

STUDY ON THE FEASIBILITY OF IMPLEMENTING A GROWTH STRATEGY AT



Presented by: Rosario Pascual Cerezuela

Supervised by: José Manuel Vicent Sáez

DEGREE IN BUSINESS ADMINISTRATION
AE 1049 – FINAL DEGREE PROJECT
ACADEMIC YEAR 2021-2022

INDEX

| A. | INDEX OF TABLES | 6 |
|-----|--|----|
| B. | INDEX OF GRAPHS | 6 |
| | | |
| 1. | EXECUTIVE SUMMARY | 1 |
| 2. | INTRODUCTION | 2 |
| 2.1 | . Purpose, justification, and motivation of the final degree project | 2 |
| 2.2 | . Objectives of the strategy study | 3 |
| 2.3 | . Methodology and justification of related topics | 4 |
| 3. | ZSCHIMMER & SCHWARZ | 5 |
| 3.1 | . Presentation of the company | 5 |
| 3.2 | . Mission, vision and values | 6 |
| 3.3 | . Description of the activity | 6 |
| 3.4 | . Definition of the market: delimitation and quantification | 7 |
| 3.5 | . Differential value | 8 |
| 4. | DESIGN OF THE BUSINESS MODEL | 9 |
| 4.1 | . Definition of the business model (CANVAS) | 9 |
| 4.2 | . Segments of customers | 9 |
| 4.3 | . Value proposal | 10 |
| 4.4 | . Channels of distribution | 10 |
| 4.5 | . Relationships with the customers | 11 |
| 4.6 | . Key resources | 13 |
| 4.7 | . Key activities | 14 |
| 4.8 | . Partners | 15 |
| 4.9 | . Sources of income | 16 |
| 4.1 | 0. Structure of costs | 16 |
| 5. | ANALYSIS OF THE ENVIRONMENT | 18 |
| 5.1 | Analysis of the general environment (PEST) | 18 |

| | 5.1. | 1. | Political-legal analysis | 18 |
|----|------|------|--|----|
| | 5.1. | 2. | Economic analysis | 18 |
| | 5.1. | 3. | Socio-cultural analysis | 19 |
| | 5.1. | 4. | Technological analysis | 20 |
| | 5.2. | Ana | alysis of the competitive environment (PORTER) | 20 |
| | 5.2. | 1. | Threat of new competitors | 21 |
| | 5.2. | 2. | Threat of substitute products | 21 |
| | 5.2. | 3. | Bargaining power of the clients | 21 |
| | 5.2. | 4. | Bargaining power of the suppliers | 22 |
| | 5.2. | 5. | Rivalry among the existing competitors | 22 |
| | 5.3. | lder | ntification and analysis of the main competitors | 23 |
| 6. | S | WO | Γ ANALYSIS | 25 |
| | 6.1. | Wea | aknesses | 26 |
| | 6.2. | Thr | eats | 26 |
| | 6.3. | Stre | engths | 27 |
| | 6.4. | Орр | oortunities | 27 |
| 7. | . 1 | IARK | KETING PLAN | 28 |
| | 7.1. | Pro | duct | 28 |
| | 7.2. | Pric | >e | 28 |
| | 7.3. | Dist | tribution | 29 |
| | 7.4. | Cor | mmunication | 29 |
| 8. | . Р | LAN | OF HUMAN RESOURCES | 30 |
| | 8.1. | Rep | presentation of the organization chart | 30 |
| | 8.2. | Fun | ections and design of the job roles | 32 |
| 9. | | PER | ATIONS PLAN | 33 |
| | 9.1. | Pha | ses of the production process | 33 |
| | 9.2. | Mea | asures of quality, prevention, and environment | 34 |
| | 9.3. | Сар | pacity of production of the company | 35 |
| | 9.4. | Cor | npanies of subcontracting | 35 |

| 9. | 5. | Supplier companies36 |
|-----|--------------|--|
| 9. | 6. | Function of procurement and storage36 |
| 10. | F | INANCIAL PLAN37 |
| 10 |).1. | Plan of investment and finance37 |
| 10 |).2 . | Forecast of profit and loss37 |
| 10 | 0.3. | Plan of pension cash flow38 |
| 10 |).4. | Pension balance38 |
| 11. | G | ROWTH STRATEGIES39 |
| 12. | E | VALUATION OF THE STRATEGY40 |
| 13. | С | ONCLUSIONS41 |
| 14. | R | EFERENCES42 |
| 15. | Α | NNEXES45 |
| Α | nne | x I. Interview with the Managing Director of Zschimmer & Schwarz 45 |
| Α | nne | x II. Location of the cluster in the province of Castellón46 |
| Α | nne | x III. Distribution of the staff by gender47 |
| Α | nne | x IIII. Distribution of the staff by departments47 |
| Α | nne | x V. Distribution of the staff by ages47 |
| A | nne | x VI. Actual representation of the organization chart of Zschimmer & |
| S | chw | arz |

A. <u>INDEX OF TABLES</u>

| Table 1. Analysis of the main competitors | 23 |
|--|----|
| Table 2. SWOT analysis | 25 |
| | |
| | |
| | |
| B. INDEX OF GRAPHS | |
| B. HINDEX OF GRAFIIS | |
| Graph 1. System of the Circular Economy | 11 |
| Graph 2. List of delegations from around the world | 13 |
| Graph 3. Organization chart of the internal structure | 31 |
| Graph 4. Phases of the manufacturing process of ceramic products | 33 |

1. EXECUTIVE SUMMARY

Zschimmer & Schwarz (Z & S) is a multinational company founded in 1894 in Chemnitz (Germany). It is dedicated to the manufacture of special chemical products, more specifically aimed at the ceramics sector. It is present in more than seventy countries and has more than 1,400 employees worldwide. In our country it has an office in Vila-Real (Castellón). We are a company that is characterized, mainly, by the growth in research and development that has taken place since its inception, as well as the diversity offered in all its products.

Throughout the development of this strategic plan, we have analyzed everything related to the organization in the Spanish delegation, both the environment and its competitors. Starting with a brief description of the theorical framework to put the client in context, followed by the business model and the analysis of the environment.

Consequently, and after studying these points, certain conclusions about the company's situation are obtained, which can be reflected and explained in the SWOT analysis. In this analysis, we can see that the company is in a favorable position within the sector to which its activity belongs, but that it has some strategic objectives for the future in order to improve its current position.

Next, we will explain each of the plans that are considered most important for the study of this plan, that is to say, we will carry out both the marketing plan, where we will be able to see how the strategies that have been adopted are working, and the human resources plan, which briefly details the internal functioning of the organization, as well as the hierarchy used for the division of labor in the development of productive activities.

In addition, an operations plan will be developed, where we will be able to see all the aspects related to the production processes of our chemical products, as well as an investment and financing plan, that is, a brief analysis of the economic situation in which we currently find ourselves.

Finally, and to finish with the plan, growth strategies will be created based on the objectives that have been established, and then, the respective evaluation of the strategies will be carried out. After analyzing the influence of these strategies, conclusions will be drawn on the analysis of the company's strategic plan.

2. INTRODUCTION

2.1. Purpose, justification, and motivation of the final degree project

The topic chosen for the elaboration of this Final Degree Project (TFG) is "the study of the feasibility of the implementation of the growth strategy," in our case, for one of the best-known German multinationals in the markets in which it operates, that is Zschimmer & Schwarz.

In order to carry out this strategic plan, this company has been selected because we consider it to be one of the best positioned in terms of the activity it carries out and in terms of its position in relation to its most direct competitors.

Moreover, taking into account two factors that we consider very favorable, such as the fact that it is a company completely committed to constant innovation, both in general aspects related to its products, and the fact that it is very aware of its respect for the environment in each of its production processes.

The main objective of this study is to know in more detail the current situation of the company in relation to the possible influence exerted by its stakeholders, as well as to analyze each of its strengths and weaknesses in order to solve or improve those aspects that require it.

After a brief introduction of Zschimmer & Schwarz, in the following documental, we will find all the analysis carried out in order to get to know in greater detail the aspects that most affect the activities they carry out, as well as whether the growth strategy applied has been effective.

