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Product Manufacturing

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3. INTRODUCTION

This report is based on the analysis of the European market of paddles for water sports made of composite materials. It is conducted in order to analyze the prospects of a young Italian company and to assess the volume of investments and their profitability.

At the time of the analysis, the company had a number of developments in the production of paddles and positive feedback from professional paddlers. But practically there was no organized sales system, accounting or processes. And there was a complete lack of understanding of EU market capacity.

At the first stage of the project the following questions were highlighted for a two-month research:

- Distribution channels
- Competitive products
- Competitors
- Composite materials production

The collected data showed that there is a big uncertainty regarding the business model. And using existing data, we can not accurately plan financial expectations. The following strategic directions were identified for additional study:

- analysis of customer segments and needs
- analysis of sales channels
- competitive analysis and product testing
- production methods
- RnD methods

It was decided to extend the term of the research up to a year before making the decision on the full launch of the project. The work on a two-month study has been described in the report as a pre-project.

For the organization of work for an extended research period, the main tasks have been set:

- defining and prioritizing the tasks for the year
- assessment of the impact of key parameters of the business model on business performance
- financial forecast for 36 months from the start of the project on a specific business model
- risk assessment

To implement these tasks, a dynamic prioritization model was developed, along with the application of the project value, risk, and opportunity (PVRO) framework and making the optimistic, real, and pessimistic financial forecasts.

At the moment, the project is at the stage of defining the business model.

4. BACKGROUND

4.1. Sport

Water sports are one of the most popular activities in the world and traditionally in Europe. There are a number of basic disciplines:

- Slalom
- Sea kayaking
- White water
- Canoe
- Polo
- SUP

...

And even fewer common types.

Some of these kinds are more professional, some are available to amateurs.

Kayaking is common both individually and as a group activity. So there are plenty of clubs organizing competitions for different level of paddlers.

4.2. Market

Manufacturers mainly appear on the basis of small workshops organized by athletes or enthusiasts.

Manufacturer`s specialization is determined by popular local sports. Most manufacturers focus on the local markets, except for a few "big" companies. Due to the narrow segments and large variability of products on the European market, there are no manufacturers of the scale of corporations. Globally, there is only one such manufacturer.

4.3. Technologies

Material is the key in the production of paddles. It defines the customer segment, product requirements and production method.

Wood – is used for the classic paddle for leisure segment with average or high price

Plastic – is cheap material for leisure segment

Composite materials – are high-tech materials for enthusiasts, amateurs and professional athletes of the middle and expensive segment. In composite materials we can distinguish: fiberglass and carbon fiber. But in reality, there are many combinations of materials.

4.4. Company history

Traditionally, many water sports athletes experiment with the production of kayaks and their accessories on their own.

Such experiments formed the basis of the company that appeared five years ago on a river popular for kayaking in the small town of Northern Italy.

Within several years, there has been mastered production technology and a number of designs for outsourcing on the basis of another manufacturer in Eastern Europe.

The paddles have passed series of testing by professionals and amateurs. There have been several deliveries to clubs.

There are interesting technological solutions in the products.

4.5. Plan before the start of the project

For season 2019, the main emphasis was on planning to maximize the practice of attending competitions.

The expected sales of goods were 220 thousand euros with a loss of 30 thousand, of which 38 are investments in production equipment.

Another target was to open the new premises for the production and to grow staff-wise.

4.6. Motivation and tasks for the project

The launch dates of the company exceeded the expectations of the founders. It was expected that the company would contain active founders and generate a turnover of more than half a million euros per year.

This caused the desire to revise the state and to analyze the prospects.

5. PROBLEM STATEMENT AND DESCRIPTION OF STRATEGY FOR IT SOLUTION

5.1. Problem statement

The company has a number of developments and quality recognition from paddlers, but sales are absolutely unstructured, there is no systematic understanding of the market, or customer segmentation. Besides there is Neithe organization in the production and development of products nor accounting.

In view of this it is difficult to assess the real prospects of the company.

5.2. Problem solution

Evaluation of the company's prospects through the assessment of market capacity, its segments, distribution channels, as well as the level of competitiveness of the current product. The outcomes of this evaluation will be the basis for planning the results of the company, the necessary investments and the return on investment.

5.3. Pre-project and extended project

To solve this problem, a number of researches and internal audits (Annexes 1) were developed for a period of 2 months.

The data of this work showed a high level of uncertainty in the existing business model and, as a result, a very low quality of possible planning.

Several strategic directions (see 6.2.) for additional analysis was highlighted and the period for this work was extended for the entire season (calendar year).

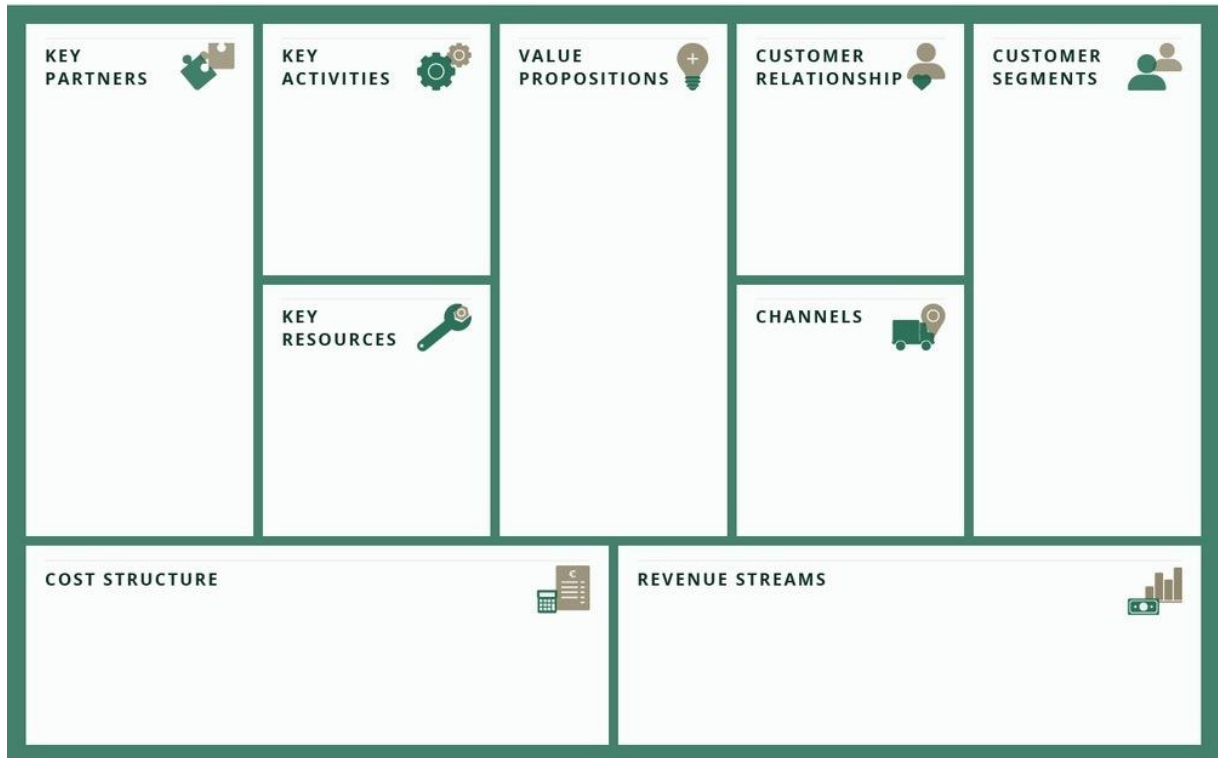
The data collected during these two months will be included in the general material on the report.

The costs planned for 2019 to conduct this analysis are presented in Annexes 2.

6. PROJECT BUSINESS MODEL

6.1. Description method

Due to the low ordering of the company activities, it is convenient to use Business-model canvas.



The description of the state of each block was made in order to highlight the areas for further analysis.

6.1.1. Customer segments

There is a segment statistics on the level of athletes in UK (2) that is relevant to all EU:



Figure 1: Segments of paddlers

Our potential segments are $\frac{3}{4}$ of the market, but we do not understand the particular needs of these customers and the level of consumption.

6.1.2. Value proposition

Despite the presence of successful models of paddles and unique solutions, we understand neither our points of differentiation, nor the value of our developments for customers.

6.1.3. Channels

Focusing on the European market at the moment looks right. It is quite large with mainly European manufacturers represented (which are almost not represented, for example, on the US market).

However, there is still an open question about the necessary distribution channels:

- direct sales at competitions
- online sales
- sale through specialized retail
- sales to clubs and associations
- OEM sales to the manufacturer of other goods

6.1.4. Customer relations

The issue that is linked to the previous points is our way of communicating with clients.

This problem can be solved by holding to hold own events, to participate in third-party events, and exhibitions. It is also necessary to understand how we create media content about us.

6.1.5. Revenue streams

Currently there is not enough information on:

- the level of discounts for specialized stores
- the frequency of orders, whether there is seasonality in it
- the form of payment

6.1.6. Key resources

The points which require additional research:

- necessary production and test equipment
- assessment of the level of our expertise and the need to attract the external one- staff
- required amount of funding

6.1.7. Key activities

The implementation of planned visits to similar manufacturers and the search for carriers of technical expertise highlighted the topic of our core competencies and focus:

- Should we should produce ourselves or use outsource?
- can we strengthen ourselves with external developers?
- How to introduce quality control with various production options?
- In what way should testing as an area be implemented?

6.1.8. Key partners

Despite the small size of the business, it requires a fairly complex distributed network of partner contacts:

- suppliers around the world
- contractors for various kinds of production, research and marketing operations
- European sports organizations
- professional athletes

6.1.10. Cost structure

In the context of the previous blocks, a high level of uncertainty concerning the necessary cost structure is understandable.

6.2. Focus of analysis

From the description of the state of the blocks of the business canvas there was made a fairly large list of tasks for the year. Among them the following ones can be prioritized:

- analysis of customer segments and needs
- analysis of sales channels
- competitive analysis and product testing
- production methods
- RnD methods

7. ANALYSIS OF BUSINESS ENVIRONMENT AND VALIDATION (TESTING) OF THE SUGGESTED

7.1. Market volume

There is no ready-made analytics on market capacity, or it is grossly erroneous. But knowing the sales of several competitors, their product range and store presence, we could indirectly evaluate the European market of composite material paddles at 10M euros.

There is a clear leader on the market (an American company), whose share (estimated through retail representation) accounts for about half of the market. There are also 5-7 companies of the second scale, which are well represented on the market and about 100 small workshops.

On this basis, the potential share of the company is 5% or 450K euro.

This estimate is rather rough and depends heavily on the distribution of sales by channels and can also be updated with data on real sales of retail stores. Both of these tasks should be completed during the implementation of the project.

7.2. Competitor analysis

The analysis of competitors, in addition to the above, showed:

- The market has quite a few companies working systematically with the European market (Annexes 3).
- There are several key markets, such as Germany and France in the context of the availability of specialized stores.
- The penetration of goods from third countries into the market is quite low. The penetration from the countries of Eastern Europe is also not high either.
- A number of manufacturers combine the production of paddles with other products for water sports or from other areas entirely. (Annexes 4).

Testing is required to verify the "openness" of local European markets and the necessity of "European production" from the consumers' perspective.

7.3. Channels

We can distinguish the following areas:

- sales through retail
- online sales
- direct sales at competitions, exhibitions, OEM sales.

The analysis of specialized stores is given in Annexes 5. About 200 stores are represented on the EU market. At the trial meetings with retail stores there has been received the information about direct purchases of the lion's share of European oars with a discount of 20-40% of the retail price.

