

**UNIVERSITAT  
JAUME·I**

**CREATIVITY IN FIRMS AND CREATIVE  
INDUSTRIES - CASE-STUDY:  
PROFILTEK SPAIN**



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## Table of content

INTRODUCTION .....	3
Chapter 1. Theoretical framework.....	5
1.1. What is Creativity .....	5
1.1.1. Factors which influence creativity and characteristics.....	7
1.1.2. Quality of Individuals that influence creativity .....	7
1.1.3. <i>Qualities</i> of Environment that influence creativity.....	9
1.2. What is Innovation .....	10
1.2.1. Typologies of Innovation .....	12
1.2.2. The Diffusion of Innovation. Stages.....	13
1.2.3. What is understood by an Innovative Firm? .....	15
1.3. Relationship between Creativity and Innovation.....	16
Chapter 2. Empirical Work. Case-study analysis .....	18
2.1. Description of the case-study: PROFILTEK SPAIN .....	18
2.1.1. Industrial environment of company: “Business of shower cubicle” .....	20
2.1.2. Profiltek Spain location: Quartell.....	21
2.2. Beginnings, Philosophy, Structure and Product/Market of Profiltek Spain .....	21
2.2.1. How did the idea start? .....	22
2.2.2. What is Profiltek Spain. Business Philosophy.....	24
2.2.3. Target .....	26
2.2.4. Products.....	27
2.3. Description of the investigation goals and results obtained .....	30
2.3.1. Results about Origin of Ideas .....	32
2.3.2. Results about Products of the firm.....	33
2.3.3. Results about Creative Process.....	36
2.3.4. Results about Environment.....	39
2.3.5. Results about Human Resources .....	42
2.3.6. Results about Marketing.....	46
2.3.7. Results about Phases towards Innovation .....	48
Chapter 3. Conclusions .....	50
3.1. Summary results and recommendations .....	50
Bibliographic references .....	56
Webgraphy .....	59
Annexes .....	61
<i>Annex 1: Interview 1 - Francisco Montolio Nebot, Profiltek Spain</i> .....	61

<i>Annex 2: Interview 2 - Santiago Alfaro, Profiltek Spain</i> .....	62
<i>Annex 3: Individual Questionnaire - Profiltek Spain</i> .....	64
<i>Annex 4: IMAGIK Technology - Profiltek Spain</i> .....	66
<i>Annex 5: TEKNOCLEAN - Profiltek Spain</i> .....	69
<i>Annex 6: ECLIPTEK Glass Technology - Profiltek Spain</i> .....	70
<i>Annex 7: Products - Profiltek Spain</i> .....	71

## **A. TABLE OF FIGURES**

Figure 1: Personal factors influencing creativity within an organization.....	9
Figure 2: Dimensions of Innovation.....	12
Figure 3: The basic components of organizational innovation.....	14
Figure 4: Five Stages in the Decision Innovation Process.....	16
Figure 5: The Bridge.....	17
Figure 6: Profiltek Spain Timeline.....	22
Figure 7: The dimensions of Innovation as present in the company Profiltek Spain....	36
Figure 8: Phases of the Profiltek Spain Production Process Phases .....	37
Figure 9: Steps of the “Bridge Model” Profiltek Spain follows.....	49

## **B. TABLE OF IMAGES**

Image 1: Twitter account of Profiltek Spain.....	26
Image 2: Shower cubicle of the company Profiltek Spain.....	27
Image 3: Usage of the IMAGIK Technology .....	28
Image 4: Shower Trays offered by the company Profiltek Spain.....	29
Image 5: Shower Trays Gotham and Rodik by Profiltek Spain.....	29
Image 6: FIJO model NORDIC produced by Profiltek Spain.....	34
Image 7: Glass manufactured with the ECLIPTEK technology.....	35

## **C. TABLE OF TABLES**

Table 1: Definitions of creativity.....	6
Table 2: Characteristics of Individuals which influence creativity.....	8
Table 3: Environmental aspects that influence creativity.....	10
Table 4: Definitions of innovation.....	11
Table 5: Product, Process, Marketing and Organizational Innovation.....	13
Table 6: Internal Environment at the company Profiltek Spain .....	40
Table 7: Personally Characteristic.....	43

## INTRODUCTION

Today, the society in which we live is in a process of continuous change, facing a very dynamic environment (*Slater et al., 2010*), which is characterized by increasing globalization (*Gumusluoglu and Ilsev, 2009*), fast technological changes (*Rui et al., 2008*) and increasingly shorter product life cycles (*Langerak et al., 2008*). Both companies and society are directly affected by this process of change. This is due to the fact that we find ourselves in a global world where, increasingly, limits are being removed, causing companies to be forced to learn to face the new challenges that lie ahead. To do this, companies must adopt different organizational measures that help them to adapt to the current situation.

Given the situation mentioned before, in the organizational field much attention is paid to creativity and innovation, representing a competitive advantage over the competition, allowing companies to survive and differentiate themselves from their competitors, thereby achieving their objectives. So creativity and innovation play a very important role today, regardless of sector or industry.

In this study we are going to talk about the *tempered glass manufacturing industry* that has also been affected by this reality, undergoing many changes, like the rest of the existing sectors. The reason for these changes is that consumers are increasingly concerned about environmental commitment and companies' compliance with the safety and quality requirements of their products, expecting that their business model is completely transparent. It should be mentioned that once it has undergone a controlled heating and cooling process, raw glass is called tempered glass. The purpose of this process is to increase its break resistance and to convert it into safety glass.

In this study, we are going to focus on a particular case of the glass manufacturing industry, the Spanish company *Profiltek Spain* which is based in *Quartell*. The company was founded in 1989 as a company dedicated to aluminium carpentry and manufacturing of blinds. In 1995 the company focused on the manufacturing of custom bathroom screens, becoming specialists.

The main objective of this study is focused on the analysis of the creativity and innovation of the *Profiltek Spain* company. In order to achieve this objective, a theoretical approach will be undertaken to both concepts mentioned along with the historical evolution, followed by the presentation of the company, where focus will lie on the industry of creating custom bathroom screens, where their headquarters and technology park will be mentioned (*Quartell*), taking into account the company's philosophy and products.

Next, an analysis of the case study of the company *Profiltek Spain* will be carried out. Finally, the conclusions of this study will be presented as well as the limitations found and, if possible, some proposals for improvement.

It is worth mentioning that *Profiltek Spain* is chosen as a case study, due to the fact that the author is currently doing business practices within its facilities, more specifically in the human resources department. For this reason, direct access to the company was granted and it was possible to discover first-hand the products manufactured by *Profiltek Spain* and the way in which they are produced. The processes turned out to be very refined in both design and quality. Furthermore, the treatment of the employees by their company turns out to be important as well.

## Chapter 1. Theoretical framework

This chapter will focus on the analysis and explanation of the theoretical knowledge of creativity and innovation. The information provided comes from a previous profound investigation carried out at both individual and organizational levels. The information collected will serve as a basis for the case study.

### 1.1. What is Creativity

Creativity is the ability to innovate and create new ideas, it is the ability to combine knowledge in a new way that can have practical use and added value. It is originality and imagination, discovery or recombination of ideas, as well as skill necessary for the development of innovation and a capacity useful for effective solutions (*Higgins et al., 2000*). In the business field, it refers to those companies that have had the ability to take advantage of their creativity by acquiring a proactive approach, managing to differentiate themselves from their competition and remain strong in the current environment characterized as changeable and unstable.

It is essential to clarify the term creativity while taking into account all factors it could be influenced by. Therefore, the concept of creativity will be determined, considering different approaches and creating a study to be carried out regarding these factors.

It is worth to mention that the definition of the concept of creativity differs from one author to another. The concept evolved over time, becoming increasingly complex and clear by incorporating new contributions. Creativity is something that always existed, despite not having been studied until recently. It is seen as a skill that one is born with, as stated by Esquivias (2004, p.3).

After carrying out a study focused on the different authors and their definitions of the concept, Esquivia opts for the statement made by Wertheimer in 1945 as the first definition of the term creativity:

*"Productive thinking consists of observing and taking into account structural characteristics and needs. This is the view regarding structural truth, not a fragmented one."* (Wertheimer, 1945)

Many philosophers, anthropologists, and psychologists, and other specialists, had creativity as an object of their study. Therefore, the variety of approaches must be taken

into account that these authors have offered in this regard. One way to define the concept of creativity is to divide it into four terms: process, product, environment and person, as suggested by Rodas (1961) and Kneller (1965). As shown in table 1, different definitions of the concept can be observed, according to the suggestion of the named authors:

**Table 1: Definitions of Creativity**

<b>Approach</b>	<b>Definition</b>	<b>Authors and references</b>
Process	<i>"The process or faculty that allows finding new relations and solutions based on information already known, and that covers not only the possibility of solving an already known problem, but also implies the possibility of discovering a problem which the rest of the people do not see."</i>	Mongeotti, 2001, p. 239
Product	<i>"The art of establishing new and significant ties between things that previously have no relation in a way that is relevant, credible and in good taste, but that somehow presents the product with a new and fresh light."</i>	Reid & Rotfeld, 1976, p. 25
Environment	<i>"The process of manipulating the environment which results in the production of new ideas, patterns or relations".</i>	O'Brien, Sibley & Ligon, 1953, p.18
Human Resource	<i>"A person who regularly solves problems, produces products, or defines new issues in a field that is initially considered new, but ultimately becomes accepted in a specific cultural context."</i>	Gardner, 1993, p. 53
All the four components	<i>"Creativity in a limited sense refers to the skills that are characteristic of creative individuals, such as fluency, flexibility, originality, and divergent thinking."</i>	Guilford, 1978, p. 25

**Source:** Own elaboration

Each item of table 1 contains the terms *novelty* and *contribution*, as Mitjans (1995) has pointed out. This can be observed regardless of the approach carried out by each author or the era in which these definitions have been written.

### 1.1.1. Factors which influence creativity and characteristics

After defining the concept of creativity, it is relevant to carry out a study on the factors that influence this concept, as those factors can have both positive and negative influences on creativity. By identifying these factors, they can be manipulated by reducing or eliminating negative factors and by stimulating or further improving the positive factors.

One of the advantages of creativity is the generation of new ideas that can be considered as a fundamental aspect for innovative companies (*Slater et al., 2010*). Based on the generation of ideas, organizations can differentiate their products and / or services from the competitors, thus achieving greater performance as well as an improvement in customer loyalty and satisfaction. This is considered as a competitive advantage for the company (*Im & Workman, 2004*).

In the study *A model of creativity and innovation in organizations* by Amabile (1988), the author divides influencing factors in two categories: determined by the individual and originating from the influence of the environment. The two categories of factors are cited below.

### 1.1.2. Quality of Individuals that influence creativity

Esquivias claims that creativity is a skill that has to be available from birth and therefore cannot develop throughout life. Another opinion is that there is a relationship between creativity and inspiration and that being creative is *a matter of luck* or *that you have to be a little crazy*. All the aforementioned claims however are myths. While there certainly are *birth* conditions that favour creativity or not, it is vital through that training and other environmental factors enhances or decreases the level of creativity of all people. Having inspiration or good luck is not enough, it is also necessary to strive in order to help creativity emerge (*Díez et al., 2010*).

To become a creative person, it is not helpful to be *scared* or in a *last minute panic*. To be creative, it is essential to activate free thinking, to be curious and motivated, to look



for new perspectives and to have an open mind. Therefore, there is no valid excuse for not being creative. With a little effort and dedication, everyone can be creative (*Díez et al., 2010*).

In his study, Amabile (1988, p.128) shows a ranking of factors that are determined by the individual and that influence creativity, from highest to lowest degree, where the ranking is measured in percentages.

**Table 2: Characteristics of Individuals which influence creativity**

Characteristics of Individuals which promote creativity	Characteristics of Individuals which inhibit creativity
<p><i>Various Personality Traits (41%):</i> persistence, curiosity, energy and intellectual honesty</p> <p><i>Self-motivation (40%)</i></p> <p><i>Special Cognitive Abilities (38%):</i> problem solving abilities</p> <p><i>Risk-orientation (34%)</i></p> <p><i>Expertise in the area (33%)</i></p> <p><i>Qualities of the Group (30%):</i> synergy</p> <p><i>Diverse Experience (18%)</i></p> <p><i>Social Skill (17%)</i></p> <p><i>Brilliance (13%):</i> high level of general intelligence</p> <p><i>Naivete (13%):</i> being naïve or new to the field)</p>	<p><i>Unmotivated (30%)</i></p> <p><i>Unskilled (24%)</i></p> <p><i>Inflexible (22%)</i></p> <p><i>Externally Motivated (14%):</i> motivated by factors aside from work itself, like only by money</p> <p><i>Socially Unskilled (7%)</i></p>

**Source:** Adapted from Amabile (1988, p.128)

- **A model of individual creativity**

Guided by the individual creativity model made by Amabile (1988), all the mentioned qualities have to be unified in order to provide an answer to the previously mentioned question (*What factors influence creativity?*). Once these qualities are unified, they are classified into three main components that promote individual creativity:

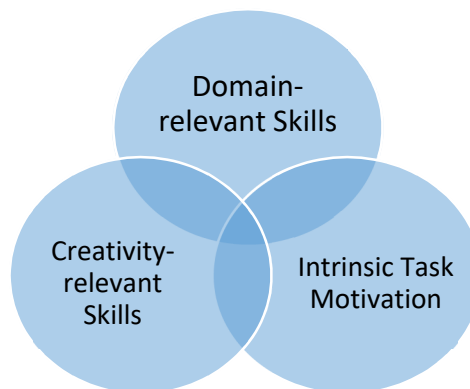
**Relevant domain skills** include "*factual knowledge, technical skills and special talents in the domain in question*" (Amabile, 1988, p.130). It can also be seen as a set of cognitive pathways that can be used to solve problems or carry out a certain task.

Skills relevant to creativity include "*favourable cognitive style to take new perspectives on problems, an application of heuristics to explore new cognitive pathways and a work style conducive to persistent and energetic search for one's work*" (Amabile, 1988, p.130).

**Intrinsic motivation of the task** "*is made up of two elements: the individual's attitude towards the task and the individual's perception of their motives for undertaking the task in a given case. Self-motivation stands out within this basic component.*" (Amabile, 1988, p.133). If the employees of an organization are enjoying the work itself, the way in which they process the information is more flexible, so that they would be experiencing positive affect, thus being willing to take risks and persist in efforts to develop and refine ideas (Grant, 2011).

