# CONTRIBUTIONS TO EVALUATE DESIGN INVESTMENT IN PORTUGUESE ORANGE FROM SILVES

Filipa Pias<sup>1</sup>

## **ABSTRACT**

Food reminds us every day that we are a part of nature and with our daily choices it is we who preserve or not biodiversity and species. It is we who promote or not the production of more health and fresh food. In an increasingly informed society about the benefits of having a balanced diet, meals started to be seen as tasting flavours and aromas, a moment of well-being, where the origin, production and method of preparation of agricultural products play a leading role. Because the market has changed, it is no longer anonymous it became personalized and essentially motivated by what you can enjoy, which implies a willingness to participate and build its own experience.

In general, the companies believe that design collaboration is an advantage but if they do not have means of measuring design's cost/benefit, it will not be easy to understand design as an investment that brings value to business. The purpose of this research is to draw the attention for the importance of design management, by evaluating the return of design's investment in the Portuguese agro-food industry and by developing a model that allows them to assess the return on investment in design.

Keywords: Agro-food, Design Value, Investment, Return.

JEL Classification: Q13.

## 1. INTRODUCTION

Food reminds us every day that we are a part of nature and with our daily choices it is we who preserve or not biodiversity and species. It is we who promote or not the production of more health and fresh food. In an increasingly informed society about the benefits of having a balanced diet, meals started to be seen as tasting flavours and aromas, a moment of well-being, where the origin and production and method of preparation of agricultural products play a leading role. Because the market has changed, it is no longer anonymous it became personalized and essentially motivated by what you can enjoy, which implies a willingness to participate and build its own experience.

The Mediterranean diet global economic value is esteemed to represent 1.9% of the national GDP and the endogenous assets are esteemed to account for about 8% of national exports and above 12% of employment (Dieta Mediterrânica, 2014, p. 53). Despite being a small farmer, Portugal has natural conditions (climate and soils) to allow a competitive offer and a bid of excellence for agricultural products, namely wine, olive oil, milk, fruit, vegetables and forest products. The variety of Portuguese products found in the Mediterranean diet has the potential to meet the demand observed for local and national products which origin is a synonymous of quality, reliability and environment friend.

Filipa Pias, CIAUD, Faculdade de Arquitetura, Universidade de Lisboa, Lisboa, Portugal. (filipa.pias@gmail.com)

However, to trust you need to know. To know that behind these products there is a history, a tradition, a way of being. There are people in love with what they do, committed to improving the quality and food safety of domestic agricultural products. Who most often choose to produce native species which make them the guardians of the biodiversity of a region, biodiversity that shapes the landscape and offers the resources required to differentiate and generate wealth for the local economy. Because more than a culinary program, Mediterranean diet is a way of life, a way of living and sharing the table, which is reflected in the production, preparation and tasting of the food (Petrini, 2012, p.15).

Design is a management process that starts at a close observation to develop solutions with and for people, taking into account technical, environmental and economic constraints associated. Through design we can develop partnerships, complement the offering, create educational activities to children and young people about the health benefits in eating the products of the season and the importance of the fruit's life cycle to the region's biodiversity, promote the street markets or markets for farmers, with secure access and mobility in order to provide a warm and participating moment, contributing to improve the quality of life in the community and to boost the local economy. Because nowadays a sustainable company, even an agricultural one, means less and less a product's offering and increasingly an immaterial offering that associates experiences, quality and wellness.

In general, the companies believe that design collaboration is an advantage but if they do not have means of measuring design's cost/benefit, it will not be easy to understand design as an investment that brings value to business.

#### 2. METHODOLOGY

We started this study with a literature review of "Design value", with special focus on Brigitte Borja de Mozota and Xenia Viladas work, by the Design Council that has been conducting different studies about design value, namely the report elaborated in cooperation with the University of Cambridge Company spending on design: exploratory survey of UK firms 2008, by Finbarr Livesey and James Moultrie, and implementing SMEs² supporting programs, such as the Designing Demand and Design Leadership Programme. We would also like to highlight DME report - Design Management Europe by Gert L. Kootstra, the work developed by DBA Design Business Association and the recent project coordinated by Antti Pitkänen the Design Roi - measurable design. Also the different studies and programs elaborated or supported by the European Union in order to encourage the companies to invest in design, specifically the publications Design as a driver of user-centred innovation; Design for Growth & Prosperity and the European Design Innovation Initiative program - Measuring Design Value and the books of Robert Verganti, Roger Martin and John Thackara.

