that the brand needed a new package and image.

The shape of the new package was aligned with the tomato cherry package, respecting the first requirement posed by the company. The second requirement was also respected: the cutting shape was in line with what the company demanded.

For the third and fourth requirements and consistent with the choice of materials, the new package proposed, was aligned with the communication required. With textual elements and using the colour spot, the brand name was emphasized, and the name of the product with the graphics came second. The new package followed the orientations of Khandpur and colleagues (2018) and included a label with a good understanding and concise information for the consumer.

The visual path of a package label promotes the company's slogan "100% do sabor, sempre" – "100% flavour, always". Next, a lower-sized black spot with the text stands out "agora numa embalagem com menos plástico" – "now, with a packaging with less plastic". The latter communicates sustainability measures as referred by the Sustainable Packaging Coalition (2011). The last requirement of the client was also fulfilled. All packages' labels of spices and condiments were consistent with the marketing communication as well as the caps. This uniformization considered the colours, shapes, graphics, and layouts, all key informative and communication elements as stated by Luca (2006).



Figure 8 – Exhibitor design for the retail shop

Source: Authors elaboration

5. Final Considerations

Packaging is an essential element in marketing communication, it facilitates brand and product recognition and should be developed with sustainability concerns. The shape (triangular cutting shape) and material (kraft) of the new packaging address Sustainable Packaging Coalition (2011)'s concerns. However, the iconic elements of the package label (Luca, 2006) could be improved in terms of background attributes (colour and pattern). Each package proposal has five colours, yet it could be reduced to four or even three colours in total, as the more colours a product has, the less sustainable it is.

The new proposal has the same package shape and size as the package of cherry tomato, optimising both the production and logistics of the company. Also, the new proposed package can protect the packed products against external conditions as required.

The new line of proposed labels for the spice was influenced in both shape and dimensions of the cherry tomato package. The first level label communicates the brand, and the second level label the product name. The different spices have different colours, to identify and distinguish the product and group them into a product line. Furthermore, the exhibitor created for the retail shop should be rethought, as its decoration (pattern background) could overshadow the communication of the packaging label itself to the consumer.

So, from the perspective of the requirements presented by the company and by the professors, the new packaging proposal fulfils the initial instructions.

From the perspective of the teaching and learning innovation, the usage of CBL methodology proved very effective to achieve the initial goals and respond to the requirements from the company and the professors. Student performance was assessed based on their participation in discussions, presentations, research and work results and students achieved the learning objectives of the course of Design and Marketing of New Products, as well as developed technical competencies and soft-skills. The students provided informal feedback to their professors, indicating they truly appreciated this challenge and suggested that the CBL method should continue to be applied in the incoming years.

We note though that the professors did not make any formal quality evaluation assessment, which is a limitation of our study. Several authors recommend evaluating CBL. For instance, Schmidt and Moust (1995) and Das, Das, Rai and Kumar (2021) used a summative questionnaire in their research, with closed questions. Also, Saur-Amaral, Aragonez and Filipe (2023) performed a quality evaluation assessment at the end of the project they implemented in two higher education courses, combining a questionnaire with closed questions and an open essay reflection. This allowed capturing different perspectives from students with different personalities and learning experiences, in a structured way.

We recommend future scholars to duly plan to evaluate the active teaching method of CBL at the end of their course. Quality evaluation is key to measure and discuss the student's perception between the two different teaching methods (traditional and active), the development of concepts based on CBL, to understand the content acquirement and how students apply the knowledge to the case study and to other future scenarios (Das et al., 2021), and it may serve as reference to compare CBL application in different years or with different groups of students.

To sum up, this research allowed a better understanding of the relationship between the industry and academy, and how knowledge and experience can be put together in a win-win situation: the company benefits by receiving different innovative ideas for new packaging labels, while the students understand how the real world, the market, works.

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