To summarize, motivation and social tools influence creativity directly. The following graph highlights the previously mentioned factors:

**Figure 1: Personal factors influencing creativity within an organization**



**Source:** Adapted from Amabile (1988)

### 1.1.3. Qualities of Environment that influence creativity

The environment needs to be taken into account as it plays a vital role in creativity. Because creativity is not simply an isolated element the following environmental factors are important. They are classified below, from highest to lowest grade, as percentages (Amabile, 1988):

**Table 3: Environmental aspects that influence creativity**

Environmental aspects that promote creativity	Environmental aspects that inhibit creativity
<p><i>Freedom</i> (74%)</p> <p><i>Good Project Management</i> (65%)</p> <p><i>Sufficient Resources</i> (52%): access to necessary resources</p> <p><i>Encouragement</i> (47%): management enthusiasm for new ideas</p> <p><i>Various Organizational Characteristics</i> (42%): valuation of cooperation and innovation</p> <p><i>Recognition</i> (35%)</p> <p><i>Sufficient Time</i> (33%)</p> <p><i>Challenge</i> (22%)</p> <p><i>Pressure</i> (12%)</p>	<p><i>Various Organizational Characteristics</i> (62%): excessive red tape, lack of cooperation across divisions and levels</p> <p><i>Constraint</i> (48%): lack of freedom, lack of sense of control</p> <p><i>Organizational Disinterest</i> (39%)</p> <p><i>Poor Project Management</i> (37%)</p> <p><i>Evaluation</i> (33%): inappropriate or inequitable evaluation</p> <p><i>Insufficient Resources</i> (33%)</p> <p><i>Time Pressure</i> (33%)</p> <p><i>Overemphasis on the Status Quo</i> (26%)</p> <p><i>Competition</i> (14%): interpersonal or intergroup activity within the organization</p>

**Source:** Adapted from Amabile (1988, p.146)

From the study presented by Amabile, it can be learnt that creativity is influenced by a very large number of variables. It can be concluded that people who are *brilliant and eloquent* may become discouraged, as the reason for this emotion is a negative effect caused by the individual himself and the organizational environment. Finally, if the impact of these factors on the individual and on his degree of creativity is identified, it is possible to drive innovation.

## 1.2. What is Innovation

Today, in order to survive, companies are forced to cope with factors such as: high levels of competition, uncertainty, changes, threats and more alike. All these factors make it essential that companies look for ways to stand out from their competitors and obtain all resources necessary for facing any challenge they may encounter. Therefore, innovation is necessary when it comes to achieving competitiveness in a business environment, which marks it as a long-term advantage (Mathison et. al., 2007).

After clarifying the concept of creativity, a company should continue with an analysis of the concept of innovation, which implies analysing the meaning of the concept, its different typologies and, finally, its stages. In addition to some aspects focused on the environment of the company, it is necessary to know what makes a company being considered as innovative. The goal of this Final Project Work is to identify a possible relationship between creativity and innovation, as well as concepts of said objects.

As the concept of innovation is subject to very diverse meanings, only those will be chosen that can be considered as to defining the concept with more precision:

**Table 4: Definitions of Innovation**

Definitions	Authors
<i>"We understand by innovation the conversion of ideas and knowledge into products, processes or services improved for the market, satisfying the needs of citizens, companies and public administrations"</i>	Canós, 2013, p.1
<i>"Innovation must be seen as a process in itself. A dynamic process through which innovation is defined and, at the same time, a business management process based on the management of people, information, knowledge and financial and technological resources. "</i>	Ruiz et. al., 2008 p .10
<i>"An innovation is the implementation of a new or significantly improved product (good or service) or process, a new marketing method, or a new organizational method in business practices, workplace organization, or external relations."</i>	OECD, 2005 , p.46

Sources: Own elaboration

As these different definitions demonstrate, the concept of innovation refers to both the generation of ideas and the process of their implementation. Therefore, the concept of innovation can be expressed by the following equation:

$$\text{INNOVATION} = \text{Generation of ideas} + \text{Implementation}$$

Now that both key concepts of the work are defined, what is the difference between creativity and innovation? This very important question must be clarified, since both

terms can be easily confused or regarded as having the same meaning. Through the definitions provided, that the difference is appears in the implementation of the concepts (*Amabile, 1996*).

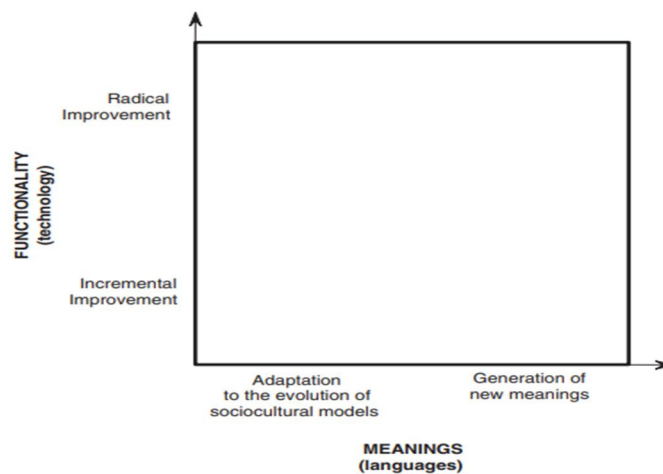
**1.2.1. Typologies of Innovation**

Having knowledge of the graphics created for the different types of existing innovation is very important, as it leads to a broader vision about the possibilities to innovate along with the difficulties that any company may go through. Different types of innovation need different types of knowledge (*Flor, 2014, p.15*):

**Innovation depending on the degree of novelty** This is divided into a radical and an incremental type. The radical type represents a total change, a break with what is known so far, that can appear as a completely new product or production process. The incremental type involves gradual changes to an existing product or service with the intention of improving it by adding value.

**Innovation according to technological changes or changes in meaning, as well as in the degree of novelty** according to Verganti (2008), innovation can refer to the functional utility of the product, its meaning or both. Furthermore, functional innovation can imply an incremental or radical improvement in technical performance, which also means that innovations can be more or less radical, as illustrated by the following figure:

**Figure 2: Dimensions of Innovation**



**Sources:** Verganti, 2008

The OECD (2005) classifies innovation into four categories: product, process, marketing, and organizational innovation.

**Table 5: Product, Process, Marketing and Organizational Innovation**

Innovation categories	Definition	Authors
Product	<i>"Is the introduction of a good or service that is new or significantly improved with respect to its characteristics or intended uses"</i>	OECD, 2005, p.48
Process	<i>"Means the implementation of a new or significantly improved production or delivery method (including significant changes in techniques, equipment and/or software"</i>	Official Journal of the European Union (n°323 p.10)
Marketing	<i>"Is the implementation of a new marketing method involving significant changes in product design or packaging, product placement, product promotion or pricing "</i>	OECD, 2005, p.49
Organizational	<i>"Means the implementation of a new organisational method in the undertaking's business practices, workplace organisation or external relations."</i>	Official Journal of the European Union ( n°323 p.10)

**Sources:** Own elaboration

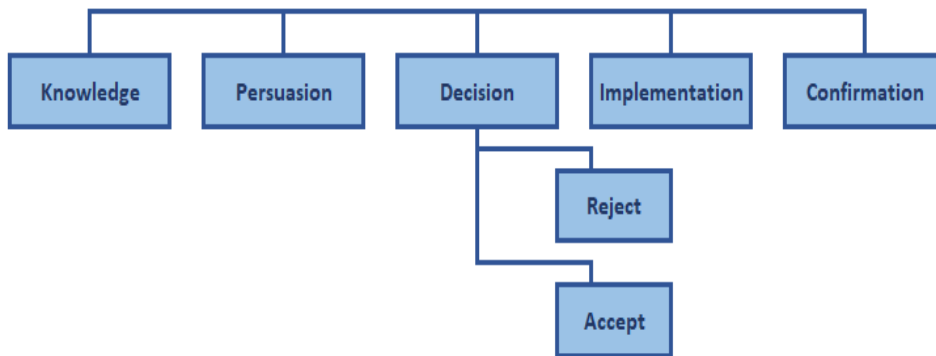
### 1.2.2. The Diffusion of Innovation. Stages

According to Rogers (1983), diffusion is the process by which an innovation is communicated through certain channels over time between members of a network of social dimensions. This diffusion process consists of 5 stages:

- **Knowledge / Consciousness:** the individual discovers an innovation, but lacks information about it

- **Persuasion:** the individual has an interest in said innovation, so the collection of related information begins.
- **Decision:** it is the decisive moment, where the individual begins to analyse the advantages and disadvantages of putting innovation into practice, and, finally, to decide whether to accept or reject it. It should be mentioned that it is the most difficult stage.
- **Implementation:** the individual puts this innovation into practice and continues to collect further information.
- **Confirmation / Continuation:** the individual must decide if the innovation remains in effect and therefore evaluate if it has been a correct decision to implement the innovation.

**Figure 3: Stages of the Decision Innovation Process**



*Sources: Own elaboration*

In 1991, Damanpour simplified the stages of innovation by reducing them into two:

- **Initiation:** the individual raises the need to introduce an innovation, the search and collection of information is carried out together with the training in how to refine the innovation. While obtaining the necessary resources, a relevant evaluation takes place which is followed by the final decision whether an implementation is desired.
- **Implementation:** initial use of innovation and introduction of necessary changes

### 1.2.3. What is understood by an Innovative Firm?

The way of deciding whether a company is innovative has evolved from one period to another. In 1977, the OECD considered a company as innovative when, through its product or process development, a radical technological change is introduced within a given reference period. However, starting in 2005, the OECD classified innovative companies into the four categories **product, process, marketing and organizational innovation** as explained in the *Innovation Typology* (chapter 1.2.1). At present, an innovative company therefore is not only responsible for technological improvements, but also subject to perform well in one of the four categories mentioned above, both increasingly and radically.

According to the Spanish National Institute of Statistics INE (*Instituto Nacional de Estadística*), innovative companies also conduct research and development (R&D) activities, using tools and methods for creating new products or processes, industrial design, marketing of new products, purchase and modification of machinery and, finally, acquire new technologies (material or immaterial).

It can be therefore concluded that the definitions illustrated above of the concept of innovation coincide with the fact that any company that produces improvements in the aforementioned fields is considered innovative.

- **A model of organizational innovation**

Within the organization, Amabile (1988) distinguishes between three basic elements:

**Motivation to innovate:** "*This component is formed by the organization's basic orientation towards innovation.*" (Amabile, 1988, p.153). This element is very important for all organizations, since it enables workers to participate and be aware of the importance of innovation in the organization. In order to establish an adequate common vision in the organization, it is essential to maintain good communication between the different members who are part of it.

**Resources in the task domain:** "*This component includes everything the organization has available to help with the assigned work in the task domain.*" (Amabile, 1988, p.154) The component refers to the resources necessary to carry out necessary tasks in a given domain. These resources can be available in the form of systems, people or information.

**Innovation management skills:** For a good management of the elements of innovation, it is necessary to maintain an adequate balance between freedom and restriction,



participation and collaboration, open communication systems for top-down or bottom-up communication and lateral, equitable and generous recognition of creative efforts (Amabile, 1988).

Figure 4 shows the intersection of the three elements mentioned above. Those companies that are at the intersection of the three elements, that is, they have the combination of these elements, are those that have the greatest possibility of being creative and innovative, as Amabile (1988, p.156) states:

*"For both the individual and the organization, then, all three elements are crucial. The greater the areas of overlap between resources, techniques for using those resources, and motivation, the greater the likelihood of true creativity and successful innovation."*

**Figure 4: Basic components of Organizational Innovation**



**Sources:** Amabile (1988)

### 1.3. Relationship between Creativity and Innovation

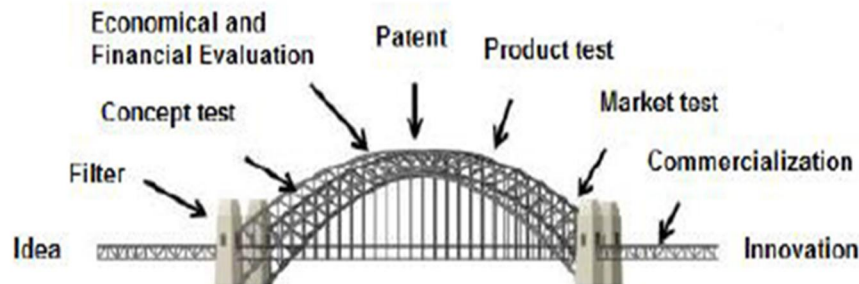
The theoretical framework demonstrates that the concepts of creativity and innovation do not have the same meaning, therefore, it must be avoided to consider them as the same. Innovation can be defined as a combination of creativity and implementation. The two concepts are closely related and the first step towards innovation is creativity. As confirmed by Amabile, *"there will be no innovation in an organization without creative ideas from individuals; you need the ideas before you can develop and implement them"* (Amabile, 1988, p.151).

In the previous "*Organizational Innovation Model*" (section 1.2.5), it can be seen that the three basic elements (motivation to innovate, resources in the task domain and skills in innovation management) influence innovation and therefore creativity.

The influence that the environment has on the two concepts creativity and innovation should be pointed out as well, as mentioned in a study called *Environmental Qualities that influence creativity* carried out by Amabile (1988). In addition to Amabile, there are other experts who have also done research on this topic, such as Dul and Ceylan (2014, p.1) who have stated that "*people who work in an environment that supports creativity can generate useful ideas for the product innovation*".

The relationship between creativity and innovation is demonstrated by a model known as *The Bridge*, which consists of nine stages that are followed by most companies. The objective that companies have by following this model is to achieve a stable and established innovation. It is worth mentioning that, depending on the type of innovation that is intended to be implemented, it is not necessary to carry out all nine stages of the model, but nevertheless it is advisable to do so while refining and implementation the innovation of a product. (MVA, 2005)

**Figure 5: "Bridge Model" of Innovation**



**Source:** Medicon Valley Academy (2005) *Medicon Valley Annual Report 2004*. Lund and Copenhagen

## Chapter 2. Empirical Work. Case-study analysis

After completion of the theoretical framework that refers to creativity and innovation from a business point of view, this chapter showcases the business of bathroom screens in Spain and, more precisely, the company *Quartell*.

First, a description of the case study will be carried out, as well as a presentation of the tempered glass business and, more specifically, the bathroom partitions sector. The philosophy of the company *Quartell* and a brief presentation of the most notable products will also be undertaken, which is followed by a description of its research serving to achieve the desired objective. The chapter closes with the obtained results. The steps described above are carried out by delving into the concepts of creativity and innovation as present in the company and as visible from different perspectives.

### 2.1. Description of the case-study: PROFILTEK SPAIN

*Profiltek Spain* is the company that has been chosen as a case study, as it is dedicated to the design and creation of bathroom screens and shower trays, which has a spectacular design and high quality in each of its products and whose main headquarters are located in *Quartell* (Valencia). This work is dedicated to the study and analysis of the creativity and innovation employed by the company in its products.

For what reason has the company *Profiltek Spain* been chosen? Because it is a company that stands out from its competition for the spectacular design and quality of its products, because the company seeks to differentiate itself from its competitors by the investment dedicated to creativity and innovation in its products. The company won the *iF Design Award in February 19th, 2020*, for being a company that manufactures its bathroom screens and shower trays using high quality products and complying perfectly with all the market requirements, in terms of quality and sustainability, for being a pioneer in the *IMAGIK* digital printing system on glass (see "Annex 4: *IMAGIK Technology - Profiltek Spain*"), in addition to its proactive vision, since it is a growing company that tries to keep up to date on the latest developments technology in its sector during its 30 years in the market, in order to meet the needs of its customers. Everything that has been mentioned adds value to the company, making the analysis and study of this company very interesting.

It is worth mentioning that this type of case study has been chosen because it is the most useful and appropriate method for studying and better understanding this phenomenon, within its context, in real life. Taking into account that the study is carried out from all possible angles, it is based on multiple sources of evidence, being an adequate method when trying to take various variables (Yin, 1994).

- **Sources of Information and data**

For the preparation of this research work, two types of sources have been used: primary sources and secondary sources, in order to collect as much information as possible about the company *Profiltek Spain*.

