

**UNIVERSITAT
JAUME I**

MARKETING PLAN OF



Schindler

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EXECUTIVE SUMMARY

This summary will detail the basic ideas of our marketing plan. Both the characteristics, analysis of the company and the main actions that we will carry out.

Schindler is a multinational company of Swiss origin that mainly manufactures elevators and escalators. It was founded in 1874 by Robert Schindler and its headquarters are located in Ebikon, Switzerland. Schindler ranks first in the manufacture of mechanic escalators and second in the manufacture of elevators, behind its main competitor Otis elevators. Schindler's products move about 900 million people worldwide every day.

When analyzing the company's current situation regarding the internal analysis, a portfolio of quality products can be seen that covers most of the needs of the current market. We will talk discuss financial part later including company results and the main indicators of profitability.

As for the external analysis, first we will analyze the micro-environment, specifically looking in detail at Schindler's main competitors, such as Otis, Thyssenkrupp, Orona and Eninter. An analysis of the main financial indicators of the competitors has been carried out and a comparison has been made. This was followed by an analysis of the macro-environment which concluded with a PESTEL analysis that went into depth on the political, economic, social, technological and legal aspects.

Next, we perform a SWOT analysis where weaknesses, threats, strengths and opportunities are analyzed in order to establish measurable and achievable objectives and thus be able to set strategies.

As for the operational actions, a series of action plans are planned to be carried out during 2021, among which we find:

Adding a new elevator model that meets a market niche that the company has not covered so far and where it relied on other brands instead.



Schindler

This will lead to a reduction of the cost for the company and at the same time a saving for the final consumer.

- Designs and tests – “Schindler Short Cube”
- Manufacturing – “Schindler Short Cube”
- Reduction cost of 10% + RP (Retail Price) 10% “Schindler Short Cube”

A series of advertising campaigns are then carried out with the goal of strengthening the brand presence both for consumers who already familiar with the brand and for those who are not. In addition, a television advertising campaign is planned to be broadcasted for the new "Schindler Short Cube" elevator model.

- Instagram advertising- Schindler.
- TV advertising – “Schindler Short Cube”

Finally, part of the logistic service will be improved by increasing the days in which the warehouse can send the products, thus obtaining warehouses capable of shipping 7 days a week.

- Warehouses - 7D

All these plans will be marked by a previously established budget, schedule and control.



1.INTRODUCTION

Schindler is a multinational of Swiss origin, its headquarters are located in Ebikon, Switzerland and is dedicated to the manufacture of elevators, escalators, dumbwaiters and platforms among others, in addition to the repair and revision of these. Worldwide it has 57,000 workers and 11,100 points of sale. Its main rival is the originally American company Otis Elevators.

The company has been founded in 1874 by Robert Schindler in Lucerne. In 1889 he began marketing the first models of elevators and it was not until 1906 when he founded the first foreign branch in Germany. The brand was a pioneer in 1998 for creating the "Smart MRL" elevator which does not need a machine room. This implies that the electrical mechanisms are located in the recesses of the cabin doors and the tractor unit is located inside the elevator shaft.

One of the most sold elevators for medium height buildings for both the residential and professional sectors is the "Schindler 3300" which unifies functionality and efficiency. It is designed to adapt easily to a building, uses the latest technology to have a greatly reduced consumption, has a solid performance and a high optimization of space (Figure 1), which are some of the main features sought by customers today.

Figure 1: Interior cabin of a Schindler 3300



Source: Schindler's website



1.1. MISSION

Schindler's mission is to satisfy consumers through excellent technical service and work, as well as to offer a high value for money in the elevator market. It also strives to maintain economic growth while at the same time gain the confidence and satisfaction of the employees, meeting the highest standards of quality and environment, thus trying to achieve excellence.

1.2 VISION

As we can find on Schindler's website: "Leadership through Customer Service. Our vision at Schindler is to achieve market leadership by providing exceptional value to our customers. Aside from competitive products, we must provide them with both service and superior customer care. To do this, our business processes must be designed to serve our customers by showing interest and avoiding any problems."

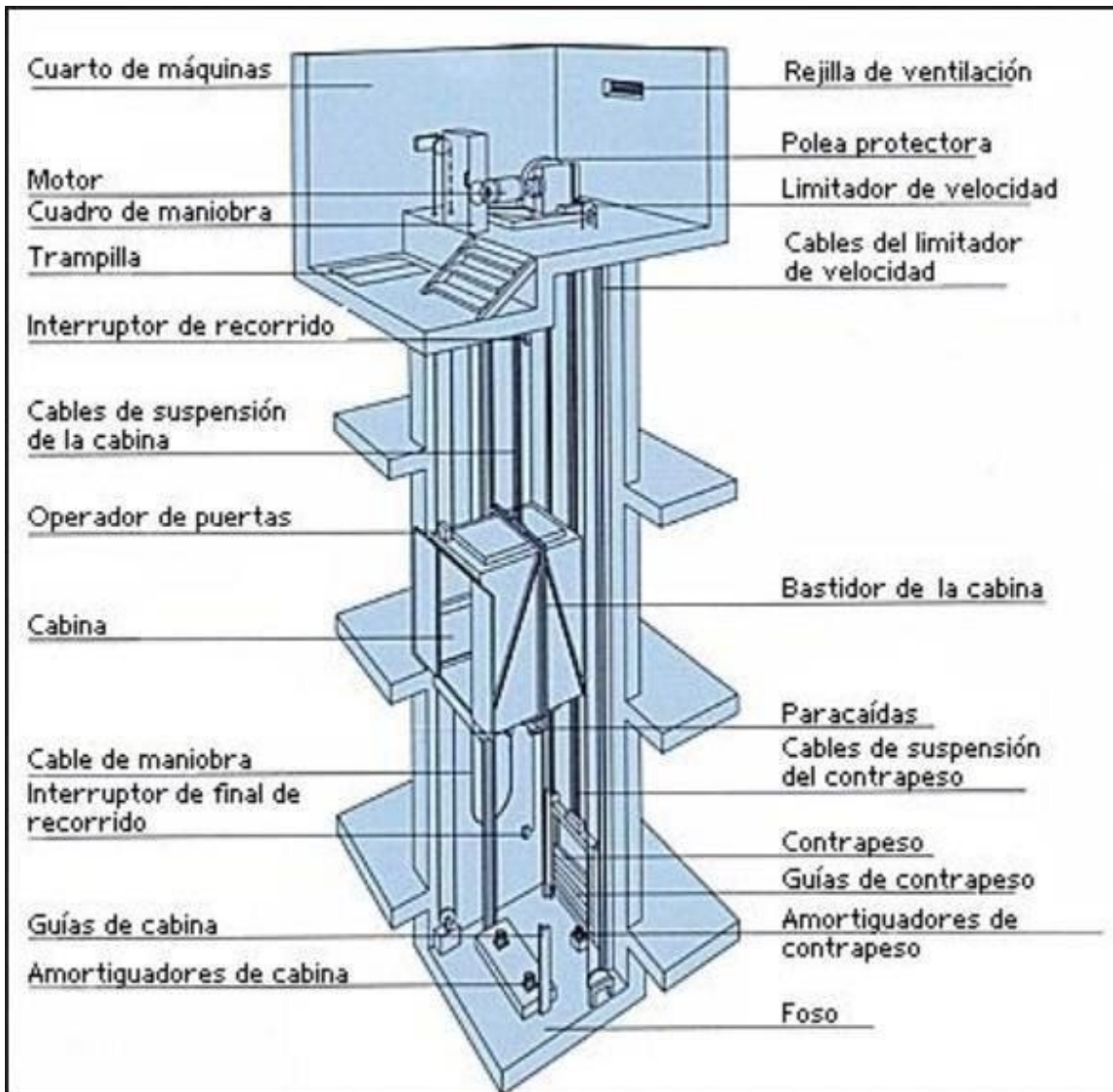
1.3 VALUES

- Safety.
- Create value for the customer.
- Commitment to people's development.
- Integrity and trust.
- Quality.



1.4 PARTS OF AN ELEVATOR

Figure 2: Main parts of an elevator



Source: Eninter's website

In order to understand in more detail some of the points discussed in this TFG, we will briefly explain some of the main parts of a basic elevator (Figure 2), with electric traction:



- Pit: This is a space where part of the essential mechanisms for braking the elevator are housed. It houses the shock absorbers, part of the electric sleeves, the roulette of the speed limiter, some photocells and some of the controls used by the technician to operate and check the components of the elevator. It also houses part of the cabin when it is at the lowest level. The pit is located below ground level on the first floor.
- Counterweight shock absorbers: These are springs located inside the pit, with a reinforced concrete base and their main function is to cushion the fall of the counterweight in the event that there is an overtravel by the counterweight.
- Cabin shock absorbers: These are springs located inside the pit, with a reinforced concrete base and their main function is to cushion the fall of the cabin in the event of an overtravel by the cabin.
- Counterweight rails These are the rails along which the counterweight runs, and are anchored to the elevator shaft.
- Cabin rails: These are the rails along which the cabin runs, and are anchored to the elevator shaft.
- Counterweight: It is a reinforced concrete block or iron block connected to the cabin by using traction cables. It is used to balance the cabin weight and the traction cables so that the motor functions correctly and the cabin is leveled at the correct height. It should be noted that if any modification is made to the cabin's weight such as changing the cabin floor, the counterweight will subsequently change too.
- Limit switch: Indicates when the elevator has reached the lower end position. Once in position, it gives the signal to the control panel.