Finally, it is worth mentioning that this analysis will be carried out in relation to tailor-made chemical products, specifically, aimed at the ceramics sector, since we considerate to be one of the most highly valued sectors with the greatest presence in the geographical area where Zschimmer & Schwarz is located in Vila-Real.

2.2. Objectives of the strategy study

As mentioned above, the main objective of this strategic plan is to understand the current situation of the company, as well as to analyze the strengths and weaknesses of the company in relation to its stakeholders, in order to determine the feasibility of implementing the growth strategy.

In addition, as has also been mentioned, the analysis of this study seeks to able to solve and improve those aspects that require it, taking into account and examining the economic, technological, political, social and environmental of Zschimmer & Schwarz.

For this reason, such a plan also helps us to be able to visualize more easily the type of management to be carried out in the company, in order to avoid possible future inconveniences or negative aspects that may directly affect it.

And finally, it is worth mentioning that this study is a good tool for the organization, since it allows it to present itself and make more internal aspects known to possible third parties interest in its activity.

In this sense, and after analyzing the objectives of this strategic plan, we will briefly detail the business objectives proposed to the company in order to successfully carry out this study:

- To understand the feasibility of implementing a strategy of growth within Zschimmer & Schwarz.
- Increased energy savings, due to the rise in electricity, gas and transport prices seen in recent months in our country.
- Implementing a circular economy, that is, reusing resources and raw materials to give them a new life.
- To increase by 12% in one year the number of solar panels in all warehouses, in order to be able to self-consume the energy generated in each of the production processes.
- To reduce the thickness of the ceramic pieces without depriving high mechanical resistance.
- To focus on greater sustainability in all products, as well as to improve the carbon footprint generated.
- Increase sales in 2022 by 8% due to the new sustainable changes that will be implemented in the company.
- Eliminate all the inequalities that exist in the company between women and men (equality plan 2019-2022).

2.3. <u>Methodology and justification of related topics</u>

For the purposes of the development of the following strategic plan, as far as the methodology is concerned, for the collection of the necessary information to carry out this study, in the first place and according to the primary sources, I have had the help of the general manager of Zschimmer & Schwarz, who has facilitated and resolved all the doubts that have arisen during the analysis, mostly through e-mails and telephone messages (See Annex I).

In addition, the help of the knowledge acquired during all the years of the degree has helped me in the collection of information and the development of this one, as, for example, in the SWOT analysis, the analysis of the environment, both general and competitive, the design of the business model and the marketing plan, since these are topics that are seen in a large part of the subjects taught in the degree of this study.

That is why, thanks to this study, in addition to providing knowledge, I have also been able to expand it, for example, in terms of plans such as the human resources plan, the operations plan and the financial plan, since, during the development of the degree in Business Administration, each of these has not been seen in great detail.

As for secondary sources of information, in order to develop the three plans mentioned above, I have relied on information found through various articles and official websites, which perfectly develop the information that was needed.

This information has been used because I consider it is the best possible way to explain the situation in which Zschimmer & Schwarz finds itself at this moment in the markets in which it operates.

In the human resources plan, I used the information to briefly describe and represent the organization from a more internal point of view.

For the operations plan, the information used has described in greater detail everything involved in the production processes that are developed in the company in terms of chemical products for the ceramic sector.

And finally, as regards the financial plan, the information that has been drafted has been of a more economic nature, that is to say, information has been used that shows, to a greater extent, the economic and financial situation, as well as the investment and financing possibilities that the company currently has.

3. ZSCHIMMER & SCHWARZ

3.1. Presentation of the company

Zschimmer & Schwarz Spain, S.L. (Z & S) is an innovative industrial chemistry organization established in our country since 1998 in the location of Vila-Real (Castellón). We are one of the most recognized companies in Spain in the sector in which we operate. Our corporate purpose is the commercialization of chemical products tailor-made for each of our customers, but more specifically, for the ceramic industry. That is why we are dedicated to the manufacture, acquisition, sale, export and import of all types of chemicals, raw materials, equipment, and tools used in the ceramic industry throughout the country.

We have the competitive advantage of diversification since we offer a wide variety of products such as tiles, tableware, sanitary ware, specific cleaning products for ceramics, etc. and directed towards various markets.

It was in 2004 that the first production plant for ceramic products in the province was opened. A year later, in 2005, the first export department was created in order to improve these activities. And, thanks to this, in 2009 the Castellón Chamber of Commerce awarded us with the export prize, thus supporting (Z & S) efforts.

In 2012, we innovated our processes and started the production of inkjet inks. And, thanks to this innovation, in 2013, we were awarded the "Alfa de Oro" prize.

In addition, in 2016 we built and launched our first central R + D laboratories, which marked a breakthrough in our production processes.

Finally, in 2018 we acquired the adjoining company, and since then we have been building the new Zschimmer & Schwarz facilities in order to further expand and improve our processes.

3.2. Mission, vision, and values

Since our inception, our mission has been to create tailor-made chemical products for each of the customers who request our products, thus offering results that are more adapted to the needs of today's customers and markets.

At Zschimmer & Schwarz we are committed to continue growing in the current chemical industry. We are looking for further growth in research, development, and technological innovation, as well as internalization and diversity of our products. In addition, as a general purpose, we have chosen to invest as much as possible in the province of Castellón, in order to promote exports, since it is one of the most important centers in the country in the ceramics sector (See Annex II).

As a philosophy we emphasize sustainable growth, long-term vision, financial independence, and the prosperity and security of all employees who make up our company. We emphasize values such as innovation, trust, respect, diversity, and tradition, which are fundamental for the proper functioning and development of the organization.

3.3. <u>Description of the activity</u>

As mentioned above, the business activity of Zschimmer & Schwarz is based on the manufacture of tailor-made chemical products for individual customers. We are a company dedicated to selling to companies in the ceramic, textile, chemical fiber and leather sectors throughout the country.

But, although our products are aimed at various sectors, our activity is more focused on the ceramics sector, since, being geographically located in an area where the ceramic sector has a large presence, we believe that this fact can help us to carry out our objectives, and to position ourselves in front of our stakeholders.

The various products and services mentioned above can be found in the catalogs that we offer to our visitors on our company's official website.

- Ceramic additives, such as chemical binders, deflocculants, preservatives, release agents or fixatives.
- Ceramic digital printing, e.g. ceramic inks, cleaners, or digital tail.
- **Digital textile printing**, such as, Diamontex primer or digital inks.
- Auxiliary products for textiles, such as, pretreatment, dyeing and printing, or finishing.
- **Special products for cleaning**, e.g. phosphonates, surfactants, or thickeners.
- Cosmetic or personal care products, such as, thickeners, surfactants, emulsifiers, or conditioners.
- **Fiber auxiliary products,** for example, oils of texturizing or Spin Finish, which is a process in which the fibers are converted into textile materials.

3.4. <u>Definition of the market: delimitation and quantification</u>

In terms of our target Market, in our case, we follow the hedging strategy of differentiation as we focus on several products offered to the satisfaction of customers in various segments.

As we have seen, although we specialize in the ceramics sector due to our favorable geographical location, we continue to offer products and services for sectors such as textiles, cosmetics, artificial fibers, and leather.

In addition, we are characterized by the total distribution of our products, as we are in charge of the delivery of our products to our end customers.

Finally, regarding the leadership style we follow in our organization, we can say that we are based on a more traditional style in which the most important decisions are taken by the top management.

However, our style is not based on autocracy but on task-orientation, that is to say, the managers of each department are in charge of managing and sending the tasks and

activities to the subordinates, so that each of them has clear roles and responsibilities at all times. Always bearing in mind that these subordinates have the power, whenever required, to give their opinion and point of view at any time.

3.5. <u>Differential value</u>

Since our beginnings, we at Zschimmer & Schwarz have been pleased to be pioneers in research and development in our processes because we believe that respect and care for our environment is fundamental. That is why we consider this fact to be part of our differential value.

These facts can be seen in each of our processes, an, as you can see, not only do we perceive this value, but so do our target audience and our entire environment, as we have been awarded for the next two most important projects of our career:

- In 2012 we started the Eco² Inkjet project, which won the "Alfa de Oro" awards in 2013. This project was implemented in order to establish new biodegradable chemical additives in inkjet for the digital decoration of products such as ceramic tiles. This meant reducing the amount of solvent inks in the decoration process.
- In 2016 we launched Eco² GLAZE, which won an "Alfa de Oro" award in 2017. This project was developed with the aim of recovering some stocks of traditional inks as our researchers discovered that, by separating the components, they could reuse the traditional inks and reuse them in more routine ceramic processes.

