



Universidad de Valladolid



ESCUELA DE INGENIERÍAS
INDUSTRIALES

UNIVERSIDAD DE VALLADOLID

ESCUELA DE INGENIERIAS INDUSTRIALES

Grado en Ingeniería de Organización Industrial

Introducción de la *Copenhagen Wheel* en los Países Bálticos

Autor:

Chillón Geck, Carlos Federico

Tutores:

Pedro Sanz Angulo

Deniss Sceulovs

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ALUMNO: Carlos Federico Chillón Geck
FECHA: 23 Mayo de 2016
CENTRO: Riga Technical University
TUTOR: Deniss Sceulovs

RESUMEN Y PALABRAS CLAVE

Este Trabajo de Fin de Grado, realizado en la ciudad de Riga, Letonia, a modo de intercambio, elabora un Plan de Empresa para estudiar la viabilidad de un proyecto de introducción de un producto de innovación, como es la Copenhagen Wheel, en un mercado nuevo. El nuevo mercado estudiado es un mercado geográfico como es, en primer lugar, la ciudad de Riga, en segundo lugar el país del cual es capital: Letonia; y por último el estudio de una expansión a los países bálticos colindantes: Lituania y Estonia, países muy similares en cuanto a características sociales, culturales y económicas.

Para el estudio en cuestión se ha procedido a hacer un análisis objetivo sobre la situación de estos países y las características individuales de cada uno de ellos para, a partir de él, elaborar una serie de estrategias de marketing que permitan la óptima introducción de este negocio.

Palabras clave: Marketing Mix, SWOT Analysis, PESTEL, Target Market, Economic Viability.



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INTRODUCTION OF THE COPENHAGEN WHEEL IN THE BALTIC STATES

AUTHOR:

CHILLÓN GECK, CARLOS FEDERICO

TUTORS:

ŠČEULOVŠ, DENISS
RIGA TECHNICAL UNIVERSITY

SANZ ANGULO, PEDRO
UNIVERSIDAD DE VALLADOLID

RIGA, MAY 2016

TABLE OF CONTENTS

1. INTRODUCTION	10
1.1 AIM OF THE BACHELOR THESIS.....	10
1.2 CITY OF RIGA AND LATVIA’S TRANSFORMATION.....	13
1.3 HISTORY OF THE COPENHAGEN WHEEL.....	15
2. FULL DESCRIPTION OF THE COPENHAGEN WHEEL	16
2.1. WHAT IS THE COPENHAGEN WHEEL?.....	16
2.2 WHY AN ELECTRIC POWERED BIKE?	16
2.3 FEATURES AND GADGETS	17
2.4 TECHNICAL SPECIFICATIONS.....	19
2.5 REVIEWS OF THE COPENHAGEN WHEEL	20
3. EXTERNAL ENVIRONMENT ANALYSIS (PESTEL).....	22
3.1. POLITICAL FACTORS.....	22
3.2 ECONOMIC FACTORS	25
3.3 SOCIAL FACTORS.....	33
3.3.1 Population of Latvia.....	33
3.3.2 Demography of Latvia	34
3.4 TECHNOLOGICAL FACTORS.....	37
3.4.1 Wi-Fi in Riga: Riga announced the European Capital of free Wi-Fi.	38
3.5 ENVIRONMENTAL FACTORS	39
3.6 LEGAL FACTORS	41
3.7 PESTEL SUMMARY	44
4. TARGET MARKET ANALYSIS	46
4.1 SITUATION OF THE COPENHAGEN WHEEL	46
4.2 TARGET CUSTOMERS	46
4.2.1 E-BIKE GLOBAL MARKET SITUATION	46
4.2.2 E-BIKE EUROPEAN MARKET SITUATION	48
4.2.3 BIKES AND E-BIKES IN THE COUNTRY OF LATVIA	50
4.2.4 REAL MARKET COMPARATION.....	51
4.2.4.1 THEORETICAL REAL MARKET SIZE	51
4.2.4.2 SELF-ESTIMATED REAL MARKET SIZE	51
4.3 PORTERS FIVE FORCES	55
4.3.1 HORIZONTAL COMPETITION	56
4.3.2 VERTICAL COMPETITION.....	57
5. SWOT ANALYSIS.....	60
5.1 INTERNAL FACTORS	60
5.1.1 STRENGTHS.....	60
5.1.2 WEAKNESSES.....	61
5.2 EXTERNAL FACTORS.....	62
5.2.1 OPPORTUNITIES	62
5.2.2 THREATS.....	62
5.3 REVIEW OF THE SWOT ANALYSIS	64