The **primary sources used** consist of 2 interviews and 1 individual questionnaire. At the beginning of the investigation process, a first interview was conducted with one of the company's co-founders, who holds the positions of deputy director and director of Customer Service (see "*Annex 1: Interview 1 - Fran Montolio Nebot, Profiltek Spain*" deputy director, director Customer Service and co-founder) where questions established by the Theoretical Framework have been raised. It is worth mentioning that Francisco Montolio Nebot is the son of the company's main founder, Francisco Montolio. Later, the second interview was conducted with Santiago Alfaro, who holds the positions of Marketing and R&D director (see "*Annex 2: Interview 2 - Santiago Alfaro, Profiltek Spain*", marketing and R&D director), where more specific questions have been asked, in order to expand information about the creativity and innovation of the company.

And, lastly, an individual questionnaire that has been attached to the two interviews carried out (see "*Annex 3: Individual Questionnaire*") was sent to technicians of the company, in order to obtain information about the environment internal and external of the company and the person. Thanks to this procedure, it has been possible to collect the necessary information to be able to start the project in the most appropriate way. It is worth mentioning that, due to current events, the appearance of the well-known COVID-19 virus, both the interviews and the individual questionnaire have had to be carried out electronically.

Regarding **secondary sources**, in this case, both the official website of the company and the employee's platform, the company's blog, as well as the company's LinkedIn account, have been used, in addition to resort to articles found in other internet sources, in order to expand and improve the information that was already available.

Before presenting the results obtained from the research carried out, it is relevant to make a presentation of the bathroom partition sector in Spain and about *Quartell*, during the following sections.

### 2.1.1. Industrial environment of company: “Business of shower cubicle”

Over the years, the tempered glass business, like other industries, has been forced to go through many changes (*Martinez, 2008*).

Traditionally, the bathroom screens were made of acrylic material and by using a lot of profiles, which caused that, over time, the sliding doors would get stuck as they stopped to slide as at the beginning. The reason for this sliding problem was the wear of the bearings due to the accumulation of soap and moisture in the profiles and rails, being less hygienic and difficult to clean. In addition to this wear, over the years they also received an unpleasant appearance, both the screens and the shower trays. The models of bathroom screens and shower trays used to be made in standard sizes.

Currently, thanks to the new advances and invocation that have emerged, the material and way of producing bathroom screens has changed, from acrylic material with a lot of profiles, to tempered glass with little profiles, even eliminating the bearings and internal profile, passing the sliding doors directly through the top lane. By using double bearings, the weight of tempered glass is better supported, thus making sliding leaves slide more smoothly, in addition to incorporating the new generation of sheet release systems. Due to the lack of profiles, cleaning of the partitions is made easier, avoiding the accumulation of dirt and moisture residues and maintaining a more pleasant appearance. Another new change that the partitions have in the present is an anti-scale treatment called *Teknoclean* (see “*Annex 5: TEKNOCLEAN – Profiltek Spain*”), which helps to repel water by preventing the appearance of watermarks.

In addition to the aforementioned advances, the new partitions have a greater variety of designs and sizes, allowing the customization of each one according to the needs of each client. Regarding production, many of the companies dedicated to this sector have opted to manufacture a certain number of standard products being mass-produced, thus seeking to increase production and decrease costs, but also keeping the possibility of a customization to a certain degree, or a directly on-demand production, where the products are 100% personalized.

In order to differentiate themselves from competitors, some companies in the sector have chosen to create their own laboratory where they can do research and develop innovative products. Other companies have even chosen to incorporate digital printing into their factories, without having to resort to other companies, thus reducing costs and time in delivering their partitions.

This new form of production based on creativity and continuous innovation has allowed large companies to differentiate themselves from their competitors, thanks to their models and prices.

The company *Profiltek Spain* has taken advantage of the novelties of the current market. But what does *Profiltek Spain* offer that makes it different from other companies in the same sector in Spain?

### 2.1.2. Profiltek Spain location: Quartell

This section is about the *La Foia* Industrial Estate, *Quartell*, which is the place where the main headquarters of the case study company is located.

The *La Foia* Industrial Estate, *Quartell*, is located in the province of Valencia. It is an industrial estate made up of 14 companies, such as: *Profiltek Spain S.A.*, International Technology 3D Printers S.L., Fuxsabany S.I., Celeste Trade S.I., etc.

The Polygon *La Foia* acts as a link between various towns in the province, such as: *Almenara*, *Faura*, *Quartell*, *Benavites*, *Quart de les Valls*, which is why a large part of the company workers come from these towns.

The 14 companies belonging to this business park (industrial estate) were founded here, with the exception of the company *Profiltek Spain*, which was initially a small company of blinds located in the town of *Quartell* and which, when turning to the manufacture of shower screens, moved its headquarters into this polygon.

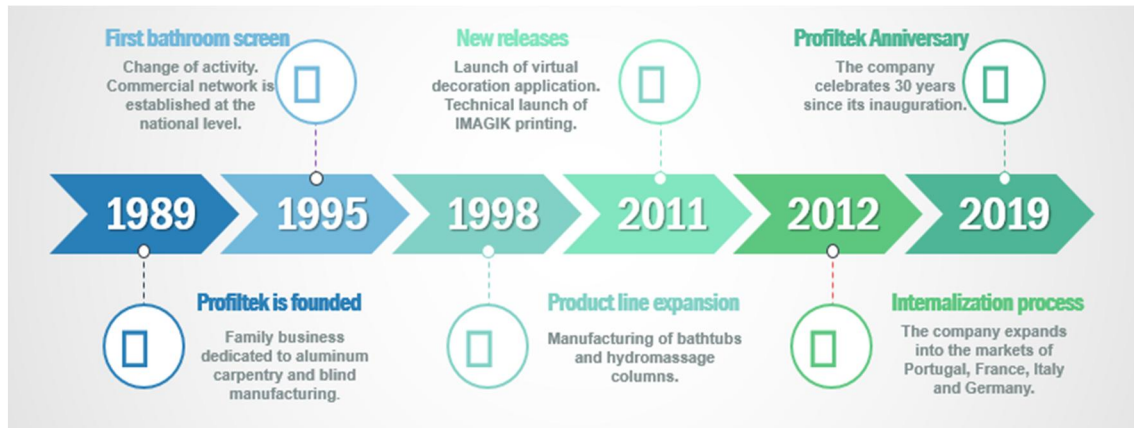
### 2.2. Beginnings, Philosophy, Structure and Product/Market of Profiltek Spain

This section will focus on presenting the company, in addition to the vision of the sector as well as Spain and *Quartell*.

### 2.2.1. How did the idea start?

As previously mentioned, *Profiltek Spain* is a company dedicated to the manufacturing of shower screens and bathroom trays. Its headquarters are located in the *Polygon Industrial La Foia (Quartell)*.

**Figure 6. Timeline of the company *Profiltek Spain***



**Sources:** *Own elaboration*

The company was founded in 1989 in *Quartell* (Valencia) by Francisco Montolio, as a family business, whose main activity was the *manufacture of compacts for blinds* and that since 1995 changed its activity to the manufacture of partitions.

The change in activity arose when a supplier showed them a mock-up of a screen, being that the moment in which they saw the potential that this product could have and the similarities it had with the compacts for aluminium blinds.

It is worth mentioning that, after a few years, Jacinto Capilla and Antonio Barba have joined the family business. The three partners have spent almost 30 years together in the company putting all their effort into the activity of the company, doing a spectacular job.

In 1998, the founders of the company chose to expand their product line, manufacturing bathtubs and hydro massage columns. The company's history is characterized by the growth, innovation, design and quality of its products.

In 2012, the company's internationalization process began, starting to sell its partitions in countries such as: Portugal, France, Italy and Germany.

Currently, the company is considered as one of the benchmark companies in the bathroom sector. Furthermore, *Profiltek Spain* is the only national manufacturer of bathroom screens that has integrated glass decoration technology into its factory.

Another fact to mention about *Profiltek Spain* is that in 2011 the company launched the first virtual application to the market that enables the search for and combination of screens with the bathroom style of each client and that, once completed, can be saved in pdf format.

And finally, and most importantly, the *Profiltek Spain* company is a pioneer in the development of the *technique of digital printing on tempered glass*, known as *IMAGIK* and launched on the market in 2011. The presentation of the *IMAGIK* technique was held in April 2011 at the Profiltek headquarters, of which the newspaper *El Levante* published an article, quoting the Minister of Industry, Commerce and Innovation, *Vicente Rambla*, who said:

*"We should all be proud to have a company like Profiltek in Valencia, which knows how to make innovation and design one of the fundamental pillars of the Valencian economy and at the same time be able to grow in exports."*

- **Who works for Profiltek Spain?**

Currently, the *Profiltek Spain* company is made up of 250 employees, among them the company's management committee, which is made up of 9 directors and a board of directors, which is in charge of making the company's strategic decisions.

The most relevant and highest-ranking positions in the company are held by Francisco Montolio who holds the position of president of the company, and his two partners, Jacinto Capilla and Antonio Barba, who hold the positions of directors, while the son of the founder, Francisco Montolio Nebot, holds the position of Deputy Director and Director of the Customer Service Department. The position of CEO in the company is held by Esteban Azcuenaga.

It is worth mentioning that the three co-founders of the company carry out different activities, as is the case of Jacinto Capilla, who works closely with R&D engineers, advising and seeking the best way to produce partitions and improve the quality of each of the models. He is also in charge of reinforcing the relationship with customers and distributors residing in Italy. Antonio Barba is responsible for collaborating with different areas of the company such as the commercial, sales and after-sales areas, advising whenever necessary. Francisco Montolio's activity is to collaborate with all areas of the



company, to determine if their support is required, and to supervise the work of the rest of the staff.

### 2.2.2. What is Profiltek Spain. Business Philosophy

A reasonable way to acquire knowledge of the company is to ask people who are directly involved in its development, such as the deputy director and co-founder, Francisco Montolio Nebot, and Santiago Alfaro, director of marketing and R&D. They define *Profiltek Spain* as: "*Family business, leader in the sector with a strong commitment to innovation, personalization and quality.*"

The company's objective is to "*make and nurture the difference year after year*". Profiltek develops its activity in regards of the following values:

- **Commitment:** The company is committed to offer quality products that meet the needs of its customers.
- **Honesty:** The company is committed to be transparent and honest with its clients.
- **Excellence:** The company is committed to offer high quality services to its clients, complying with the provisions of the law and beyond.
- **Innovation:** The company invests into the continuous innovation of its bathroom showers and screens.
- **Customer Satisfaction:** The clients are most important for the company, so they are involved in the process. *Profiltek Spain* uses this term to refer to the importance given to the customer or consumer.

A phrase that defines the company is "*If we do it, we must be the best.*" (Antonio Barba). Through this phrase we can define the commitment acquired by the company regarding the quality of its products. For the company, quality is a very important characteristic, which is why it is reflected both in the elaboration of its products and in the quality of the services that accompany them. Thanks to the great ambition of the partners and the team that forms *Profiltek Spain*, the company has been able to enter into markets of Portugal, France, Italy, Germany, the United Kingdom and Poland.

The company's desire to be able to offer its customers a high-quality product has led to an investment in its own laboratory where quality controls are carried out, thus ensuring

compliance with regulations and achieving that both its bathroom screens and shower trays stand out from the competition for their quality and innovative design.

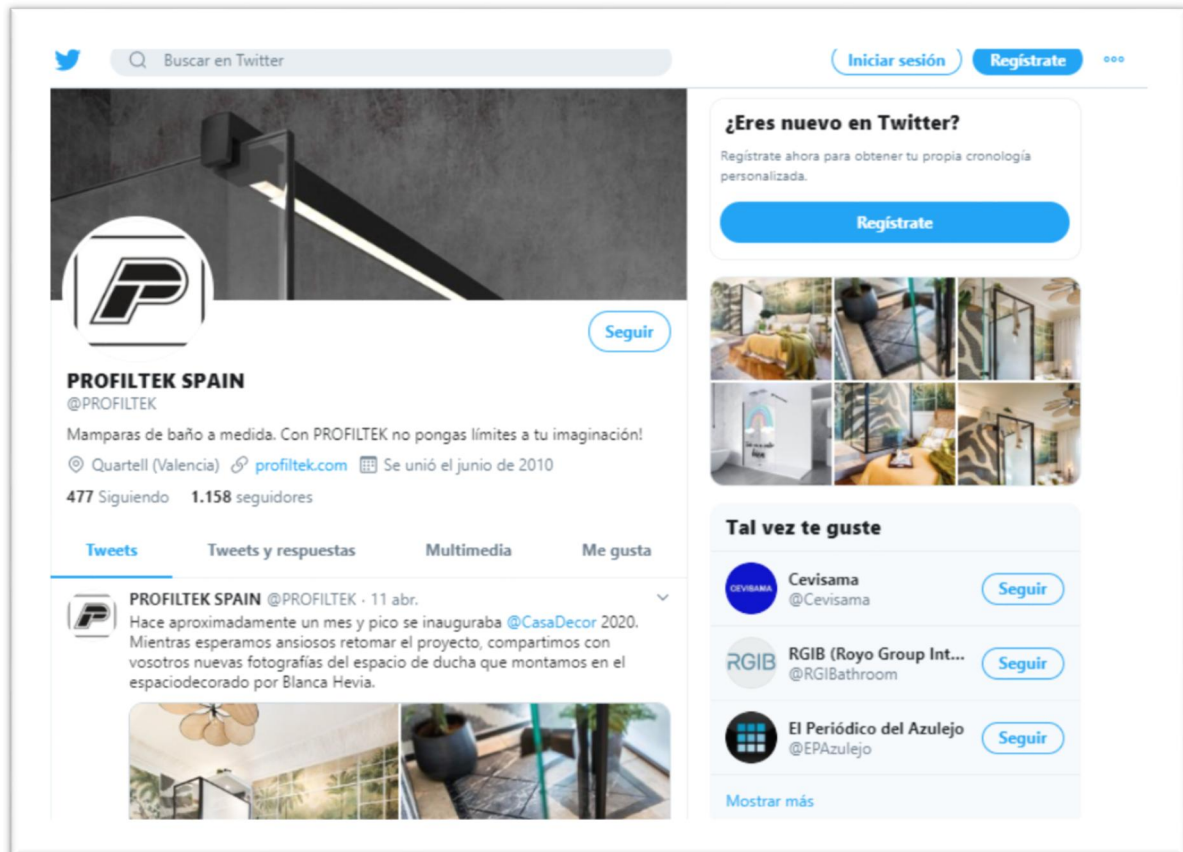
While manufacturing the bathroom screens and shower trays the employees have optimal working conditions, since the company considers them as part of the company. The objective of the company is that their employees are safe and comfortable when carrying out their tasks. The company's partners are aware of the risks involved in manufacturing these products, so they invest heavily in PRL (Prevention of Occupational Risks), in order to improve working conditions and avoid all kinds of incidents.

*"Here we are all important, so each employee has to leave his job in the same conditions in which he entered: HEALTHY AND WITHOUT ANY KIND OF DAMAGE." Sources: Sandra Lleó, PRL Technician*

Another very important point to mention about the employees of *Profiltek Spain* and the location of its factory, is the reason why the company has decided to build its headquarters in the *La Foia* Industrial Estate. As mentioned above, the company, before changing its activity, was engaged in manufacturing compacts for blinds. The initial location of the family business was inside the town of *Quartell*. By changing their activity and expanding its facilities, the company has opted for the *Quartell* industrial estate due to its good land and sea communications, as well as to the fact that most of the people who work at the company have their residences in the surrounding towns.