4. <u>DESIGN OF THE BUSINESS MODEL</u>

4.1. Definition of the business model (CANVAS)

The business model refers to the description of the basis on which any organization is created, and by which it provides and captures value for its environment.

One of the most widely used tools for the design of a business model of the company is the CANVAS model, which relates nine concepts for the creation of such models.

In the following points, we will elaborate on each of the points that are part of the CANVAS model on Zschimmer & Schwarz.

4.2. <u>Segments of customers</u>

A fundamental aspect within organizations are the customers and end-consumers of the products and services offer.

In our case, as mentioned several times throughout the study, our products and services are targeted at various sectors, such as the textile, chemical fiber, leather and ceramic industries.

However, although all our products and service can be demanded by these sectors, they are mainly aimed at the ceramics sector, since, as mentioned above, we have a very favorable geographical position that can provide us with many opportunities.

The companies that most frequently request our products are organizations in the aforementioned sectors which, in some of their production processes, need chemical products in order to be able to continue with the normal course of these processes.

4.3. Value proposal

For a company to have a high perceived customer value today, it must have a characteristic that makes this value attainable, and therefore differentiates it from its competitors.

At Zschimmer & Schwarz, we have this characteristic, and the products and services we offer have the competitive advantage that they are tailor-made, that is to say, it is the clients and customers who request the characteristics of the products they wish to buy from us. This factor, since our beginnings, has made us different from the rest of our competition, and for this reason, we have achieved the success we have today.

We are based on solving the problems to our customers, and we help them in everything necessary in the production process of ceramics, or the industry to which our products or services are directed.

We want to offer you, at all times, the best on the market without losing the quality that characterizes us. In addition, always taking into account the health of our environment and the sustainability that we are constantly striving for.

4.4. Channels of distribution

In industrial companies, distribution channels are an important factor in getting products and services to end customers.

At Zschimmer & Schwarz, we take care of the complete distribution of our products to our customers.

It should also be noted that we are responsible for reusing and repairing the packaging of our products if it was necessary.

Finally, as we are in charge of managing the distribution to our customers, we have an SDDR system, that is to say, a Deposit, Return and Refund of Containers System, in which customers return the empty containers of the products in order to receive a discount on the price of that product.

With this system we achieve that, thanks to the incentive of the discount on the product, our customers help us to promote the reuse and sustainability of packaging, as well as to attract their attention and loyalty.

A key point is that we have recently implemented a circular economy system, which is based on the use of our resources.

This circular economy system allows us to reduce waste to very low levels, since it is kept in this system until it can no longer be reused. It is a model contrary to the traditional linear model, known as "use and throw away".

Recycled Design

Collection Production and reprocessing

Consumption, use, reuse and repair Distribution

Graph 1. System of the Circular Economy

Source: Own elaboration.

4.5. Relationships with the customers

An important aspect for us is our visibility to existing and future customers and the fostering of good relations with them.

This is why we have recently been attending trade fairs and events, both national and international, to achieve this objective.

Fairs such as Cersaie, established in Bologna (Italy), which could be held again after the global pandemic of 2020, and created for companies to showcase their new research and development projects.

In addition, you can also find us at the international Cevisama trade fair in Valencia, which will be held again this June 2022 after the postponement due to the worldwide increase in infections last year due to the global pandemic of COVID-19.

The following dates are some examples of upcoming trade fairs where our customers will be able to meet us this year:

- All China Leather Exhibition (ACLE). Fair organized for leather Exhibition in Shanghai (China) in July-August 2022.
- All African Leather Fair (AALF). Organized for leather exhibition in Ethiopia in November 2022.
- **Interdye China 2022.** Fair organized for the dye, pigment, and chemical industries in the textile sector.
- **Ceramitec**. Fair dedicated to the exhibition of the ceramic industry in Munich (Germany) in June 2022.
- **Uniceramics Expo.** Dedicated to the exhibition of ceramic products, such as ceramic floor and wall tiles, in Foshan (China) in July 2022.
- Cosmetorium. Organized in Barcelona, in September 2022, with the aim of providing information on the formulation, manufacture, and distribution of cosmetic products, that is to say, personal care products.
- Making Cosmetics. Fair dedicated to the science of beauty and wellness.
 Organized in Milan (Italy) in November 2022.
- H3i Italy. Organized in Milan, in June 2022, to showcase the ingredients, formulation and techniques used in the manufacture of special cleaning products, both domestic and industrial.
- **Middle East Coatings Show.** Organized in Dubai (United Arab Emirates), in June 2022, for the coatings industry exhibition.
- **Lubricants Expo.** Organized in Essen (Germany), in September 2022, for the exhibition of lubricants products.

4.6. Key resources

Within the most important key resources of an organization, we can find both tangible and intangible resources.

In terms of tangibles resources, we can find done delegation in our country, which is the one located in Vila-real (Castellón), and therefore, the delegation that is the object of the study of this strategic plan.

But we also have a large number of delegations all over the world. Below you will find out which ones they are and where they are located:

Graph 2. List of delegations from around the world

EUROPE

- •6 in Germany.
- •2 in Belarus.
- •1 in Spain.
- •2 in France.
- •5 in Italy.
- •2 in Switzerland.
- •1 in Turkey.
- •2 in Ukraine.

ASIA

- •1 in South Korea.
- •1 in Macao.
- •5 in People's republic of China.
- •1 in Russia.

AFRICA

- •1 in Egypt.
- •1 in Tunisia.

NORTH AMERICA

- •3 in United States of America.
- •1 in Canada.

SOUTH AMERICA

- •1 in Argentina.
- •1 in Brazil.

CENTRAL AMERICA

•1 in Mexico.

Source: Own elaboration.

In terms of intangible resources, we can affirm that we currently have around 40 employees, the majority of whom are men (see Annex III). And, therefore, it can be seen that there are more departments occupied solely by men (See Annex IIII).

In addition, there are inequalities in their age, as they are more concentrated between 41 and 50 years of age (see Annex V).

So, this fact has encouraged the creation of the 2019-2022 equality plan that we are currently implementing, which states we need to increase the number of women employed in our workforces.

Furthermore, as a company with more than 20 years of experience in the Spanish market, and with an international presence for more than 100 years, we have sufficient knowledge and experience to cope with any kind of situation that may arise.

All these years of experience have help us to increase the value of this experience, as well as to maintain and improve the good relationships we have created with both regular customers and new customers who demand us.

4.7. Key activities

The key activities carried out in organizations are fundamental, as they are responsible for carrying out the production processes for the manufacture of products.

In our case, as mentioned above, our main activity is based, in the first place, on the manufacture of chemical products aimed at various sectors. However, we are also dedicated to the sale, both for export and import, of these products.

These are mainly aimed at the ceramics sectors, both nationally and internationally, as there is a wide variety of countries where products from these sectors are processed to a large extent.

4.8. Partners

Partners are one of the stakeholders that can bring us great benefits, whether they are individuals or different organizations.

At present, we can count on different partnerships and collaborations to carry out certain activities in our processes.

In 2020, we announced the collaboration as a strategic partner and shareholder with the Samia S.p.a organization, which is an Italian company created for the purpose of manufacturing chemicals for the tanning industry. Our role in this collaboration is mainly based on carrying out finishing and pigments tasks for this organization.

In addition, in 2020 we were also able to start collaborating with the Beauty Cluster of Barcelona, a highly recognized association within the beauty, cosmetics and personal care industry, aimed at promoting sustainable development, innovation and digital transformation.

In 2021, we joined the United Nations Global Compact in order to emphasize our commitment to the environment and the impact it can have on every activity we do at Zschimmer & Schwarz.

Lastly, one of the most regular partnerships we have is with Universitat Jaume I. here, we offer informative sessions and talks about new innovative projects or aspects of relevance to society today.

These sessions are face-to-face, held at the University's facilities. And, normally, anyone who wants to listen to the topics we are going to talk about can attend.

4.9. Sources of income

The sources of funding in today's organizations, due to the current economic situation in the country, are becoming more representative in the balance sheets.