- **Control cable:** The electrical and control cables hanging from the cabin and connected to the control panel, which are located in the machine room. They cannot be put under pressure, as they could break during the constant ascent and descent of the elevator.
- **Parachute:** It is the wedging system, a safety system consisting of brake pad that circulate on the rails of the cabin and in some cases also on the rails of the counterweight. In case the speed limiter will jump due to an increase in speed, it would give the order to activate the parachute, using the brake pad and stopping the cabin instantly.
- **Cabin:** This is the area where people enter to move between floors. The cabin is attached by traction cables to the motor and the counterweight. The motor is needed to move the elevator from floor to floor.
- **Cabin frame:** The frame or structure of the cabin.
- **Door operator:** The motor, bearings, gears and control systems that are responsible for opening and closing the cabin doors when the control panel gives the order.
- **Suspension cables or cabin traction:** These are the traction cables that suspend the cabin, which are connected to the cabin and to the counterweight at their respective ends, and are moved by the motor.
- **Displacement switch:** Indicates when the elevator has reached the upper end position. Once in position, it gives the signal to the control panel.
- **Trap door:** Serves as an exit or entrance to the elevator shaft for the technician, in case he cannot make it through the usual entrances due to a blockage.



- Cable limiter and speed limiter: It is a system that consists of a pulley that in case of having a higher speed than the established one, will make use of the wedge system or activate the parachute, breaking the elevator. They usually tolerate speeds up to 10% higher than the established one. For example, an elevator that works at 1 m/s would activate wedging when the speed limiter observes a speed of 1.10 m/s.
- Engine: The engine is responsible for moving the elevator. In most cases these engines are electric and have a reduction system.
- Control panel: Controls all actions performed by the elevator, from opening and closing the doors, speed, buttons, etc. It is the software of the elevator.



2.ANALYSIS OF THE CURRENT SITUATION

2.1. INTERNAL ANALYSIS

2.1.1. Marketing area

- **PRODUCT**

After analyzing the company's product portfolio, we found the following information.

Schindler has a product range of three:

- Elevators
- Electric escalator
- Electric ramps

In terms of product length we observe the following products:

- Elevators:

Schindler 2400:

Schindler 2400:

The Schindler 2400 elevator is designed for the masses and pays attention to detail within the professional field. It is designed to transport people at the same time as medium-weighted cargo such as trolleys or pallets. The elevator is extra large and is often used in public buildings such as shopping malls, airports, etc.

It has electric traction ranging from 1000 to 4000 kg and a speed of between 0.8 and 1.6 m/s. As we can see in Figure 3, the cabin has a typical design that you would see in shopping centers, it is designed in stainless steel, capable of withstanding scratches and carrying the weight of blunt or industrial objects.



Schindler

Figure 3: Schindler 2400 interior cabin

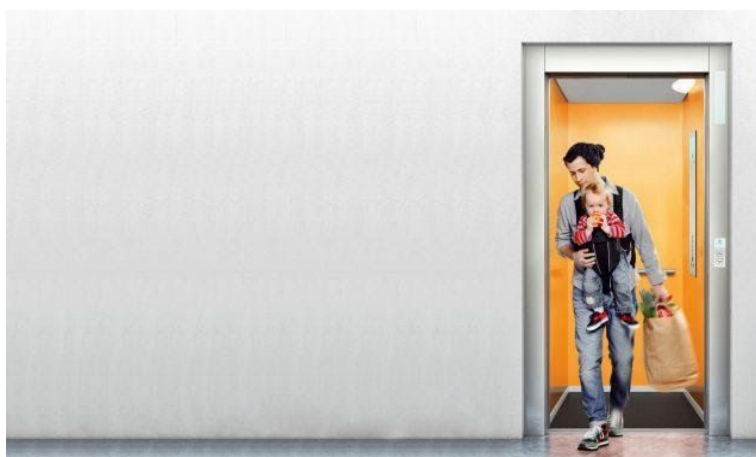


Source: Schindler's website

Schindler 3100:

It is an elevator designed for the residential environment, it has the comfort while at the same time suitable for low to medium traffic intensity. It has a load capacity of between 450 kg and 630 kg and a capacity of 6 passengers. Its speed ranges from 0.6m/s and 1m/s.

Figure 4: Interior of the Schindler 3100 cabin



Source: Schindler's website

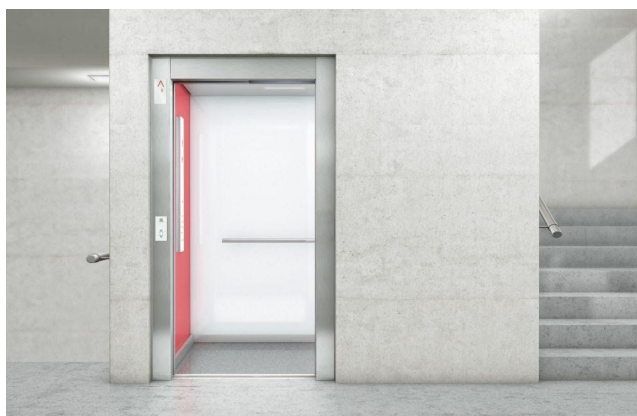


Schindler

Schindler 3300:

The Schindler 3300 is chosen to suit both residential and commercial environments. It is functional and at the same time efficient, has an average size, a load capacity of between 400 and 1150 kg and can transport between 5 and 15 passengers. Its speed ranges from 1m/s to 1.6 m/s.

Figure 5: Schindler 3300 interior cabin

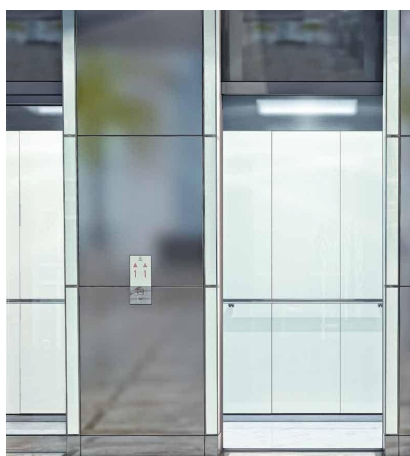


Source: Schindler's website

Schindler 5500:

The Schindler 5500 is an elevator designed for both public and commercial buildings. It has a load capacity of 630 kg to 2500 kg and can transport between 8 and 33 passengers. Its speed ranges from 1m/s to 3m/s.

Figure 6: Interior cabin Schindler 5500



Source: Schindler's website



Schindler

Schindler 7000:

The Schindler 7000 has the particularity that it is designed specifically for high buildings. It can have a travel height of 500m and a speed of up to 10m/s. The cabin capacity is 2000 kg.

Figure 7: Schindler 7000 cabin interior



Source: Schindler's website

Schindler car elevator:

The Schindler car elevator is designed to transport vehicles. Their load capacity is 4500 kg. It has a speed of between 0.16 and 0.66 m/s and has a wide cabin capacity and robustness to lift vehicles.

- Electric escalators

Schindler 9300 AE:

The Schindler 9300 escalator is ideal for commercial or public buildings. It is designed for a maximum height difference of 20 m with a step width of 1000 mm, the angle of inclination can vary between 27, 30 and 35 degrees and the nominal step width can also vary between 600, 800 and 1000 mm



Schindler

Figure 8: Escalator 9300 AE

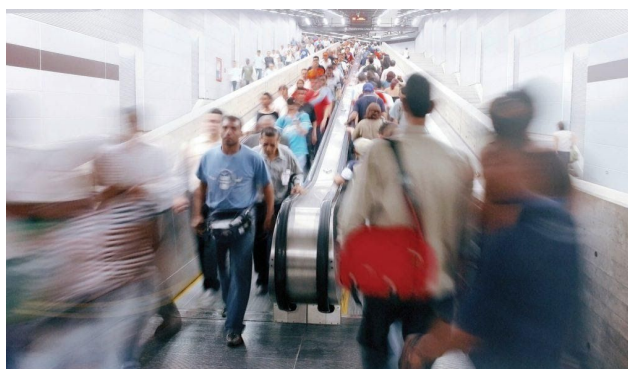


Source: Schindler's website

Schindler 9700AE:

The Schindler 9700AE escalator is designed to withstand a large number of passengers, is capable of working 24 hours a day, and its components are capable of withstanding the most demanding situations. The maximum difference in level is 50m, with a step of 1000 mm, angle of inclination of 24.5, 27.3 and 30 degrees.

Figure 9: 9700AE escalators



Source: Schindler's website



- Electric ramps

Mobile ramp 9500 AE:

The Schindler 9500 AE mobile ramp can maintain a degree of inclination of up to 12 degrees and supports a maximum drop of 8m. It is ideal for shopping malls and is designed to transport its passengers in a silent and comfortable way, it guarantees safety and integrates into the building.

Figure 10: Escalator 9500 AE



Source: Schindler's website

In the following picture we can see the interior design choice of Schindler cabins:

Figure 11: Design possibilities in the Schindler elevator cabin

Elección del diseño

El ascensor Schindler 3300 aúna diseño y funcionalidad haciendo que los pasajeros se sientan cómodos y seguros. Combine estilo, colores y opciones para adaptarlo a su edificio. Unos materiales cuidadosamente seleccionados realzan su aspecto y atmósfera.

