

MAPAERO CASE

From aeronautics to wind power - a successful diversification of an SM

Group 9





Table of contents

- **01.** INTRODUCTION
- **02.** WIND ENERGY MARKET
- O3. SWOT ANALYSIS AND DIAGNOSIS
- **04.** STP STRATEGY
- **05.** ACTION PLAN
- 06. CONCLUSION



Introduction

Mapaéro is a SME specialized in the development and manufacture of aeronautical paints. However, the company has decided to expand, but especially to develop its activities. To do so, the company is looking to diversify its customer portfolio by bringing Boeing into its business or to penetrate the wind energy market and its growing demand for resistant paint.

With the help of this document, we will provide as much detail as possible on the Wind Market, explaining its distribution, Mapaero's strengths and weaknesses in this market and its development possibilities.

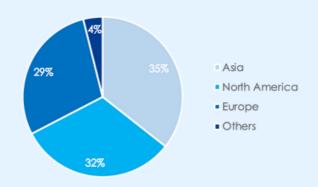
Discuss its segmentation and finally develop an action plan to help Mapaero gain market share.



Wind Energy Market

The global wind energy market is distributed in such a way that a large part of this market is in Asia, then comes North America, Europe and finally, with a small participation rate, the rest. Moreover, this market represents about 2% of the goblal electricity comsumption.

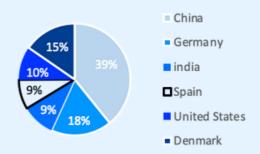
Wind Energy Market



Continent Market sho				
Asia	35,60%			
North America	31,80%			
Europe	28,70%			
Total	96,10%			
Others 3,90%				

		MW Producced in 2011		
Guodiang United Power	China	3042		
Sinovel	China	3700	China	12842
Goldwind	China	3600		
Mingyang	China	2500		
Enercon	germany	3203	Germany	5794
Siemens	germany	2591	Germany	3//4
Suzion Group	India	3116	india	3116
Gamesa	Spain	2802	Spain	2802
GE Wind	United States	3170	United States	3170
Vestas	Denmark	5054	Denmark	5054
			_	
	total	32778		32778

MW Producced in 2011

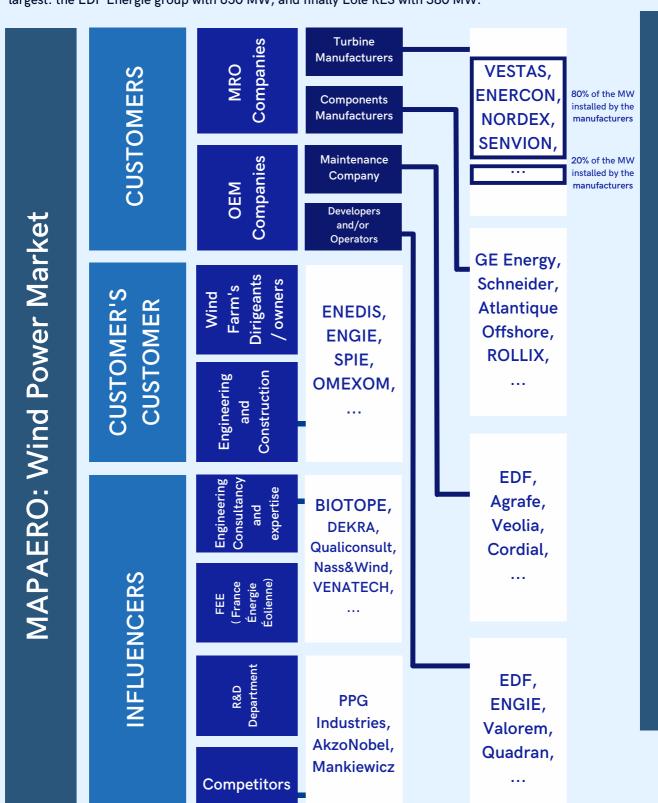




Wind Energy Market: Elements

Who says market says market organization! Here the rule is the same, you can find the main customers, customers of customers, competitors, and influencers.