To work on this case study we propose to apply the Direct Observation method with mechanical support and Survey for data collection. With the former we want the data collection to take place on the company's premises. The visit will include a brief presentation of the research and the answer of a short survey, which aims to obtain information about the company's strategy, financial data - to apply to the financial indicators: ROI, ROA, payback and RODI. To characterize the company's use of design we apply *The Design Ladder*, that consists in 4 steps: *Non-design, Design as form-giving, Design as process* and *Design as strategy*. And to characterize the vehicles used by companies to communicate their identity to the market we use the Visibility Vectors develop by Xenia Viladas: *Products, Communication* and *The Spaces* (Viladas, 2010, p.39).

<sup>&</sup>lt;sup>2</sup> Small and medium-sized enterprises.

## 3. ANALYSIS

Up to now about 20 SMEs were visited, the vast majority located in *Beira* regions and in the regions of *Oeste*, *Ribatejo*, *Alentejo* and *Porto*. These companies produce olive oil, fruit, wine, rice, cheese and chocolate.

The data collected so far indicate that most of these companies do not have Balance Sheet and Income Statement – nor financial data which would allow to use certain financial ratios to evaluate the return on investment in design. They usually invest in design, but as a technical skill, because despite they are interested on design skills, they don't know how it can add value to the business. Therefore, most of the SMEs visited are at step 1 and 2 of *The Design Ladder* this means that usually these companies do not use design or just use it from time to time design (*Non-design*), or use regularly design but in a perspective of a project conclusion (*Design as form-giving*).

#### 4. MODEL

From the information obtained and based on our literature review and the management tool Balanced Scorecard, we built a model for investment evaluation in design, whose indicators depend on the objectives and targets to be achieved, and on the means available to evaluate them, so that they actually represent the purposes and the company's ability to accomplish and evaluate them. For as Deborah Mrazek ([sd], p.7) or Xenia Viladas (2010, p.141) stated when describing that even the most innovative companies, which usually are those that invest in design, have not accurate systems but define indicators according to the objectives and their capabilities.

The model takes as its starting point the definition of a purpose that comes from the strategy followed by the objectives and targets to be achieved. Although the model is composed by several phases, the development process is not sequential, because all stages are related and will be adapted to achieve the objectives. A relationship of cause and effect that allows you to monitor the process and fine-tune or fix the path outlined in one or more stages whenever necessary (Figure 1).

The model consists of two categories of assessment, one with strategic guidelines and the other with performance indicators, both categories are defined according to the needs, capabilities and means that the company has to evaluate. The first category is dedicated to the strategic guidelines and includes the phases of Project, Objectives, Targets and Initiatives.

The Project is a starting point for achieving certain goals outlined by the strategy. Objectives should focus on the creation of value based on the three pillars of sustainable development: social welfare, environmental friendliness and economic prosperity. Targets translate into value what you want to achieve at a pre-defined period of time. The Initiatives are the operationalization of the Project to achieve the Targets, namely the create of a program of activities where design is present through: Products that comprise the offer, Communication that comprises the corporate identity and Spaces where the company's activities are developed. In the second category the performance indicators include the Qualitative and Quantitative Metrics to evaluate the process and the Outcomes.

Figure 1. Model to Evaluate the Investment in Design

#### STRATEGY

01. PROJECT
The Project is a starting point for achieving the goals outlined by the strategy
Suggestions:
Identify a need
Create a new product Reduce fixed costs
Add value to...