- > **2 estilos diferentes**
Escoja la serie Curva para crear una apariencia suave y orgánica o la serie Recta para lograr un aspecto moderno y lineal. Los estilos están compuestos por diseños para techos, esquinas y pasamanos.
- > **4 techos**
Los techos se adaptan perfectamente al estilo y llevan incorporada iluminación LED de bajo consumo.
- > **41 colores**
De los frescos y alegres, a los cálidos y acogedores, elija el color de las paredes y el suelo entre nuestras tres líneas de decoración.
- > **Combinaciones exclusivas**
Si desea personalizar el interior de su cabina, tiene a su disposición nuestro concepto Libertà.

Source: Schindler's website



Schindler

- **Product Focus**

Schindler's products focus on consumer needs. From a marketing point of view, consumers are given the sense of obtaining direct benefits. Schindler conveys the image of a quality brand, with products of Swiss origin, which is associated with excellence and the highest quality standards. Therefore the company must continue to make efforts to improve its products. The brand wants its products to be up-to-date and ahead of other elevator companies.

- **Brand decisions**

The brand reflects the value that a consumer acquires when buying a product. This has been achieved through advertising and other brand attributes that created this image to the outside world over the years. Schindler S.A. has a high brand value and follows a unique brand strategy. Unlike other companies that have second brands, Schindler's strategy for growth is to buy the portfolio of local and much smaller companies, thus increasing the amount of equipment it has.



2.1.2. FINANCE AREA

- **Availability of resources**

The assets of Schindler S.A. for the year 2018 are a total of 637,631,000 €

- **Debt capacity**

Schindler's debt capacity by 2018 is 57.39%. An optimal level is considered to be between 50 and 60%. A higher level may compromise the solvency of the company

- **Benefits**

The 2018 profit for Schindler amounts to 72,003,000 €

- **Profitability**

- Return on Total Assets (ROA) = 12.71%

- Return on equity (ROE) = 29.83%



2.1.4. Location and staff

- **Human Resources**

The Schindler company has a human resources system that favors and helps the worker to reconcile family life. The schedules are flexible so that the worker can adapt his schedule to fit in with his working life.

The company has a preference for promoting workers before hiring external people for positions such as area manager, technical area manager and commercial area manager. In addition, the company hires interns for one-year periods to train them for the position and, if they qualify, take the position. They go through a selection process, either before starting the internship or at the end of it, in case there is a position available for which the intern can apply.

- **Delegations, offices and branches**

In Spain, Schindler has a branch in each province with offices and a small warehouse where the main parts that are always in demand are kept and where there is a need in stock reserve. It also has a delegation for each autonomous community to which the branches answer directly.

Its factory is located in Zaragoza, where most of the mechanical components are manufactured, such as engines, cabins, counterweights and part of the electrical components. The central offices are located in Madrid in the business park of La Moraleja. From here the company's main decisions are taken.



2.2. EXTERNAL ANALYSIS

2.2.1. ANALYSIS OF THE MICROENVIRONMENT

The microenvironment includes all the factors related to the company that affect the organization. To have a deeper understanding, we will analyze the aspects that have to do with the structure and nature of the market, competitors, suppliers, etc.

- **Suppliers**

The Schindler Group has a wide range of suppliers. They must pass the strictest quality controls to ensure that the raw materials for its elevators are of the highest quality. It is worth mentioning that Schindler manufactures more than 90% of its products in its factories and the main material from which they are supplied is iron and derived alloys.

- **Sector**

The elevator sector in Spain has experienced a major crisis related to the Spanish economic crisis that took place between 2008 and 2014, which was characterized by a sharp fall in housing prices. Moreover, construction of new buildings was almost completely stopped, which led to three factors:

1. The sale of new elevators was almost completely halted.
2. Modernizations or renovations of obsolete, poorly maintained or old equipment came to a drastic halt.
3. There was a price war between the main companies, which led to a sharp reduction in prices.



As an example, a Schindler Exclusive contract (All Risks, includes the total replacement or repair of any part, excluding vandalism or external factors such as bad weather) and ATA24h (Rescue and technical assistance of people free of charge 24 hours a day and 7 days a week) could cost approximately 2000 € + VAT in 2004. Meanwhile, in 2018 the same contract only cost 1200 € + VAT.

- **Customers**

As mentioned above, partly due to the financial crisis and the rise of new technologies, customers have changed their mentality, in which they now care much more about the price they have to pay for products. The rise of new technologies allows them to compare prices of products and get additional information on the Internet.

Schindler has recently created a customer community, in which you have certain advantages. Its website states the following: "Schindler Community is a discount program that allows you to save on more than 300 brands such as Amazon, Booking, Carrefour... Simply by having a maintenance contract of your elevators with Schindler. To be part of Schindler Community you need a maintenance contract for your elevator with Schindler. There are no additional requirements to start saving on your day-to-day purchases."

- **Competitors**

The elevator market has a high number of competitors, both at the level of multinationals and local companies. We will analyze the four main competitors at a general level, that is, companies that have similar characteristics to Schindler. The analyzed companies will be compared on a financial level, number of employees, etc.



OTIS

ZARDOYA OTIS, S.A.

Otis is currently the largest manufacturer of elevators and escalators. It was founded in 1853 in New York, USA. Interestingly, it was the first company to install a safety method in case of cable failure by designing a wedging system to prevent a free fall, very similar to the one used today. Worldwide they have installed their equipment in places like the Empire State Building, the Eiffel Tower and the World Trade Center, while in Spain they have installed it in places like the Torre Mapfre.

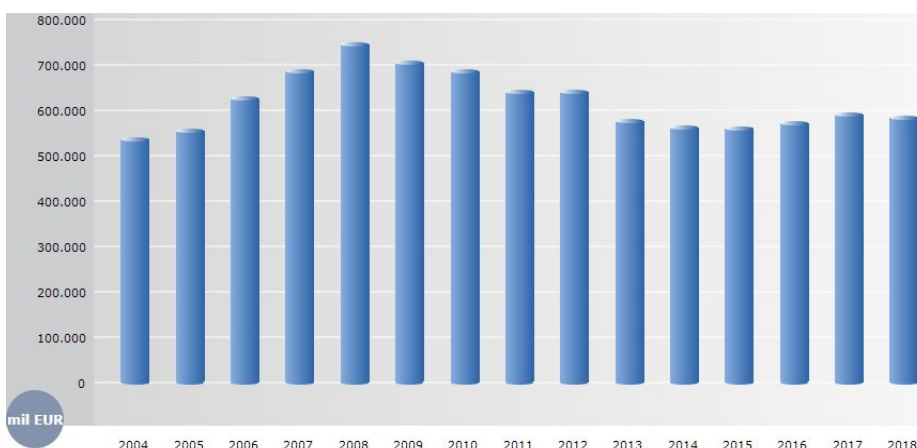
With regard to its economic figures in Spain, we obtained the following information on group and size during the year 2018 (Figure 12) and operating revenues from 2004 to 2018 (Figure 13):

Figure 12: Information Otis Zardoya

Información grupo & tamaño (2018)			
Ingresos explotación	584.378 mil EUR	Indicador Independencia BvD	D
Resultado ejercicio	148.874 mil EUR	Empresas en el grupo corporativo	1.578
Total activo	663.884 mil EUR	Núm. accionistas	32
Número de empleados	3.200		

Source: SABI

Figure 13: Operating revenues Otis Zardoya 2004-2018



Source: SABI



Thyssenkrupp Elevators is a division of the Thyssenkrupp Group, a German steel company, which is engaged in several divisions including steel, investment goods and services, elevators and the automotive industry. Specifically Thyssenkrupp elevators. It began to work in Spain in 1984, and has a total of 70 delegations distributed nationally.

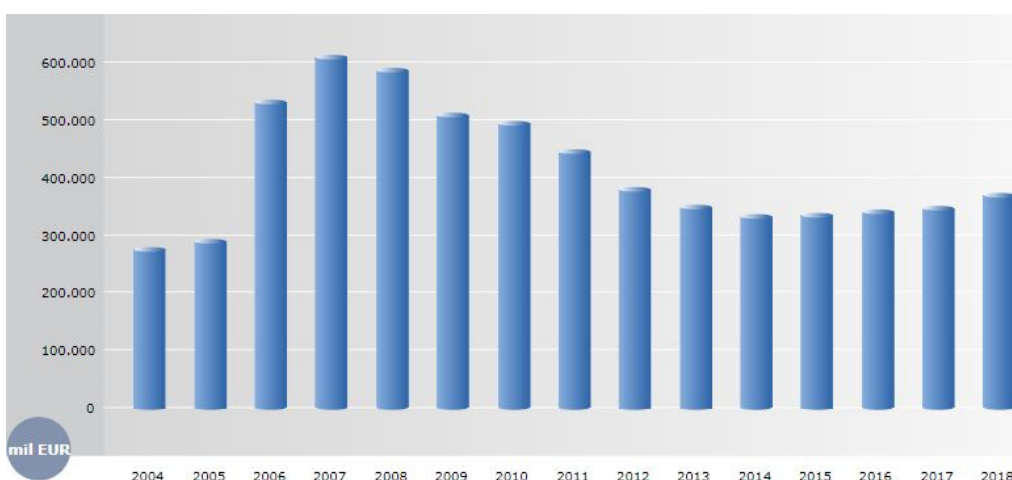
With regard to their economic numbers at Spanish level, we obtain the following information on group and size during the year 2018 (Figure 14) and operating income from 2004 to 2018 (Figure 15):

Figure 14: Thyssenkrupp Elevator Information

Información grupo & tamaño (2018)			
Ingresos explotación	368.978 mil EUR	Indicador Independencia BvD	D
Resultado ejercicio	43.843 mil EUR	Empresas en el grupo corporativo	872
Total activo	240.309 mil EUR	Núm. accionistas	2
Número de empleados	2.731	Núm. participadas	17

Source: SABI

Figure 15: Thyssenkrupp Elevator operating revenues 2004-2018



Source: SABI



Orona is a company dedicated to the manufacture, installation and maintenance of elevators and escalators. It is of Spanish origin and is located in Hernani, Guipúzcoa, in the Epele industrial park. It is the first company in the elevation sector with ISO 14006 Ecodesign certification worldwide. It has a high presence in the national sector and is entering the international market with force.