Additional research is needed to analyze online sales of competitors, OEM sales and sales at trade shows. Data collection will require the analysis of the competitors' participation in each of the channels.

Testing will require the information from retail stores.

7.4. Competitive product analysis

Product analysis revealed the following three aspects:

Analysis of prices and materials (Annexes 6)

The main criterion for price diversification is the material. Aside from a couple of competitors specializing only in the professional segment, all others have 2-3 options for the material.

There are geographical features of pricing. For example, Germany is traditionally the place of producing more expensive paddles.

At the moment we have one material presented and this limits the flexibility of our offer. This conclusion forms several development tasks for a year. It is covered in detail in section 8.

Feature analysis

Evaluation of paddles is quite subjective. But there are generally accepted characteristics on the market, such as:

- the size of the paddle blade
- the weight of the blade

The work with these characteristics should be implemented during product development. The stability of these characteristics should be ensured by the production process and quality testing.

It is also worth noting that at the moment we are not sufficiently controlling the characteristics of the product when receiving products from a third-party manufacturer.

Options and technology analysis

Although the composite paddle is simple in functionality, it is quite technological and variable. There are many solutions in various parts, such as:

- collapsible elements
- a variety of pipe rigidity paddle
- the edge of paddle of increased strength
- the inclusion of other materials in the design

...

The model range should be composed including similar technologies and options depending on the segment and sport.

In addition, it can be noted that among manufacturers there is neither type classification of products nor a single approach to the product model and its variability. This point requires determining what approach we are ready to adopt.

More about the tasks for testing the product can be found in the next section.

8. PRODUCT ARCHITECTURE / TECHNICAL DESCRIPTION

8.1. General state

Most of the manufacturers on this market are small companies, but the level of technical solutions is quite high.

Composite materials are traditionally common in the aviation and automotive industry, and specific sports such as hockey and surfing. Access to knowledge in this area is quite limited.

In addition to this, the necessary approach to the production of these products rather repeats the approach of a large industrial enterprise.

Developments are conducted at the junction of many areas, such as:

- designing
- chemistry
- hydrodynamics
- metrology

There is a need in narrow-profile experts for limited tasks as well as in various opportunities from contract organizations.

During the analysis, several problems were solved:

- audit of the current state of the product, production methods, testing and development
- comparison of these data with similar production of products from composite materials (for example, bicycles)
- verification of the company's methods by experts from other areas

During the implementation of these tasks, two aspects were discovered:

- In this area there are specialized engineering companies that are focused on the manufacture of products or parts made of composite materials for business clients. This basically forms the market for engineering outsourcing in the field of composite materials. At the same time, the diversification of this market is based on the complexity of engineering tasks and cost of work (related to the region of the

contractor). To check the adequacy of the decision on the production of oars in Italy, the analysis of the engineering outsourcing market is needed. This is necessary both for the whole product and for individual parts of the product or production operations

- Testing our knowledge requires the involvement of external experts as consultants. The search and testing methods of cooperation is a separate extraordinary task.

8.2. Manufacturability of products

To accurately assess an existing product, a number of actions are required:

- description of production operations
- producing reference models and fixing characteristics
- analysis of characteristics with the competitive ones, physical tests in laboratory conditions and testing by consumers
- fixing the weak and strong places in the product and the formation of the order for the development of improvements
- formation of a quality control system

Such work will stabilize the quality of the product and measure its level on the market.

8.3. Materials

Analysis of the use of materials (see 7.4) sets the task of mastering new composite materials. In turn, this may require:

- development of new models or adaptation of existing models for new material
- adaptation of the production procedure
- creation of test samples
- study of the market of materials

The main existing materials on the market are:

- *100% carbon fiber*

This is the most expensive segment which is technically the most perfect.

- Combination of carbon fiber and fiberglass

This group for some manufacturers is combined with the first one. This is the average option both price and manufacturability-wise.

- Fiberglass

This option is from the middle price category. In its production there are many color solutions, in contrast to carbon fiber, which may require additional tests.

- Besides these main groups, there are inclusions of additional materials, for example Kevlar, or combinations under the unique name of a specific manufacturer

8.4. R&D

In the field of development there are several typical areas in which tasks can be defined:

- *Development process*

The key component that is currently lacking is understanding of the consumers' needs in various segments and sports, and of the detailed analysis of competitors' products.

This is the area for the ideas of new developments. This can be validated by the paddlers of the required segment or sport. We need to assess the potential value of this development, the cost of its implementation and the impact on the cost of the product.

After this, the process of creating pilot samples and their testing begins.

- *Development implementation*

After successful testing of the prototype, the solution should be digitized (if we are talking about a new paddle), the matrix model is created, the production procedure is developed, tested and given to athletes partners for a test.

- *Laboratory*

Regardless of the place of producing of paddles, critical testing operations should be implemented in our laboratory. It is necessary to form typical test benches and a set of tools for specific tests.

In addition, there are new models and ideas, which are under development. Their completion is in the task list for the year.

9. FUNCTIONAL SYSTEMS AND TOOLS

9.1. Description of the approach

A critical analysis of the company's business model and business environment has added a large number of new tasks in addition to existing operational ones.

An open question of self-production and the involvement of external experts, distribution channels and materials can greatly influence financial planning, but it is critical in this project.

In the course of implementing the collection of information about the business environment, it is necessary to dynamically change the financial assessment. In order to do this, we need to determine the parameters that require clarification and assumptions made at this stage.

In addition, the project has a need to assess the value of various planned actions, potential risks and opportunities associated with clarifying data during their implementation. For this purpose, the PVRO framework was applied. Basic ego stages are as follows:

- highlighting the main attributes of the project that affect its value
- assessment of the importance of these attributes for the project
- assessment of the impact of these attributes on project profitability
- assessment of the most probable attribute values
- definition of the target result, the most probabilistic one and its comparison with the baseline expectation
- identification of risks and opportunities by attributes and of the project as a whole
- revision of importance of attributes

This analysis makes it possible to determine the strategic objectives for the year and assess their impact on the project. It also provides estimates of the project's results, the risks of its achievement and additional opportunities.

The received revenue outcomes are used in optimistic, realistic and pessimistic financial forecasts.

9.2. Financial planning

Within the current year, the main task is to determine the company's business model and analyze its development prospects. With this approach, sales are not given a key place, and the profitability of the year is not expected at a high level. To assess the effectiveness, the period of 36 months after the current year is taken.

To understand the yield on the project's profitability, the forecast has been extended for another 2 years.

9.2.1. Assumptions

For financial planning, a number of assumptions are made which can be revised over time:

- This year, only 3 test paddles will be sold to the store, we will not have time to get to a larger volume
- The price of the paddle for the store is 150 euro
- From next year, in the first year of operation, 20 paddles are sold in the shop, in the second - 40
- 10 paddles for 200 euros are sold at the competition
- In the following years, through the contacts with the competition, there are extra 25% of sales at the competition
- At the event 20 paddles for 200 euros are sold
- According to contacts with events in the following years there are additional sales of 33% of sales from events
- At the key exhibition, 50 paddles are sold, at the others- 25, the price is 150 euros
- According to contacts with exhibitions in the following years sales occur at 33% of sales at exhibitions
- Online sales from 2020 make up 10% of the total turnover
- The cost of 2019 paddles is taken on the basis of the current one that is 70 euros, from 2020 it is 60 euros.

- The number of paddles produced in 2019 is by 30% more than sales, in 2020, 2021 by 20%, in 2022 - by 10%
- Investments in equipment in 2019 are 31K, in 2020 - 25, in 2021-30, in 2022 - 10
- The level of tax burden requires additional research

9.2.2. Evaluation of income and costs

For many of the costs and revenues in the company there are no statistics and for some there are no estimates, so they will require further clarification.

Income planning is based on planning visits to competitions, stores, exhibitions and events.

	2019	2020	2021	2022
Stores	20	30	30	30
Competitions	12	15	20	20
Events	2	5	5	5
Exhibitions	1	2	3	3

9.2.3. Financial forecast

REVENUE	2019	2020	2021	2022	2023	2024
Gross sales	\$41 750,00	\$158 000,00	\$292 000,00	\$326 000,00	\$400 000,00	\$500 000,00
NET SALES	\$41 750,00	\$158 000,00	\$292 000,00	\$326 000,00	\$420 000,00	\$500 000,00
COST OF SALES						
Beginning inventory	\$0,00	\$11 200,00	\$23 840,00	\$35 520,00	\$48 560,00	\$64 560,00
Plus goods purchased/manufactured	\$21 000,00	\$63 200,00	\$116 800,00	\$130 400,00	\$160 000,00	\$200 000,00
Total goods available	\$21 000,00	\$74 400,00	\$140 640,00	\$165 920,00	\$208 560,00	\$264 560,00
TOTAL COST OF SALES	\$21 000,00	\$74 400,00	\$140 640,00	\$165 920,00	\$208 560,00	\$264 560,00
Gross Profit	\$20 750,00	\$83 600,00	\$151 360,00	\$160 080,00	\$211 440,00	\$235 440,00
EXPENSES						
Selling						
Salaries and wages	\$10 000,00	\$24 000,00	\$24 000,00	\$24 000,00	\$24 000,00	\$24 000,00
Payroll taxes	\$0,00	\$2 760,00	\$2 760,00	\$2 760,00	\$2 760,00	\$2 760,00
Advertising	\$10 000,00	\$16 500,00	\$16 500,00	\$16 500,00	\$16 500,00	\$16 500,00
Total selling expenses	\$20 000,00	\$43 260,00	\$43 260,00	\$43 260,00	\$43 260,00	\$43 260,00
Administrative expenses						
Salaries and employee expenses	\$50 000,00	\$78 000,00	\$78 000,00	\$78 000,00	\$78 000,00	\$78 000,00
Payroll taxes	\$8 760,00	\$17 940,00	\$17 940,00	\$17 940,00	\$17 940,00	\$17 940,00
Rent	\$3 000,00	\$11 400,00	\$11 400,00	\$11 400,00	\$11 400,00	\$11 400,00
Travel and entertainment	\$26 000,00	\$44 000,00	\$32 000,00	\$25 000,00	\$25 000,00	\$25 000,00
Other	\$10	\$2	\$2	\$2	\$2	\$2

	000,00	500,00	500,00	500,00	500,00	500,00
Website hosting and maintenance	\$2 000,00	\$5 000,00	\$10 000,00	\$10 000,00	\$10 000,00	\$10 000,00
Furniture and equipment	\$31 000,00	\$25 000,00	\$30 000,00	\$10 000,00	\$10 000,00	\$10 000,00
<i>Total Administrative expenses</i>	<i>\$130</i> <i>760,00</i>	<i>\$183</i> <i>840,00</i>	<i>\$181</i> <i>840,00</i>	<i>\$154</i> <i>840,00</i>	<i>\$154</i> <i>840,00</i>	<i>\$154</i> <i>840,00</i>
TOTAL OPERATING EXPENSES	\$150 760,00	\$227 100,00	\$225 100,00	\$198 100,00	\$198 100,00	\$198 100,00
Net Income before taxes	(\$130 010,00)	(\$143 500,00)	(\$73 740,00)	(\$38 020,00)	\$13 340,00	\$37 340,00
Taxes	\$2 000,00	\$5 000,00	\$10 000,00	\$10 000,00	\$10 000,00	\$10 000,00
Net profit	(\$132 010,00)	(\$148 500,00)	(\$83 740,00)	(\$48 020,00)	\$3 340,00	\$27 340,00
Revenue						
Sales	\$41 750	\$158 000	\$292 000	\$326 000	\$420 000	\$500 000
Direct Costs	\$21 000	\$74 400	\$140 640	\$165 920	\$208 560	\$264 560
<i>Gross Margin (Profit)</i>	<i>\$20 750</i>	<i>\$83 600</i>	<i>\$151 360</i>	<i>\$160 080</i>	<i>\$211 440</i>	<i>\$235 440</i>
<i>Gross Margin%</i>	50%	53%	52%	49%	50%	47%
Expenses						
<i>Operating Expenses</i>	<i>\$150</i> <i>760</i>	<i>\$227</i> <i>100</i>	<i>\$225</i> <i>100</i>	<i>\$198</i> <i>100</i>	<i>\$198</i> <i>100</i>	<i>\$198</i> <i>100</i>
EBIT	(\$130 010)	(\$143 500)	(\$73 740)	(\$38 020)	\$13 340	\$37 340
Interest	\$0	\$0	\$0	\$0	\$0	\$0
Taxes	\$2 000	\$5 000	\$5 000	\$10 000	\$10 000	\$10 000
<i>Net Profit</i>	(\$132 010)	(\$148 500)	(\$78 740)	(\$48 020)	\$3 340	\$27 340

In the current version, the financial plan shows unprofitability within three years after launch.