However, proud of this, we can affirm that, at the present, we are a fully self-financed company, that is to say, we are an organization that uses all its internal resources from the activities we carry out in our production processes.

Therefore, we do not rely on external resources or external financing, that is to say, we can make investments with our own resources.

4.10. Structure of costs

The structure of costs has to be taken into account in a company of any size, since, for good accounting management, it must be known at all times what costs are likely to be incurred in the course of the core business.

For a company of our size, these are many types of costs, for example, fixed costs, variables costs, direct costs, and indirect costs.

The following is a concise list of the costs we can expect to incur in our daily business:

- Costs of production or operating costs: these are related with the manufacturing process. These costs can be of three types:
 - Cost of direct materials: these are the costs necessary to carry out the activity of transforming raw materials into finished products.
 - Cost of direct labor: costs related to the salaries of personnel involved in manufacturing activities.
 - Costs of indirect manufacturing: these are the costs do not influence the two previous types.
- Costs of business: these costs are related to the activities of sales of our products. Some of these costs can be the following:
 - Selling costs.
 - o Distribution costs.
 - Costs of marketing.
 - Costs of the after-sales service.

- Administration costs: these are related with the costs incurred in the departments of administration, control, and operations within Zschimmer & Schwarz.
 - Salaries and wages of the employees of the above-mentioned departments.
- Costs of research and development: these costs are related with the need to carry out research and technological development activities.

In addition, we also have costs for the use of different supplies, such as, for example, electricity, water, telephone, gas, etc.

And costs generated by the depreciation of fixed assets within the company, such as, for example, depreciation of machinery or transportation elements.

Finally, we can also find predictable and non-predictable costs, such as, for example, costs generated due to possible, machine breakdowns or accidents, such as floods or fires.

5. ANALYSIS OF THE ENVIRONMENT

5.1. Analysis of the general environment (PEST)

In order to identify the factors of the environment which affecting Zschimmer & Schwarz in the ceramics sector in Spain, we will use the PEST analysis of the current Spanish situation by diagnosing the following four dimensions: political-legal analysis, economic analysis, social analysis and technological analysis.

5.1.1. Political-legal analysis

With regard to the evolution of the ceramics sector in Spain, we can observe that until 2016, in the political-legal sphere, this sector was characterized by a period of invariability due to the fact that the Spanish political system was stable. Moreover, in this case, the legislation and regulation of economic activity was flexible.

The sector, over the years, has been favored thanks to the various aids it has received, such as, for example, the aid granted by the Institute of Small and Medium Valencian Industry (IMPIVA) in the period experienced by the crisis from 2007 to 2011.

However, as a result of the global pandemic we have experienced and the increase on the prices of energy and gas, the sector has been affected and has had to ask both the Generalitat and EU for public aid and subsidies in order to improve new green technologies and thus be able to cope with the process of decarbonization that is taking place.

5.1.2. Economic analysis

In terms of the economic environment, Spain has experienced several phases in recent years. In 2018, the economy grew at an estimated rate of 2.7% (FMI), largely due to increased more slowly, due to the decline in household consumption, the fall in business investment, the high fiscal deficit and the public debt accumulated in that period.

Moreover, it should be noted that, after the COVID-19 pandemic, the sector had to face a huge drop in demand, thus entering a "fourth sectoral crisis". Even so, this fact did not cause them to lose hope, as the Castellón cluster is strong and had already overcome three previous sectoral crises.

In 2020, this favorable situation was pleasantly reflected, as the industry outperformed and successfully ended the year with a growth of 2.3%, as reflected in the Ceramic Industry Sector Report 2021.

In 2021, as mentioned above, a strong growth of the industry could be seen, even surpassing the Italian industry, one of the most competitive countries in terms of ceramics, and all this, despite the continuation of the pandemic that, today, is still going on.

In the last year, despite the good evolution of the sector, it has been endangered and at risk, due to the cost over runs that are being generated in energy. This is overburdening the feasibility of companies producing in the Spanish energy sector.

Both prices of electricity and gas have increase by 100% in the last year, which have seen a decrease in their daily margins.

The situation may lead to a loss of competitiveness and, above all, puts at risk the continuity of the sector, as well as the jobs of all the employees who work in it and, therefore, of the Spanish households that make a living from it.

5.1.3. Socio-cultural analysis

As for the socio-cultural dimension, the recent recession in the construction sector caused by the economic crisis in 2007 affected the ceramics sector, as the decline in construction meant that the demand for ceramic materials and products was reduced to almost zero.

In addition, powers such as China and India are becoming increasingly important in industry and have lower labor and raw material costs. This causes an increase in their demand as their products are offered at lower prices than those of our country. However, offering a lower quality than that offered by our products.

Another factor to be highlighted is the climate. This must be analyzed since, in the ceramic sector, the products that are manufactured are usually used in countries where there climate is warm and with high temperatures. This is why, in some Latin American countries, ceramic products such as tiles are being demanded in large quantities, and this is helping to increase exports of our products.

Finally, it should be mentioned that trends and fashion also have an influence. In this case, Italian manufacturers, on many occasions, are the ones who establish the design, and for this reason, the Spanish companies must renew and innovate to create original and differentiated designs from the rest countries, without neglecting quality.

5.1.4. Technological analysis

In terms of the development of the Technology, the companies in the ceramics sectors currently have highly mechanized processes, due to the large investments that they have made in machinery. For this reason, the personnel costs have been reduced in recent years, with the exception of tasks such as supervision and monitoring of the production line.

In addition, the European union is becoming more and more stringent with regard to the emission of gases into the atmosphere. For this reason, various technologies are being developed for the purification and filtering of pollutant fumes and gases.

Finally, with the new sustainability objectives that are being implemented, green technologies are being carried out in the vast majority of companies to improve air, water and soil quality and thus reduce the environmental impact of each process.

5.2. Analysis of the competitive environment (PORTER)

After analyzing the factors of the general environment that affect our company, we are going to develop those factors that can affect its profitability in the sector in which it operates. For the analysis of the specific environment of Zschimmer & Schwarz we will use the five competitive forces model of Porter, which explains the degree of attractiveness within the sector by means of the following five variables: the threat of new competitors, the threat of substitute products, the bargaining power of customers, the bargaining power of suppliers and the rivalry between existing competitors.

5.2.1. Threat of new competitors

As for our competitors, in today's chemical sector, there is a high level of barriers to entry, as a high initial investment and a high volume of capital is needed to carry out the activities.

This is why, due to the emergence of such barriers to entry in the chemical sector, the threat of entry of new competitors is much lower, and therefore this is an advantage and an opportunity for us, as we will have fewer direct competitors and less pressure.

5.2.2. Threat of substitute products

As will be seen below, we have four more direct competitors in the geographic area in which we are located.

However, as we have already mentioned, a characteristic feature is our diversity. We offer solutions for all kinds of problems and for various sectors, not just the ceramic industry, and that is why there is not a wide variety of companies engaged in the same activity, so the number of substitute products is lower.

This fact gives us the possibility to differentiate ourselves from the rest of our competitors, and to be seen as a company with greater value for our customers. In addition, the quality of our products and the minimal environmental impact we bring to our environment.

Therefore, in this case, the threat from existing substitutes is minimized.

5.2.3. Bargaining power of the clients

Customers, being one of the most important stakeholders for organizations, exercise, on most occasions, a certain amount of power over them.

In our case, our customers have an intermediate level of bargaining power, as they are not in charge of implementing conditions on prices, quality, or delivery times.

However, they do take care of activities such as, applying for the requirements that the products they demand from us must have, as this is the basis of our main activity, the manufacture of chemical products made to measure for each of our clients.

5.2.4. Bargaining power of the suppliers

In Zschimmer & Schwarz, as a manufacturer of chemical products for various industries, we have suppliers for each of the production processes in each of these industries since the production of the products in each of these industries requires different raw materials.

Therefore, these suppliers have a certain level of power over us, because without this collaboration, our production processes would not take place.

However, in each of our agreements we try to establish agreements in order to avoid possible conflicts or future problems, and to clarify at all times, what are the need of both parties, in order to be able to meet both of them.

5.2.5. Rivalry among the existing competitors

With few competitors around us, the degree of rivalry between us is less intense that it may be in other more competitive sectors.