6. MARKETING MIX	66
6.1 MARKETING OBJECTIVES.....	66
6.2 THE 7 P's OF MARKETING (MARKETING TACTICS)	68
6.2.1 PRODUCT.....	69
6.2.1.1 THE FIVE LEVELS OF OUR PRODUCT	71
6.2.2 PLACE	72
6.2.2.1 PRO'S AND CONS OF SELLING IN RETAIL STORE VS. ONLINE STORE	72
6.2.2.2 CONCLUSION	74
6.2.3 PRICE.....	75
6.2.3.1 CONCLUSION	78
6.2.4 PROMOTION.....	78
6.2.4.1 PUBLIC RELATIONS.....	79
6.2.4.2 INTERNAL STAKEHOLDERS	80
6.2.4.3 CONNECTED STAKEHOLDERS	81
6.2.4.4 EXTERNAL STAKEHOLDERS	82
6.2.4.4 CONCLUSION	82
6.2.5 PEOPLE.....	83
6.2.6 PROCESS	84
6.2.6.1 STRATEGIC PROCESSES	87
6.2.6.2 KEY PROCESSES	88
6.2.6.3 SUPPORT PROCESSES	92
6.2.7 PHYSICAL EVIDENCE	95
6.2.8 THE EIGHTH 'P': PROTECTION	96
6.2.8.1 ENVIRONMENT.....	96
6.2.8.2 CUSTOMERS	97
6.2.8.3 STAFF.....	97
7. RISK MANAGEMENT.....	100
8. ECONOMIC PLAN	106
8.1 COSTS.....	106
8.1.1 EFFECTIVE ANNUAL HOURS OF WORK AND RATIO PER HOUR OF THE SALARIES.....	107
8.1.2 AMORTIZATION OF ASSETS	110
8.1.3 STARTING BUDGET AND MONEY FOR CONTINGENCIES.....	111
8.1.4 INDIRECT COSTS PER MONTH.....	113
8.1.5 PURCHASES FROM THE SUPPLIER.....	113
8.2 EXPANSIONS AND FURTHER COSTS.....	118
8.2.1 SECOND YEAR, FIRST EXPANSION.....	118
8.2.2 THIRD YEAR, SECOND EXPANSION	121
8.2.3 FOURTH YEAR, THIRD EXPANSION	125
8.2.4 FURTHER EXPANSIONS	130
8.3 INCOMES	131
8.4 SUMMARIES AND BALANCE SHEET	134
8.4.1 EXPENSES SUMMARY	134
8.4.2 LOAN AMORTIZATION.....	138
8.4.3 AMORTIZATION OF ASSESTS.....	139

8.5 FINANCIAL VIABILITY	143
9. CONCLUSIONS	148
10. BIBLIOGRAPHY.....	150
11. WEBGRAPHY	152
12. APPENDIX	154
12.1 LIST OF FIGURES	154
12.2 LIST OF TABLES.....	156

1. INTRODUCTION

1.1 AIM OF THE BACHELOR THESIS

The reason of writing this document is to elaborate the Final Degree Project of the degree in Engineering of Industrial Organization.

The main objective and mission of this thesis is to study the viability of introducing the Copenhagen Wheel in the country of Latvia by elaborating a marketing plan that shows that viability. This Final Degree Project will be focused on the Copenhagen Wheel as a product and the author will, objectively point out the pros and cons of the introduction of this specific product in the Baltic States.