On the French market, there are three primary leaders: the Engie group with 1000 MW, which is the largest. the EDF Energie group with 650 MW, and finally Eole RES with 380 MW.





Swot analysis

The SWOT analysis of Mapaéro will help us to identify factors that impact the company functioning and offer. It will help us develop a full awareness of all the factors involved in making a business decision: which is here in order to highlight the relevance of entering or not the wind energy market.

Strengths

- There is a high increase in production since 2000, from 150 tons of paint to 1033 tons in 1033 which lead to a high increase in turnover of the company.
- Product's criteria are tested and approved by famous aircraft manufacturers (Airbus, Boeing).
- Highly develop R&D in order to constantly innovate (it represent 15% of the company's turnover).
- They have high distinction in their field: they have been awarded as the "best supplier of the year" in 2013 by Airbus and received the 2015 Gold Award SQIP for the best supplier of materials in the category "best improvers". They are also the market leader in waterborne paint in the aerospace industry.
- The company as a high presence abroad with customers in more than 100 countries (in Europe, Asia, South America and North America). Mapaéro ensures its presence abroad thanks to sales representatives, partnerships and distributors which are essential to be efficient and international.
- The product remains from a pioneer vision in the field of more environmentally friendly aviation paint (almost ten years ahead compared to its main US competitors). It is based on "performance innovation environment" (which is the slogan of the brand). Furthermore, their products offer is in forefront of technology. They also offer coatings tailored to the needs of each client.
- According to their customers, they have many strong customers since many years such as the aircraft manufacturers (Airbus, Dassault, Embraer, etc.), their subcontractors (Latécoère, Aerolia), the airlines (Air France, British Airways, etc.) and the defense departments without distinction of nationality (national armies).
- Finally, they try to be as close as possible to their customers by doing some exhibitions
 (for example with the Air show at Le Bourget) where they can do some visit of the
 company showroom and also communicates its innovations via media interviews and via
 its website.

Weakness

- Strong specialization in the aerospace market due to the nature of the market competition. The company is not competitive enough.
- The market of wind energy represents only 2% of the world's electricity consumption cycle.



Opportunities

- Worldwide demand has become more important for offshore production.
- The wind energy market and the development of renewable energies are steadily increasing. Every year the market has been growing exponentially since 1995.
- Mapaéro is close to big airbus manufacturers (Airbus, Dassault..)
- They have a diversify market. They are specialized in the development and manufacture of aeronautic paints, paint market in the wind sector to expand their customer.

Threats

- They do not provide new innovation in the past 10 years.
- The conditions of the global wind market have become very difficult, and the development constraints are becoming stronger for the industry.
- The rising international oil prices and changes in international policies will lead to higher costs for businesses.
- Although Mapaéro is in the "big four" of the most important company in the industry, the competition is high. They have 7 direct competitors.

Our diagnosis

On the one hand, Mapéro has an innovative and distinctive product feature in the dedicated industry. Their customers are big and famous companies. Their clients are large and reputable companies, and the reputation of their clients who trust Mapaéro enhances Mapaéro's brand image. 15% of the company's turnover is dedicated to research and development, which is a very high budget. However, in the last 10 years they have not created any new innovations. This is why this budget could be reduced today.

There is a high competition in the market, but the competition has also changed in its form in recent years with new comparative advantage created. The market is dominated by the American company PPG Aerospace and the Dutch company AkzoNobel which represents 70% of the total market. The other 30% of the total market is shared between the French company, Mapaéro, the American one: Sherwin Williams and the German company: Mankiewicz. This competition of the market is a oligopolistic and it make barriers to entry higher.

On the other hand, Mapaéro competitors are present in many various markets such as in the aviation market, wall paints, marine coatings, automobile, industry, murals-architectural, chemical industry... Developing in different new markets could allow Mapaéro to increase its sales. In addition, the wind market become more and more difficult. the situation of overabundance of supply, which is explained by the fact that many players want to take advantage of the growth of the wind market, is pulling the price of wind turbines down. And new international players are trying to enter this market, notably in China.