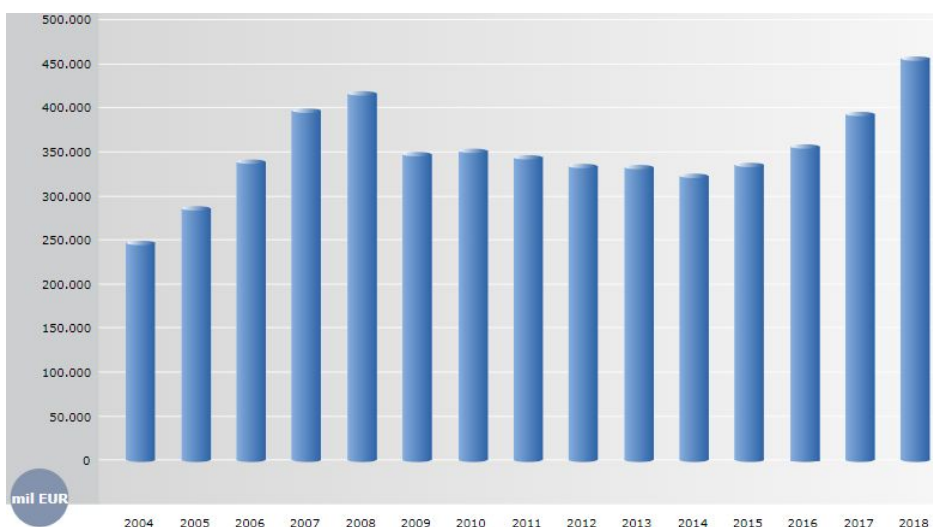
With regard to its economic figures in Spain, we obtained the following information on group and size during the year 2018 (Figure 16) and operating income from 2004 to 2018 (Figure 17):

Figure 16: Orona Information

Información grupo & tamaño (2018)			
Ingresos explotación	455.477 mil EUR	Indicador Independencia BvD	A-
Resultado ejercicio	68.451 mil EUR	Empresas en el grupo corporativo	57
Total activo	739.874 mil EUR	Núm. accionistas	1
Número de empleados	2.060		--

Source: SABI

Figure 17: Operating revenues Orona 2004-2018



Source: SABI



Eninter elevators is a company of Spanish origin with headquarters in Cornellà de Llobregat, Barcelona. It is dedicated to the manufacturing of elevation machinery and maintenance services for elevators. It was founded in 1973 and opened up to the international market in 2014.

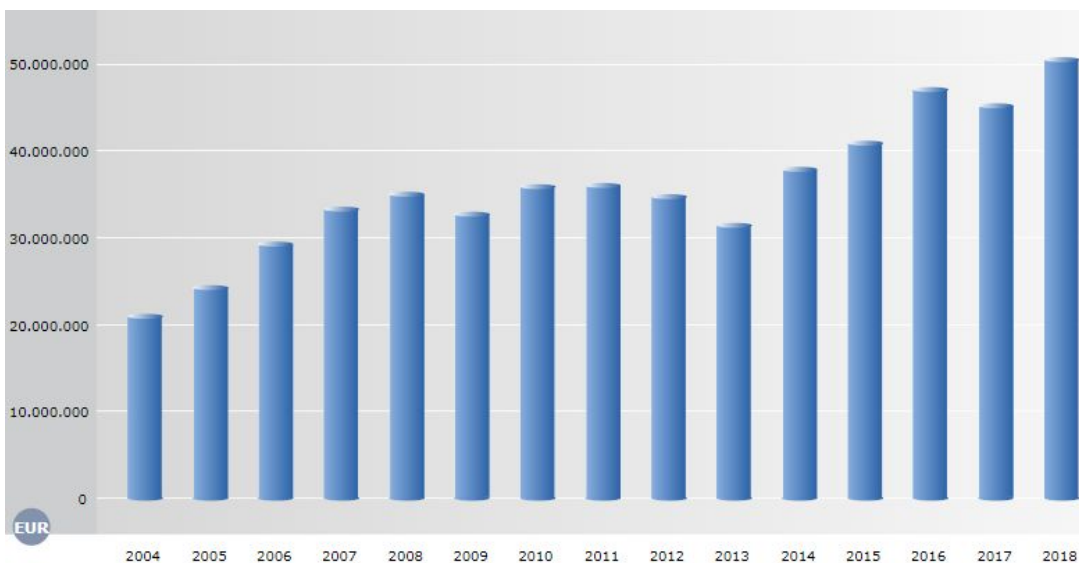
As for its economic figures in Spain, we obtained the following information on group and size during 2018 (Figure 18) and operating income from 2004 to 2018 (Figure 19):

Figure 18: Eninter information

Información grupo & tamaño (2018)			
Ingresos explotación	50.503.940 EUR	Indicador Independencia BvD	D
Resultado ejercicio	4.449.925 EUR	Empresas en el grupo corporativo	19
Total activo	78.109.380 EUR	Núm. accionistas	1
Número de empleados	480		

Source: SABI

Figure 19: Operating income Eninter 2004-2018



Source: SABI



Schindler

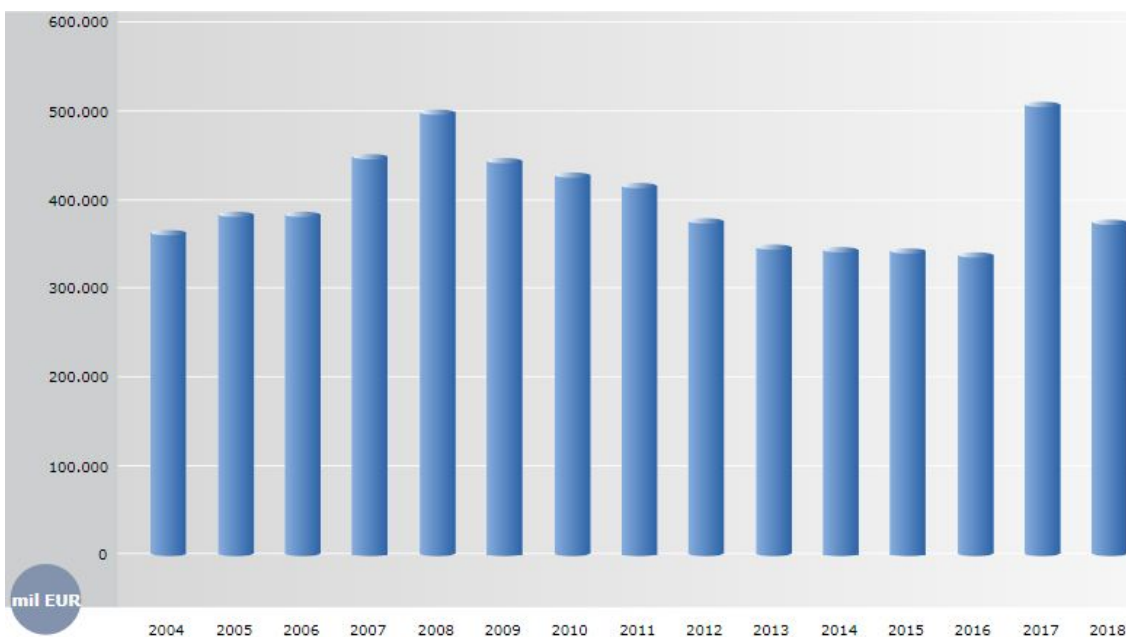
Finally, in order to make a correct comparison, Schindler will also be compared. With regard to its economic figures in Spain, we obtained the following information on group and size during the year 2018 (Figure 20) and the operating revenues from 2004 to 2018 (Figure 21):

Figure 20: Schindler information

Información grupo & tamaño (2018)			
Ingresos explotación	373.794 mil EUR	Indicador Independencia BvD	D
Resultado ejercicio	72.003 mil EUR	Empresas en el grupo corporativo	217
Total activo	637.631 mil EUR	Núm. accionistas	2
Número de empleados	2.433	Núm. participadas	18