Having analyzed the four points above in relation to the five competitive forces model of Porter, we can affirm that the degree of rivalry that exists is not very high, and that our current position in the market favors us in terms of existing relationships between all our customers.

5.3. <u>Identification and analysis of the main competitors</u>

In order to find and analyze the main competitors we have at Zschimmer & Schwarz, we have based our analyses on the companies that are listed in the same National Classification of Economic Activities (CNAE), that are located in the same geographical area and that have a certain influence on us.

As well as, taking into account, in which companies are the most demanded by customers looking for our types of products.

Below, in the following table provides a brief analysis of our four most direct competitors:

Table 1. Analysis of the main competitors

| NAME OF THE COMPANY | CHARACTERISTICS OF THE COMPANY | STRENGTHS | WEAKNESSES |
|---|---|--|--|
| Gardenia | Company dedicated to the production of solutions for companies in the ceramics sector, specifically for the construction industry. | The incorporation of the manufacture of projected cork for the construction. | Lack of greater environmental awareness. |
| Lamberti | Company dedicated to the design and production of customized chemical solutions in the different sections within the industrial sector. | They implement long-term actions, for example, actions aimed at empowering women in agriculture. | They are responsible for the same activities as Zschimmer & Schwarz. |
| DECOROIL DIGITAL PRINTING TECHNOLOGY | Company specializing in industrial supplies for the ceramics sector. | They have a wider variety of products for their target markets, for example, solutions for rollers or vehicles for inks. | The only and exclusively manufacture products for the ceramics sector. |

| | | | They have strong | |
|-------|--------------------|----------------------------------|------------------|-------------------|
| A 191 | | Company specialized in providing | research, and | Lack of |
| | ditivosCerámicos | solutions for the ceramic and | development and | consistency in |
| AC | aitivoscerarriicos | porcelain sector. | environmental | quality policies. |
| | | | policies. | |
| | | | | |

Source: Own elaboration.

The four companies mentioned in the table above are located in the province of Castellón and they are the most competitive companies at present.

Our competitors do not exert a great influence on us, since we are the ones who exert an influence on the rest, due to the fact that, we are characterized as one of the strongest companies in the market in which we operate nowadays.

This is reflected in the number of their sales, which have been declining in recent years. In addition, it should be noted that, with the current situation of rising the prices of energy and gas, the low sales figures have been accentuated.

6. SWOT ANALYSIS

At this point, we will highlight and analyze the strengths and weaknesses of Zschimmer & Schwarz in order to assess its potential and thus be able to further develop the most appropriate strategies to be adopted.

In order to find these strengths and weaknesses, we will use the full SWOT analysis, in which the variables of opportunities and threats are also analyzed.

Table 2. SWOT analysis

Weaknesses **Threats** Focus solely on the ceramics Rising of the energy prices. Plan of equality. sector. High cost of the sustainability and innovation. **Strengths Opportunities** Strong focus improving Increasing the level of the on sustainability in all processes. environmental awareness in the High level in the quality of our society. products. The favorable geographical We offer strong value to our location of the ceramics sector. employees. Increase in ceramics production in Castellón. Increase of the production of ceramic in Castellón.

Source: Own elaboration.

6.1. Weaknesses

- Although the ceramics sector in the Valencian Community, specifically in Castellón, is a strongly positioned sector, it should be noted that focusing all products on this sector may mean a loss of certain opportunities in other large sectors.
- As one of our main objectives is to increase the presence of sustainability in all our production processes and the constant innovation we seek, we have to take into account that this may involve additional costs when it comes to manufacturing and research in order to be able to develop these constant improvements.

6.2. Threats

- At present, we can see how the increase in the price of energy, water and gas is directly affecting many of the ceramic companies in Spain, as they have been forced to stop using some of their machines in their production processes. This may affect our demand, since, if they produce less, they will demand less and less of our products. In addition, the reduction in the use of machines may mean that we will have to reduce the number of employees.
- As we have seen previously, we are not characterized by having a very egalitarian workforce in terms of gender and age, that is to say, we have more male the female workers, and they are more concentrated between 41 and 50 years of age. Therefore, this can be a negative point from the customers' point of view, as it can be perceived as a more traditional and unequal image when it comes to the treatment of employees.

6.3. Strengths

- At Zschimmer & Schwarz we can emphasize that we have a strong interest in further improving our processes and products in terms of sustainability, and this due to the increasing environmental awareness that is being created over the years.
- As a company with more than 20 years of experience in the sector, we have undergone many changes and improvements that have helped us to adapt our products to the needs of the markets, and this has led to an ever-increasing improvement in the quality of our products.
- In addition, at Zschimmer & Schwarz we are an organization with strong values, and therefore, we support our employees and give them the necessary opportunities to develop all the processes and tasks of which they are a part.

6.4. Opportunities

- It should be noted that, over the years, and to an increasing extent, Spanish society is becoming more environmentally aware, both at an individual and business level, that is to say, individuals and companies are increasing their demand for more environmentally friendly and sustainable products, a fact that can help us to achieve our goals related to our more sustainable environment.
- One of the opportunities we have since the establish of Zschimmer & Schwarz in Spain has been its geographical location, as the Spanish headquarters is situated in one of the strongest Spanish centers of the ceramic sector.
- In the last year, following the global pandemic, there has been a large increase in production of ceramic products in Castellón, which may encourage and favor an increase in demand for our products and services.

7. MARKETING PLAN

Based on our current and future goals at Zschimmer & Schwarz, we have taken the following actions on the following four P's of marketing: the product, the price, the distribution and the communication.

7.1. Product

As far as our products are concerned, we can say that they are characterized by being of an industrial nature since, as they aimed at the industrial sector (leather, cosmetics, ceramics, textile, chemical fiber, etc.), they involve a whole transformation process from the time they are demanded until they are delivered to the end consumer.

To this end, we follow a strategy of diversification and differentiation, that is to say, we have a different alternative of products according to the needs of our customers in each of the markets that we serve.

Offering at all times what each of our customers demand us, taking into account at all times, that the quality we want to offer is not lost.

In addition, we have a single brand strategy, that is to say, our entire production belongs solely to our brand.

7.2. Price

We base the pricing of our products on the perceived value of our customers. From the very beginning, we have attached great importance to quality and the values associated with our products, and this is therefore a relevant factor in the pricing of our products and services based on the perception of our customers.

In this case, we set psychological prices, as we have already mentioned, associated with the quality of our products and services. That is why we are not characterized by low prices, because quality, in our case, must be paid for.

However, we can offer to our customers certain discounts, such as volume discounts, that is to say, rebates.

7.3. <u>Distribution</u>

Regarding the decisions we make about the channels of distribution, first of all, we use direct or zero-level channels, that is to say, we do not have intermediaries in charge of the distribution of our products to the final consumer, as we are in charge of it ourselves.

This decision, therefore, helps us to have more control over the distribution.

Furthermore, in terms of logistics, we are in charge of storing our short stock in our facilities in Vila-real, as will be discussed later in the operational plan.

7.4. Communication

In order to carry out the analysis of communication, we must first of all talk about advertising. At Zschimmer & Schwarz, we do not have an advertising service, that is to say, we do not pay for communicating our message or showing our activity.

Secondly, in our case, we do not have any promotional activities either, that is to say, our form of promotion consists of discounts to our customers.

In terms of public relations, we have our official website where our customers can find all the news, both current and past new, about the company. In addition, as mentioned above, we are present at a variety of trade fairs and exhibitions around the world every year.

Fourthly, at Zschimmer & Schwarz, our customers have different sales methods, that is to say, the can place orders by telephone, by travelling to our premises or by our sales representative who make regular visits to the premises of our customers. Moreover, through our official website you can also contact us to place the orders you wish.

Finally, in terms of direct marketing, we communicate through the most widely used technological tools nowadays, that is to say, social networks, as we have an official profile on Twitter, on Facebook, on Instagram and on Youtube. In addition, on our official website, you can also find our updated catalogues, divided by the sectors to which the products are addressed.

On our You tube's channel, our customers can find informative videos about Zschimmer & Schwarz, as well videos showing the chemical and production processes of some products or treatments.

It is also worth nothing that, in the last year, we have implemented a monthly podcast, in order to promulgate sustainable chemistry and the environment in today's industries.