O2. OBJECTIVES Description of what is required with the Project, based on the pillars of sustainable development: Social, Environment and Economics

O3. TARGETS
 Definition of the results to be achieved for a period of time Social Environment Economics

**\*** 

# INDICATORS 05. QUALITATIVES

Metrics selection to evaluate the results

**↓** ↑

06. QUANTITATIVES Metrics selection to evaluate the results

OUTCOMES

O4. INITIATIVES

Activities to undertake to achieve the

Objetives. Design is

Objetives. Design is present at: Product, Communication and Spaces

Product: develop or adapt a product or service according to an opportunity or a perceived need

Communication: corporate Identity and

materials creation Spaces: areas where there is business activity

Source: Own elaboration

# 5. CASE STUDY - SILVES, CAPITAL DA LARANJA

Silves town is applying the design evaluation model in investment in the new brand - "Silves, capital da laranja". Its goal is to give notoriety to orange and producers in that region by associating to the name of Silves, recognized for its tangible and intangible heritage, and to the quality and accuracy with which orange is produced.

The collaboration began with the presentation of the model and a joint work to think and define all parameters that make up the model starting at the identification of Objectives focusing in the creation of value sustainable development: social welfare, environmental friendliness and economic prosperity (Figure 2).

## 6. CONCLUSIONS

Generally, the companies usually invest in design, but as a technical skill, because despite they are interested on design skills, they don't know how it can add value to the business. Design is a management process starts at a close observation to develop solutions with and for people, taking into account technical, environmental and economic constraints associated. Through design we can develop a narrative that shows that behind these products there is a history, a tradition, a way of being.

The model that we propose contextualizes the intervention of the design which can be of social, environmental and economic range and identifies its collaboration: product, communication and space. We believe that it can help the companies, and Silves town to evaluate the investment in design in the new brand, as well as to turn the collaboration in the development more profitable. It provides an overview that helps to focus on the essential and to monitor the development process.

Table 1. Application the Model to Evaluate the Investment in Design in the New Brand – Silves, Capital of the Orange

	STRATEGY			
01. PROJECT				
Silves, capital of the orange				
02. OBJECTIVES - Sustainable	development			
SOCIAL	OCIAL ENVIRONMENT			
To help to improve the eating habits of children and youth.	Quality and sustainability of the used resources.	To add value to the brand - Silves, capital of the orange		
To have a more informed society about the benefits of consuming orange	Add value to the brand - Silves, capital of the orange	To add value and attractivenes to the territory		
To invite the Silves community to be ambassadors of this initiative				
03. TARGETS				
SOCIAL	ENVIRONMENT	ECONOMICS		
To improve the consumer's satisfaction	To reduce CO2 emission	Public recognition of the bran		
To improve the producer and retail satisfaction	To preserve biodiversity	To increase the product's distribution		
<b>04.</b> INITIATIVES - Design is present at				
PRODUCT	COMMUNICATION	SPACES		
To promote partnerships with restaurants and hotels to promote the brand	rants and hotels to pro- importance for the sustainabil-			
To Participate in local activities such as food festivals	Packaging with sustainability information used	Camper van or kiosks to sale Silves oranges products: jam, fruit, juice		
	To support a social cause and or an action for the environment	Partner of research's meetings about health, environment an agriculture		
		Improve farms local market		

	INDICATORS					
05. METRICS QUALITATIVE		06.		06. METRICS QUANTITATIVE		
	Consumer, retail and producer feedback survey			RODI		
	Number of followers			ROA		
	Mentions and "likes" in social media			Increase sales		
	Accession of producers			Market share		
	Kick-off event			Average stock		
	Brand value			Distribution in new locations		
	Patents and awards			Net income		
	Reduction of CO2 emissions					
	Biodiversity					
	Add value to the territory					
	OUTCOMES					

Source: Own elaboration

#### REFERENCES

Beiras descobrem o poder da maçã e das marcas DOP (2014). Acceded in 28<sup>th</sup> of June 2014, on the Web site of: Conferências "Empreendedorismo Agrícola - Cultivar o Futuro": http://cultivarofuturo. globalnoticias. pt/2014/05/03/beiras-descobrem-o-poder-da-maca-e-das-marcas-dop/.