Source: SABI

Figure 21: Schindler operating revenues 2004-2018



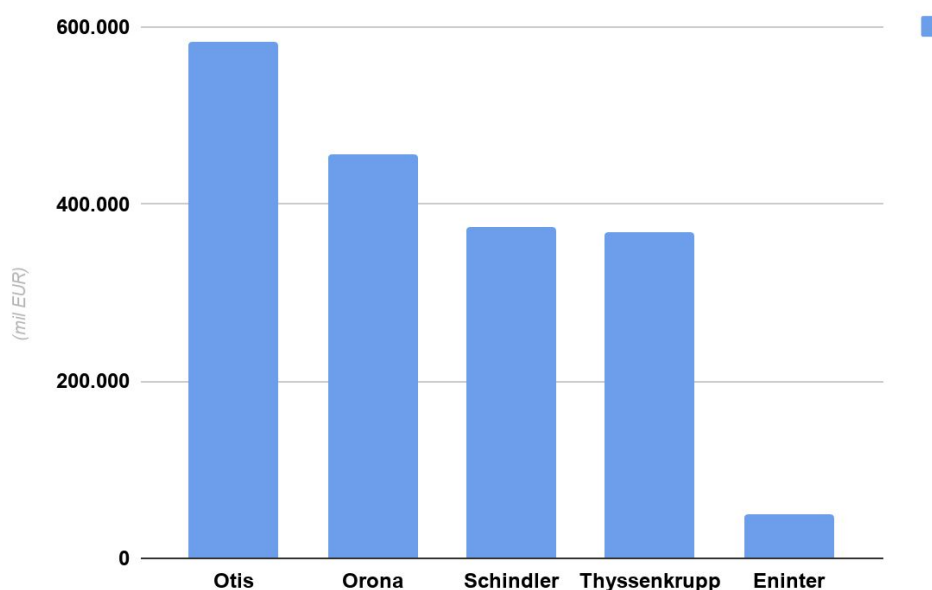
Source: SABI



- **Comparison of competitors**

In terms of operating revenues, Otis is the main competitor with revenues of EUR 584,378 thousand in 2018, compared to EUR 455,477 thousand for Orona, EUR 373,794 thousand for Schindler and EUR 368,978 thousand for Thyssenkrupp. Finally, we find Eninter with an operating income of EUR 50,503,940 (Figure 22).

Figure 22: Operating revenues year 2018

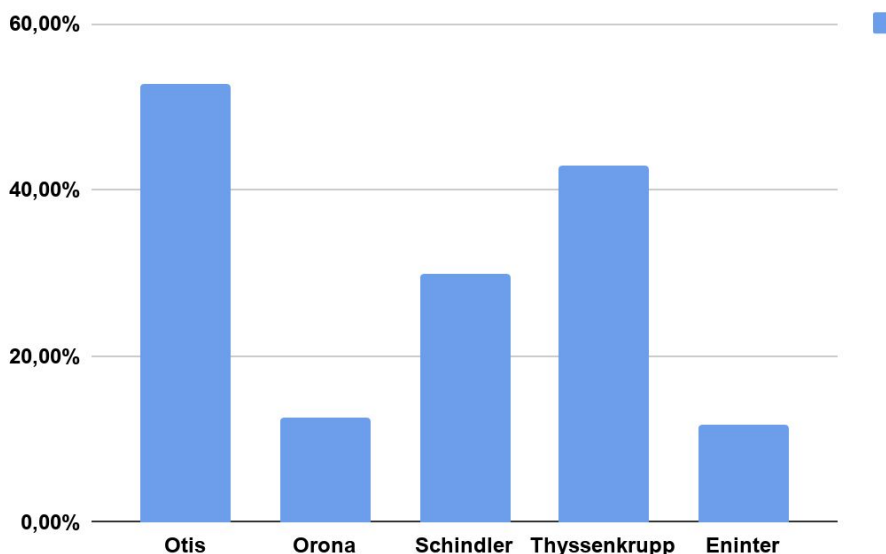


Source: Own elaboration

In terms of financial profitability (ROE), i.e. the ratio between the profit deducted by taxes and other expenses in the company's equity, we find firstly Otis with a profitability of 52.76%, then Thyssenkrupp with 43.03%, then Schindler with a profitability of 29.83%, Orona with 52.76% and finally Eninter with 11.81% (Figure 23).



Figure 23: Financial performance in 2018



Source: Own elaboration

2.2.2 Analysis of the macro-environment.

The business macro-environment refers to factors outside the company, all of which have a certain impact on the company. We will use a PESTEL analysis to analyze the situation. The aspects we will study are: political, economic, social, technological, ecological and legal.

Firstly, in the political field, it is worth mentioning that for three years in a row the Valencian government has launched a programme of aid for the development and renovation of buildings, which involves improvements such as accessibility, lowering the elevator to street level or modernizing old equipment. Each autonomous community gives its own aid depending on criteria such as the number of residents living on the property, economic income, disabilities, etc. These aids are approved annually. The drawback is that mayors, directors or architects do not know if the aid for their proposed budget will be approved during the onward year, which creates uncertainty.



As for the economic field, as mentioned in the previous section, the crisis or economic cycles have a great impact on a majority of companies. For example, as we explained in the previous section, maintenance prices have experienced decreases of up to 60% in their contracts from 2004 to 2020. However, a recent article by La Vanguardia (2019) states the following:

“The elevation sector invoiced more than 3.000 million euros during 2018, 3.5% more than in 2017, and employed 18.900 workers, according to la Federación Empresarial Española de Ascensores (FEEDA), which represent 80% of the elevator in Spain.

In terms of installations, last year Spain exceeded 1.100.000 elevators for the first time in its history, reaching a total of 1.102.392, maintaining Europe’s top position as the country with the highest number of elevators installed. During 2018, almost 15.000 new elevators were installed in Spain, which implies a growth of 1,37% compared to 2017, when the number of elevators installed at the end of the year was 1.087.289.

This data, provided by the Industry General Directorates of each province, did not include the respective contribution of Ciudad Real, Albacete, Cuenca, Toledo, Murcia, Asturias and the Balearic Islands, as confirmed by the FEEDA.”

As we can see in the article, there is a recovery from the previous crisis of 2008-2014, however, it seems that another global economic recession is coming, triggered by COVID-2019, a coronavirus from Wuhan (China) that is causing havoc around the world, although its future is still uncertain, as a recent article on COVID-19 (Kristalina Georgieva, 2020) explains:

"The global growth forecast for 2020 is negative, with a recession as bad or even worse than the global financial crisis but we expect a recovery in 2021.



It is paramount to prioritize containment and strengthen health systems everywhere. The economic impact is, and will be, severe, but the sooner the virus stops, the faster and stronger the recovery.

While developed countries are in a "better position" to respond to the crisis, emerging markets and poor countries face "significant challenges". According to Fondo's estimates, international investors have withdrawn \$83 billion ('77,14 billion) in recent days from emerging markets, the "largest capital outflow to date."

Continuing, in the social field, Spain is a country that is experiencing in recent years a change in demographic trend. There is urbanization, where citizens leave the villages to live in cities. This produces an increase in demand for housing in cities and subsequently a greater demand and usage of elevators.

A study on population growth (United Nations, 2018) explains that "Currently, 55% of the world's people live in cities. According to a new UN report, this proportion is expected to have a 13% increase by 2050, making sustainable development increasingly dependent on properly managing urban growth, especially in low- and middle-income countries that will be the main countries for said growth .

It is projected that 68% of the population will live in urban areas by 2050. The reason for this is that part of the world's population will move from rural to urban areas, and with this prediction comes the prospect of population growth, with about 2,5 billion additional people living in cities by then."



As far as technology is concerned, progress in elevators has been minimal over time, certain features are improved but we believe that progress is progressive and slow and there is no disruptive improvement over time. However, with the age of Internet, certain improvements are expected, as explained by KONE's Chief Technology Officer (Maciej Kranz, 2019):

"Artificial intelligence is used to keep elevators fully connected. These systems allow you to instantly update information and be on the latest, before something needs to be repaired, is not working right or needs to be replaced. This way you can make adjustments before the elevator has to be stopped for maintenance so that full-time functioning can be ensured.

Finally we conclude the PESTEL analysis with the legal issues that may affect the company. In the residential sector, elevators must undergo the RGP (Revision General Periodica) every four years, and in the professional sector every two years. These are a series of checks and tests that test whether the elevator complies with the latest regulations in force and whether all its safety elements work as they should:

-Bi-directional communication: In case someone is trapped inside the elevator, the bi-directional communication puts the trapped person in contact with the control center by means of a tele-alarm or GSM system.

-Wedging: It is checked that the wedging system slows down the elevator by utilizing the wedges to the rails where the elevator circulates. This would occur when the elevator circulates at a speed higher than allowed that could be caused by a break in the traction cables or a slip in the pulleys of the traction group.



-Differentials and ground connections: The correct operation of the differential systems and ground connections is checked, so that in the event of any electrical abnormality, it goes directly to the ground instead of affecting any user. In 2018 the new regulation makes it compulsory to connect the elevator rails to the ground as this had not been compulsory until now.

- The use of guardrails either on the upper or lower part of the car. This prevents the technician from falling down between the elevator and the floor where there is a gap. In case of a failure between floors, It also prevents the danger of falling down the elevator shaft.

These are some of the main factors that are examined in the periodic general revisions. In total more than 50 points are inspected. If a point considered critical is not corrected, a second inspection must be carried out after six months. If the defect is minimal, the period established for its correction is until the next inspection, either four years in the case of the residential area or two years in the case of the public area.