8. PLAN OF HUMAN RESOURCES

8.1. Representation of the organization chart

At Zschimmer & Schwarz we have a vertical hierarchical structure, with the chairman first, followed by a secretary and three board members.

Thereafter, we have one proxy and one joint proxy. We also have two auditors and an alternate auditor. And finally, there are three alternate administrators.

It should be noted that some of the positions mentioned are performed by the employees themselves, that is to say, there are some of these workers who have various functions and responsibilities within the company, and they are highly qualified to carry out so many tasks and activities.

To continue with the hierarchy, we can find two general managers and a quality manager for each of the processes.

In addition, we have different positions depending on the department, for example:

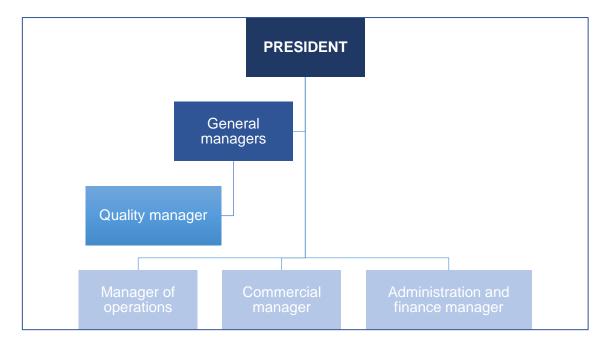
- Operations department: we have a department manager and different managers depending on the subcategory within the department, for example, production manager, manager of internal logistic, etc.
- Department of the process of engineering.
- Commercial department: we have the respective department director, as well as managers such as technical assistance or key account management.
- Department of design.
- Administration or finance department: the head of the department plus those responsible for management control or accounting.

Technical department or department of laboratory.

• Marketing department.

That is to say, in other words, each of the departments that make up the company has a department director, followed by the different managers and technicians within each of the sub-categories of each department.

Below is a brief representation of the organization chart of Zschimmer & Schwarz (see Annex VI):



Graph 3. Organization chart of the internal structure

Source: Own elaboration.

8.2. Functions and design of the job roles

In order to clarify the roles and responsibilities performed by each of our employees, and thus develop the job design, we will use the 5 fundamental parts developed by Mintzberg:

- **Strategic apex**: as mentioned above, we have a president, a secretary and three board members, who are responsible for taking the most important decisions and for the proper management of the organization.
- Middle line: to connect the employees who perform the activities necessary for
 the creation of our products and the top management of the company, we have
 different department heads, who are responsible for delegating tasks and
 activities to each of the components of the operational core.
- Operational core: those employees in charge of carrying out the tasks necessary for the manufacture of our products. At present, we have around 22 employees in charge of the production processes.
- **Technostructure**: we have certain proxies and joint proxies who are responsible for taking certain important decisions in the company.
- Support Staff: a fundamental part when it comes to safety, hygiene, coffee shop, informatics, etc. we have support staff of a simple nature, such as those in charge of the maintenance of the company and all its areas, as well as the cleaning staff, in charge of keeping the hygiene law always present.

9. OPERATIONS PLAN

9.1. Phases of the production process

Because our activities may be directed towards several sectors, each sector requires different materials and tools for the manufacture of the products, and therefore each of these products will be made in a different way from the others.

However, as our main activity is aimed at the ceramics sector, we are going to briefly mention the stages through which raw materials and materials for the manufacture of products for the sector of the ceramic in our country must pass.

Graph 4. Phases of the manufacturing process of ceramic products

Milling Pressing Enameling Decoration Polishing

Source: Own elaboration.

Firstly, the process of milling consists of crumbling the clay particles, which are then pressed in order to reduce the pores of the materials used and thus achieve a higher density in the product.

Next, the glaze is applied, that is to say, the product is immersed in a container that containing the glaze. Once it has dried, the product is decorated and finally polished to ensure that no lumps remain.

Our processes and techniques for carrying out the processes that we develop are those that we consider to be best adapted to the needs of each of our clients, since, after years of previous experience, they have been the most effective in terms of their quality.

9.2. Measures of quality, prevention, and environment

As for the policies of quality we have adopted, we can find that, according to the UNE EN ISO 9001:2015 standard, some of our measures of quality are the following:

- Protection of people.
- Generate good communication from all parties within the organization.
- Inform customers of any possible errors in products or orders.
- To achieve total customer satisfaction through these policies.

In other words, all our production processes and raw materials are constantly subjected to various tests and trials in order to comply with the standards of quality that have been established for us, we also seek to ensure that our suppliers comply with these standards in terms of raw materials and materials, our main objective being the total satisfaction of our customers.

As far as the environment is concerned, the protection of people and the environment is a fundamental aspect for Zschimmer & Schwarz, and we consider that the pursuit of the highest quality in our products can be synonymous with the constant pursuit of respect for our environment.

Since our beginnings, we have been pioneers in innovation and development and, therefore, we have always had respect for the environment in mind. That is why, in all our processes of production, we have been adopting and improving techniques committed the environment. This fact is supported by the "Alfa de Oro" awards we were granted years ago.

However, even with this commitment in mind, we will not stop innovating for the future in search of new measures that respect our environment, as it is constantly changing.

Finally, we have a quality management system certified according to DIN EN ISO 9001. We are also one of the companies contributing to the promotion of more sustainable oil of palm within the round table on Sustainable Palm Oil (RSPO).

9.3. Capacity of production of the company

The capacity of production in a company that manufactures products largely on demand from its customers is a complicated issue.

However, in our case, as far as our capacity of production is concerned, many factors must be taken into account in order to carry out this measurement, but as far as chemical products aimed at the Spanish sector of ceramics are concerned, we can generate around 200 tons of injections per month.

Taking into account the production of products aimed at other sectors, our capacity of production would be much higher, that is to say, we are a company with a high capacity of production, and this is due to our constant success and the quality of all our products.

9.4. Companies of subcontracting

In terms of subcontracting, as we have already mentioned, we do have various suppliers of materials and raw materials, however, as far as channels of distribution are concerned, we are the ones in charge of this.

Today, we have agreements with various companies that help us in our day-to-day processes of production.

First of all, we have agreements with temporary employment agencies (ETT) that help us with the hiring of temporary employees to carry out our processes of production in those seasons when our capacity of production increases, and more workers are needed in these moments.

In addition, we also have various companies that offer us different basic services, such as, for example, electricity, water, and gas, or in terms of communications and telephony.

9.5. Supplier companies

The suppliers are one of the fundamental parts of a processes of production in an organization.

In our case, and as mentioned above, we have several companies supplying materials and raw materials, since, as our products are aimed at various sectors, different materials are needed in each of them, and therefore we need suppliers for each of the sectors we are targeting.

In addition to suppliers of materials and raw materials, we also need suppliers of spare parts and machines, because if we need to replace parts or complete machines due to breakage or malfunctions, we need to replace them as quickly as possible, so that our customers do not have to wait for a long timer and thus have a negative image of Zschimmer & Schwarz.

9.6. Function of procurement and storage

To carry out procurement, as we have already mentioned several times throughout the study, we have some suppliers who are responsible for providing us with the materials and raw materials necessary to carry out our processes of production.

As far as storage is concerned, in our case, as we manufacture our products to measure and on demand from our customers, we have a very low level of stock.

Therefore, at the present, we have three months of stock, that is to say, the products we manufacture, or the materials provided by our suppliers are stored for a maximum of three months in our facilities.

This also allows us to save costs such as costs of stock, as we invest less capital in facilities solely for the storage of products and materials.

10. FINANCIAL PLAN

10.1. Plan of investment and finance

At the start of our case study, we have certain non-current assets that help us in the development of our business.

First of all, in terms of tangible fixed assets, we have our facilities, the factory where we carry out all our processes of production. In these facilities, we have elements such as furniture, machinery, computer equipment, tools and tooling, etc. In addition, we also have elements of transport, since, as previously mentioned, we are in charge of the distribution of our final products.

With regard to intangible fixed assets, we have applications to our computers, used in each of our departments, to help us with the correct management of matters, related to the accounting, administration and finances of Zschimmer & Schwarz.

And, finally, we also have accumulated depreciation, that is to say, both our tangible and intangible fixed assets are depreciated and lose value with use and the passage of time. This is why we have suppliers of fixed assets, due to the possible wear and tear or failure of some of them.