To conclude, in our opinion, Mapaéro should not enter the wind-energy industry although the company needs to further is horizon. The market is very broad and companies of all sizes and countries are using various strategies to squeeze market share and make difficult innovative companies to survive in this market. Mapaéro could focus on other market such as the coatings industry.



STP Strategy

The STP strategy is a three-step model that examines your products or services as well as the way you communicate their benefits to specific customer segments.

A successful segmentation strategy must be effective, measurable, accessible, actionable, and rentable.

Segmentation

Mapaéro needs to segment its product offering according to the many customers and markets it serves. Segmentation allows you to understand why people buy in that market and can help you identify opportunities.

Today, offerings related to the wind energy market are one of the most important strategic focuses. Therefore, Mapaéro has a great opportunity to establish itself in this new, environmentally friendly and therefore extremely important field. To do so, the company must develop its environmental strategy, but above all, it must rely on the advantages of its chain value to improve industrial productivity.

Currently, the wind energy business is made up of about 100 SMEs, each of which employs between 25 and 100 people, and is backed by around 15 big enterprises.

Mapaéro's chain value has many actors. It is composed of:

- Manufacturing of parts and components (such as nacelles, brakes, castings...)
- Design and construction (such as logistics, installation, network connections...)
- Research and development (such as wind measurements, the technical and geotechnical expertise, developers...)
- And the exploitation and upkeep (such as the site setup, maintenance, repair...)

Here are the pros and cons to the use of wind energy:

Pros:

- On the European market, it was sold for 68 euros per megawatt hour, compared to 32 euros for nuclear.
- France presently has 8,000 wind turbines, accounting for 8% of the country's total energy mix.
- It is an energy that allows to fight against global warming because it is green, renewable
 and inexhaustible based on the ancestral use of wind. It does not require any fuel (no
 greenhouse gases, no toxic or radioactive waste).

Cons:

Wind energy is difficult to predict. Indeed, the winds are difficult to anticipate and it is
necessary to know that, if a wind turbine needs a minimum wind to start, it will stop
working in case of winds higher than 90 km/h.



- Physiological disturbances, sleeplessness, headaches, and nausea have been reported in residents living near wind turbines.
- The manufacturing materials are polluting; in fact, a wind turbine is made up of 90% concrete and steel for the mast and 10% glass or carbon fibers for the blades.
- Wind turbines are accused of defacing the scenery by causing visual and noise pollution.
 They are most commonly found in wide plains, particularly in the Hauts-de-France and Grand Est.
- Wind turbines are detrimental to the wildlife, especially the birds who get trapped and torn in the blades.

Targeting

In the wind energy market, there are two types of potential customers for Mapaéro products: Original Equipment Manufacturers (OEMs), such as wind turbine manufacturers, and Maintenance and Repair Companies (MROs).

The OEMs are national and international medium and large sized companies that have factories specializing in the production of wind turbine blades, which include in their processes the application of paint and finishes. For them, important paint features include anti-erosion, frost protection, and shadow paint for farms located near military zones. Mapaéro designs anti-corrosion paint that is perfect for these types of customers.

MROs are national SMEs that perform maintenance and internal and external maintenance of wind turbines, including the repair of erosion and corrosion damage on wind blades and the repainting of the entire structure (mast, nacelle, and blades).

Mapaéro should therefore focus on these two different types of customers as it meets their respective needs.

There is an industry trend which is the growth of the wind energy services market. A study conducted in 2012 by Deloitte and Taylor Wessing shows that this market traditionally dominated by original equipment manufacturers (OEMs) will grow. One reason for this is that project funders and wind farm owners are looking for longer-term service and maintenance contracts. Mapaéro must therefore focus on this objective in the short and long term.

Positioning

Aeronautical paints have a global market of more than \$ 400 million. The market is controlled by PPG Aerospace of the United States and AkzoNobel the Dutch firm AkzoNobel, which together account for 70% of sales. The remaining 30% is split among a few other rivals, including American Sherwin Williams, German Mankiewicz, and French Mapaéro (Aerospace Coatings).