9.3. The project value, risk, and opportunity (PVRO)

9.3.1. Determining PVAs

Project value attributes (PVAs) are derived from the main activities in the project, which we have identified in the analysis of the business model. I recall them:

- analysis of customer segments and needs
- analysis of sales channels
- competitive analysis and product testing
- production methods
- RnD methods

To make the attributes measurable, they were translated into the following:

- Level of understanding of distribution channels

Estimated integral parameter, which consists of the understanding of the work of stores, competitions, exhibitions ...

The level, on the example of stores, is based on the total number of stores on the market that is 200 in two dozen countries. Visiting 40 of them gives rather full picture, visiting 20 stores provides us with the average understanding.

To implement this attribute, in addition to the visits themselves, the tasks of creating questionnaires, preparing lists, etc. are included.

- Level of understanding of customer needs

It is similar to sales channels which assess the segments and the needs of different consumers.

- Level of manufacturability of the product

The attribute contains a number of tasks for evaluating an existing product (see 8.2.).

- Level of manufacturability of the material

The attribute contains tasks for the development of additional composite materials (see 8.3.).

- Level of know-how

The attribute contains tasks for organizing the product development process (see 8.4)

Within the framework of the model, three critical attributes have been introduced:

- Project term

It is the indicator of the time required to implement the analysis of the business model. With a large volume of tasks it is difficult to determine it accurately and therefore the effect of time on the project is estimated.

-Investment in the project

It is parameter of investment in the project during the analysis of the business model.

- Price per unit

Attribute of product price elasticity.

9.3.2. Initiation income valuation

Based on an assessment of the market at 450K euros per year or 675K for 18 calendar months, sales expectations were at 450K.

9.3.3. The impact of PVA on income and the probability of PVA achieving

For each attribute, two dependencies are formed:

- The impact of the attribute on the company's profitability in terms of creating additional value

and

- The estimation of the probability of achieving an attribute, coming from real possibilities

The dependency data of each attribute is given below:

Project term

Reducing or delaying the project adds or takes away the time of the project, and accordingly changes the volume of sales.

Start 18 (exactly this period is counted in graphs) of a monthly implementation fixed 1.03.2020 and it is on this basis that the financial forecast is calculated.

Probability of terms: the implementation of the minimum volume of tasks is estimated at 5 months, and of the complete one - at 11 months, taking into account that the project has already been going for two months. At the same time, if there are delays in implementation, the project may be prolonged up to a year.

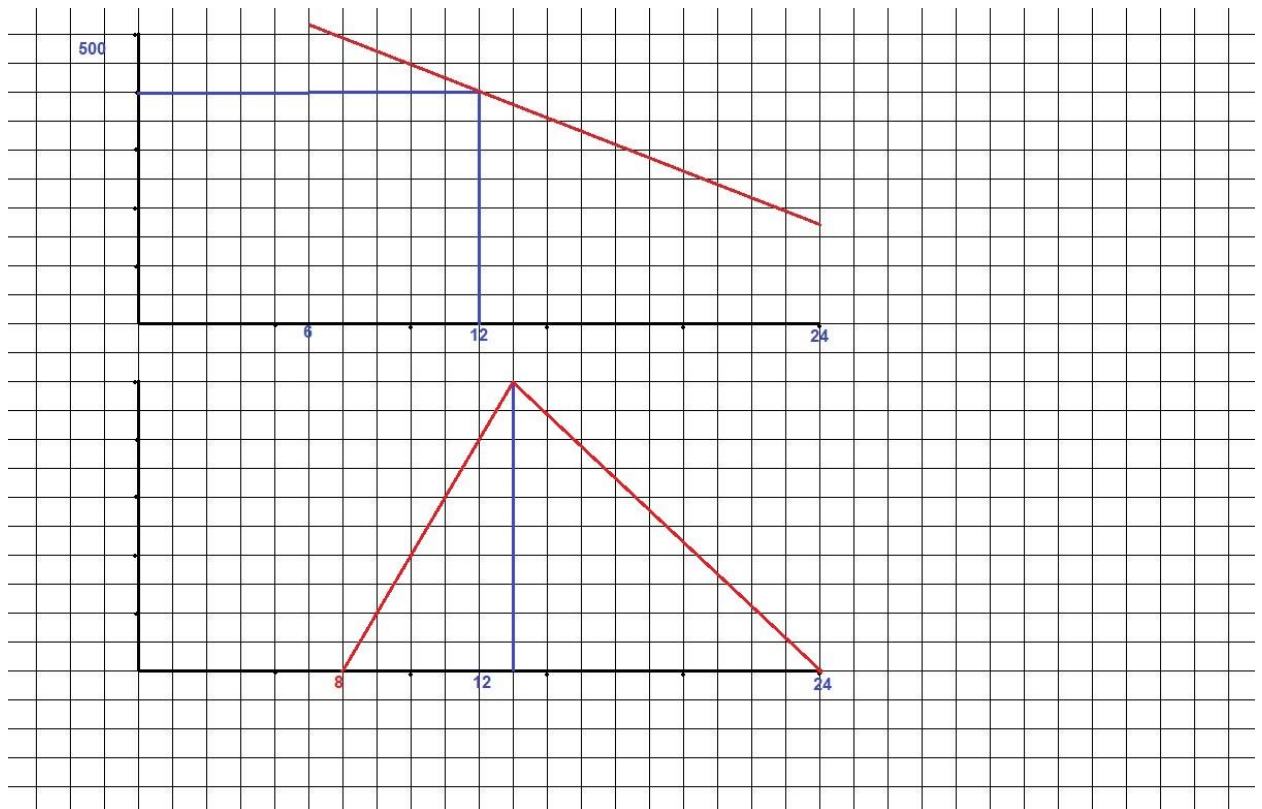


Figure 1: Impact of the term of the project in months

Investments in the project

Investments in the project have been approved in full and correspond to the project maturity. Raising them will not give a strong increase. But their level below 60% will not allow the project to exist.

From the point of view of probability, under-expenditure means lagging in the execution of tasks or incorrect estimation of costs. The situation is possible in the opposite direction as well.

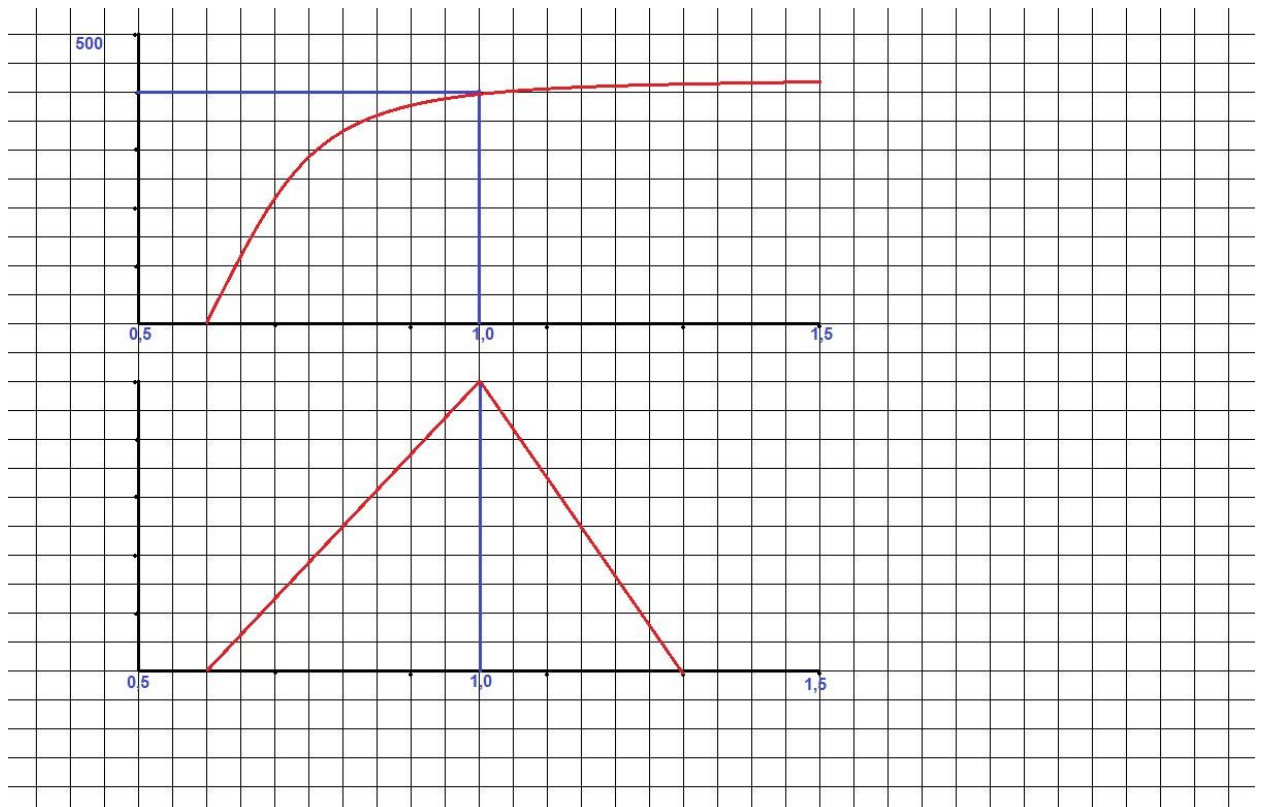


Figure 2: Impact of investments relative to the planned value

Level of understanding of distribution channels

The European market for our products is rated at 9M. Our potential share of 5% is 450K with full market knowledge or 675K in 18 months. The value of sales with basic knowledge is 100K. Our current knowledge is 20%. The graph is exponential, as the insufficient understanding of the channels reduces the effectiveness of our efforts to increase it.