Marketing is a key part of business success and for the consecution of this document a marketing plan should be used as a basis for executing the marketing strategy.

A marketing plan sets out clear objectives and lists the actions that need to be taken to achieve them. Perhaps most importantly, it looks at how the author can ensure that the plan becomes reality.

A marketing plan should include factors such as:

- Setting up an external, as well as an internal analysis of the industry or business area in which the product is trying to be introduced.
- Deciding which customers to target and how to reach them.
- How to win customer's trust and keep them pleased afterwards.
- Continually reviewing and improving everything that is done to stay ahead of the competition.

It is needed to remember that marketing in itself will not guarantee sales, but a well-researched and coherent marketing plan will give a much better chance of building long-term, profitable relationships.

To realize this marketing plan a broad strategy to achieve our objectives has to be settled. It is important for a marketing plan to:

- Set clear, realistic and measurable targets.
- Think about deadlines for meeting targets.
- Provide a budget for each marketing activity.
- Specify who is responsible for each activity.
- Make sure the objectives are logically thought.
- Link to the strategy. All parts of our business must work together.
- Remember to focus on the long-term strategy. It is not necessary to look for short-term profitability, although cash flow is important.

The main steps willing to follow in order to make this marketing plan are described by the next flow chart:

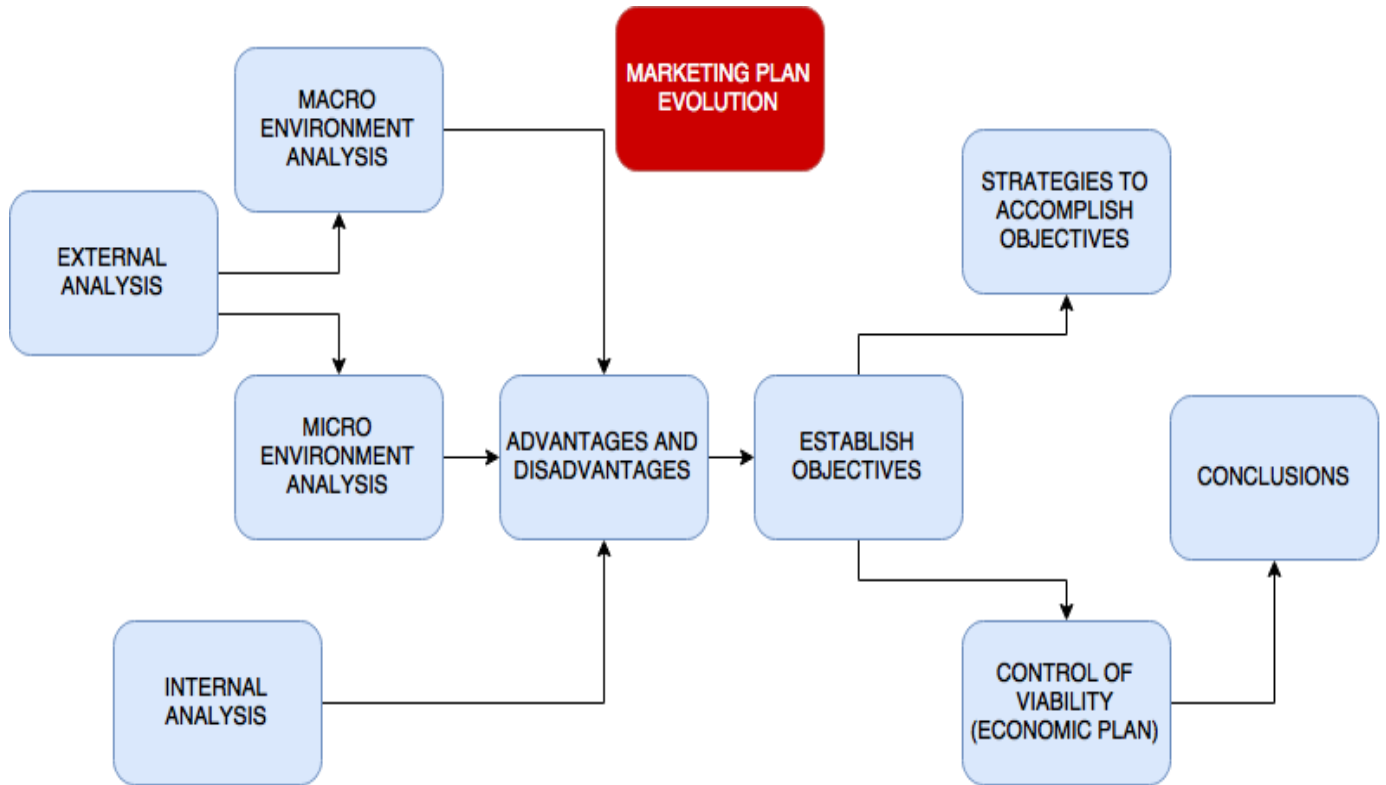


Figure 1: Marketing plan step by step.

1.2 CITY OF RIGA AND LATVIA'S TRANSFORMATION

In the last years, the city of Riga has made a big investment in implementing environmental policies.

The Riga City Environment Programme 2011-2017 (hereinafter referred to as the Riga City EP 2011-2017) is being elaborated since the previous Riga City Environmental Strategy has expired, and there is a need for a new environmental policy document at the municipal level.

On one hand the Riga City EP 2011-2017 is a continuation of the main directions, objectives and tasks set in the Riga City Environmental Strategy 2000-2010, for some of the commitments and plans have not been fulfilled due to the limited funding.