The control bodies authorized to carry out these inspections are called OCAs (Organismos de control autorizados), which are the companies in charge of carrying out these reviews. The regulations are in constant movement as they tend to change every three or four years and elevator companies must constantly adapt in order to comply with all the regulations.

The Real Decreto (2291/1985) quotes: "The owner or community of owners has the obligation to take care that it is kept in a perfect state of functioning, as well as to prevent its use when it does not offer the due guarantees of security for the persons or things. This is why the inspection of elevators is so important. For this purpose, you will have to comply with the following obligations:

-Contract the maintenance and revision of the installation with a company registered in the Registro de Empresas Conservadoras in the corresponding Órgano Territorial competente de la Administración Pública.



-To request in due time the realization of the periodic elevator inspections with a Organismo de Control (OCA).

-In the event of an accident, it is mandatory to inform Órgano Territorial competente de la Administración Pública and the Empresa conservadora.

-Facilitate the maintenance company to carry out the checks and inspections that it is obliged to make on its elevator or handling equipment.”

3. DIAGNOSIS

Figure 24: Schindler’s SWOT analysis

WEAKNESSES	THREATS
<ul style="list-style-type: none">• High bureaucracy.• High price.	<ul style="list-style-type: none">• Economic recessions.• Number of competitors.
STRENGTHS	OPPORTUNITIES
<ul style="list-style-type: none">• Entry barriers in the sector.• Elevators are a necessity.• Schindler’s brand image.	<ul style="list-style-type: none">• "Internet of Things".• New products.

Source: Own elaboration



3.1 Strengths

- A market with high entry barriers, the elevator market is mostly dominated by a few multinationals with many years in the industry, and economies of scale predominate. The costs of starting in the sector are very high, although the incoming company will be dedicated to the maintenance of the elevator, there must be technicians 24/7 prepared for possible trappings or emergencies.
- People need elevators to be able to go up a building, and these are difficult to change for substitute products that have similar characteristics. The ageing population, urbanization and the current lifestyle are factors that favor the elevator sector to a great extent. We therefore consider this fact to be a strength that makes the elevation sector necessary for the population.
- Schindler has a high reputation, i.e. consumers perceive the logo and the company as a quality company that meets the highest standards, offering good service, a high response rate to problems and complicated situations.

3.2 Weaknesses

- Being a large multinational comes with a lot of bureaucracy, which slows many processes of the company. From applying discounts, preparing contracts, setting up budget for repairs to perform the work on modernizations or replacements. Many procedures have to be performed which slows the process and increases the waiting time. It is a factor that can weaken the brand, whereas today more and more customers are impatient and want things as quickly as possible.



- As we mentioned in the strengths, Schindler has a high reputation and image perception. This inevitably leads to a higher price, in fact, it has one of the highest prices in the whole elevator and escalator sector in the vast majority of its products or contracts. Therefore the high price can be seen as a weakness in a certain way.

3.3 Threats

- As mentioned above, the elevator sector is highly dependent on the housing market, so it is very vulnerable to real estate bubbles. It is also severely affected by economic crises or recessions and to periods of uncertainty such as the one we are experiencing at the moment caused by the COVID- 19 as mentioned above.
- Mergers by competitors or the purchase of portfolios can cause problems for Schindler. An example would be the possible purchase by Thyssenkrupp from the company Kone, which can lead to a market monopoly. As one board member announces (Alfred Schindler, 2019): “Schindler does not rule out an antitrust offensive in the courts to stop any agreement that would result in the merger of Thyssenkrupp's elevator divisions with its rival Kone”.



3.4 Opportunities

- Most customers demand a lower price for elevators. This can be an opportunity for the company that could produce an elevator with a lower price and more standardization. This would meet the characteristics that the current market is looking for, where an elevator has a short pit, which is normally required when renovating a building on ground level.
- Schindler is starting to implement internet connection in its elevators. This is a point that can be very well exploited in the current market. The Telecommunication market is booming and elevators can have much more connectivity than they currently have in order to offer great user experiences.



4. SEGMENTATION AND POSITIONING

4.1.Segmentation

The elevator market has basically three consumer segments that we clearly identify:

- Segment of owners who are looking for a high quality elevator: Segment characterized by the search for an efficient and quality elevator, with the expectation that it will have a longer durability than the competition and better performance even if it has a higher price. Its main function is to offer a highly qualitative, reliable and durable elevator.
- Segment of owners looking for an elevator with the greatest technological advances: A segment characterized by people, usually with a higher than average income, seeking to have the greatest technological advances above all. They want to be at the forefront in terms of technology, functionality, acquiring benefits superior to those of the competition such as connectivity, programming, television systems, etc. Its main function is to acquire the greatest technological offer while still weighing in price and quality, be it to a lesser extent.
- Segment looking for economic elevators: A segment that seeks economic savings. They seek to acquire an elevator at the lowest possible price without caring so much about quality or technological characteristics. These attributes are still somewhat relevant for the consumer, but price remains the decisive factor.



The attraction of each of the segments is the following:

- Community of owners looking for a high quality elevator: It is the most important and appropriate segment of the three. It represents a high portion of Schindler's customers, who are looking for the quality and brand image that Schindler offers.
- Community of owners looking for an elevator with the greatest technological advances: Schindler is always ahead of its competitors in terms of technological advances, following a strategy of leadership, so this segment is also of interest to the company.
- Community looking for economic elevators: Segment looking for economic savings. In the end, this segment can be ruled out because Schindler's elevators and products are priced higher than most of its competitors and for this market segment Schindler cannot meet the expectations in terms of price.

4.2. Positioning

Quality, reliability, safety, innovation, technology, design and price are the attributes that Schindler's target audience usually looks for.

Next we will look at Schindler's positioning map (Figure 25). Between the two factors we will find firstly price and secondly technological innovations. Based on the amount of technology or number of technological gadgets that can be configured in each of Schindler's elevators and its main competitors.



Figure 25: Schindler's positioning



Source: Own elaboration

5. OBJECTIVES AND STRATEGIES

For the objectives and strategies we will use the SWOT analysis used in the previous point. Through this analysis we will determine where Schindler wants to position itself, utilizing the found strengths in combination with the opportunities and at the same time improving on the weaknesses while reducing the threats to a minimum.

We can find different objectives depending on our diagnosis. Quantitative objectives can be translated into figures and are generally easier to control. Next we will see the quantitative objectives of Schindler S.A.

- To prevent and avoid any type of occupational accident by any worker of the company or third party, especially assembly technicians who are the most exposed to this type of incident because they work at heights, exposed to electrical currents, weight loads, etc.

It is worth mentioning that Schindler has one of the lowest accident rates in the whole sector. However, the goal is to reduce the accident rate by 100% by 2021. Therefore, Schindler will carry out small "exams" called "Safety Go" in



which the head of the technical area will accompany the technicians in their daily work, checking that they use all the safety elements that are provided and observing that they comply with all the regulations that they are obliged to comply with. If the technician does not comply, he will have to repeat the corresponding courses. This exam is in addition to providing the employees with all the necessary courses, the appropriate equipment and all the safety elements that Schindler is already doing.

- Increase the portfolio of customers and the total number of equipment for which Schindler is the responsible maintenance company. This means that even if Schindler is not the company that manufactured and assembled the elevator, it can be the maintenance company of the equipment, carrying out the necessary maintenance, repairs and inspections that correspond to it.

The company wants to increase by 10% the total portfolio it owns in Spain before 2022. It will achieve this in two ways:

- Firstly, by buying up small companies at a regional level.
 - Secondly by hiring new employees whose main function is to "capture" new clients, whether they are companies or communities of owners with or without a property manager.
- Create a new product, a Schindler brand elevator at a lower price with more standardization that meets the characteristics that the market seeks in these times, such as an elevator that meets the requirements of a short pit, i.e. for pits of a distance less than 1000 mm that is normally required when renovating a building on ground level. It should be noted that some competitors already have elevators with these features, for example the Otis 2000E.



- It also aims to reduce the delivery time of its products by 25% by the beginning of 2021. The standard delivery usually takes between 3 and 5 days. Despite this, it will propose a change in management by improving delivery times.

One of the objectives mentioned above is the correlation between the mission and vision, as well as taking advantage of the strengths and opportunities, improving the weaknesses and reducing the impact of the threats. Therefore, this is the basis that will be used to create the strategies for the marketing mix. Therefore, marketing strategies and actions must be aimed at achieving these objectives. In the end, it intends to create a new model by mid 2021.

6.MARKETING MIX- Operational actions

At this point we will deal specifically with the definition of the programs to be followed by the product in order to comply with the strategies and objectives that we mentioned above. The marketing mix consists of the product, price, communication and distribution sections. The four points must be coordinated and consistent with each other so that there can be an optimal relationship in the marketing mix.

6.1. Product, focus and brand value

Schindler has a wide range of products as mentioned above. However it is argued that there is untapped market potential and therefore we will prepare a new product.

According to the website of Eninter (2020) "Going down with the elevator to zero means removing any steps or architectural barriers that are there until you reach the elevator. An elevator at street level will undoubtedly guarantee accessibility to the home. Therefore, we must be aware that the steps can be a great inconvenience for people with mobility problems, and especially for those who travel in wheelchairs.", as illustrated in Figure 26.