Probability:

- now knowledge of channels is assessed as 20% - this is the minimum
- the maximum possible this year, is assessed as 80% (in terms of resources)

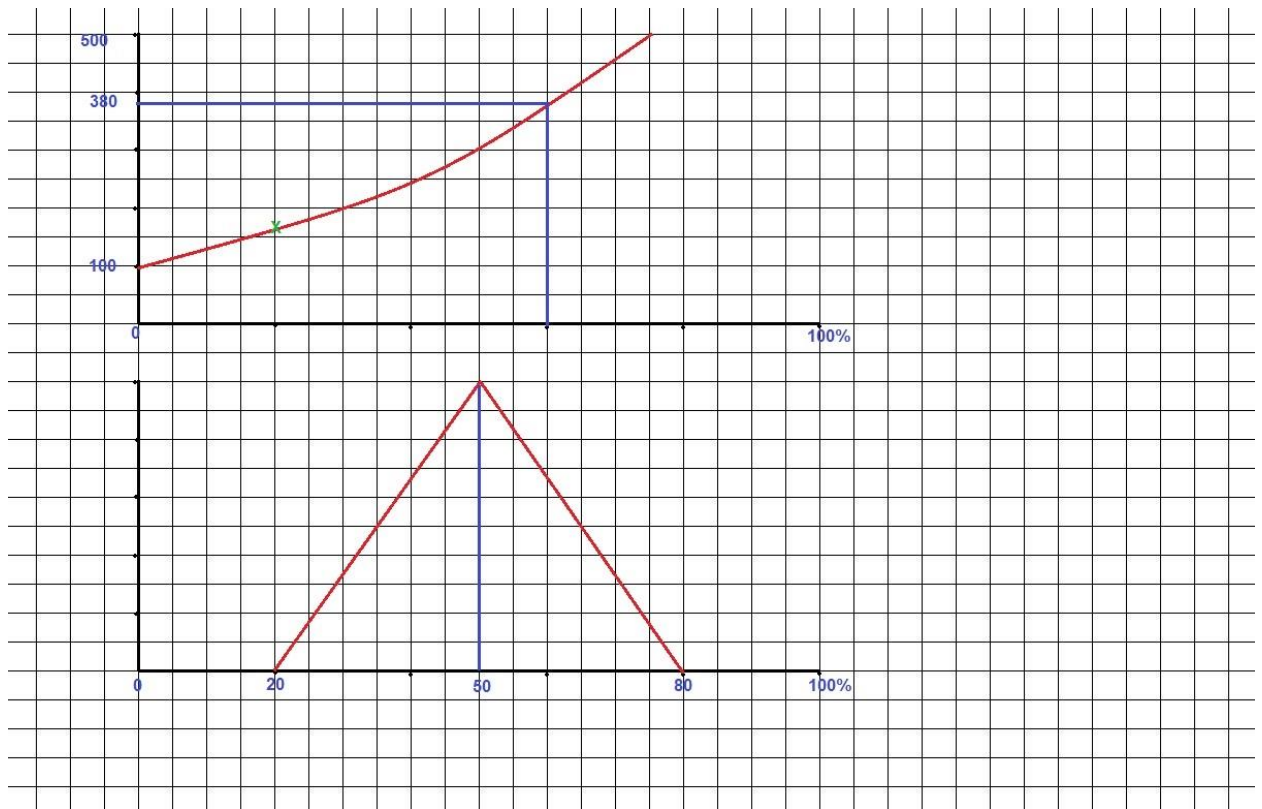


Figure 3: Impact of understanding sales channels (%)

Level of understanding of customer needs

The overall logic of customer insight repeats the understanding of channels. The only difference that here our current knowledge is 30%.

Probability:

- the existing level of understanding is higher because of customers' own sports experience, however this does not facilitate the collection of complete information, as contact with different customer segments can be quite time-consuming.

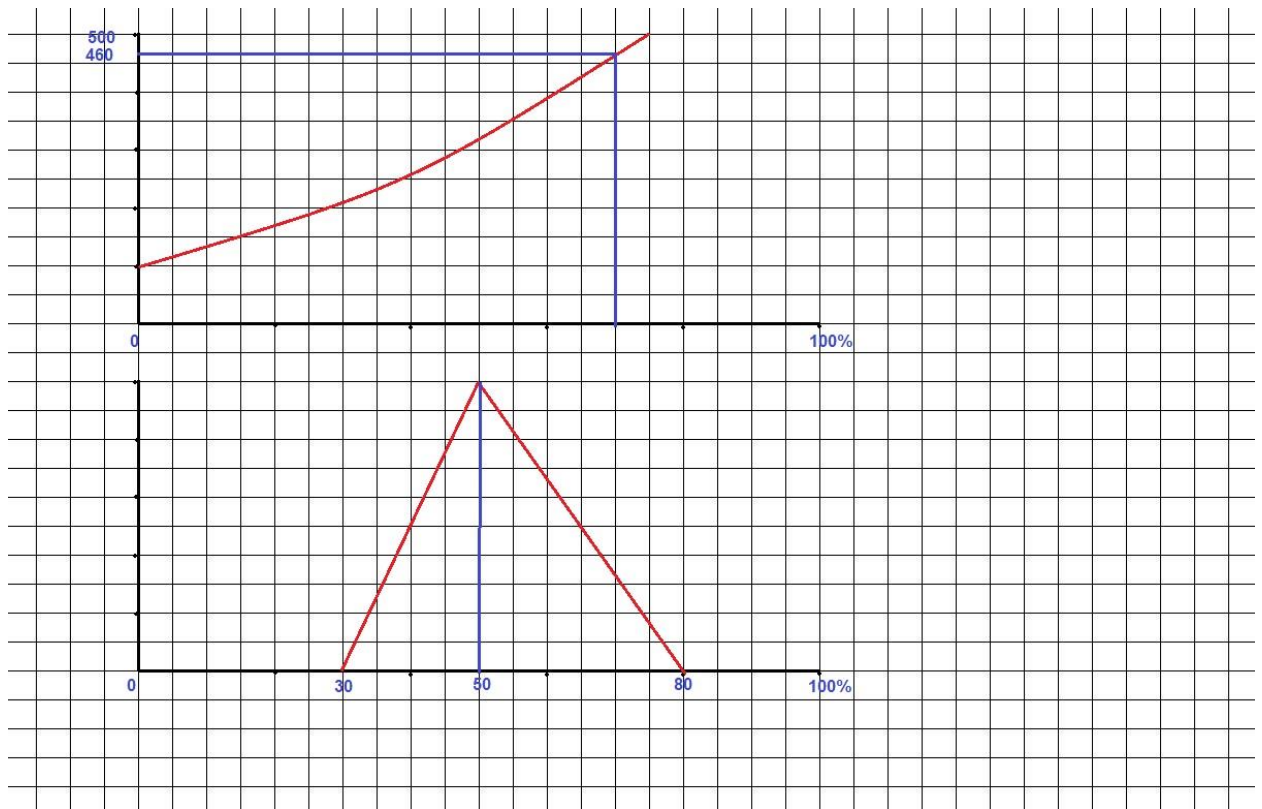


Figure 4: Impact of understanding customer needs (%)

Level of manufacturability of the materials

"1" refers to the development of technology in three main materials. Above "1" stands for the development of own unique solutions.

The current competency is rated as "0.7".

Sales are highly dependent on the presence of both glass and carbon in the product line. The presence of pure and mixed carbon fiber still slightly increases the sales.

The probability is recorded as an estimate of the probability of mastering new materials.

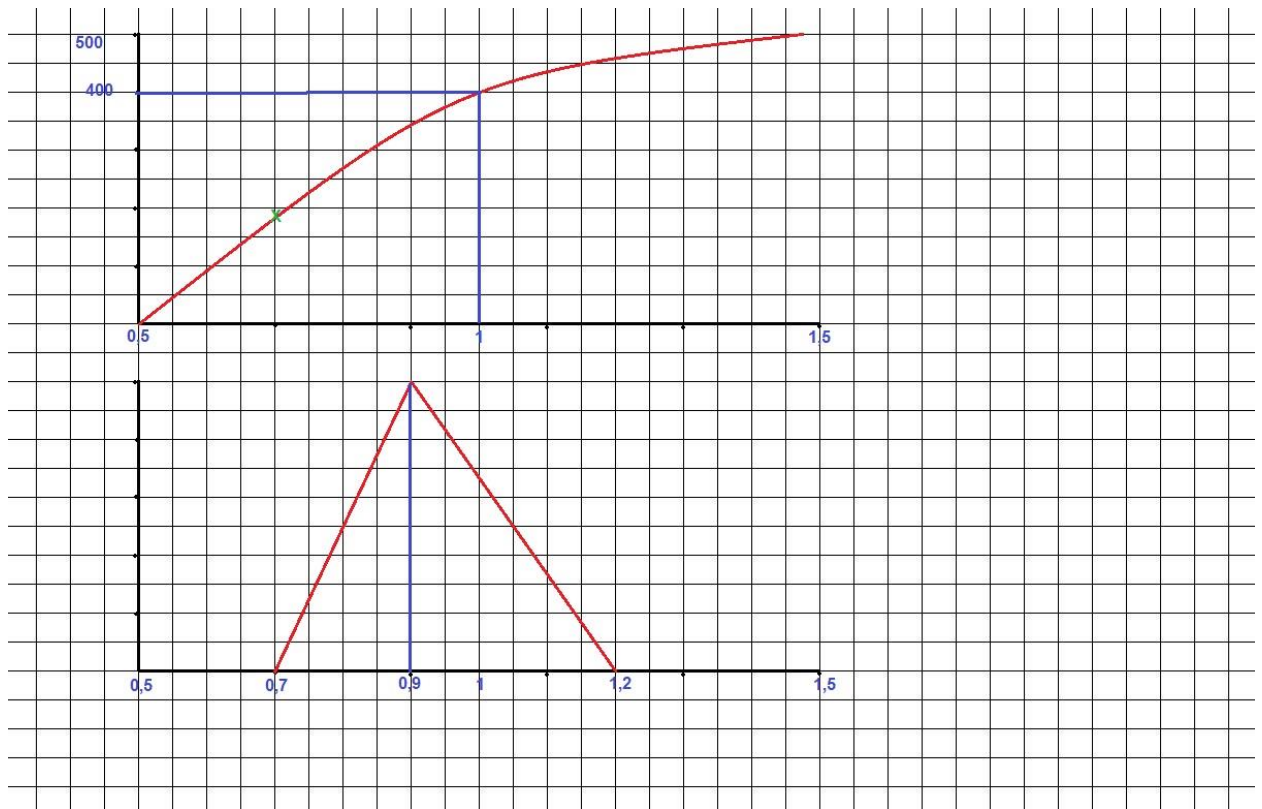


Figure 5: The impact of manufacturability of materials in relation to the development of the main three ones

Level of manufacturability of the product

The “manufacturability” includes product specification, quality control organization, and a test with competitors. These are formal tasks that must be performed and cannot be over-fulfilled.

“1” stands for performing all the tasks.

The level of sales without improvements is 100K.

The internal assessment of everything that is necessary to organize is written down in probability.