The company is proud to say that they still employ some of the people with whom they have started their business. Regarding the current selection of personnel, *Profiltek Spain* continues to choose to offer work to people living in nearby towns. However, this does not rule out people who commute from farther towns, provided they have skills and qualifications that are suitable for the required works.

The company *Profiltek Spain* considers that social networks are very important, since they help companies to be closer to their customers and suppliers. For this reason, the company has its own official website *www.profiltek.com*, a blog and Instagram and Twitter accounts. In order for social networks to be fully updated, the company puts three employees in charge of the online appearance.

Image 1: Twitter account of *Profiltek Spain*

Sources: <https://twitter.com/PROFILTEK>

### 2.2.3. Target

*Profiltek Spain's* objective is to expand into new markets, being able to deliver its products to those with an individual lifestyle, with sophisticated, elegant and modern tastes, people who seek to give their bathroom a distinguished touch.

The products offered by the company *Profiltek Spain* are aimed at a more selective public, customers who are not just looking to renovate their bathroom, but trying to make their bathroom a place of relaxation, where they feel safe and comfortable, and for this, the company offers its customers a wide variety of products with a spectacular design and high quality. The bathroom screens and shower trays manufactured by the company are mainly aimed at people with medium or high purchasing power, although it is not intended to exclude others.

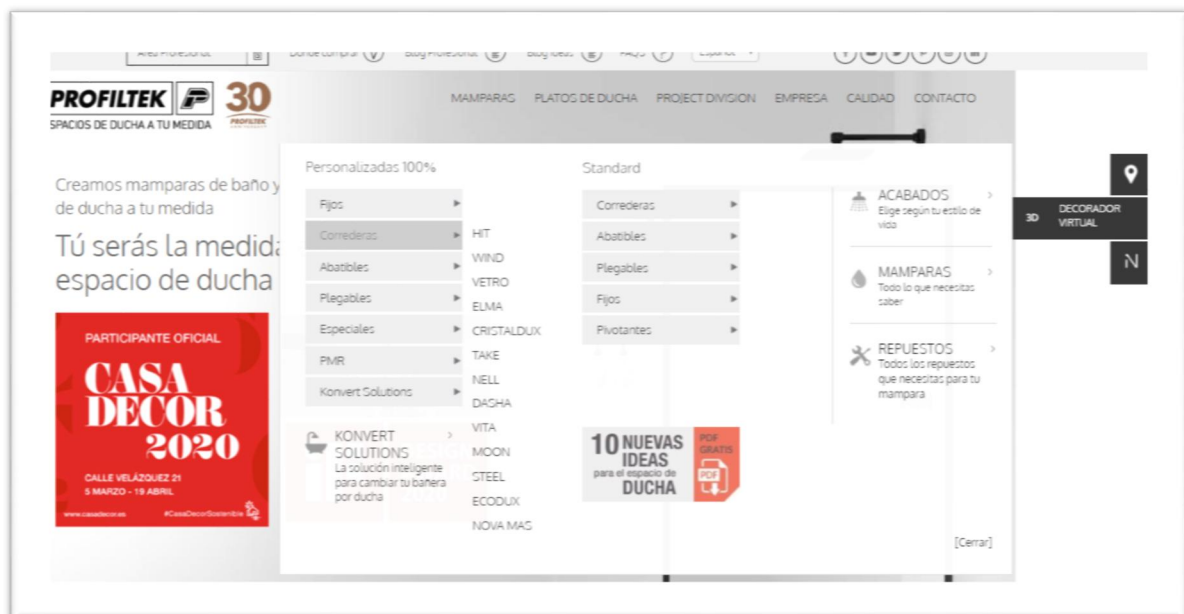
In summary, *Profiltek Spain* tries to attract customers who are looking for a product that excels in the following characteristics: design, quality and innovation.

## 2.2.4. Products

The company offers its clients a very wide variety of bathroom screens and shower trays, which can be adapted according to their preferences and needs. For both product types, the company offers its customers a very wide range of models.

The company offers two varieties of bathroom screens: 100% personalized and standardized screens. For each model of 100% personalized screen, a desired type can be selected as: fixed, sliding, swinging, folding, *PMR (for people with some type of disability or physical limitation)* and *Konvert Solutions*. As for the standard model, the following types can be chosen: sliding, swinging, folding, fixed and pivoting. Once the type of screen is selected, the next step is to opt for the desired design.

Image 2: Shower cubicle of the company *Profiltek Spain*



Sources: [www.profiltek.com](http://www.profiltek.com)

For the decoration of the partitions, *Profiltek Spain* uses the *IMAGIK technology*, which allows the total personalization of tempered glass. *IMAGIK* uses glass as a canvas into which the chosen graphic is carved. Unlike previous technologies which consist of adhesive foils, the new technology delivers a tempered glass with a persisting individual graphic. The process is comparable to a tattoo gun. *IMAGIK* can also be used to decorate railings, backlit glasses, escalators, backlit light boxes, headboards, furniture, cabinets and doorways.

**Image 3: Usage of the *IMAGIK* Technology in architecture**

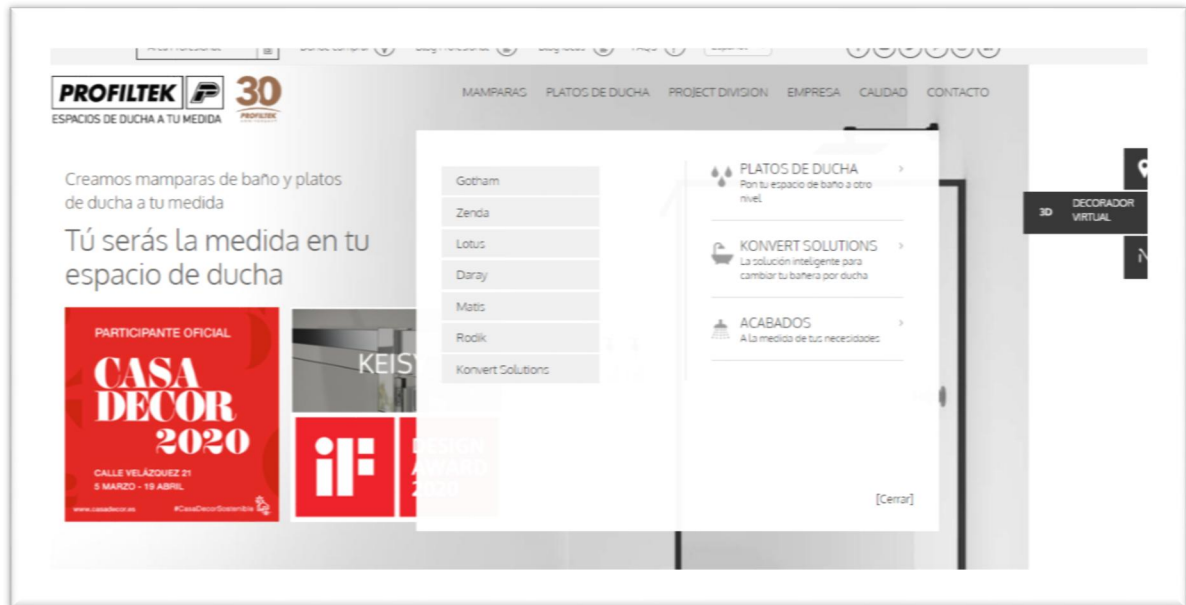


Sources: [www.profiltek.com](http://www.profiltek.com)

To be able to complete the bathroom screens, *Profiltek Spain* recommends a series of accessories to its clients like the finishing of profiles, types of handles or knobs, towel rails and integrated hangers. Each accessory comes with the possibility to choose between various types.

Regarding shower trays, *Profiltek Spain* offers a selection of seven varieties: *Gotham*, *Zenda*, *Lotus*, *Daray*, *Matis*, *Rodik* and *Konvert Solutions*. Eligible characteristics of the shower trays are: light weight, extra flat, non-slip, cut-out, siphon valve, antibacterial, easy cleaning and ecological material. *Profiltek Spain* offers its customers to resume maintenance of the shower trays and repair costs, if necessary. Furthermore, various dimensions and the possibility of adding a RAL (*colour style*) and mesh finish can be chosen. The texture of the material can be stone, *SOLIDTEK* or slate and the height varies between 3 and 4 centimeters, depending on the selected model.

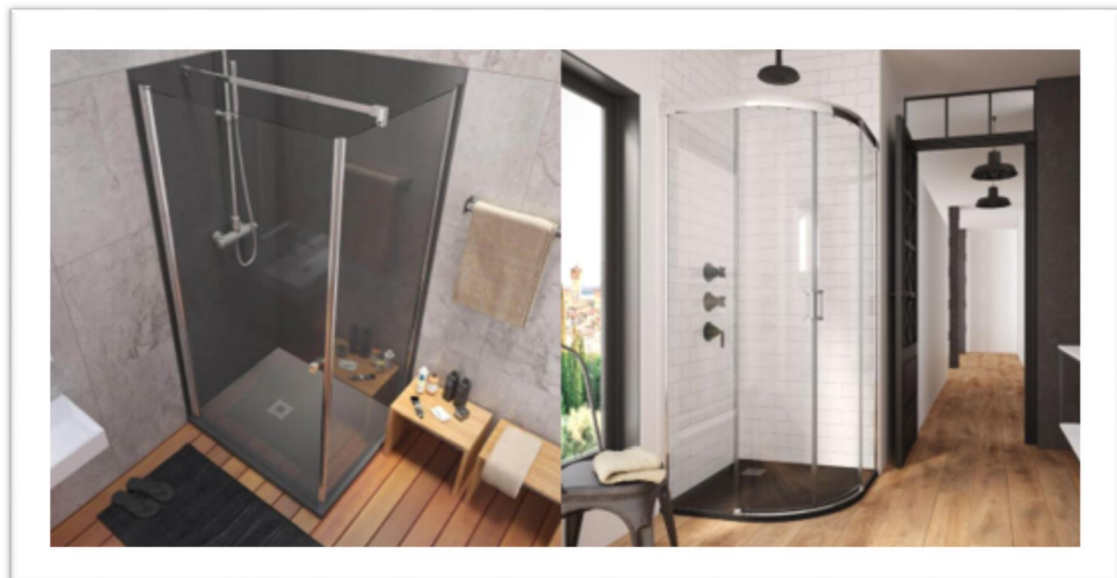
**Image 4: Shower Trays offered by the company *Profiltek Spain***



Sources: [www.profiltek.com](http://www.profiltek.com)

Both the bathroom screens and shower trays manufactured by *Profiltek Spain* have a guarantee of 5 years, which shows the great confidence that the company has regarding quality and robustness of its products.

**Image 5: Shower Trays *Gotham* and *Rodik* by *Profiltek Spain***



Sources: [www.profiltek.com](http://www.profiltek.com)



### 2.3. Description of the investigation goals and results obtained

The objective of this research is to determine if the chosen company is creative and innovative. In order to achieve this goal, following questions will be answered:

- How do ideas arise in *Profiltek Spain*?
- How is the creativity process carried out in *Profiltek Spain*?
- What degree of formalization exists at *Profiltek Spain*?
- From whom do the ideas come?

The questions asked start from the theoretical concepts named in Chapter 1, based on the model of *The Bridge* (see Image 4). To do this, all different phases of *The Bridge* needs to be observed as well as the creative process that makes innovation happen.

A series of more specific questions related to the four general questions above will be asked. Due to the 2 interviews carried out and the individual questionnaire (see Annexes) as well as the section *Sources of information and data*, it was possible to collect the information necessary to answer these specific questions.

The specific questions have been organized into seven categories where creativity has been taken into account: Origin of Ideas, Product, Process, Environment and Human Resources, according to Rhodes (1961) and Kneller (1956) and Marketing. In the seventh category, an analysis is performed to determine if the company follows *The Bridge* model.

Therefore, the specific objectives of this research is to answer the following questions:

- **Origin of Ideas:**

Q1: How do the ideas appear in *Profiltek Spain* when it comes to design a product?

Q2: Do the ideas always come from the same person or do all the members of the company participate?

- **Products of the company:**

Q1: Regarding the origin of ideas about creating products, how do they arise? What are they inspired by?

Q2: As indicated in the theoretical framework, do you consider that the company's products are innovative? Can the type of innovation used by the company to develop its products be described as radical or continuous? Is innovation achieved by designing a new product or by implementing a new (technological) process to manufacture an existing product?

- **Creative process:**

Q1: How are the phases of the creative process of *Profiltek Spain* carried out?

Q2: Is a deadline set for each new design, or is it just designed as ideas come up?

Q3: Can we consider that the company follows an innovative process?

- **Environment and Organization:**

**Internal Environment:**

Q1: Can it be said that the working environment of *Profiltek Spain* promotes innovation, following the factors of Amabile (1988)?

Q2: What is the degree of formality inside the company?

**External Environment:**

Q1: What are the benefits of the company being located in the *Quartell* industrial estate?

Q2: Does *Profiltek Spain* have a relationship with other nearby agents?

**Organization:**

Q1: In terms of organization, do you consider the company to be innovative?

- **Human Resources:**

Q1: Do company members consider themselves as a creative person?

Q2: What motivates you the most when you do your job?

Q3: Regarding specific training and knowledge, do the members of the company have specific knowledge related to the tasks performed?

Q4: What are Santiago's skills?

- **Marketing:**

Q1: What are the distribution channels and points of sale used by the company?

Q2: Regarding communication, what communication and social media tools does the company use?

Q3: Regarding the packaging of shower screens and trays, is the company innovative?

- **Phases towards Innovation**



Q1: Regarding *Bridge Model*, does *Profiltek Spain* follow each of the phases: generation of the idea, filter, proof of concept, economic and financial evaluation, patent, product test, market test and marketing?

Next, the analysis of the results obtained from the case study based on the responses received by the company to the aforementioned questions will be presented. The analysis carried out consists of interpreting the answers obtained and classified by category, taking as a reference the theoretical framework.

### 2.3.1. Results about Origin of Ideas

**Q1 + Q2: How do ideas appear in *Profiltek Spain* when it comes to designing a product? Do the ideas always come from the same person or do all the members of the company participate?**

*Profiltek Spain* is inspired by different sources, such as: trends, fairs, competition or proposals made by clients. They select the ideas they like most and from there it is about creating new model proposals.

Santiago explains that today things have changed and that inspiration can be drawn from all places:

*“It is important to be clear about the strategy of the company, the sector and its different sales channels. We market many products, in different ranges, therefore, the competition, other sectors of the bathroom and the home are inspiration. You have to be vigilant about what happens in styles and decorative trends, fashion and technology. Everything can be a source of inspiration. Today there is no longer a single fashion, everything can work. All aesthetic trends make sense, the combination of them offers great possibilities, a world of alternatives that is more complex and at the same time more exciting for a designer.”*

**Do the ideas always come from the same person or do all the members of the company participate?** As it observed in the responses received during the interviews, Santiago is considered as *the creative person* of the company. Together with the Marketing and R&D technicians, he belongs to the people who generate most ideas. Santiago, together with the marketing team, is in charge of managing a database with

proposals and suggestions, which is constantly updated through reports and reviews of web pages and magazines.