10.2. Forecast of profit and loss

In order to analyze the forecast profit and loss account, we will first analyze the sales made and the expenses incurred.

In our case, we have obtained more sales tan expenses that we have generated, therefore, our export result would be positive.

With the operating result obtained plus the financial result, which in our case is positive, and subtracting the taxes on profits that are applied to us, we obtain a positive profit and loss account.

Therefore, the result of forecast of our annual financial years means that, with the generation of all our activities, we would obtain profits or benefits.

10.3. Plan of pension cash flow

In order to be able to manage the cash movements within the company, that is to say, income and expenses, we will draw up a cash flow forecast plan.

This plan of cash Flow will be based on the following movements during the year:

- Inflows of capital: as regards the capital inflows needed to carry out our strategic plan, first of all, we can mention that all the capital will be provided from within, that is to say, we have sufficient financial resources to carry out the plan. It will not be necessary to apply for bank loans or public subsidies. In addition, the amount of the sales we will make during the period will be added to our own contributions of capital.
- Outflows of capital: in terms of outflows of capital, first of all, we can lose this through the fixed assets we have in the company, such as, for example, the machinery necessary for the processes of production we carry out. In addition, we must also take into account in this section the salaries of each of the employees of the company, social security, insurance, supplies such as electricity, water and telephony, as well as the taxes that are applied to us for carrying out our activity.

Finally, after analyzing each of the most relevant aspects of our treasury plan, we can affirm that, although we have a large amount of outflows of capital due to our activity, we have sufficient resources due to our activity to meet these outflows.

10.4. Pension balance

In the previous section, we analyzed how our resources can be used to meet our strategic plan. However, to confirm this assumption, we have studied our forecast balance sheet which, as its name suggests, gives us a better picture of the economic situation we are currently in.

Therefore, in our case, it would be positive, that is to say, analyzing the ratios, both solvency and liquidity, we affirm that with our assets we can meet the debts that may arise.

Moreover, with few liabilities on our balance sheet, we would have a very debt to deal with in the short term.

11. GROWTH STRATEGIES

Today, we are one of the best positioned companies in the Market in which we operate, and that is why, since our beginnings, we have followed the strategies that, according to the moment in which we found ourselves, have been best suited to our needs and those of our clients.

Therefore, and after the analysis carried out, due to the objectives we have set ourselves, we believe that the best strategy to follow is the strategy of development of the product.

The implementation of this strategy is due to the strong investment we want to make in research and development, as we believe we have all the necessary resources and capabilities to carry it tour with our products and in the markets in which we operate.

To this end, we aim to achieve an 8% increase in sales by 2022.

Furthermore, as mentioned above, we have always followed a strategy of diversification and differentiation, as our products are always manufactured according to the needs of each of our customers. This fact helps us to meet and improve the Satisfaction of our customers and, therefore, to achieve our objectives and goals.

12. EVALUATION OF THE STRATEGY

For the control and evaluation of the strategy discussed in the previous point, we will analyze three important aspects of its implementation: the appropriateness, the feasibility and the acceptance.

First of all, the appropriateness of the implementation of such a strategy. In our case, implementing the strategy of product development would be appropriate, since, as we have seen throughout the study, one of our main objectives is the strong investment we want to make in terms of technological research and development, and that is why this strategy would help us to achieve it, as well as to increase customer satisfaction and, therefore, increase sales.

To continue, taking into account the feasibility of implementing such a strategy, we can verify that fits perfectly with Zschimmer & Schwarz, that is to say, it fits at all levels with all our policies, organizational culture, resources and capabilities.

Finally, after the previously mentioned points, the acceptance criterion much be analyzed, that is to say, knowing how to identify the possible consequences of implementing this strategy. Therefore, in our case, we consider that its establishment in the business organization would be accepted by each and every one of our stakeholders, as we believe that it would only bring advantages for all of them. To verify this, we are going to analyze three highly relevant factors:

- Profitability: with the implementation of the strategy of the product development, we consider that the value perceived but our customers would increase, as well as the image we generate towards them. This would lead to an increase in demand and, therefore, in profits.
- Risk: this type of strategy would entail a certain risk of finance, as it would, to a
 certain extent, raise the costs necessary for product development, and therefore,
 the prices of the products would have to be increased.
- Stakeholders: in our case, our main stakeholder Group would be our customers,
 as they are the ones who are going to make us grow as an organization.
 Therefore, as far as they are concerned, we consider that this would be a positive
 risk, as we would addressing a larger public and, therefore, greater possibilities
 for growth.

Finally, in summary, by analyzing each of the criteria necessary to be able to check whether the strategy that has been selected will be a turning point for the organization, we have been able to verify that this strategy would be correct in our case. Although it involves a certain risk of finance, we believe that it would bring more positives and create more value for the image of Zschimmer & Schwarz.

13. CONCLUSIONS

In conclusion, and to conclude with the study of this strategic plan base on the company Zschimmer & Schwarz Spain, we can say that, in the national panorama, we are among the best positioned companies according to the manufacture of chemical products aimed at the ceramics sector.

This fact, together with many years of experience in our business, has brought us to the point where we are today.

However, there is still room for constant improvement due to our strong focus on commitment and responsibility towards the quality of our products and the sustainability of our environment.

We want to continue to innovate in our daily activity, overcome our weaknesses and take advantage of our strengths by fulfilling our objectives, in order to ensure that our customers are completely satisfied with our products and services, since, as has been clearly seen throughout the document, they are one of our stakeholders who have the most power over us and our decisions when it comes to manufacturing our products.

Finally, although the current economic situation in our country is not the most favorable, we will do everything we can to maintain and improve our position and to achieve the proposed objectives, and thus continue to grow as a united and committed organization, both with our customers and with the environment that surrounds us on a daily basis.

14. REFERENCES

- Historia Zschimmer & Schwarz. Retrieved on February 7, 2022 from https://www.zschimmer-schwarz.es/empresa/historia/
- Zschimmer & Schwarz. Retrieved on February 7, 2022 from https://www.zschimmer-schwarz.es/
- Zschimmer & Schwarz España Sociedad Limitada en Castellón. Retrieved on February 7, 2022 from https://www.einforma.com/informacion-empresa/zschimmer-schwarz-espana
- Zschimmer & Schwarz como empleador. Retrieved February 9, 2022 from https://www.zschimmer-schwarz.es/carrera/zs-como-empleador/
- Ribés, B. (2018). *Martin Haberl:* <<*Zschimmer & Schwarz seguirá creciendo, y no solo en cerámica>>*. EL MUNDO [online] available at https://www.elmundo.es/comunidad-valenciana/castellon/2018/10/22/5bce0636268e3ed3658b4577.html
- ELMUNDO (2022). Zschimmer & Schwarz promueve el ahorro energético y la sostenibilidad en sus productos [online] available at https://www.elmundo.es/comunidad-valenciana/castellon/2022/02/10/62056493fc6c83aa598b45ed.html
- Corresponsables (2021). ODS12. Zschimmer & Schwarz reforzará su compromiso medio ambiental en 2022 [online] available at https://www.corresponsables.com/actualidad/zschimmer-schwarz-reforzara-su-compromiso-medioambiental-2022
- Zschimmer & Schwarz Spain, S.A. (2019). *I Plan de Igualdad de Zschimmer & Schwarz España,*S.A. [2019-2022] [online] available at https://www.zschimmer-schwarz-espana.pdf
- El periódico del Azulejo (2021). La cerámica de Castellón empieza el 2021 con la mayor subida de producción desde 2017 [online] available at https://www.elperiodicodelazulejo.es/actualidad/ceramica-castellon-empieza-2021-mayor-subida-produccion-2017-LRPA007581
- Ribés, B. (2021). La patronal del sector cerámico pone en escena el riesgo de la deslocalización por el alza. EL MUNDO [online] available at https://www.elmundo.es/comunidad-valenciana/castellon/2021/12/14/61b7a1f5fdddff05598b45d8.html
- Ripolles Martínez, C. (2021). Zschimmer & Schwarz apuesta por la economía circular. COPE [online] available at https://www.cope.es/emisoras/comunidad-valenciana/castellon-provincia/castellon/ceracope/noticias/zschimmer-schwarz-apuesta-por-economia-circular-20210913 1495090

- C.A.D. (2022). La apuesta por la innovación de las empresas más importantes de Castellón. ELMUNDO [online] available at https://www.elmundo.es/comunidad-valenciana/castellon/2022/02/21/6210e528fdddff6fb38b45a7.html
- Martí, S. (2021). El sector cerámico en peligro: posibles parones en la producción y sobrecostes.