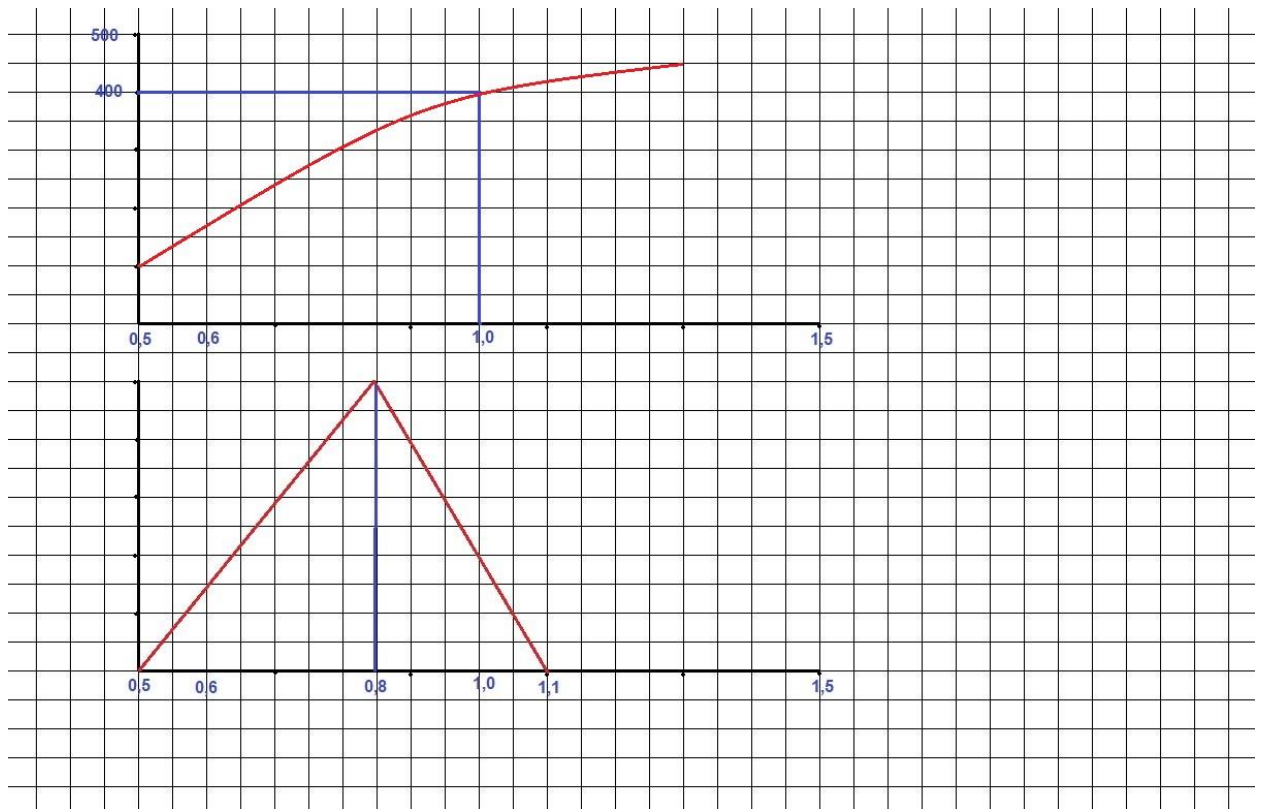


Figure 6: The impact of the manufacturability of the product relative to the planned tasks

Level of know-how

"1" refers to the implementation of the existing ideas. At this value, sales reach the planned reading.

"3" is the tripled amount of the number of developments.

Sales without new developments is 100K.

In assessing the probability is the possibility of the technical implementation of this amount of developments.

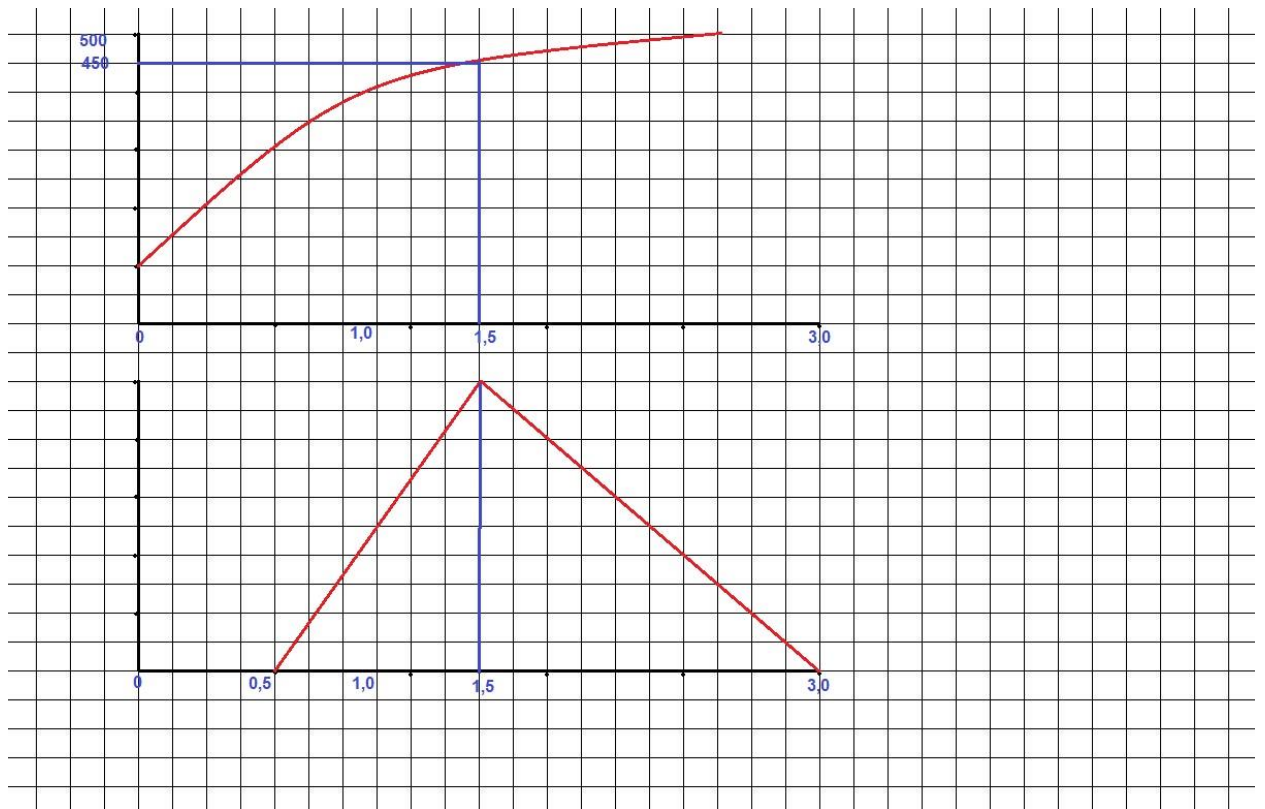


Figure 7: Impact of know-how on existing development ideas

Price per unit

The price range is from 100 euros for Chinese-made paddle, and up to 300 euros, which is the most expensive paddle on the market.

We focus on the TOP-5 manufacturers, whose prices start at 200, we need to be a bit cheaper at the start.

To assess the probability there is no sufficient knowledge. There are statistics showing the average current value of 150 euros.

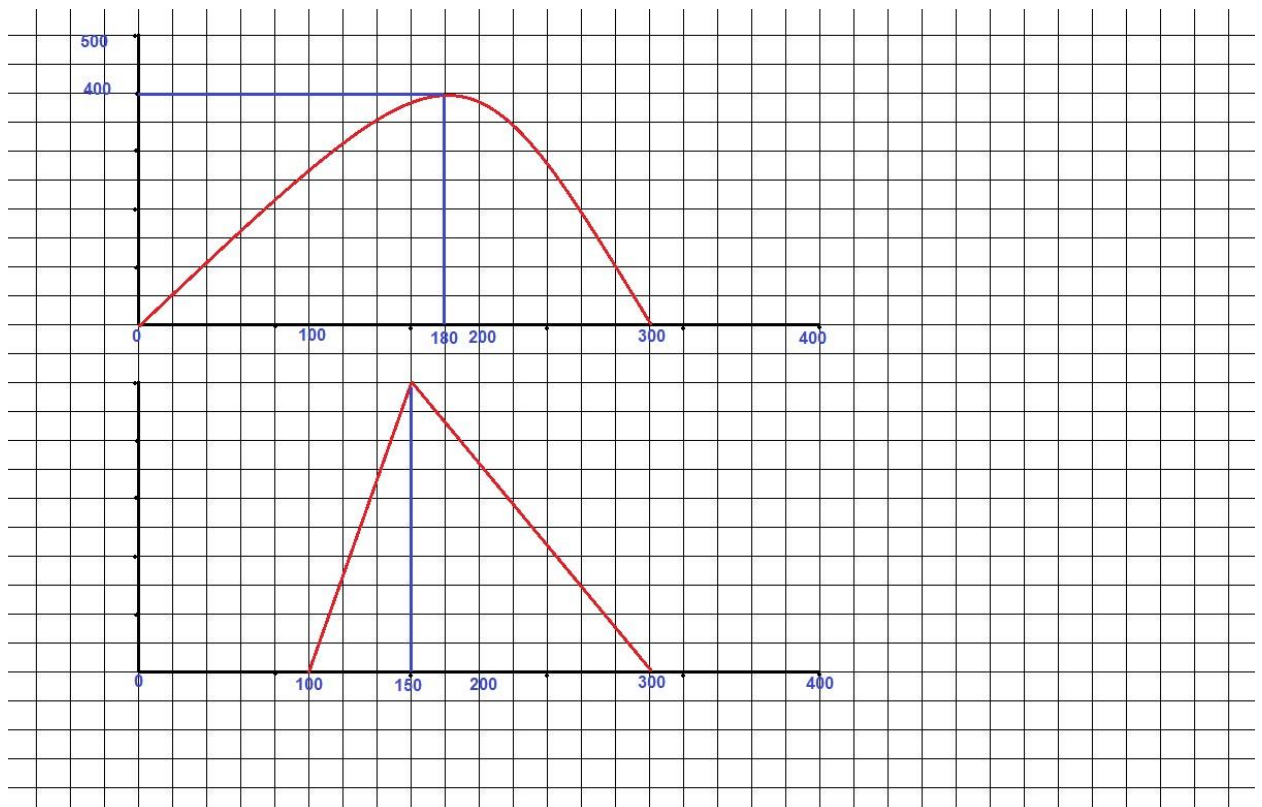


Figure 8: Impact of price (Euro)

9.3.4. Importance of PVAs

The importance of attributes is formed on the basis of management evaluation, as part of 100%:

#	PVA	Importance PVA
1	Project term	5%
2	Investment in the project	12%
3	Level of understanding of	25%

	distribution channels	
4	Level of understanding of customer needs	10%
5	Level of manufacturability of the product	18%
6	Level of manufacturability of the material	10%
7	Level of know-how	12%
8	Price per unit	8%

9.3.5. Goal value

The goal sales volume is formed from the approved goal for each attribute and attribute importance and it makes 407 thousand.

#	PVA	Importance PVA	Vsales i	
1	Project term	5%	400	20
2	Investment in the project	12%	400	48
3	Level of understanding of distribution channels	25%	380	95
4	Level of understanding of customer needs	10%	460	46
5	Level of manufacturability of the product	18%	400	72
6	Level of manufacturability of the material	10%	400	40
7	Level of know-how	12%	450	54
8	Price per unit	8%	400	32
		100%		407

9.3.6. Likely value

Likely value or, in our case, probabilistic sales volume is formed by transferring the most probable attribute value to the graph of the impact on sales for each attribute and further multiplication by the attribute weight. The sum of values is 345.5 thousand.