Figure 26: Removal of architectural building barriers



Source: Europa 9

To lower the elevator to ground level or street level, we must modify the elevator pit. We must drill to a distance of 1000 mm as it is required by regulation. Most elevators are suitable for 1000 mm pits (Figure 27). Sometimes a pit cannot be lowered to ground level, usually because pillar blocks have been found and cannot be drilled. In that case, a reduced pit distance must be maintained with an elevator made with this purpose in mind (Figure 28). It can be from 200 mm to 900 mm - 1000 mm, for which a series of conditions and compensatory measures will be required to comply with the short pit regulation.

The main issue is that every day there are more and more buildings in which it is necessary to make the short pits, but Schindler does not have a specific elevator that adapts to these conditions and they resort to mounting a third party elevator instead. This causes Schindler to have to charge a higher price to its customers because the cost of these elevators is higher. Therefore, Schindler will manufacture a new model of elevator that can be adapted to short pits. For this purpose, Schindler's engineers will develop the new "Schindler Short Cube", a model of elevator capable of covering a short pit of up to 350 mm.

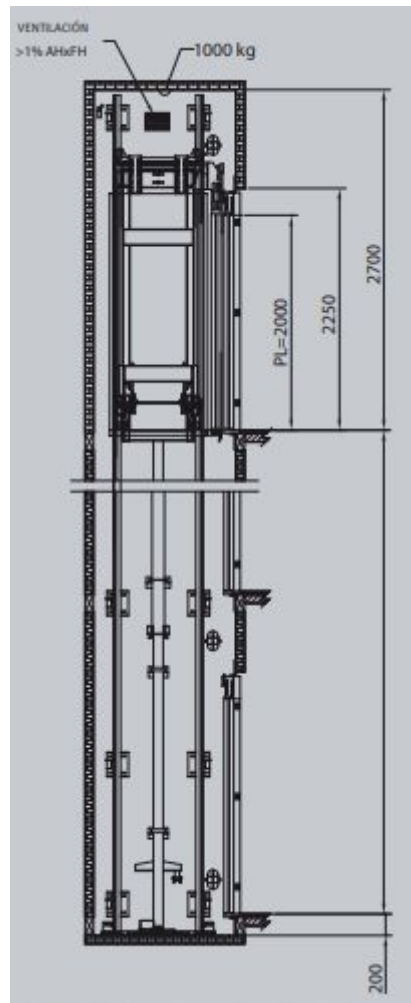


Figure 27: Pit elevator 1000 mm



Source:Raloe

Figure 28: Pit elevator 200 mm



6.2. Price, fixing and adaptation

The price customers pay is a powerful instrument that will influence the demand for our elevator. Increasing the brand image or quality will result in a higher cost which at the same time should also result in a higher price for the end consumer. The price to be set will be determined by estimating the costs and the demand. It will also depend on the competition, sector and other factors discussed in the previous points.



For our brand and model, the main objective is to maintain the current leadership in quality, maximizing the perceived customer value through the following point of communication.

According to Eninter's website (2020), the elements that we have to take into account when choosing a maintenance company for modernization, replacement or installation are:

"The type of service required: Whether you will need installation, maintenance or both. Indicate the type of property where you are going to install it: if it is a building, a villa or a single-family home, for example. The people who will need to go up there regularly. Number of floors where the elevator will stop. The space available for its installation, as it will determine the installation of one type of elevator over another. Determine the type of elevator that best suits your needs. Determine the budget you have.

On the other hand, you have to take into account some elements that they will offer you and that will affect the final price: Type and model of the elevator. Depending on factors such as space, they will have to install one type or another or they may offer you options based on their price. The finishes, which are not essential but are appreciated: floors, panels, doors, displays, button panels and lighting are the main elements you will have to choose and which will condition the final purchase price. If works and licenses are needed to adjust the device."

Schindler being the manufacturer of the "Schindler Short Cube" model, we claim that the cost of this product will be reduced by 10% compared to the cost of buying this product from another company. In addition, it is worth mentioning that it will be of superior quality. Schindler meets all quality standards especially complying with ISO: 9001 and ISO: 14001. The 10% lower cost will result in a 10% lower final price for the consumer, with a much more competitive price and a higher market share than before.



6.3. Communication

In order to follow the planned objectives and strategies, we have two actions to carry out:

1. To make Schindler known to those people that have not been aware of the brand and at the same time to reinforce the presence and image of the brand.
2. To introduce Schindler's customers and potential customers to the product "Schindler Short Cube".

As mentioned in the financial section, Schindler's result in 2018 was € 72.003.000 of which 2.5% will be used to cover both points, amounting to € 1.800.075.

1. To make Schindler known to those people that have not been aware of the brand and at the same time to reinforce the presence and image of the brand.

We believe that Schindler SA has a minimal presence in social networks, at least in Spain. Nowadays, people between 28 and 38 years old, who we consider to be young adults, use social networks frequently. In addition these users are starting to become independent, many of whom become homeowners.

Therefore we will create an advertising campaign using social networks. Specifically "Instagram" will be used with an advertising system known as "Stories", which Instagram describes as "[...] audiovisual content on the platform that, unlike normal publications, are temporarily, i.e. have a certain duration and, after that period, disappear.

According to the statistics obtained from the web (Community Manager, 2020), there are several advantages:



“According to data published by Smart Insights, “In 2017, 70,7% of U.S. companies use Instagram.” Sprout Social has published that “25% of Instagram ads are videos”. According to Instagram itself, approximately 2 million advertisers choose Instagram each month. There are 25 million companies that share and promote their products on this social network. The time spent watching videos on Instagram has increased by over 80% year over year and daily video production also increased four times over the previous year”

These campaigns have a lower cost compared to traditional advertising, and are therefore an attractive option when looking at impact and cost. The cost for this campaign is € 30.000 which is 1,67% of the existing budget of € 1.800.075.




2. Promote the "Schindler Short Cube”

To promote our new elevator we have created a television advertising campaign. It is assumed that elevator companies have very little screen time. It is time to change this fact and put Schindler ahead of other companies. To do this we will devote 98,33% of the € 1.800.075 allocated as advertising budget.

According to the web (Oblicua, 2020): "Television advertising is indisputably the most powerful form of advertising. Advertising on television means reaching hundreds of thousands or millions of people at the same time, and doing so through the most relevant and prestigious advertising medium. Television advertising brings fame and credibility, and helps more than any other to achieve the desired positioning. By properly combining moving images, sound, effects and color, television advertising allows advertisers to run campaigns with the highest levels of creativity and artistic expression. Below in Figure 29 are the advertising rates shown for 2020.



Figure 29: Public TV tariffs. 20 seconds. Broadcast on a working day

	 ANTENA 3	 CUATRO	 TELECINCO	 LA SEXTA
7:30				
8:00	650 €			
8:30				
9:00	450 €			450 €
9:30				
10:00				
10:30		1.100 €	2.200 €	
11:00	1.200 €			650 €
11:30				
12:00				
12:30				
13:00	3.300 €	2.400 €	3.200 €	2.500 €
13:30				
14:00				
14:30	6.500 €		3.800 €	
15:00		6.600 €		3.500 €
15:30	10.000 €		8.000 €	
16:00				
16:30				
17:00	8.000 €	3.400 €		2.900 €
17:30			6.000 €	
18:00				
18:30	7.500 €			
19:00		3.000 €		3.000 €
19:30	8.500 €		6.000 €	
20:00				
20:30	16.500 €	7.900 €		
21:00	15.000 €		17.500 €	9.000 €
21:30		10.000 €		
22:00				
22:30	de 13.000 € a 21.500 €	de 15.000 € a 16.000 €	de 20.000 € a 25.500 €	de 9.000 € a 12.100 €
23:00				

Source: Oblicua

Here we select the advertising spaces which can be interesting for self-promotion:

Antena 3 - 20'' - Working day - Time table from 15:00 h to 15:30h - € 10.000

Cuatro - 20'' - Working day - Time table from 15:00 h to 15:30h - € 6.600

Telecinco - 20'' - Working day - Time table from 15:00 h to 15:30h - € 8.000

La sexta - 20'' - Working day - Time table from 15:00 h to 15:30h - € 3.500

Antena 3 - 20'' - Working day - Time table from 22:00 h to 22:30h - € 21.500

Cuatro - 20'' - Working day - Time table from 22:00 h to 22:30h - € 16.000

Telecinco - 20'' - Working day - Time table from 22:00 h to 22:30h - € 20.000

La sexta - 20'' - Working day - Time table from 22:00 h to 22:30h - € 12.100



It will be promoted on the main four television channels during 20-second advertising spots. One between 15:00h and 15:30h and the next between 22:00h and 22:30h. The total advertising campaign will be a period of 17 working days.