Santiago reports that the team in charge of creating ideas and a product project is made up from people of different departments and that this team is working from the beginning and as a vital part of the product development. He also explains that, although the project is led by a person from R&D (he refers to himself and to the R&D coordinator), the process can be undertaken by everyone and each member contributes with their specific knowledge in production, processes, logistics, purchasing, quality and sales. The team usually holds weekly scheduled meetings in order to see the evolution of the product and propose possible improvements.

The methods and processes practiced within the company (the Marketing and R&D departments in particular) to collect and later implement ideas and implement are appropriate. This is confirmed not only because of the responses received from the people interviewed, who praised the company and the way of managing things, but also because of the sales numbers that were achieved by *Profiltek Spain* during their 30 years of existence. The design of the products created by the company obviously meets the expectations and preferences of all customers, as *Profiltek Spain* became a benchmark company in its sector on a national level.

### 2.3.2. Results about Products of the firm

**Q1: Regarding the origin of ideas about creating products, how do they arise? What are they inspired by?**

The ideas used to create each bathroom screen or shower tray, along with each accessory that accompanies them, come from different sources. Santiago mentions during his interview that in order to obtain a design that is well received in the market, a lot of research work is required while being attentive to the market, customer preferences and changes in trends.

*“It is important to be clear about the strategy of the company, the sector and its different sales channels. We market many products, in different ranges, so the competition with other companies, as well as other sectors of the bathroom and home are inspiration. You have to be aware of what happens in the styles and decorative trends, fashion and technology. Everything can be a source of inspiration.”*

**Q2: As indicated in the theoretical framework, do you consider that the company's products are innovative? Can the type of innovation used by the company to develop its products be described as radical or continuous? Is innovation achieved by designing a new product or by implementing a new (technological) process to manufacture an existing product?**

Guided by the theoretical framework, an innovative product can be understood as what “is new or significantly improved with respect to its characteristics or intended uses” (OECD, 2005, p. 48). So, taking this definition as a reference, the pending question would be: Do the products created by *Profiltek Spain* have improved features and uses?

To successfully answer this question, the model of bathroom screens classified by the company the product type *FIJO* will be taken as a reference, which is one of the many fully customizable models that the company offers to its customers as a suggestion. The *NORDIC* series has been specifically chosen (to see the rest of the various products classified as *FIJO*, as well as its accessories, see “*Annex 7: Products – Profiltek Spain*”).

**Image 6. *FIJO* model *NORDIC* produced by *Profiltek Spain***

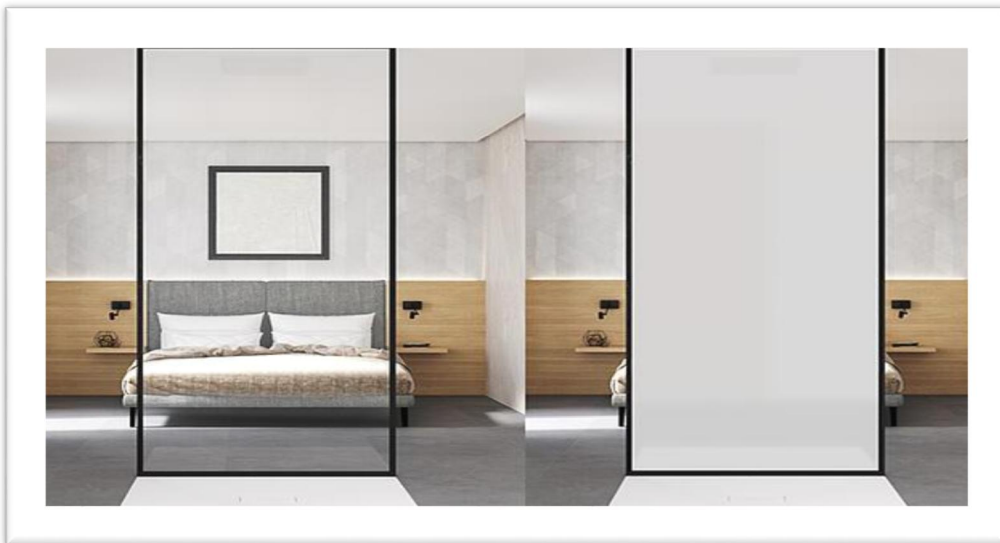


Sources: [www.profiltek.com](http://www.profiltek.com)

Observing the *FIJO NORDIC* model with *ECLIPTEK* technological glass, it can be affirmed that the products designed by the company *Profiltek Spain* can be classified as innovative results of the creative process. The company's products stand out for their

originality in design and for the customization tools that the company makes available to its customers. Thanks to the technology that *Profiltek Spain* owns, it offers its clients the freedom to personalize the bathroom screens, not only according to their space requirements, but also according to their tastes and preferences in style. The company suggests to its customers a wide number of designs that follow current trends and may even be novel, as seen in the possibility of incorporating *ECLIPTEK* technological glass into the *FIJO* model, which stands out for turning from transparent to opaque glass. through a remote control.

**Image 7: Glass manufactured with the *ECLIPTEK* technology**

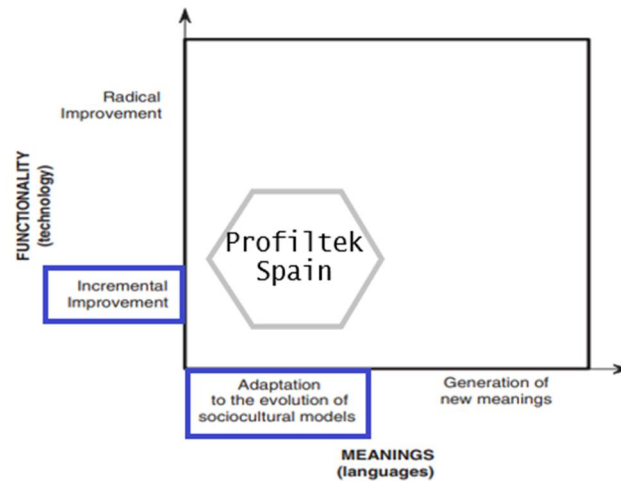


Sources: [www.profiltek.com](http://www.profiltek.com)

Regarding the type of innovation followed, it can be affirmed that the innovation of the products designed and created by the company is a continuous type, since bathroom screens and shower trays already exist and only some new features are incorporated. The type of innovation increases the value of the product without deviating from the established one.

Taking Verganti's (2008) dimensions of innovation as a reference, the innovation typology of the Profiltek company is reflected as follows:

**Figure 7: The Dimensions of Innovation as present in the company *Profiltek Spain***



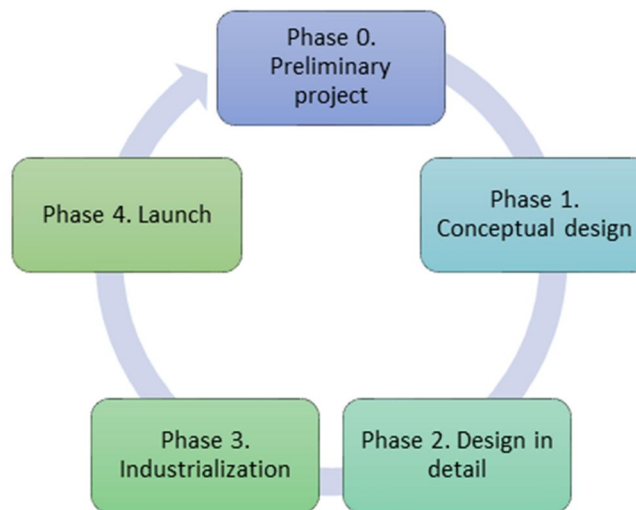
**Source:** Adapted from Verganti (2008)

In terms of the product category it turns out that the company managed to adapt to the tastes, preferences and needs of its customers, by introducing the techniques called *IMAGIK*, *ECLIPTEK* and *MIRASTAR* which enables customization of bathroom screen. It is worth to mention that, besides of standardized products off the shelf, the company offers 100% personalized products as well. Among these personalized products are products suitable for people with reduced mobility.

### 2.3.3. Results about Creative Process

**Q1 + Q2: Regarding the phases of the creative process of *Profiltek Spain*, how are they carried out? Is a deadline set for each design, or is it just designed as ideas arise?**

In order to answer these questions, all the phases followed by *Profiltek Spain* in the creative process will be presented through a cycle chart. The cycle graph provides a clearer view of the continuous sequence in order to distinguish the different phases.

**Figure 8: Phases of the creative process used in the company *Profiltek Spain***

**Source:** Own elaboration

### **Phase 0. Preliminary proposal / Preliminary project**

The proposals can be of any type (new products, new technologies, redesigns, process improvements, range extensions, etc.). The hypothesis on which the proposal is based is specified in the preliminary project proposal, as well as the challenges of the project. If the Product Committee considers it as possibly seminal, the completion of the *Preliminary Project* is approved.

The technical, commercial and aesthetic objectives are specified in the Preliminary Draft. A comparison is made with the expected competition or market prospecting, and a budget for the development of the project, the necessary resources and a deadline for the development is calculated, as well as a study of costs or sales price (*PVP*) and return on investment.

### **Phase 1. Conceptual design**

With the preliminary project data, in this phase the project *briefing* and the detailed timing of the project are defined for its validation. The *briefing* must contain the budget for the development of the project, the date of commercialization, the objective cost and the forecast of sales, as well as the technical, aesthetic and commercial objectives that are established as stated in the *Preliminary Project*.

The conceptual design of the product in form of sketches, renders, prototypes, models and more is presented to the Committee for validation. This design is evaluated with other departments, for example with Production, Quality, SAT (*Technical Assistance*) and Logistics in order to analyze possible critical points.

**Phase 2. Design in detail**

In this phase, the initial list of materials is made and the cost of each component is assessed to see if it meets the objectives of the *briefing* or if the design needs to be adjusted (*Valued BOM - Bill of Material*). *BOM Control* is performed to list all components, calculate their forecast and specify other characteristics such as packaging conditions. Manufacturing plans are made.

**Phase 3. Industrialization**

In this phase, all necessary the activities for the production of the project under development are carried out: standard operations, control plan, assembly manual and final PVP calculation for all product variables. The first samples are also validated and the corresponding quality tests are undertaken. All results are recorded in their corresponding Test Report.

**Phase 4. Launch**

The first units of the new model (*Series 0*) are manufactured and the corresponding internal and external tests are carried out on these models to certify that the manufacturing process is correct and that the regulations are met. Completion of the format FT0501R (*New Product Production Launch Approval*) is vital before launching the new product.

After completing the mentioned phases, the company begins the process of commercialization and identification of possible improvements of the new manufactured product. At this point, the marketing department is in charge of carrying out the video and photography campaign that, once taken, will be presented on the company's website and on social networks. In addition, all distributors are informed of the product, in order to be able to present the product to all possible clients in order to start with orders. As soon as orders arrive, the product is assembled.

**Is a deadline set for each design, or is it just designed as ideas arise?**

Regarding this question, Santiago explains that once the preliminary draft has been approved by the Product Committee, project Timing is carried out, which consists of a series of actions. "*Phase 1. Conceptual Design*" has an established calendar which times each action necessary to prepare the product.

**Q3: Can we consider, therefore, that the company follows an innovative process?**

To answer this question, it is helpful to remember what process innovation is: "*A process innovation is the implementation of a new or significantly improved production or delivery method.*" This includes significant changes in techniques, equipment and / or software. (OECD, 2005, p.49)

Taking into account that the company has its own laboratory, enabling it to develop new techniques for improving its products without having to resort to external factories (such as the *teknoclean* method, the *IMAGIK* tool), the company can be considered to make significant improvements to its products, therefore, it is innovative within its creative process.

**2.3.4. Results about Environment****Internal environment****Q1: Can it be said that the working environment of *Profiltek Spain* promotes innovation, following the factors of Amabile (1988)?**

In order to answer this question, an individual questionnaire was used (see "Annex 3: Individual questionnaire") which has helped to collect the data necessary for the investigation of factors that, according to Amabile (1988), promote the innovation in companies. (See section "*2.1. Description of the case-study: PROFILTEK SPAIN*").

The individual questionnaire has been delivered to several members of *Profiltek Spain*, who were asked to give values from 0 to 10 each of the assignments. The value 0 stands for "*completely disagree*" and 10 represents "*completely agree*". The table below demonstrates the average of all individual questionnaires:



**Table 6. Internal Environment at the company *Profiltek Spain***

<b>Statement</b>	<b>Value (0 - 10 points)</b>
Whole team's opinion is valued	10
Communication is appropriate	10
Degree of freedom in company is appropriate	10
Appropriate management in projects	9
Employees are properly encouraged	9
Cooperation and innovations is valued	10
Merits and achievements are recognised	9
Sufficient time available to accomplish tasks	9
Enough resources to perform my task	9
Company with an ambitious outlook and regards challenges as a growing experience	10
Situations of pressure within the enterprise are frequent	8

**Source:** Adapted from Amabile (1988)

The questionnaire reveals that the company features the following: support for its members, good communication, degree of freedom, value of cooperation and innovation, recognition of achievements and merits, adequate resources and, finally, a reasonable level of challenge. According to Amabile (1988), these are necessary attributes to encourage thinking and innovation. There are two features of the environment that limit the creative process: limited time to carry out tasks and situations of continuous stress within the company environment.

At the end of the individual questionnaire, a question was asked that included all the topics previously seen, covering factors of an open nature. The purpose of the question was to obtain more information:

*" Please indicate if you agree or disagree with the following statement:*

*"I consider that the working environment at Profiltek Spain encourages innovation"*

Based on the responses obtained throughout the interview about the concept and bearing in mind that the company also has features of cooperation and ambition, it can be concluded that all questioned members agreed that the work environment in the company encourages innovation although improvements are always possible.

## **Q2: Regarding the degree of formality in the company, what is it?**

In order to measure the degree of formality in the company, several questions have been asked (See "Annex 2: Interview 2 - Santiago Alfaro, Profiltek Spain"). The result of these questions is presented globally:

At *Profiltek Spain*, weekly meetings are held (usually on Fridays) where topics related to the company and its activity are discussed, and above all, to see the evolution of the products and to propose possible improvements. The members of the R&D engineering department hold meetings more frequently, depending on the needs of the company and the products to be designed or modified. The same occurs with the rest of the departments upon necessity.

All the ideas proposed by the members are registered and verified within a database. To expose ideas, the technique known as *Brainstorming* is used. Although not all ideas are accepted at that time, they are recorded in the database, as they can be used for future design ideas.

In summary, the company has a database where all ideas and proposals provided by all involved members are collected and stored, along with other relevant external information such as: events, platforms, fairs and competitors related to the bathroom and home sectors. Therefore, it is clear that a high level of formality exists in the company.

## **External Environment**

### **Q1: What are the benefits of the company being located in the *Quartell* industrial estate?**

Section "2.1.2. *Profiltek Spain location: Quartell*" focuses on the *La Foia* logistics park and shows the facilities and explains the advantages of having its headquarters located there from the point of view of the company.

Francisco states that an opportunity appeared to expand the business in the construction of a new industrial estate in the *Quartell* area. Location of the new industrial estate had

good communications via both land and sea. Taking advantage of the moment a factory was built.

Another reason that influenced the decision to move the family business to precisely that polygon has been the fact that the people with whom the business was started with are living in *Quartell* and neighboring towns.