Paint is not a particularly important item. Paint prices are significantly lower in the wind business, estimated at around €10-15/kg, than in the aerospace sector, which is closer to €20/kg.

Mapaero therefore places greater emphasis on timely delivery of environmentally friendly items than its competitors.

Paint lifespan is no longer a priority for manufacturers. Wind farm managers purchase wind turbines based on their technical specifications and cost, and generally delegate maintenance to MROs.

Positioning Statement

For companies who are looking for an eco-friendly, high-quality, anti-erosion, and frost protection paint, Mapero offers a wide range of the most high-quality and innovative options-each provides a positive and customized experience for our customers. Unlike other paints, Mapero more focus on environmental protection and inspire reliable and long-term customer relationship, and intensely focus on the needs of customers.



Marketing Mix

Product

The product that Mapaero provided is innovative, high-performance paints, putties, and coatings tailored to the needs of each client. The company's R & D department has developed paint for wind turbines, more specifically to protect the blades and whose major characteristic is to be anticorrosive. Since this paint can be used in military aircraft, the quality, therefore, can be tested.

Price

The sale prices for paint are much lower in the wind power industry, estimated at around 10 to 15 €/kg. Since Mapaero is a company with a leading position in continuous 'performance - innovation - environment', they should be able to control their price among this range, or even lower, since the competition between this industry is brutal.

Place

The global electricity consumption shows a 2% increase since 1995, detailly, Asia (35.6%), North America (31.8%) and Europe (28.7%). Since companies' painting selling is exclusively based in Hamburg (Germany), and the German market is one of the most important sectors in Europe. Based on that, we think Mapaero should start with the German market, the entry barrier will be less.

Promotion

Advertising: Mapaero can do guerrilla marketing, for example, billboards or bus signs.

Public Relations: Company can use its website for publicity. For example, companies can promote their concept of environmental responsibility, that is, respecting the environment. Moreover, the company can release their latest product on their website which can gain more exposure. As far as paint is concerned, the MROs generally work in a tight flow because the tin of paint lasts about 1 year. They ask their suppliers to be particularly responsive. Therefore, having a consistent brand image is essential.

Sponsorship: Company can sponsor some environmental-related events.



Organizational Evolution

Potential changes in the company

Based on the overall marketing environment, we can tell, first of all, in the wind energy market, there will be very fierce competition in the future. That's why mapero has to find out what makes it different from others and optimize its service, technology, and price. Secondly, we intend to enter the European wind energy market from Germany, which means that mapero will have to invest more money in the German office. Following are the potential changes we assume Mapero will encounter:

- 1. Based on the offer of paint on the wind energy market, a literature search and a competition analysis shown in the third strong axis, especially used by the direct competition to Mapaéro products, we find the communication on specialized technology. We can also see that the least used communication points are environmental protection and certifications. Hence, the company should focus more on winning qualified certifications to build differentiation.
- 2. Company structure: Hiring 2 more employees in the Commercial (Marketing & Communication) department. Hire 2 more employees in the R&D department. Not only to identify the general and specific needs of potential customers, their requirements at the time of purchase, and their current problems with the products they use but also to identify possible new products to develop with a special paint technology that is not currently available on the market.

Training

1. Setting courses for the 'customer relations' sector. They are the group of people that contact customers directly, so they should be trained well both professionally and communicationally.

Germany Office

1. Expand more employees in the German office.



Conclusion

Before having analyzed the report of Mapaéro, we studied the wind energy market in broad. We saw that this sector has a lot of stakeholders such as influencers, customer's customer and customers. They are all working from many different organizations.

Then, in this case study we have analyzed the data presented in the report in order to make a diagnosis of the situation. Following a SWOT of the company Mapaéro we conclude that the wind power sector is a difficult sector to enter because of his numerous competitors and the broadness of it.

However, with an STP strategy and further development such as marketing mix, we tried to understand and explain how Mapaéro could enter the wind energy market with potential changes within the company, within the German office, and the training of employees.