1	Project term	5%	375	18,75
2	Investment in the project	12%	300	36
3	Level of understanding of distribution channels	25%	325	81,25

4	Level of understanding of customer needs	10%	325	32,5
5	Level of manufacturability of the product	18%	350	63
6	Level of manufacturability of the material	10%	300	30
7	Level of know-how	12%	450	54
8	Price per unit	8%	375	30
			345,5	

9.3.7. Determining scenarios

As a result of the implementation of PVRO, we have three sales level values for 18 months after the start of the project:

Evaluation of sales before the start of the project makes 450K

Goal sales -are 407K

Likely sales - are 345.5K

The financial outlook for these values is as follows:

REVENUE			
	\$450	\$407	\$345
Gross sales	000,00	000,00	500,00
NET SALES	\$450	\$407	\$345
	000,00	000,00	500,00
COST OF SALES			
Beginning inventory	\$7 000,00	\$7 000,00	\$7 000,00
Plus, goods purchased/manufactured	\$210 000,00	\$189 933,33	\$161 233,33
Total goods available	\$217 000,00	\$196 933,33	\$168 233,33
TOTAL COST OF SALES	\$217 000,00	\$196 933,33	\$168 233,33
Gross Profit	\$233 000,00	\$210 066,67	\$177 266,67

TOTAL EXPENSES	OPERATING	\$355 450,00	\$355 450,00	\$355 450,00
Net Income before taxes		(\$122 450,00)	(\$145 383,33)	(\$178 183,33)
Taxes		\$10 000,00	\$10 000,00	\$10 000,00
Net profit		(\$132 450,00)	(\$155 383,33)	(\$188 183,33)
Revenue				
Sales		\$450 000	\$407 000	\$345 500
Direct Costs		\$217 000	\$196 933	\$168 233
Gross Margin (Profit)		\$233 000	\$210 067	\$177 267
Gross Margin%		52%	52%	51%
Expenses				
Operating Expenses		\$355 450	\$355 450	\$355 450
EBIT		(\$122 450)	(\$145 383)	(\$178 183)
Interest		\$0	\$0	\$0
Taxes		\$5 000	\$5 000	\$5 000
Net Profit		(\$127 450)	(\$150 383)	(\$183 183)

9.3.8. Re-prioritization of attributes and framework outputs PVRO

At the current stage of the project there is no reason to revise the importance of the attributes, since there are not enough data showing their real impact on the company's profitability. As data is received, priorities can be revised to maximize revenue.

The application of the framework showed several points that had been missed in the tasks for the year:

- Work is needed to assess the manufacturability of competitors' products through surveys from consumers and stores, as well as to assess the customers' need in this manufacturability.

- The assessment of the impact of unique developments on demand is needed
- Evaluation of sales in various segments and materials is needed to understand price elasticity

In the future, the assessment of the risks and opportunities of the attributes given in the PVRO is required.

9.4. Marketing

At the current stage of analyzing the business model, it is quite difficult to talk about product positioning.

There are a number of hypotheses that should be tested during this year:

- The European market is sensitive to the place of production (registration) of the company
- Direct product promotion is possible on various European markets without intermediaries
- Our main segment is advanced amateurs

In addition, the following test marketing activities are planned:

- Sponsorship at sporting events
- Test on ambassadors' effectiveness
- Participation in the exhibition
- Analysis of online sales of competitors

9.5. Staff

The work within the framework of the business model analysis is rather difficult for forming a staff of employees. We have not defined the scheme of production, sales, marketing and many tasks requiring situational solutions.

Therefore, the basic structure for this year is still 4 people, whose functions are not fixed to a large extent yet, but the tasks are assigned.

In addition, it will be necessary to attract a certain number of non-state contractors:

- an accountant
- a marketer
- a designer
- a logistician
- possibly professional paddlers

10. IMPLEMENTATION STRATEGY AND PROJECT CONSTRAINTS

10.1. Method of prioritizing tasks

As part of the analysis of the business model and business environment, new varied tasks were added to the operational tasks, forming a list of about 100 tasks distributed geographically with different importance and urgency. In addition, various project participants have evaluated the importance of certain tasks differently. A common tool with high flexibility was needed. Such a tool was developed under the guidance of the supervisor Sergiy Potapov. It is a method for dynamic prioritizing complex tasks.

10.1.1. Forming a task list

The main activities for this year (see 6.2.) are divided into separate tasks. So, in the direction of "analysis of distribution channels" there has been selected the part of the "analysis of specialized stores", from where, in turn, the following tasks have been allocated:

- making the lists of stores for visits
- creating a questionnaire for stores
- production of test oars for stores
- production of promotional products
- ...

To this list the operational and other tasks that appeared during the implementation of the analysis have been added.

10.1.2. Evaluation of task attributes

For each task, the attributes that characterize it are highlighted. So, according to the task of "creating the list of stores for visits" there are several attributes:

- the number of countries
- the number of sports represented
- the number of types of stores

Each attribute is assigned with the minimum allowable value for the task and the maximum required.

The number of “countries” in the “list of stores” should be from 4 to 8 for the adequate representation of the European market.

The current state is 3 countries.

10.1.3. Valuation and urgency

For each task its importance and urgency is determined.

10.1.4. Identifying risks and opportunities

For each task "risk" and "opportunity" is calculated

Risk is an indicator of the task lagging behind the minimum value, and multiplied by its importance. This risk means not completing the task and includes its importance.

Opportunity is an indicator of the task's lag behind the maximum value, multiplied by its importance. This indicator means lagging till the full completion of the task.

10.1.5. Prioritization

At first prioritization occurs basing on the risks until the minimum values of all tasks are fully completed, after which it switches to “decreasing” opportunities.. Besides the importance of the task prioritization takes into account its urgency.

A fragment of the prioritized tasks is shown in Annexes 10.

10.1.6. The results of model implementation

The tasks of high prioritization are determined by the date of implementation and the responsible person. As tasks progress, the current state data is updated and new priorities appear.

From this list of tasks PVAs were formed into PVRO with a rating of importance and urgency.

10.2. Resource management

In addition to managing tasks, their implementation and the responsible persons, there are issues of financial support, and inventory management.

Finance

Investments in the Italian company by non-residents at the stage of its formation is the aspect that requires planning and a large degree of flexibility.

The cost plan for 2019 has an investment schedule. But it will need to include some advance for additional flexibility.

Inventory

The difficult issue is the management of production and equipment. It is quite hard to plan the peak load. The following year, this point should be taken into account.

Information

One of the tasks is to organize the storage of information, digital models, and data. With a distributed team and the desire to involve external contractors and consultants, this is a critical moment.

10.3. Risk analysis

The business model and the financial forecast includes dozens of parameters that need to be clarified from all areas of business. Currently, the financial forecast for four years is unprofitable. And without reviewing the implementation of a number of indicators, the company can not continue to exist.

The task plan for the year is very tight and requires high team coordination and flexibility. Inefficiency will quickly freeze the entire project.

Project termination

The termination of the project is most likely due in 2019 during the implementation of the business model analysis or in 2020 as part of its unsuccessful implementation.

Most probably the project will remain in its previous form as a small workshop within the ecosystem that serves kayaker paddlers: a guest house, and a slalom channel ...

11. CONCLUSIONS

The project has already undergone several major changes during its implementation:

- the scale of the project has been significantly revised
- the focus of the project has been expanded to include more business model issues in addition to analyzing the market

In fact, the project turned out to be more complicated than expectations, more financially capacious, and the current situation is more uncertain than it seemed before.

At the same time within 4 months there were implemented:

- primary market analysis
- evaluation of several options for financial results
- highlighted key areas for the expanded period
- a model for assessing key areas for project revenue
- a scheme for organizing tasks

In the current rather rough financial forecast 4 years are planned with losses. Project profitability is scheduled for 5 year. This requires the project to take the following steps:

This requires the project to take action:

- to conduct a qualitative assessment of the parameters of the business model and financial forecast and update these data dynamically
- to search for the most diverse ways to optimize the business model, such as: outsourcing production, outsourcing marketing tasks, working with a distributed staff of freelancers, logistics optimization

- to search for ways to diversify business to increase its scale: ,e.g., expanding the types of products or services produced, expanding markets.

12. Glossary

Carbon fiber - a strong, stiff, thin fiber of nearly pure carbon, made by subjecting various organic raw materials to high temperatures, combined with synthetic resins to produce a strong, lightweight material used in construction of aircraft and spacecraft.

Fiberglass - a material consisting of extremely fine filaments of glass that are combined in yarn and woven into fabrics, used in masses as a thermal and acoustical insulator, or embedded in various resins to make boat hulls, fishing rods, and the like.

Kevlar - a fiber having resistance to high temperatures and great strength, formed from an aramid and used in materials for bulletproof vests and radial tires.

13. LIST OF SOURCES AND LITERATURE USED

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17. The Handbook of High-Performance Virtual Teams. Jill Nemiro. 2008
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19. Planning, Tracking, and Reducing a Complex Project's Value at Risk. Tyson R. Browning. 2018

11. ANNEXES

14.1. Annexes 1. Milestone schedule in pre-project

#	Action	Description	Term	Responsible
<u>1</u>	<u>Distribution channels</u>			
a.	Collection of data on shops, online stores, clubs, rentals ...	Europe data	1th week	Arseniy, Italy – Mishel
b.	Preparing questions for visits to stores ...		1th week	Arseniy, Mishel
c.	Meetings with shops, clubs, rentals	In Italy	by agreement	Mishel
<u>2</u>	<u>Market analysis</u>			
a.	Existing market analytics	Does it exist	2d week	Arseniy
b.	Data on competitors		3d week	Arseniy
c.	Clubs` data	Counting the number of members	4th week	Arseniy
<u>3</u>	<u>Product and model range</u>			
a.	Analysis of competitive products	Comparison of fun and model lines of manufacturers from around the world	3d week	Arseniy
b.	Comparison, reviews	Opinion prof. publications, bloggers	5th week	Mishel, Arseniy
<u>4</u>	<u>External exprets, contractors / production and product development</u>			
a.	Visit to the "carbon" production	Italy and EU	by agreement	Mishel, Arseniy
b.	Consultation with experts	Consultation with designers of composite products	by agreement	Mishel, Arseniy
<u>5</u>	<u>Equipment and internal competencies</u>			
a.	Analysis of the production process, used equipment, requirements	In Italy	by agreement	Mishel, Arseniy

14.2. Annexes 2. Financial plan for 2019

<u>expenses</u>			march	april	may	june	july	august	september	october	november	december
trips around Europe	8000				2000	2000	2000	2000				
trips others	4000			500	500	1000	500	500	500	500		
trips to suppliers	4000			1000	500	500	500	500	500	500		
Russia-Ukraine	6000		500	750	750	750	750	750	750	750	250	
exhibition	4000			1000		2000				1000		
bus	15000			15000								
finishing bus	5000				5000							
equipment	4000			1000	1000	1000	1000					
prototypes	2000			500	500	500	500					
external development	5000			500	500	1000	1000	1000	500	500		
paddles	14000			4000	5000	5000						
sales	-20000				-4000	-4000	-4000	-4000	-4000			
salary	58760		5876	5876	5876	5876	5876	5876	5876	5876	5876	5876
web-site	2000			500	1000			500				
printed products	1000			1000								
exhibition products	4000			4000								
sponsorship, events	5000				1250	1250	1250	1250				
company registration + support	5000			3400	200	200	200	200	200	200	200	200
liquidation of old company	5000				5000							
Taxes	2000			200	200	200	200	200	200	200	200	400
Rent	3000		300	300	300	300	300	300	300	300	300	300

	136760	6676	39526	25576	17576	10076	9076	4826	9826	6826	6776
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14.3 Annexes 3. Analysis of the number of stores by country and the representation of competitors (fragment)

All	176		71	1	16	0	12	1	2	2	3	21	1	14	4	1	16	12	1	8	1	0	5	7	2	3	1	
counties	found in search		Werner	ophion	tnp	elio	ROBSON	wildsup	cps	knysna racing	Mitchell	Select	raab	Galasport	Tambo	Dynamo Baltic	Prion	Kober	Angle paddle	Red Paddle Co	Core	vaida	Kainer	Celtic Paddles	Mistra	Bic sport	Indiana	
France	23		1				1		1			11		3				5						1				
Spain[1][3]	7		3												3									3				
Sweden	17		4		2													1		1				2				
Norway	4		2																									
Germany	26		16		5		4			1	1						8	1										
Finland	2		1									2																
Poland	2		2				1							1														
Italy	4		2		1		1					1		1			3											
Great	25		17		3		3				1	3		1						3				2		1		
Romania	3						1					1																
Greece	2		1																					1				
Bulgaria	7		3		2															1						1		
Hungary	2																											
Portugal[1][6]	2		1	1																				1				
Serbia	1																											
Austria	9		3													1	3	1							1			
Czech	4		2		2									2	1		1				1							
Iceland	1																											