**Q2: Does *Profiltek Spain* have a relationship with other nearby agents?**

The company *Profiltek Spain* has signed agreements with different universities in Valencia and Castellón (*UPV, UJI*), business schools such as ESIC, technological institutes (*AIMME, AIMPLAST, ITENE, ITC*), and business associations (*ASEBAN, FEBAN*). Regarding its customers and suppliers, the company boasts of having more than 20 years of relationship.

The company values the importance of maintaining long-term ties with its close agents which results in a long duration of those relationships.

**Organization**

**Q3: In terms of organization, can you say that the company is innovative?**

To help answering this question, a definition of the concept of innovation applied to organizations shall be considered: "*The implementation of a new method of organization in the company, business practices, organization in the workplace or external relations*" (*OECD, 2005, p.49*).

Taking into consideration the relationship that the company maintains with its external agents, *Profiltek Spain* can be considered as an innovative company in regards of the organization. As previously stated, the company maintains relationships with a large number of external agents, which provides the company with a broader and more innovative vision. The *Profiltek Spain* company is committed to innovation, personalization and the quality of its products.

**2.3.5. Results about Human Resources**

Carrying out research and studies of people is very important, since they are the ones who provide brand value to the company and ideas. People represent the source of creativity. Authors such as Cabarcos and Dopico (2005) affirm that people represent the

main source of competitive advantage, thus understanding the importance of human capital.

The most appropriate way to obtain true results regarding the human factor of the company, is taking into consideration the opinion of some members who make up the *Profiltek Spain* team. It would have been preferable to collect the opinion of all the members, but it is very difficult since the company employs roughly 250 people. Therefore, it has been chosen to ask for the opinion of a mixed group of people.

As seen in the theoretical framework, Amabile (1988) presents three types of factors that intervene in creativity that have been examined and taken into consideration: domain relevant skills, motivation of intrinsic tasks and skills relevant to creativity. Four questions were asked during the interview: Do you consider yourself as a creative person? What motivates you at work? Do you have specific knowledge? Given that Santiago holds the position of Marketing and R&D Director, what skills does he possess?

**Q1: Do company members consider themselves as a creative person?**

In order to answer this question, a table has been prepared (see “*Annex 3: Individual Questionnaire*”). Before answering the questionnaire, the interviewees were asked to mark with an X the qualities, competences and skills they consider to possess. The qualities that make up the table are considered as “*qualities of problem solvers that promote creativity*”, according to Amabile (1988, p.128). The following table presents the results obtained regarding the personality characteristics that members of *Profiltek Spain* consider to possess:

**Table 7. Personality Characteristics**

Persistence	X	Ability to perform tasks	X
<i>Curiosity</i>	X	Teamwork	X
<i>Energy</i>	X	Experience in various fields	X
<i>Honesty</i>	X	Social skills	X
Self-motivation	X	High intelligence level	X
Problem-solving skills	X	New in the field	X
Risk Orientation skills	X	Ambition	X

Sources: Adapted from Amabile (1988)

The table of personality characteristics of Amabile (1988) demonstrates that the employees of Profiltek Spain identify themselves as possessing almost all the variables.

The individual questionnaire was closed by asking the interviewees an open question whether they considered themselves as creative people. The vast majority of the answers were "yes", except for Francisco, who replied "*I do not consider myself a creative person.*" This leads to the conclusion that Santiago, along with Marketing technicians and R&D engineers, are very creative employees.

Santiago's response is somewhat different:

*"Well, in a profession like this you must be imaginative at least, visualize a solution and have different approaches to the same problem. But hey, that must be judged by others, don't you think?"*

While the answer stated by Patricia Alhambra, one of the marketing technicians, to this question has been very clear:

*"Yes, I think that creativity is something that you are born with and also something that you work and study to achieve and I have worked a lot in this area."*

## **Q2: What motivates you the most when you do your job?**

Employees of an organization who feel motivated when carrying out their work is very important to achieve a specific objective. This question was asked to Francisco during the first interview, whose answer was:

*"I am motivated by teamwork, to improve, to grow, to achieve the results that we set for ourselves, and what it brings me the most is being able to satisfy the needs of our clients with whom we like to create long-term relationships. We have clients with +20 years of relationship."*

This same question has also been asked to Santiago and Patricia (see "*Annex 3: Individual Questionnaire*"), who have answered from a different perspective:

*"Create products or services that are useful to people, that are well received and clear and represent income for the company." - Santiago*

*"I love that it is not routine, every day we have new and different projects." - Patricia*

**Q3: Do the members of the company have knowledge related to the tasks performed?**

At the beginning of the first interview, Francisco was asked if they had knowledge related to the sector when the company started the business of bathroom screens and shower trays. His response was:

*"None, as I have mentioned, we came from the manufacturing of roller shutter compacts. One day, a supplier showed us a model of a partition and invited us to take a sample. That's where we saw the potential that this product could have, the productive similarities that we had with the compacts (aluminum) and we began to manufacture them to become 30 years later the leading company in the national market and one of the leading players in Europe. As for the shower trays, it is a complementary product, but we did not have any experience."*

During the interview, the training available to him was also mentioned, where Francisco explained:

*"I have a degree in Business Administration and Management and I have a Master of Business Administration (MBA) from the ESIC (Business & Marketing School)."*

In the individual questionnaire, the question was asked whether the employees of Profiltek Spain had specific studies or preparations for the tasks they carry out. The answers affirmed that they have the necessary training for their tasks, so they have the necessary knowledge and experience.

**Q4: Considering that Santiago is the Director of Marketing and R&D, what skills does he possess?**

The fact that Santiago is regarded as the "*most creative person*" in the company raises curiosity regarding his skills and tasks within the company. Compared with other employees of the company, he covers multifunctional positions, which is why Santiago seems to be a key person of *Profiltek Spain*. He was therefore questioned what skills are necessary for his positions and answered:

*"On the one hand, having experience in the sector, the product and the sales channels. This is achieved over the years, although this answer works for everything ... right? In truth, I think that you have to have different skills, of clear technical knowledge, but above all of human team management. People*

*management I consider to be the most difficult by far. Doing what is possible to meet the objectives, that a team feels identified with them, achieving motivation, a good atmosphere, managing frustrations, egos, etc... this is the most complicated thing..."*

As you can see, Santiago finds it a bit awkward to answer openly questions about himself, but his two positions in the company (Marketing Director and R&D Director) would not be supportable without the skills he mentioned. This is confirmed by the opinion of his colleagues, who in addition to praising his qualities as a professional, have also spoken about his qualities as a person.

### **2.3.6. Results about Marketing**

#### **Q1: What distribution channels and points of sale does *Profiltek Spain* use?**

It is necessary to specify that the company *Profiltek Spain* does not have its own stores, but works with intermediaries. Therefore, customers of the company can find their products via: traditional channels for the distribution of bath products, professional channels of installers, metalwork, plumbers and glassware, large furniture shops and hardware stores as well as decoration professionals.

The company, as was presented in section "2.2.1. *How did the idea start?*". As markets for its products, the company has established themselves in Spain, Portugal, France, Germany, Italy, and more recently Poland as well as the United Kingdom.

The company is very selective when choosing its distributors, which is why it signs agreements only with the establishments it considers appropriate to sell its brand, since, towards the final consumer, the distributors are those who represent the *Profiltek* brand. For this reason, the company has sales representatives located in all countries mentioned above, ready to advise and take orders on time from distributors, avoiding unnecessary delays.

Inside Spain, *Profiltek Spain* brand products can be bought in establishments such as: Leroy Merlin, El Corte Inglés and sanitation establishments of different sizes, all being multi-branded, some of them even having small exhibitions of the *Profiltek's* products. Upon request by a distributor, *Profiltek Spain* opens their facilities in the context of a guided tour and presents samples of their products to the customer.

**Q2: Regarding communication, what communication or social media tools does the company use? What message does it transmit to its customers? What type of packaging do you use?**

Regarding communication and the use of social networks, Santiago states:

*“Communication in our company is conditioned by the product and the sales channels. Our products are not sold directly to the individual, so we focus on professional channels and means to reach them easily.*

*In the ON part, we logically have a website where we try to explain the company's values, its product catalog and above all, be a means of communication with our distribution. We put at your service a host of tools and information to make the job of selling the product easier. For example, the virtual decorator, a back office for online orders, their follow-up, invoice management, order situation consultation, databases, budgets, etc...”*

The company considers that social networks represent a very valuable tool as of today, which is why the *Profiltek Spain* is present on the main social networks consisting of its own website, an official blog, an account on Instagram, Twitter and, especially, LinkedIn. Via these channels the company informs about the products and aspects that can help to select the decoration styles, dimensions, criteria to take into account, safety, etc... Social media is managed by the marketing department in collaboration with an external agency.

*Profiltek Spain* places great importance on events, which have been an opportunity to make themselves known within the sector and strengthen relationships with close agents. It is also worth mentioning that the company's showroom is located within its facilities. It is used for various purposes, such as: presenting examples of its products to potential customers before signing the agreement and giving instructions about the products and components to the employees of the distributors. The exhibition is also used as a waiting room for visitors, who are normally clients of the company or belong to companies with which they maintain a professional relationship.

To conclude, *Profiltek Spain* can be seen as a proactive company with a dynamic vision that uses social networks and other communication tools to maintain a close relationship with its suppliers and end customers. As the clients are very important for *Profiltek Spain*, their employees spend time in updating blogs, the company's website and social network accounts in order to stay connected, to inform about the advances and news that are



going to be in the market, and finally giving advices when the client is about to choose a product.

### **Message and Packaging**

The company feels identified with message: "*If we do it, we must be the best*". With this message, it aims to transmit confidence to its distributors and end customers, that everything they manufacture complies with all the necessary regulations, that the company takes care of all the details in order to offer the best product on the market with a design adapted to all tastes and preferences.

Regarding packaging, *Profiltek Spain* considers it to be very important, since it is not a product that is sold on shelves. Packaging is a means to protect the product until it reaches its end customer. Therefore, the cardboard boxes that surround each screen and shower tray are simple, robust and environmentally friendly.

### **Q3: Is the company innovative according to this category?**

According to the OECD (2005, p.49), marketing innovation can be defined as: "*The implementation of a new marketing method that involves significant changes in product design or packaging, product placement, product promotion or prices.*"

Taking into account the activity that *Profiltek Spain* maintains on social networks, the use of communication tools to stay connected with its customers and their desire to grow and enter new markets, it can be affirmed that the company is innovative.

## **2.3.7. Results about Phases towards Innovation**

### **Q1: Does *Profiltek Spain* follow each of the phases contained in the “*Bridge Model*”?**

Previously, (section "2.3.3. Results on the Creative Process") the production phases followed by the company *Profiltek Spain* have been presented. Based on the information provided by the company, it can be affirmed that most of the phases presented by the “*Bridge Model*” are followed, although the company has presented them separately and with a different designation.

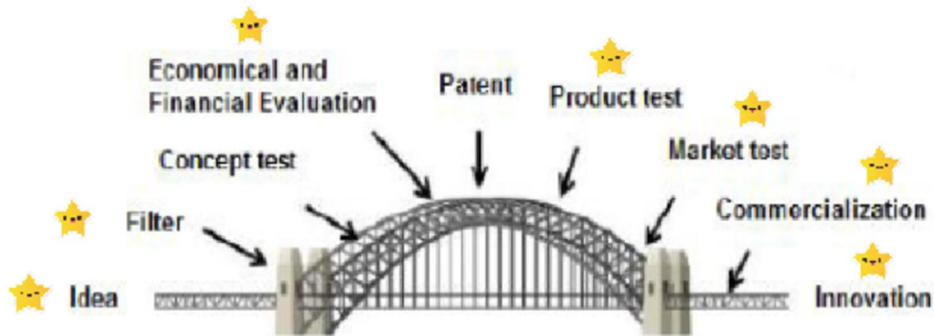
The company is audited and certified annually by IVAC (*Independent Certification Institute*) and based on this methodology, it manages all kinds of projects (for example regarding: new products, redesigns, improvements, range extensions, etc.). Considering

projects of new ideas, it should be mentioned that the company appoints the realization of a "Preliminary project", which must go through the Product Committee to be evaluated for approval.

The technical, commercial and aesthetic objectives of the product are specified in the aforementioned preliminary project. Comparisons are made with the competition or estimated market prospect. A budget for the development of the project is set, the necessary resources and a deadline for the development are determined as well as a study of costs or sales prices (*PVP*) and return on investment.

In the image below illustrates the phases of the "*Bridge Model*" and highlights the phases followed by *Profiltek Spain* with the star symbol.

**Figure 9: Steps of the "Bridge Model" followed by the company *Profiltek Spain***



**Sources:** Adapted from *Medicon Valley Academy (2005) Medicon Valley Annual Report 2004. Lund and Copenhagen.*

## Chapter 3. Conclusions

To conclude the previous chapters, a brief summary of the results will be presented and accompanied by recommendations. It will be followed by limitations encountered throughout the investigation as well as proposals for possible future investigations.

### 3.1. Summary results and recommendations

The research allowed to understand the theoretical concepts in a more practical way. The main ideas of each category and corresponding conclusions shall now be nominated.

#### **Origin of Ideas**

Inspiration can come at any time and from different sources: fairs, events, magazines, fashion trends or even from competitors. All ideas are equally valid and good. Because ideas may be ahead of their time, those who get discarded are stored in a database in order to keep them for a later usage.

It turned out that *Profiltek Spain* values the opinion of all employees, that the Brainstorming technique is used, and that all ideas are archived. However, the way to value ideas and to come up with new ideas varies within the different departments, as each uses an “individual” technique. An example is showed by Santiago whose technique consists of putting himself on different levels (especially in the user's place), thus being able to imagine the changes necessary for the product.

#### **Products of the Profiltek Spain**

The products manufactured by *Profiltek Spain* are undoubtedly innovative, as they follow the new trends in bathroom furniture in being original and creative. The company easily adapts to changes of the market and even tries to be ahead of the time with its products, thus falling into the category of continuous innovation. The company improves the products already available continuously with incorporating a wide variety of accessories and customization possibilities that are increasingly innovative and enable a better quality.

Thanks to their research and development, *Profiltek Spain* developed new techniques to add to their products (*IMAGIK* design technique, *ECLIPTEK* or *MIRASTAR* glass, *teknoclean* technique, etc.) in order to stand out from their competitors and to offer the final customer a safe and high quality product. To convey this feeling, a 5-year guarantee is offered on all products.

### **Creative process**

*Profiltek Spain* follows a 5-phase process: Preliminary Proposal, Conceptual Design, Detailed Design, Industrialization and Launch. At the end of the Launch phase, the company prepares the commercialization of the product and the identification of possible improvements. The production process schedule will be established.

The processes used by the company can be considered as innovative due to the unique production techniques created by the company itself while avoiding to resort to external services. These techniques also make the products more resistant and easy to clean for the final customers.

The *IMAGIK* technique created by *Profiltek Spain* is very innovative as it differentiates the company from its competitors and offers the market a different design technique that is resistant to wear and tear.

### **Environment**

The work environment improves innovation, since the opinion of every employee is taken into account. This encourages employees to do their jobs, value innovation and cooperation, recognize merits, and be ambitious to produce high-quality products each day. The company is highly formalized, with constant review of each idea via a database.