On the other hand during this time Latvia has joined the European Union and agreed to achieve new objectives, especially in the area of environmental policy, which ranks high among the European Union's priorities. Environmental policy is an area, in which European Union traditionally strives for increasingly higher standards in prevention of pollution and an increased efficiency of use of natural resources.



Previous experience shows that people of Riga are willing to actively participate in policy-making, and this applies to environmental policy planning as well.

As an example, in 2012, Latvia ranked in place number one¹ at the EPI (Environmental Performance Index),

Being aware of all this, the introduction of the Copenhagen Wheel is more than an interesting idea.

Lately, there has been an increase in the use of bicycles and the investment for new infrastructures are getting higher, as it will be shown later. There is still a lot to improve in the city to make the usage of bicycles optimum. There are some positive and negative characteristics about the nature of Riga's city that will be discussed, compared and explained.

Basically, the project of introducing the Copenhagen Wheel in the Latvia tries to take the advantage of this moment of development and growth of the country and

¹"[2012 Environmental Performance Index \(EPI\)](#)". Yale University and Columbia University in collaboration with The World Economic Forum and European Commission.

the more and more important environmental conscience and awareness of the people living here.

At the moment, Latvia is one of the current countries from where it is possible to buy the Copenhagen Wheel. Right now, the only way to get the wheel is to pre-order it from the company Superpedestrian, responsible for its creation. The price is 949\$ US. Shipping or delivering and taxes may be additional depending on the location of the buyer. The shipping costs for international sells (outside USA) would be 99\$ but not all VAT/GST costs (costs for tangible goods and services) are paid by the customer.

The Copenhagen Wheel is not more than the solution to change a car for a bike with all the benefits that it brings along, all the environmental and healthy ones. That is how this new invention was born. Copenhagen's major's effort to make the most bike-friendly city in the world and the aim of showing the rest of the countries that changing a car for a bicycle is possible.



One of the most interesting insights the Danish researchers share is how they've discovered that many

Danes don't consider cycling exercise. People in Denmark can easily be riding back and forth 5 km per day, and if you ask them on a questionnaire if they are physically active, they will say 'No, I don't do any exercise'," as researcher Ledgaard Holm says.