Therefore, the cost of the campaign will be as follows:

17 x Antena 3 - 20" - Working day - Time table from 15:00 h to 15:30 h - 17 x € 10.000

17 x Cuatro - 20" - Working day - Time table from 15:00 h to 15:30 h - 17 x € 6.600

17x Telecinco - 20" - Working day - Time table from 15:00 h to 15:30 h - 17 x € 8.000

17 x La sexta - 20" - Working day - Time table from 15:00 h to 15:30 h - 17 x € 3.500

17 x Antena 3 - 20" - Working day - Time table from 22:00 h to 22:30 h - 17 x € 21.500

17 x Cuatro - 20" - Working day - Time table from 22:00 h to 22:30 h - 17 x € 16.000

17 x Telecinco - 20" - Working day - Time table from 22:00 h to 22:30 h - 17 x € 20.000

17 x La sexta - 20" - Working day - Time table from 22:00 h to 22:30 h - 17 x € 12.100

Total cost of € 1.660.900, the remainder of the budget amounting to € 109.175 will be used to broadcast the ad. The company we will hire for this service is "The mood project" company that has made ads for large multinationals such as Vodafone or Schweppes. It has its headquarters in Madrid.

6.4. Distribution

As for the distribution of Schindler's replacement parts and components, the service is not as fast as the competition. They are sent from the main producing factories worldwide. There are factories in Zaragoza and in Slovakia. The electronic parts such as boards, inverters, etc. come from the headquarters in Switzerland. Despite the distance, the pieces arrive in four working days. The service is considered fast but not as fast as the main competitors. On a side note, we can see that the weekends are not used for shipments, which can be precious time that could be taken advantage of. In addition, nowadays clients want things as soon as possible to arrive.



As the website Equality (2020) explains: "We risk the commercial image and prestige that ensure profits. We must also keep in mind that many customers have contracted our service because of the used working method to ensure success. If it fails, our credibility will be damaged, as well as the confidence placed by the consumer in choosing us above the competition.

With responsibility and commitment we can offer a service of timely delivery, assuring normal company performance and avoiding problems of production, logistics and accounting differences caused by the absence of goods. Without a doubt, time will be critical because it is one of the few things that cannot be bought. This type of company, where pallets, groupage and parcels are moved from one place to another, punctuality is a top priority in order to demonstrate seriousness and increase customer confidence."

Therefore, it is proposed for Schindler to carry out overtime for the warehouse personnel, alternating between all the personnel of each factory or warehouse so that one extra day a month, either a Saturday or a Sunday, is enough without pressuring the warehouse personnel too much. The cost of the employees will be higher but given the circumstances it is a good option for the company and its image to reduce the waiting time for shipments.

The Real Decreto (2001/1983) states: "When for technical or organizational reasons, workers cannot enjoy their weekend or holiday, the company is obliged to pay the employees at least 175% of the normal wages for the hours worked, unless a compensatory rest is provided. This is in addition to the week's wages".



7. SCHEDULE, CONTROL AND BUDGETS

In order for us to be able to fulfil the strategies and the position where we want to be, we must follow a scheme, where a pre-established time and fixed budget is determined. To this end, the following section will be about the timetable, budgeting and control.

7.1. Schedule

In order to carry out the strategies that we have defined previously, we set deadlines so that we can balance our resources. The schedule is one of the most important instruments to check the correct execution of the marketing plan.

However, the EAE Business School (2020) explains: "It does not matter if a schedule is not strictly adhered to. In fact, almost none of them are designed with that intention in mind. They are guidance documents, which guide the manager's work in the initial phase and can therefore be changed before, during or after the execution of the tasks described therein. A set of wishes that are almost always abstract and ill-defined, the timetable is the visualization of these wishes and planning over time".

Figure 30: Schindler's schedule for 2021

Actions	Periods											
	1	2	3	4	5	6	7	8	9	10	11	12
A1 - Designs and tests – "Schindler Short Cube"	■	■	■	■	■							
A2 - Manufacturing – "Schindler Short Cube"						■	■	■	■			
A3 - Cost reduction 10% + RP 10% for the "Schindler Short Cube"										■	■	■
A4 - Instagram Advertising - Schindler	■	■	■	■	■	■	■	■	■			



A5 - TV advertising - "Schindler Short Cube"													
A6 - Warehouses - 7D													

Source: Own elaboration

In our schedule (Figure 29) we have 12 periods of which each period represents a month of the year with as starting date 01/01/2021 and end date 31/12/21. The actions to be fulfilled are:

- Designs and tests – “Schindler Short Cube” Firstly, the first five months the engineering department of Schindler will make the design of our model and will carry out all the necessary tests so that the elevator can be put on the market. The average time for designing a new model is usually 5 months, with the whole department working together.
- Manufacturing – “Schindler Short Cube” Manufacturing will take place from the beginning of the sixth month until the end of the ninth month. The elevators are manufactured on measurement for each community of owners or depending on the case. In certain parts the elevators can be prefabricated and assembled to streamline processes. It should be mentioned that many of the models of elevators share most of the parts and electronic components, which produces savings for the company and greater efficiency.
- Cost reduction 10% + RP (Retail Price) 10% of the “Schindler Short Cube” From the tenth month we will have the first units on sale, as we do not have to pass on the higher cost of sale of having to buy this product from third parties. We can already apply a final price 10% lower than we had until now and at the same time have costs lowered by 10%.
- Advertising Instagram - Schindler. During the first nine months we will carry out the Schindler advertising campaign to make the general public aware of our brand. Once the “Schindler Short Cube” has been manufactured, it will be announced in the Instagram campaign and subsequently in the television campaign. This way we want the public to remember the brand.



- TV advertising – “Schindler Short Cube”. During the tenth month, we will carry out the TV advertising campaign. During 17 working days we will broadcast the mentioned ads, where the new model "Schindler Short Cube" will be presented. It will follow after the Instagram campaign. This way we want to make the public aware of the Schindler brand who will remember us from the previous campaign, thus making the advertising more effective.
- Warehouses - 7D. During the whole year of 2021 we will be setting up the warehouse 7 days a week. Moreover, we will be working on weekends to speed up the processes and shipments, that is, on Saturdays and Sundays. The warehouse staff will be working to prepare orders and other shipments and thus reduce the time of transport of the goods by the Schindler company. It should be noted that this proposal does not include opening 24 hours a day.



7.2. Budgeting

Regarding the budgeting we have the following actions to consider:

Figure 31: Schindler's budget

Actions	Budget
A1 - Designs and tests – “Schindler Short Cube”	€ 40.000,00
A2 - Manufacturing – “Schindler Short Cube”	€ 128.000,00
A3 - Cost reduction 10% + RP 10% “Schindler Short Cube”	€ 0,00
A4 - Instagram Advertising - Schindler	€ 30.000,00
A5 - TV advertising – “Schindler Short Cube”	€ 1.770.075,00
A6 - Warehouses - 7D	€ 15.267,84

Source: Own elaboration

- Action 1

For achieving action 1. - Designs and tests – “Schindler Short Cube” the budget to be taken into account is that of two industrial engineers who will work during the 5 months assigned full time to this project. The gross cost of both workers amounts to 8,000 euros x 5 months = € 40.000. As for the tests, we will not consider the cost since the material of the prototypes and tools we need is practically available in the workshop and therefore it is not necessary to acquire more material.



- Action 2

Regarding the manufacturing, the model “Schindler Short Cube” has to be ordered once the budget is accepted. Despite this we must have a buffer to speed up the processes of delivery to the customer. It is estimated that the price of having the parts available and pre-assembled in the warehouse amounts to € 128.000 euros including labor costs.

- Action 3

Action 3 - Reduction of cost 10% + RP (Retail Price) 10% “Schindler Short Cube” does not need to take budget into account, since actions 1 and 2 will automatically lead to the completion of action 3.

- Action 4

As mentioned above, the price of this campaign is € 30.000, which represents 1,67% of the budget allocated for advertising campaigns, namely € 1.800.075.

- Action 5

As mentioned in the previous section, the cost totals € 1.660.900 for the advertisements of the main channels. We have to add the remaining budget of € 109.175, which will be used to carry out the advertisement. The total cost amounts to € 1.770.075.



- Action 6

The cost of keeping the warehouses open for the factory in Zaragoza implies a cost of € 19,88 gross per hour per worker for the company. Summing up, 8 hours on Saturday plus 8 hours on Sunday during the whole month add up to a total of 64 hours which become 768 hours per year. In total, the cost is 768 hours x € 19,88 gross/hour = € 15.267,84.

7.3. Control

Finally, we need to perform financial control to check that the actions we want are being fulfilled within the time and budget that we have established. Here we will observe whether anomalies occurred and corrected them in time. Depending on each action we will need a different type of control.

Figure 32: Schindler's control

Objective	Checking frequency	Control method	Control department
A1 - Designs and tests – “Schindler Short Cube”	Weekly	Schindler's engineering manager will check the performance and execution of the detailed activities by its employees on a weekly basis.	Engineering Department
A2 -Manufacturing – “Schindler Short Cube”	Weekly	Schindler's engineering manager will check the performance and execution of the detailed activities by its employees on a weekly basis.	Engineering Department



A3 - Cost reduction 10% + RP 10% "Schindler Short Cube"	Bi-monthly	The person in charge of the financial department will check the completion of this action on a bi-monthly basis.	Financial department
A4 - Instagram Advertising - Schindler	Daily	The employees of the marketing department must check the execution of the actions every day.	Marketing Department
A5 - TV advertising - "Schindler Short Cube"	Daily	The person in charge of the marketing department is responsible for checking the execution of the television campaign.	Marketing Department
A6 - Warehouses - 7D	Monthly	The person in charge of the storage department is in charge of executing this action	Warehouse Department

Source: Own elaboration



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