A very important piece of information obtained from the interview is that the company, in addition to see the benefits of locating its headquarters to *Quartell*, has taken into account the impact on its employees and neighboring companies. Today, the *Profiltek Spain* has around 250 employees who are living in the neighboring towns.

## Human Resource

The company's employees are professionals. In the marketing and R&D department employees with a creative personality can be found who are highly motivated. They can dedicate themselves to design new products or technologies, which is a perfect task for creative people.

Regarding knowledge, the founders of the company initially did not have specific knowledge of the sector. Nevertheless, a university training and other knowledge appropriate for the main activities are available now.

With respect to the staff their treatment, it can be said that *Profiltek Spain* does everything possible to understand the individual situation of their employees and to adapt its working schedules according to distinct needs. Possible adaptations are a reduced workday for employees who just become parents, flexible working times depending on the employee's needs to manage their daily routine, including caretaking for children and school requirements, etc. A formal request however is required.

## Marketing

The company does not have own sale-points, but works together with carefully selected distributors. It uses communication tools to correspond with final customers, focusing on social networks that are most used by potential final customers and above all, providing a blog via its website. For *Profiltek Spain*, staying close to its final consumers is very important, because due to selling products via distributors (and therefore not their own stores) the company has no control over the attention that the final customer receives. These accounts not also serve to inform, but also offers advice on choosing the bathroom screen or shower tray that suits best.

*Profiltek Spain* focuses on their customers, and maintain a very comprehensive customer service which is able to answer all the questions of the customer while communicating in a professional style but with sympathy and kindness.

## The “Bridge Model”

In order to achieve innovation, *Profiltek Spain* follows 7 of the 9 elements contained in the “Bridge Model”. These elements are included within the 5 phases of the creative

process described earlier and are taken into account when designing and manufacturing new products.

To be an innovative company, it is necessary to follow a certain procedure and, above all, to put the innovative idea into practice. A team of very well prepared and trained people is necessary to carry out this procedure.

*Profiltek Spain* meets the necessary criteria to be considered as an innovative company because the overall design of its products, their features and accessories is innovative.

### Final remarks

With regards to the concepts of creativity and innovation it can be concluded that *Profiltek Spain* stands out for being creative and innovative. The most striking examples are the following:

- The company is doing a magnificent job which is demonstrated by its achievements up to today. Being a young company with only 30 years of existence *Profiltek Spain* demonstrates that is possible to produce innovative products of high quality. The company has invested a lot of effort to become recognized as a benchmark company in the sector.
- *Profiltek Spain* is a pioneer in techniques such as direct digital printing on glass (*IMAGIK*) and the launch of free application known as *Virtual Decoration 4.0*. This application is available for Smartphones and Tablets and allows the customer to choose and combine parts from 19 series of screens. In addition, a preview of the result is shown and can be saved in pdf format.

As commonly known, claiming that perfection exists would be wrong, which applies to *Profiltek Spain* as well. The company is truly innovative and creative with respect to the aforementioned categories, however improvements are always possible, such as:

- **Company HR Department:** Currently 2 HR technicians and a PRL technician work for the department, in addition to the HR director. Given the total number of employees, an increase of personnel for shall be considered for this department. Since the workload currently exceeds the available office hours, delays in the completion of necessary HR tasks are inevitable.
- **Lack of coordination between the HR Department and the company's factory coordinators:** Within the HR department a matrix has been designed for

each factory section such as maintenance, warehouse, partitions, glass and Platek (dedicated to manufacture shower trays) in order to control the training level and knowledge of each employee concerning their work area. Each new employee must go through a 3-month training period, which includes phases and periods to follow, where the employees learn to manage the entire production process corresponding to their work area. For example, glass workers must know how to carry out the entire process that takes place from the moment the unhardened glass arrives until its completion, even though their main tasks are focused onto receiving the glass. This shall enable all employees to keep the production running even in the event that a key employee who controls a specific machine becomes ill. Being a good concept in theory, the problem arises in the daily routine when factory coordinators do not implement the indications given by the HR department. Therefore, small conflicts arise and production processes are subject to delay.

Finally, the creative process and the phases followed by the company when designing and manufacturing its products shall be taken into consideration, bearing in mind that Profiltek Spain has its own laboratory. Thanks to this *Profiltek Spain* is able to develop new techniques for improving its products such as the teknoclean method, the IMAGIK tool, and others. Therefore, the company introduced both significant and technological improvements to its products, which distinguishes itself as innovative within its creative process.

### **3.2. Limitations and future research**

Finally, the limitations encountered during the case study shall be mentioned below, as well as suggestions for future research.

During the investigation process, the appearance of a virus known as COVID-19 has significantly limited the possibility to conduct interviews. Initially, the investigation process was set up to take advantage out of the author's internship at the company starting in September 2019 in order to meet all office employees. Due to the state of national emergency declared by the Spanish President on 14th of March 2020, the internship contract had to be suspended and therefore the interviews had to be conducted via email. This influenced the case study as an authentic conversation was not possible.

As proposal for future research the following suggestions could provide a good aid to orientation:

- Carry out a more exhaustive investigation about the sector in order to detect whether other companies dedicated to the same sector comply with the phases presented in the *Bridge Model* or if any of these companies are innovative in other terms as the company staged in the case study. The fields to be analysed include, but are not limited to process, organization and commercialization.
- Study whether other companies dedicated to the same sector use radical innovation and, if possible, find examples of other types of production processes.
- Consider to attend main fairs of the sector in which the company staged in the case study is active. Carry out an analysis of the presented products and the participating companies.



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## Annexes

### *Annex 1: Interview 1 - Francisco Montolio Nebot, Profiltek Spain*

#### **INTERVIEW 1: FRANCISCO MONTOLIO NEBOT - PROFILTEK SPAIN**

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##### General questions

1. How would you define the company Profiltek Spain?
2. How would you define its business philosophy in a few words?
3. How did the company start and where did the idea come from?
4. Who is forming the team of Profiltek Spain?
5. As for the organization of the company, could you talk about:
  - Departments and tasks
  - Communication between members
  - Personal freedom and decision-making capacity
6. When the company started, did you have any knowledge of the sector?

##### Questions about the working climate

7. Profiltek Spain is located in the Polígono Industrial Foia, Quartell. What have been the benefits of locating your headquarters and factory here? (Evaluation, network expansion ...)
8. What are the dimensions of the production facilities of Profiltek Spain?
9. What social networks exist in Profiltek Spain and how important are they for the company?

##### Personal questions

10. Do you have an academic background regarding the tasks of your work? If so, when and how did you achieve it?
11. Have you always considered yourself as a creative person?
12. What motivation do you take from your work?
13. Of all the people around you, who do you consider to be most creative?

*Annex 2: Interview 2 - Santiago Alfaro, Profiltek Spain*

**INTERVIEW 2 - SANTIAGO ALFARO - PROFILTEK SPAIN**

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Personal questions

1. Do you consider yourself as a creative person?
2. What motivation do you take from your work?
3. Do you have a specific background related to the tasks that you carry out? What training studies did you take?
4. Do you have an academic background regarding the tasks of your work? If so, when and how did you achieve it?
5. Of all the people around you, who do you consider to be most creative?
6. What skills do you consider as important to be the director of Marketing and Research and Development?

Questions about the product

7. How are ideas developed in Profiltek Spain when it comes to design a product? Do ideas always come from the same persons or does everybody participate?
8. The products manufactured by the company are characterized by their innovative and fashionable designs. What inspires you to design these products?
9. Is a record kept of new ideas? Are these ideas constantly monitored?
10. Is a database used to collect ideas of new developments?
11. With which models of shower cubicle walls has Profiltek Spain introduced itself to the market? Could you describe it?

Questions about the creative process

12. How are the different phases of the creative process carried out?
13. Do you set a deadline for each design, or do you just keep designing as ideas arise?
14. Once the samples are ready, are the product and the market tested before the launch?
15. The company is dedicated to the design, production and marketing of products. How does your opinion of the production process relate to the views of others?

Questions about Marketing

16. How is the packaging process handled in the company?
17. What are the distribution channels and points of sale used by Profiltek Spain?
18. Regarding communication, which communication and social media tools are used by the company? How are they managed?
19. Does the company relate to representatives for the environment, such as competitors, clients, suppliers, universities or institutes? If so, who are those?

Questions about Innovation

20. Is Profiltek Spain innovative in product, process, organization or Marketing?
21. Is the type of innovation that the company uses to make its bathroom screens and shower trays radical or continuous?



*Annex 3: Individual Questionnaire - Profiltek Spain*

**INDIVIDUAL QUESTIONNAIRE - PROFILTEK SPAIN**

Internal Environment

For each of the following statements, rate from 0 to 10, which means 0 that you completely disagree and 10 totally agree:

**Table 6. Internal Environment**

<b>Statement</b>	<b>Value (0-10 points)</b>
Whole team's opinion is valued	
Communication is appropriate	
Degree of freedom in company is appropriate	
Appropriate management in projects	
Employees are properly encouraged	
Cooperation and innovation is valued	
Merits and achievements are recognised	
Sufficient time available to accomplish tasks	
Enough resources to perform my task	
Company with an ambitious outlook and regards challenges as a growing experience	
Situations of pressure within the enterprise are frequent	

Motivate if you agree or disagree with the following:

*"I consider that the working environment in Profiltek Spain encourages innovation"*

Human Resources

Mark with an X each skill, ability or quality that you think you possess:

**Table 7. Personally Characteristics**

Persistence	X	Ability to perform tasks	X
Curiosity	X	Teamwork	X
Energy	X	Experience in various fields	X
Honesty	X	Social skills	X
Self-motivation	X	High intelligence level	X
Problem-solving skills	X	New in the field	X
Risk Orientation skills	X	Ambition	X

1. Do you think you are a creative person?

2. What motivation do you take from your work?

3. Have you acquired specific knowledge to work at Profiltek Spain?

*Annex 4: IMAGIK Technology - Profiltek Spain*

With *IMAGIK*, spectacular results can be achieved due to 6 primary printing colors applied with injection heads.

Any image, color and design can be quickly painted on glass. It remains more durable and preserves the elegant translucency of the material, such as transparent, blue or smoke gray.

- The results are spectacular.
- Printed with ceramic inks.
- Photographic technology: Maximum print resolution is 1440 dpi.
- Continuity of the graphs regardless of the number of sheets and size of the overlaps of each partition model.
- Scratch and wear resistance against water or duration of time
- 6 printing primary colors are used.
- Quality and guaranteed adherence: The technique complies with UNE EN 14428 and UNE EN ISO 2409 standards. Additionally, certified by ASTM D870 and ASTM D2247 standards.

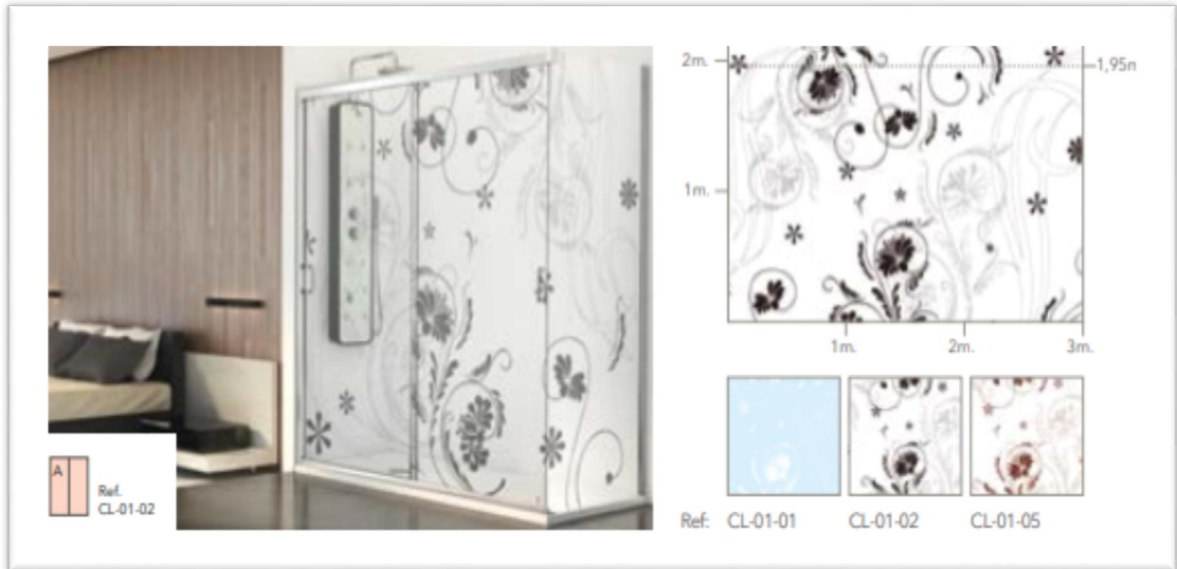
More than 70 designs can be selected from the company's collections in the Virtual Decorator. A custom design can be created as an alternative.

Some examples of designs made with *IMAGIK*:

- **CLASIK FOG**



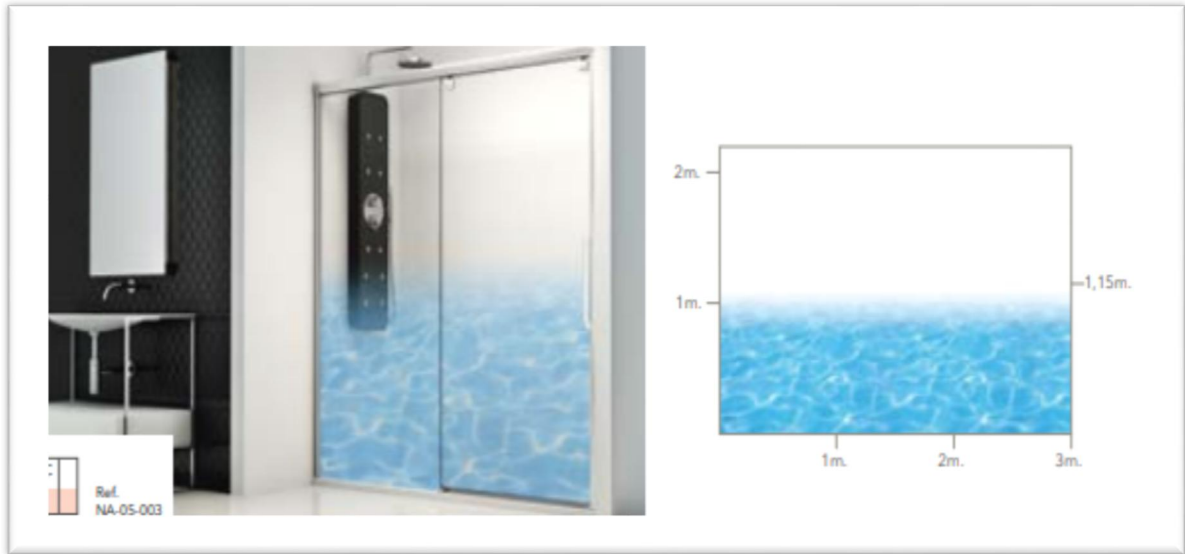
- **CLASIK VINTAGE**



- **COSMOPOLITAS SILUETAS**



- **NATURAL CALM**



- **NATURAL BAMBÚ**



*Annex 5: TEKNOCLEAN - Profiltek Spain*

**TEKNOCLEAN: IMPECCABLE BATHROOM SCREENS**

*TEKNOCLEAN* is an intelligent system that, when applied to the glass surface, forms a protective film against liquids and minimizes the incrustation of dirt and limescale, thus offering an impeccable, fast and long-lasting cleaning.