Borja de Mozota, B. (2006). *The Four Powers of Design: A Value Model in Design Management*. DMI – Design Management Review. 17(2).

Certification of Protected Designation of Origin - PDO. Acceded in 10<sup>th</sup> of June 2014, on the Web site of: http://ec.europa.eu/agriculture/quality/door/list.html.

DBA Design Business Association, Design Effectiveness Awards (2013). Acceded in 2<sup>th</sup> of November 2011, on the Web site of: DBA Design Business Association: http://www.effectivedesign.org.uk.

*Design as a driver of user-centred innovation* (2009). Acceded in 17<sup>th</sup> of October 2011, on the Web site of: Commission of the European Communities: http://ec.europa.eu/index en.htm.

Design delivers for business, Design Leadership Programme (2012). Acceded in 10<sup>th</sup> of September 2013, on the Web site of: Design Council: http://www.designcouncil.org.uk/.

Design for Growth & Prosperity - Report and Recommendations of the European Design Leadership Board (2012). European Commission. ISBN: 978-92-79-25946-3

Designing Demand: Make design deliver lasting sucess for your business - Solutions for business funded by government. Design Council 2010.

Dieta Mediterrânica - Valor Económico e Perspetivas de Sustentabilidade (2014). Conferência "O valor económico e sustentável da dieta mediterrânica". Espírito Santo Research. BES Arte & Finança, Lisboa.

Kaplan, R.S. and Norton, D.P. (1996). *Linking the Balanced Scorecard to Strategy*. California Management Review. 39(1).

- Kootstra, G.L. (2009). The incorporation of design management in today's business practices. An analysis of design management practices in Europe. Acceded in 19th of October 2011, on the Web site of: Design Management Institute: http://www.beda.org/index.php/resources/item/121-design-management
- Livesey, F. and Moultrie, J. (2008). *Company Spending on Design: Exploratory survey of UK firms* 2008. University of Cambridge. ISBN: 987-1-902846-73-5.
- Martin, R. (2009). The Design of Business. Harvard Business Review Press. ISBN: 978-1-4221-7780-8.
- Mrazek, D., Lucente, S., Sato, S., Menter, A., Wai, C., Wakid, K. and Hartley, P. (2011). The holy grail of design measurement. *Design Management Review*. 22(2): 6-16.
- Petrini, C., Bogliotti, C., Rava, R. and Scaffidi, C. (2012). *The central role of food*. Congress Paper. Acceded in 1<sup>th</sup> of May 2014, on the Web site of: Slow Food: http://www.slowfood.com/filemanager/official\_docs/SFCONGRESS2012\_Central\_role\_of\_food.pdf.
- Pitkänen, A. (2012). Design Roi Measurable Design. Arts Promotion Centre. Finland.
- Plunkett Foundation (2012). *Making Local Food Work*. Acceded in 1<sup>th</sup> of May 2014, on the Web site of: Plunkett Foundation: https://www.plunkett.co.uk/growing-projects.
- Thackara, J. (2006). *In the Bubble, Designing in a complex world*, The MIT Press. ISBN: 978-0-262-70115-0.
- The Design Ladder, Danish Design Centre (2001). Acceded in 10<sup>th</sup> of June 2015, on the Web site of: Danish Design Award: http://ddc.dk/wp-content/uploads/2015/05/Design-Ladder\_en.pdf.
- The Designing Demand Review (2008). Acceded in 1th of June 2011, on the Web site of: Design Council. http://www.designcouncil.org.uk/sites/default/files/asset/document/designing-demand-review .pdf
- The Value of Design Factfinder Report (2007). Acceded in 1th of June 2011, on the Web site of: Design Council. https://www.designcouncil.org.uk/sites/default/files/asset/document/TheValueOfDesign Factfinder\_Design\_Council.pdf.
- Verganti, R. (2009). *Design-driven innovation*. Harvard Business Review Press. ISBN: 978-1-4221-2242-6.
- Viladas, X. (2008). Managing Design for Profits. Indexbook, 2010. ISBN: 978-84-92643-39-4.