For many there, it's not a choice of activity but their mode of transport.

1.3 HISTORY OF THE COPENHAGEN WHEEL

There is a history behind this wheel and a cause for it to begin. Copenhagen's mayor was increasing the budget to promote the bicycle use and getting better facilities and infrastructure for bikers. As the budget increased the use of bicycles did the same until one year, a top was reached. The use of the bike was not getting higher although he still increased the budget.



Figure 2: Why the CW was invented.²

The city of Copenhagen together with the MIT (Massachusetts Institute of Technology) found out in a research that people who had to take a longer than a 12 km trip don't use the bicycle anymore as a transport mode, because of the sweat or getting too tired. Trying to find a solution to this problem and aiming the goal of having half of the people in Copenhagen who take a ride to work or school doing it by bike they reached the idea of this Copenhagen Wheel. They also together started to develop it over several years. They created a Start-up called Superpedestrian and begun to work on it.

² <https://www.superpedestrian.com>

2. FULL DESCRIPTION OF THE COPENHAGEN WHEEL

2.1. WHAT IS THE COPENHAGEN WHEEL?

The Copenhagen Wheel transforms your bicycle into a smart electric hybrid, quickly and easily by simply replacing your back wheel. The Wheel contains a motor, batteries, multiple sensors, wireless connectivity, and an embedded control system. The Wheel learns how you pedal and integrates seamlessly (which means it is a smooth boost) with your motion, multiplying your pedal power 3x—10x. It makes hills feel flat and distances shrink, so you can cycle just about anywhere.

The wheel returns the energy you input while braking and cycling and stores it for when you need a bit of a boost. At the same time, sensors in the wheel are collecting information about air and noise pollution, congestion and road conditions.

The Copenhagen Wheel differs from other electric bikes in that all components are elegantly packaged into one hub. There is no external wiring or bulky battery packs, making it retrofittable into any bike. Inside the hub, the manufacturers have arranged a motor, 3-speed internal hub gear, batteries, a torque sensor, GPRS and a sensor kit that monitors CO, NOx, noise (dB), relative humidity and temperature. In the future, it will be possible to spec out the wheel according to the riding habits and needs.

2.2 WHY AN ELECTRIC POWERED BIKE?

Most people like to ride electric bikes because they:

- Like to save money, meet new people, and protect the environment.
- Have the chance to arrive at its work without having sweated in case of using a bike.
- Deserve more fun and freedom in their lives.

- Can control their own budget, with the usual increasing price in fuel and gas.
- Enjoy the feeling of riding a bicycle - except for hills, starts, and headwinds.
- Prefer their local errands to be easy, slow paced and attractive.
- Still need convenient, point-to-point transportation after losing their driving privileges.
- Have the sense of taking part in environmental protection.
- Have considered a gas-powered moped or small motorcycle, but dislike the noise, smell, starting problems and special laws.

2.3 FEATURES AND GADGETS

- POWER ASSIST 

Riders are given a boost as they pedal by measuring their effort, instead of using a throttle. This preserves the normal biking experience while enabling riders to bike faster, further, and easier.

When the rider pedals harder, such as when going uphill, the wheel pushes with increasing power. Using your smartphone with the Superpedestrian app, you can vary the level of powered assist. There are multiple options. You can turn the power off for making it work like a normal bike, or you have other options with increasingly power boost which are exercise, with only a light regeneration mode; eco, standard and turbo which gives you up to a 50 km/h speed, all easily controlled by the smartphone you use as the remote control.

- REGENARATIVE BREAKING 

As you bike, the wheel is able to capture energy when braking or going down hill that it stores in the integrated lithium battery pack. The battery can be recharged

with the charger as well, which is included and the battery level is always shown on the mobile phone and in the centre of the wheel as well.

- SMART CONTROL



All actuation of the wheel happens automatically via the pedals through sensing and control algorithms.