14.4. Annexes 4. Competitor analysis

	General data		total requests for «kayak paddles» 1000-10000	Products		Channels				Technologies
	Year of foundation	Description	Request in searching system	Assortment	Other products	Presented stores	Dealers	Social networks	Online shop	Description
Werner	1965	USA. 50-75 employees	100-1000	All range, carbon fiber 30%	No	71	Yes	Twitter. Youtube. Instagram. Facebook - 43000 subscribers	No	Customized materials from «KASO plastics».
TNP	1992	Czech. 10-12 employees https://ru.tnp.cz/kak-i-gde-my-proizvodim/	10-100	All range, carbon fiber 10%	No	16	Yes	Youtube. Instagram. Facebook - 375 subscribers	No	
Robson	2007	Czech. Part of the group Tahe outdoors (Estonia) - the leaders in Europe for the goods for	10-100	All range, carbon fiber 15%	Robson one of six brands	12	Yes	General Tahe. Facebook 16000	In Facebook	
Select		France. There is a parent company SM Composites	10-100	All range, carbon fiber 50%	Eudders for windsurfing	21	Yes	Twitter. Vimeo. Facebook 5000	Yes	Using Kevlar
Galasport	1990	Czech	10-100	All range, carbon fiber 50%	Kayaks	14	Yes	all. Facebook 5000	No	
Prijon	1962	Germany. 35 employees. In 2013 made 5000 kayaks and turnover 5M	10-100	small assortment, carbon fiber 10%	Kayaks, clothes, accessories	16	Yes	Vimeo. Youtube. Instagram. Facebook - 5000 subscribers	Yes	
Kober	1986	Germany. 15 employees.	10-100	All range, carbon fiber 20%	Part of the Kober-Moll group, which includes the manufacturer of cheap	12	Yes	No	No	
Kajak Sport	1989	Finland	0-10	three models, two of them are carbon	Many accessories for kayaking	11	Yes	Youtube. Facebook 700 subscribers	No	There is a unique design of the paddles with ethnic
AT	1996	USA. Part of some larger group of kayaking products	10-100	All range, carbon fiber 50%	Six other brands	19	Yes	Twitter. Youtube. Instagram. Pinterest. Facebook - 48000 subscribers	in Facebook	
Braca	1991	Lithuania	10-100	100% carbon fiber	No	17	Yes	Facebook - 6000 subscribers	No	Production description
Lettmann	1965	Germany. 16 employees	10-100	All range, carbon fiber 50%	Kayaks	13	Yes	Youtube. Instagram. Facebook - 3000 subscribers	Yes	
Raab	2010	Czech	10-100	No info	No	1	? Possible agents	No web, Facebook 2000 subscribers	No	Paddles are produced by a third-party engineering

14.5. Annexes 5. Analysis of stores and representation of competitors (fragment)

	Competitors	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
Country	Web	Werner	ophon	itnp	elio	ROBSON	Wildsup	cps	knysna racing	Mitchell	Select	raab	Galasport	Tambo	Dynamo Baltic	Prion	Kober	Angle paddle	Red Paddle Co	Core	vaida	Kainer	Celtic Paddles	Mistral	Bic sport	Indiana	Kajak Sport	AT	
Slovenia	http://www.kajak-chen.si												1																
Slovenia	http://www.prijon-sportcenter.si															1													
Slovenia	http://www.alpin-action.it/en/	1									1						1												
Slovenia	www.feelfree.si																	1	1										
Slovenia	www.nazraku.si																		1										
Slovenia	https://www.soca-rafting.si/store/																												
Belgium	kanocenter.be												1									1						1	
Belgium	www.padlstore.com	1									1																1		
Switzerland	www.seekajak.ch	1																					1	1					
Switzerland	www.kustersport.ch																								1	1			
Switzerland	www.passion-nautique.chen.ch	1									1																		
Switzerland	www.paddlershop.ch	1															1												
Switzerland	www.siestaoppi.ch																												
Switzerland	http://globepaddler.ch/																												
Switzerland	www.kanuwelt.chen.ch																1												
Switzerland	www.sportmania.ch																		1										
Switzerland	mountainsurf-kitechen.ch																												
Denmark	http://www.okkcenter.dk	1																											
Denmark	kajak.dk												1																

14.6. Annexes 6. Competitors' prices. Part 1

Minimum												
Werner					308	352	285	277	277	189		
Select					369		179	319		220		
Galasport								239		199	280	
AT					299			264				
Braca					249		379		349	209	329	249
Lettmann					409			539	519	259	539	389
Robson					305							
Kober					432			435				

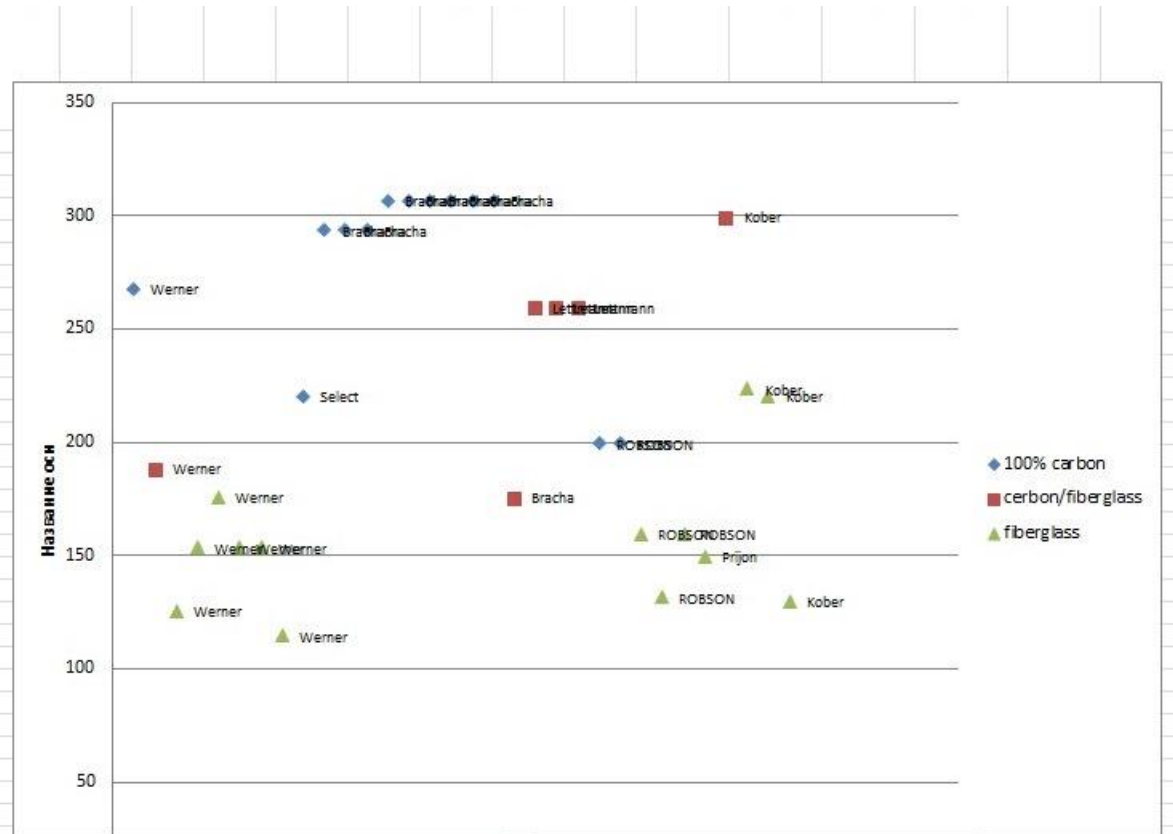
Werner groups

Select groups

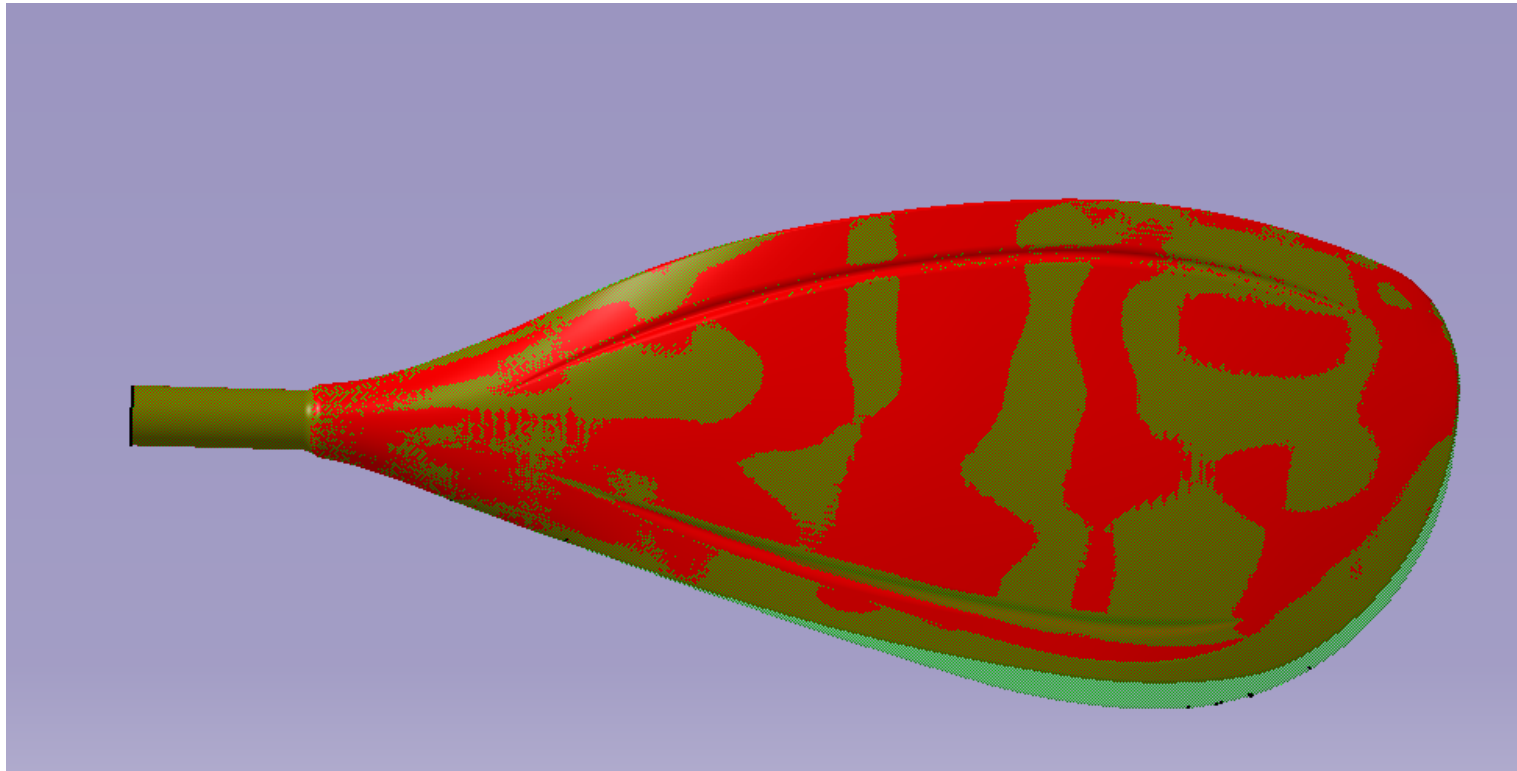
	Group	Subgroup	Model name	Carbon	touring	fishing	stand-	whitewater	coastal-	canoe	slalom	polo
Werner	Touring	low-angle	CAMANO CARBON	?%	308							
	Touring	low-angle	OVATION	100%	436							
	Touring	low-angle	ATHENA	100%	352							
	Touring	high-angle, lumpy-waters	CORRYVRECKAN	?%	308							
	Touring	high-angle, lumpy-waters	SHUNA CARBON	?%	308							
	Touring	touring-kids	SKAGIT CF	Carbon	154							
	Touring	inflatable-kayak, low-angle	KALLISTE	100%	352							
	touring/coastal-	inflatable-kayak, high-angle/lumpy-	IKELOS	100%	352				352			
	touring/coastal-	inflatable-kayak, high-angle/lumpy-	CYPRUS	100%	352				352			
	fishing	high-angle	CYPRUS: HOOKED	100%		352						
	fishing	low-angle	KALLISTE: HOOKED	100%		352						