Among the main advantages of using *TEKNOCLEAN* in partitions are:

- Easy cleaning.
- The look remains as good as new for a longer time.
- Minimum accumulation of limescale and other polluting substances.
- Surface protected by non-stick coating which resists common cleaning products.
- Protection from difficult stains such as oils or greasy substances.



**Glass treated with *TEKNOCLEAN***



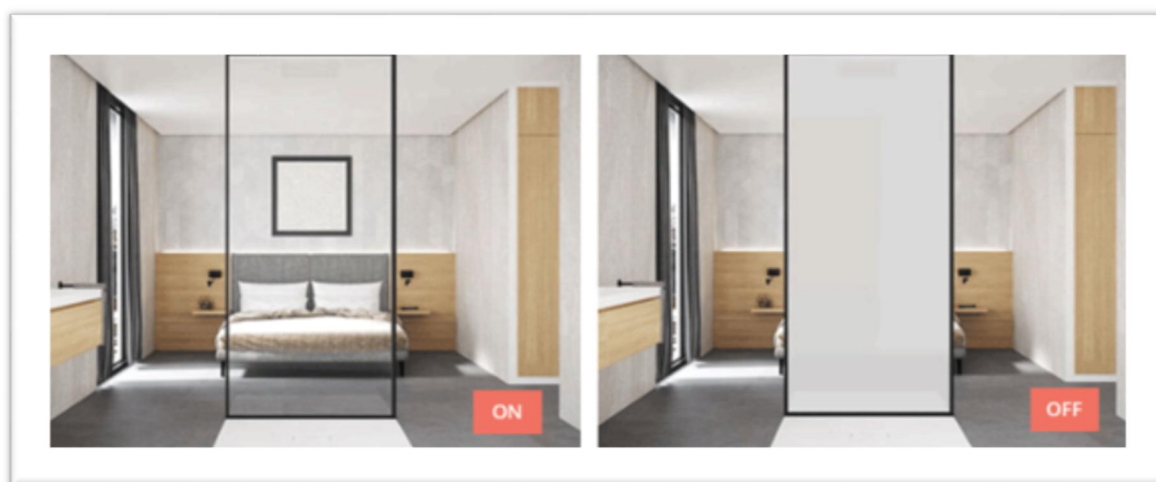
**Untreated glass**

## Annex 6: ECLIPTEK Glass Technology - Profiltek Spain

### CHARACTERISTICS OF ECLIPTEK

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*ECLIPTEK* glass allows the screen to be converted from transparent to opaque by a remote control which creates a different and at the same time spectacular effect.



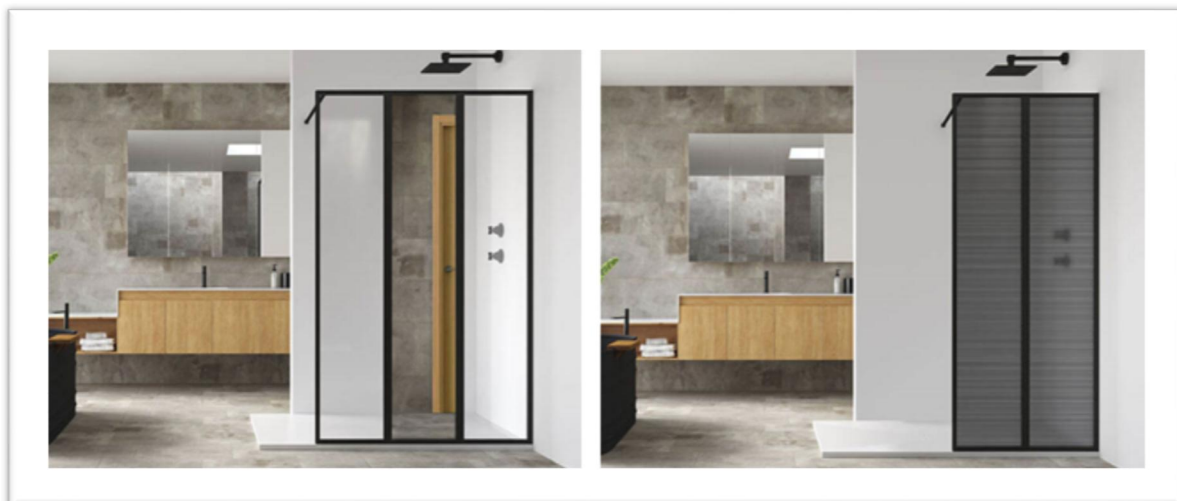
Its main characteristics are:

- Thickness 4 + 4 mm.
- Opaque laminated glass that becomes transparent through electric current.
- Consumption of 8 W / m<sup>2</sup> when glass shall be transparent
- *ECLIPTEK* operates between 60 and 80 V, a transformer is supplied by *Profiltek Spain*.
- For more information, see the Fixed Nordic series. Only available in FN-2001 and FN-2015.

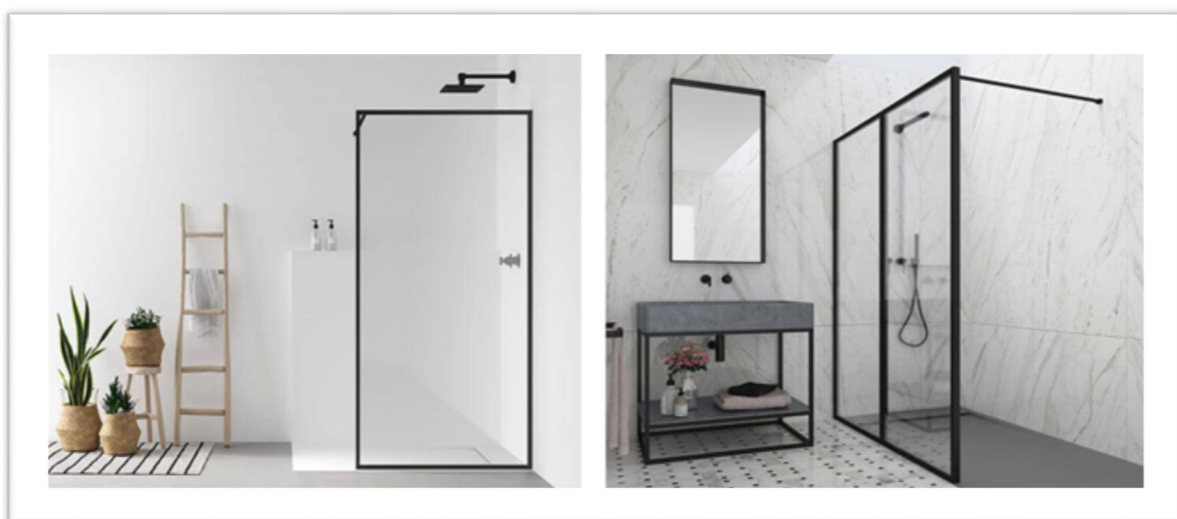
*Annex 7: Products - Profiltek Spain*

**FIJO NORDIC COLLECTION**

- **First and Second FIJO NORDIC MODELS**

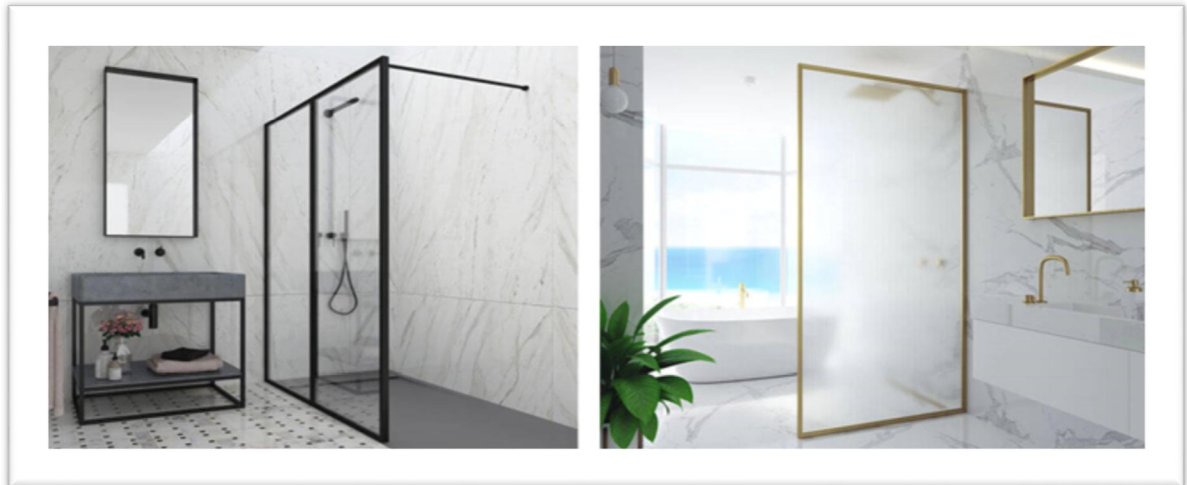


- **Third and Fourth FIJO NORDIC MODELS**





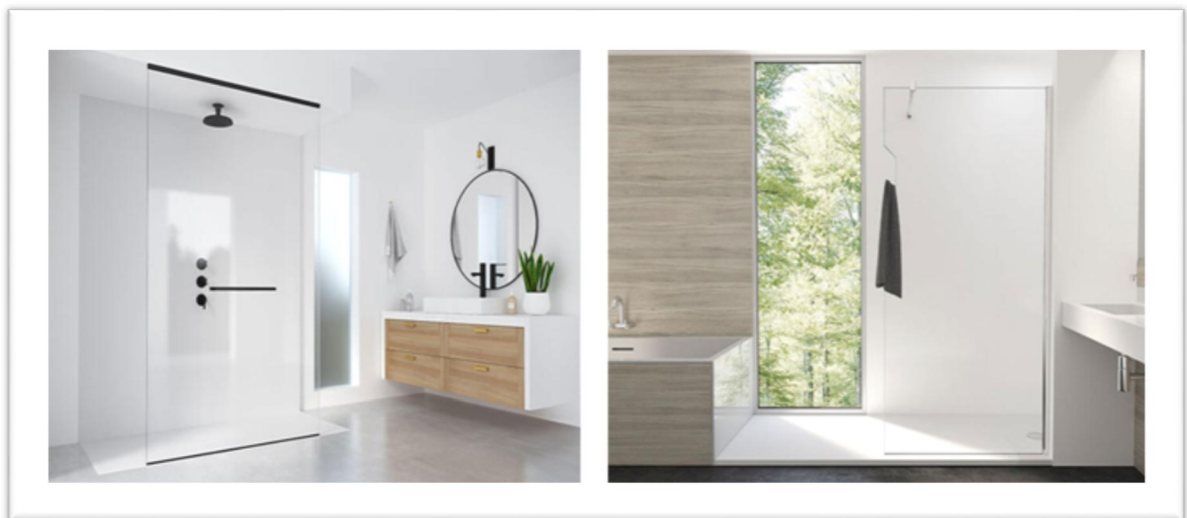
- **Fifth and Sixth FIJO NORDIC MODELS**



***FIJO ONE COLLECTION***

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- **First and Second FIJO ONE MODELS**



- **Third and Fourth FIJO ONE MODELS**

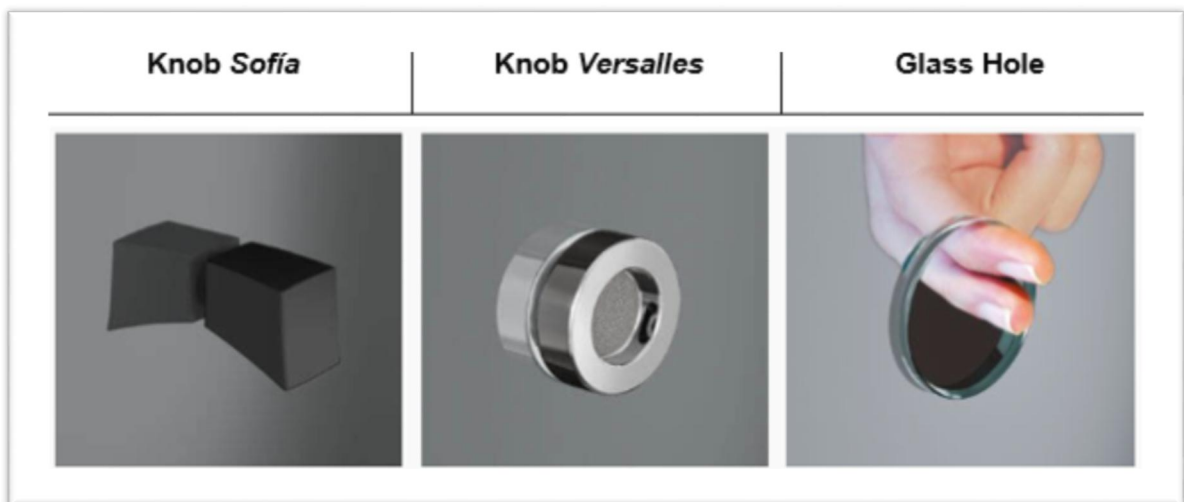
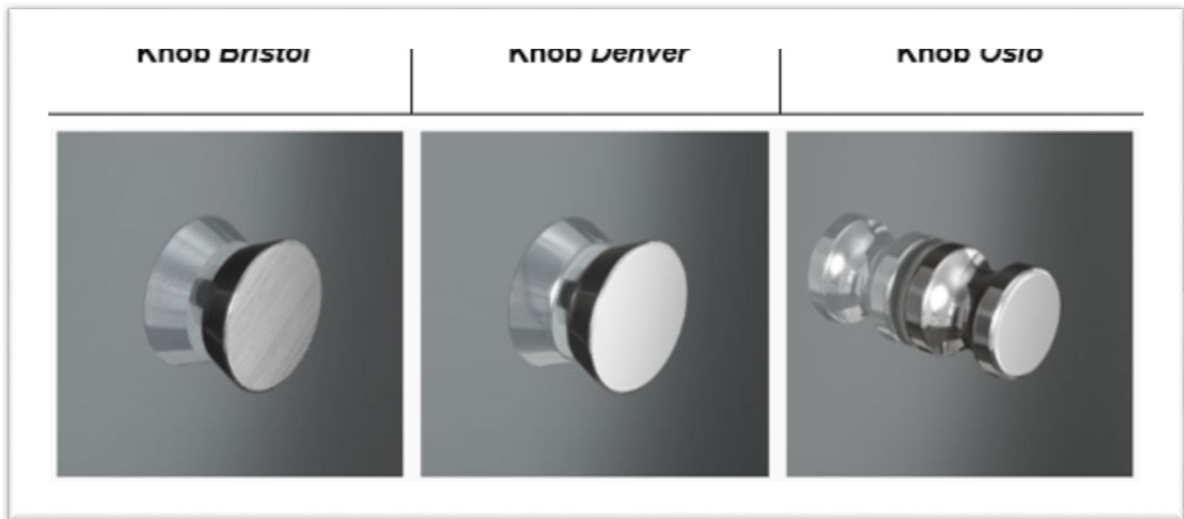


**ACCESSORIES**

- **HANDLE TYPES**



- **KNOB TYPES**



- **GLASS TYPES**