 Economia3 [online] available at https://economia3.com/2021/12/20/467829-sector-ceramico-en-peligro-posibles-parones-y-sobrecostes/
- Roig, B. (2022). El azulejo de Castellón reclama que la UE facilite ayudas públicas para la descarbonización. elPeriódicoMediterráneo [online] available at https://www.elperiodicomediterraneo.com/castello-provincia/2022/01/25/generalitat-pide-ue-facilite-ayudas-publicas-ceramica-descarbonizacion-61936318.html
- I.D. (2022). La generalitat pide a Bruselas que permita las ayudas públicas al sector del azulejo para su transición energética. LAS PROVINCIAS [online] available at https://www.lasprovincias.es/economia/generalitat-pide-bruselas-20220125194017-nt.html
- El periódico del Azulejo. (2022). El azulejo español e italiano, unidos para que Europa facilite la transición verde [online] available at https://www.elperiodicodelazulejo.es/industria/el-azulejo-espanol-e-italiano-unidos-para-que-europa-facilite-la-transicion-verde-AC114570
- Deloitte. (2021). *El sector cerámico español muestra su fortaleza durante la pandemia* [online] available at https://www2.deloitte.com/es/es/pages/finance/articles/informe-sectorial-sobre-la-industria-ceramica.html
- EL MUNDO. (2021). La industria cerámica española ahorra hasta 100 millones en 3 años de ajustes de producción [online] available at https://www.elmundo.es/comunidad-valenciana/castellon/2021/06/01/60b53082fc6c8313218b4667.html
- Zschimmer & Schwarz España Sociedad Limitada-Villareal/Vila-real. Retrieved on February 28, 2022 from https://empresite.eleconomista.es/ZSCHIMMER-SCHWARZ-ESPANA.html
- Comprometidos con la innovación y el medio ambiente. Retrieved on February 28, 2022 from https://www.zschimmer-schwarz.es/noticias/comprometidos-con-la-innovacion-y-el-medio-ambiente/
- Zschimmer & Schwarz. Retrieved on February 28, 2022 from https://de.wikipedia.org/wiki/Zschimmer_%26_Schwarz

- plazacerámica. (2021). Zschimmer & Schwarz viaja a Cersaie para presentar sus últimas novedades cerámicas [online] available at https://castellonplaza.com/zschimmer-schwarz-viaja-a-cersaie-para-presentar-sus-ultimas-novedades-ceramicas
- Cabrerizo, J. (2022). Cevisama 2022 | Listado de empresas expositoras en la feria internacional cerámica. El Periódico del Azulejo [online] available at https://www.elperiodicodelazulejo.es/diseno/cevisama-2022-listado-de-empresas-expositoras-en-la-feria-internacional-ceramica-AH119828
- Noticias | Fechas de ferias. Retrieved on March 03, 2022 from https://www.zschimmer-schwarz.com/news#c1550
- Samia S.P.A y Zschimmer & Schwarz se unen para ofrecer productos químicos para cuero.

 Retrieved on March 03, 2022 from https://www.zschimmer-schwarz-se-unen-para-ofrecer-productos-quimicos-para-cuero/
- ¡Nos unimos al Beauty Cluster Barcelona! Retrieved on March 03, 2022 from https://www.zschimmer-schwarz.es/noticias/nos-unimos-al-beauty-cluster-barcelona-2/
- Martí, S. (2021). El grupo Zschimmer & Schwarz se une al Pacto Mundial de Naciones Unidas.

 Economia3 [online] available at https://economia3.com/2021/06/02/445687-el-grupo-zschimmer-schwarz-se-une-al-pacto-mundial-de-naciones-unidas/
- Conexiones para el mundo. Retrieved on March 03, 2022 from https://www.zschimmer-schwarz.es/empresa/delegaciones/#location country 12
- Lamberti. Retrieved on March 14, 2022 from https://www.lamberti.com/
- Gardenia Química. Retrieved on March 14, 2022 from http://www.gardeniaquimica.com/index.php/es/gardenia-quimica-empresa
- DECOROIL Digital Printing Technology. Retrieved on March 14, 2022 from https://decoroil.com/
- AditivosCerámicos. Retrieved on March 14, 2022 from http://www.aditivosceramicos.com/
- plazacerámica. (2021). Zschimmer & Schwarz estrena un podcast mensual para divulgar la química sostenible en la industria [online] available at https://castellonplaza.com/zschimmerschwarzestrenaunpodcastmensualparadivulgarlaquimicasostenibleenlaindustria
- Informe de empresa de Zschimmer & Schwarz España SL. Retrieved on April 06, 2022 from https://www.datoscif.es/empresa/zschimmer-schwarz-espana-sl

- Política de Calidad. Retrieved on April 16, 2022 from https://www.zschimmer-schwarz.es/politica-de-calidad/
- Zschimmer & Schwarz España. (2019). Química a medida. Catalogo corporativo [online] available at https://www.zschimmer-schwarz.es/app/uploads/2021/12/Catalogo-corporativo-Zschimmer-Schwarz-ES.pdf

15. ANNEXES

Annex I. Interview with the Managing Director of Zschimmer & Schwarz

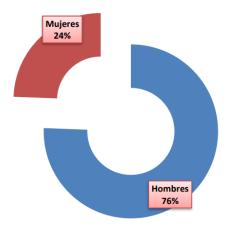
- I. In terms of the style of leadership adopted in the structure of the organization, which one do you think is used in the company?
- II. About the decisions of distribution, are you in charge of distribution or do you have companies that help you with this task?
- III. What are your sources of income, are you able to finance yourselves or do you rely on external funding?
- IV. Who are your most direct competitors and what do you think is their influence on Zschimmer & Schwarz?
- V. In terms of prices, are they competitive and do you offer any discounts to your customers?
- VI. How do customers who wish to place orders with the company place them, by telephone or by coming to your premises?
- VII. What is the maximum capacity of production today?
- VIII. Do you use subcontractors for any specific task?
- IX. In terms of suppliers, because you offer products for different sectors, do you have a single supplier for all of them or do you have a supplier of a raw materials for each sector?

X. As a company that operates largely on demand, I assume that you will have little space for stocks, right?

Annex II. Location of the cluster in the province of Castellón



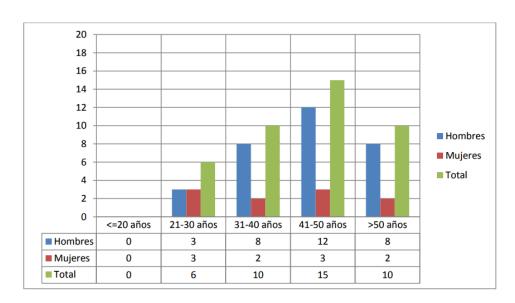
Annex III. Distribution of the staff by gender



Annex IIII. Distribution of the staff by departments

| Dpto. | Dpto. Técnico / Lab. | Dpto. Técnico | Dpto. Comercial | Almacén / Cargas | Prod. Inkjet | Dpto. Técnico / Diseño | Administ ración | Limp ieza | Contabilid ad y Finanzas | Direcció n | Dpto. Técnico / I+D | Ing. Proces os | Producció n Trad. | Director Financiero | Dpto. Marketin g | Producción / Almacén |
|---------|----------------------------|------------------|--------------------|---------------------|-----------------|------------------------------|--------------------|--------------|--------------------------------|---------------|---------------------------|----------------------|----------------------|------------------------|------------------------|-------------------------|
| Hombres | 5 | 2 | 4 | 2 | 6 | 3 | 1 | 0 | 1 | 2 | 1 | 1 | 1 | 1 | 0 | 1 |
| Mujeres | 2 | 1 | 0 | 0 | 0 | 1 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Total | 7 | 3 | 4 | 2 | 6 | 4 | 4 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |

Annex V. Distribution of the staff by ages



Annex VI. Actual representation of the organization chart of Zschimmer & Schwarz