14.6. Annexes 6. Competitors' prices. Part 2

		100% carbon	carbon/fiberglass	fiberglass
Werner	ALGONQUIN	267		
Werner	BANDIT CARBON		188	
Werner	BANDIT			125
Werner	BANDITO			153
Werner	CHURCHILL			175
Werner	GUIDE STICK			153
Werner	NANTAHALA			153
Werner	LUNA			114
Select	C1	220		
Bracha	Canoe Slalom Roc	293		
Bracha	Canoe Slalom Roc	293		
Bracha	Canoe Down River	293		
Bracha	Canoe 20	306		
Bracha	Canoe 21.5	306		
Bracha	Canoe Medium	306		
Bracha	Canoe Uni 2000	306		
Bracha	Canoe Uni Extra V	306		
Bracha	Canoe Uni Super f	306		
Bracha	Canoe Children		175	
Lettmann	Olympic		259	
Lettmann	Perfect Pro SL		259	
Lettmann	Perfect Pro Team		259	
ROBSON	QUANTUM	199		
ROBSON	C1-RODEO	199		
ROBSON	CHLOROPHYLL C1		159	
ROBSON	STRIDE		131	
ROBSON	SON		159	
Prijon	JANUS CANOE		149	
Kober	Rocket SL		299	
Kober	Ranger		223	
Kober	S-Power		220	

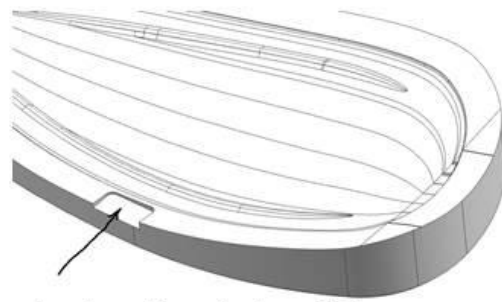
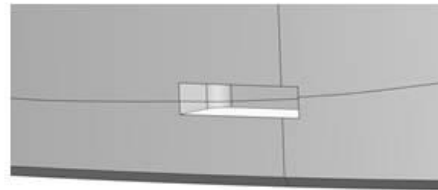


14.7. Annexes 7. 3D model of paddle

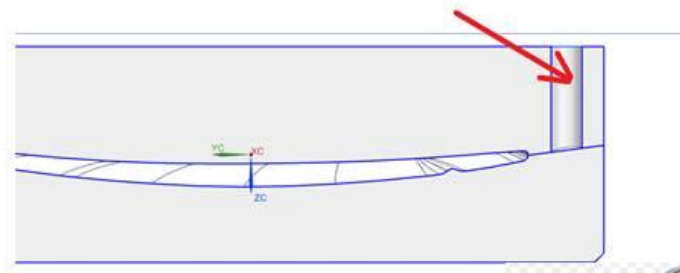


14.8. Annexes 8. Technology consulting example

Nothing was foreseen for disassembly

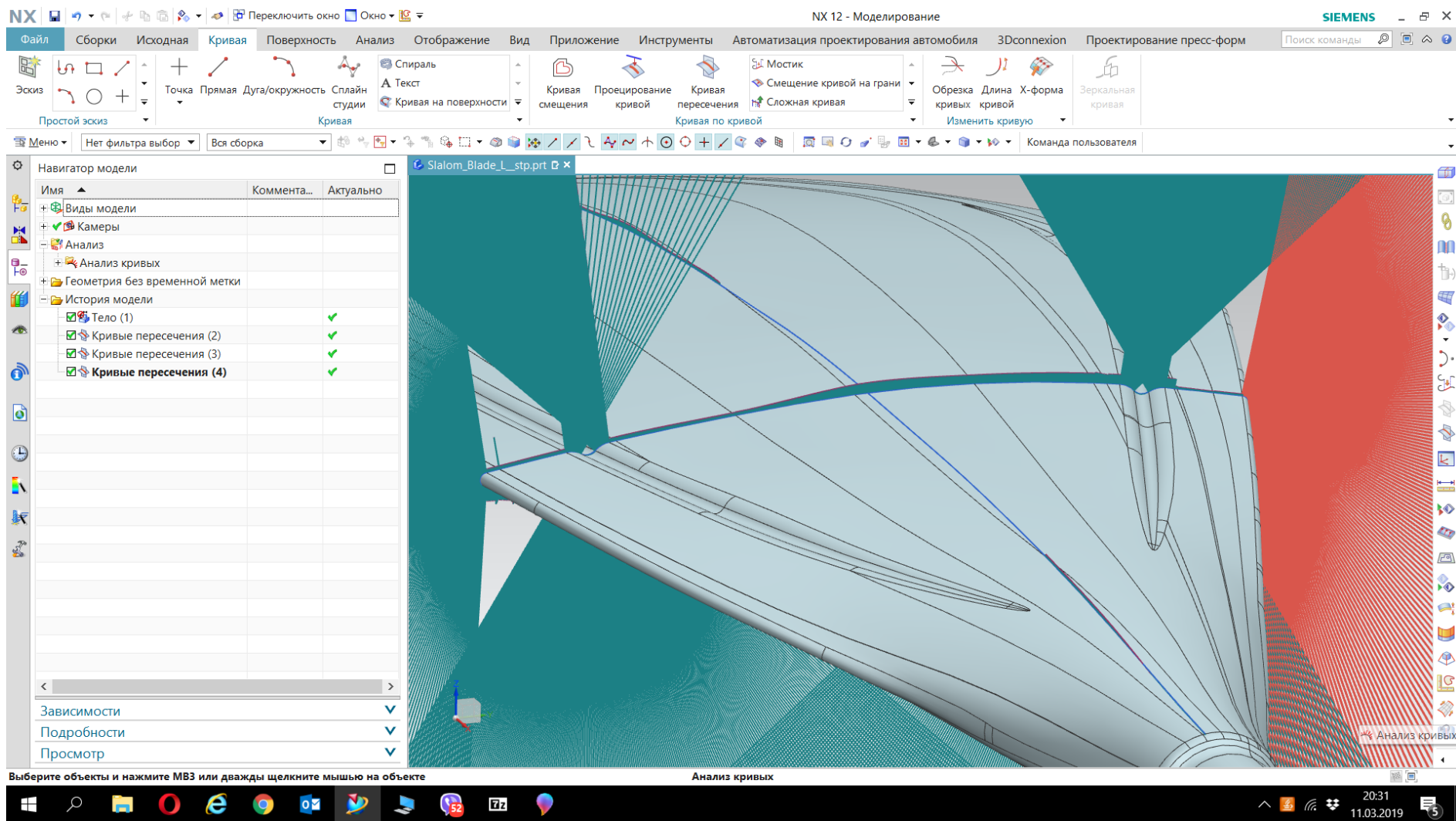


1-st option is to add several pockets (cutouts)
Screwdriver could be used for disassembly



2-nd option is to add threaded holes for setscrews.
Screwing the setscrew clockwise direction will disassemble the molding form also. As for me more professional way

14.9. Annexes 9. Defect analysis of the 3D model created on the basis of the prototype



14.10. Annexes 10. Dynamic form of task prioritization

WBS	направлен	PVA	Theme	Initiative	Attribute	Imprt	Pric	CURRENT_VA	minV	maxV	RISK	OPPO	TM	ToDo		
1	1.1.1.1	каналы	понимание каналов сбыта	магазины	список магазинов для визитов	ко-во	8	4	9	10	20	8%	44%	0,32	1,76	4
2	1.1.1.2	каналы	понимание каналов сбыта	магазины	список магазинов для визитов	страны	8	4	3	4	8	20%	50%	0,80	2,00	3
3	1.1.1.3	каналы	понимание каналов сбыта	магазины	список магазинов для визитов	тип (город, река, море)	8	4	2	3	3	27%	27%	1,07	1,07	3
4	1.1.2.1	каналы	понимание каналов сбыта	магазины	опросники для магазинов	уровень реализации	6	6	7	8	10	8%	18%	0,45	1,08	3
5	1.1.3.1	каналы	понимание каналов сбыта	магазины	сбор информации о магазине и сотрудничестве	готовность сотрудничать	8	4	9	10	20	8%	44%	0,32	1,76	4
6	1.1.3.2	каналы	понимание каналов сбыта	магазины	сбор информации о магазине и сотрудничестве	потребность опытных образцов	8	4	3	5	10	32%	56%	1,28	2,24	3
7	1.1.3.3	каналы	понимание каналов сбыта	магазины	сбор информации о магазине и сотрудничестве	количество опросов о существующих условия	8	4	3	5	10	32%	56%	1,28	2,24	3
8	1.1.3.4	каналы	понимание каналов сбыта	магазины	сбор информации о магазине и сотрудничестве	количество опросов по объему продаж	8	4	0	3	5	80%	80%	3,20	3,20	2
9	1.1.3.5	каналы	понимание каналов сбыта	магазины	сбор информации о магазине и сотрудничестве	данные об ассортименте	8	4	2	10	20	64%	72%	2,56	2,88	2
10	1.1.3.6	каналы	понимание каналов сбыта	магазины	сбор информации о магазине и сотрудничестве	данные о видах спорта	8	4	2	10	20	64%	72%	2,56	2,88	2
11	1.1.3.7	каналы	понимание каналов сбыта	магазины	сбор информации о магазине и сотрудничестве	количество опросов об уровне спортсменов	8	4	2	10	20	64%	72%	2,56	2,88	2
12	1.1.3.8	каналы	понимание каналов сбыта	магазины	сбор информации о магазине и сотрудничестве	количество опросов о потребностях клиентов	8	4	0	5	10	80%	80%	3,20	3,20	2
13	1.1.3.9	каналы	понимание каналов сбыта	магазины	сбор информации о магазине и сотрудничестве	ко-во контактные лица	8	4	5	10	20	40%	60%	1,60	2,40	3
14	1.1.4.1	каналы	понимание каналов сбыта	магазины	подведение результатов тестирования	ко-во магазинов	7	3	0	10	20	70%	70%	2,10	2,10	3
15	1.1.5.1	каналы	понимание каналов сбыта	магазины	последующие договоренности	ко-во магазинов	8	2	0	10	20	80%	80%	1,60	1,60	3
16	1.2.1.1	каналы	понимание каналов сбыта	соревнования	график соревнований для визитов	ко-во	8	7	1	8	12	70%	73%	4,90	5,13	1