You may think to have such a wheel on your bike could be an easy target for thieves but in the opposite. The wheel is blocked as long as your smartphone and his Bluetooth are far from the bike and it unlocks as you come near to it. You can block it anytime only from your smartphone and with no other actions.

- MOBILE APP



The complimentary mobile app allows you to choose amongst a menu of customizable rides, and track personal usage statistics including time, distance, calories burned, elevation climbed and more, all of which can be compared and shared with friends.

So, the wheel is controlled through your Smart Phone and becomes a natural extension of your everyday life. Simply place your phone on the handlebars and its Bluetooth module syncs with the Bluetooth module in the hub of the Copenhagen Wheel.

As it works with an app, all the features are evolving constantly and there are a high number of engineers working to upgrade all of it.

2.4 TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATIONS			
MOTOR	US: 350 W, EU: 250 W	BICYCLE COMPATIBILITY	Single-speed or 7/8/9/10-speed Shimano/SRAM-compatible drivetrain
SIZE	26 inch or 700c rim		
BATTERY	48 volt Lithium	TOP SPEED	US: 20 mph, EU: 25 km/h
CONNECTIVITY	Bluetooth Low Energy (4.0)	BRAKE TYPE	Rim brake and regenerative braking (downhill and back-pedal)
RANGE	Up to 50 km / 31 mi		
BATTERY LIFE	1000 cycles	WEIGHT	5.9 kg / 13 lbs
SMARTPHONE OS	iOS, Android	DROPOUT	120 mm (single speed), 135 mm (single speed and multi-speed)
CHARGE TIME	4 hours		

Figure 3: Technical specifications of the CW.³

The latest updates will include 28 inches wheels, and more compatibility with a bigger number of smartphones as well as with other gears, since the Copenhagen Wheel still uses your own bike gears for a more complete experience.

³ <https://www.superpedestrian.com>

2.5 REVIEWS OF THE COPENHAGEN WHEEL

instead of adjusting your speed using a throttle or button, you'll simply pedal faster

engadget 

M.I.T. Ushers in Biking 2.0 With Copenhagen Wheel

GIZMODO

Welcome to TIME's annual round-up of the best inventions making the world better, smarter and—in some cases—a little more fun.

TIME

Helping people move through cities in a seamless way

Forbes

Cycling is limited to the scale of the city, but we want to help people overcome the city.

WIRED

New tech turns regular bikes into hybrids

theguardian

3. EXTERNAL ENVIRONMENT ANALYSIS (PESTEL)

This external analysis helps to figure out in which environment the project and the new product will be developed in a certain area. The political, economical, social, technological, environmental and legal factors will be studied one by one. Each of them will form a research in the market that is being analysed and will help to determine if this concrete market is a good option to get in.

3.1. POLITICAL FACTORS

The Republic of Latvia is a country in the Baltic region of Northern Europe, one of the three Baltic States. With an extension of 64,589 km² it is bordered by Estonia to the north, Lithuania to the south, Russia to the east, and Belarus to the southeast, as well as a maritime border to the west alongside Sweden.⁴



Figure 4: Map of Latvia and surroundings.

Latvia is a democratic parliamentary republic established in 1918. The capital city is Riga (European Capital of Culture 2014). Latvian is the official language. Latvia is divided into 118 administrative divisions, of which 109 are municipalities and 9 are cities⁵.

⁴ <http://www.lahistoriaconmapas.com/atlas/map-animal/Latvia-animal-map.htm>

⁵ "Administrative divisions of Latvia" www.ambermarks.com

The **Saeima** is the parliament of the Republic of Latvia. It is a unicameral parliament consisting of 100 members who are elected by proportional representation, with seats allocated to political parties, which gain at least 5% of the popular vote. Elections are scheduled to be holding once every four years. The Saeima in a separate election elects the president, also hold every four years. The president appoints a prime minister who, together with his cabinet, forms the executive branch of the government, which has to receive a confidence vote by the *Saeima*. Last elections in October 2014 let this representation of the senate:

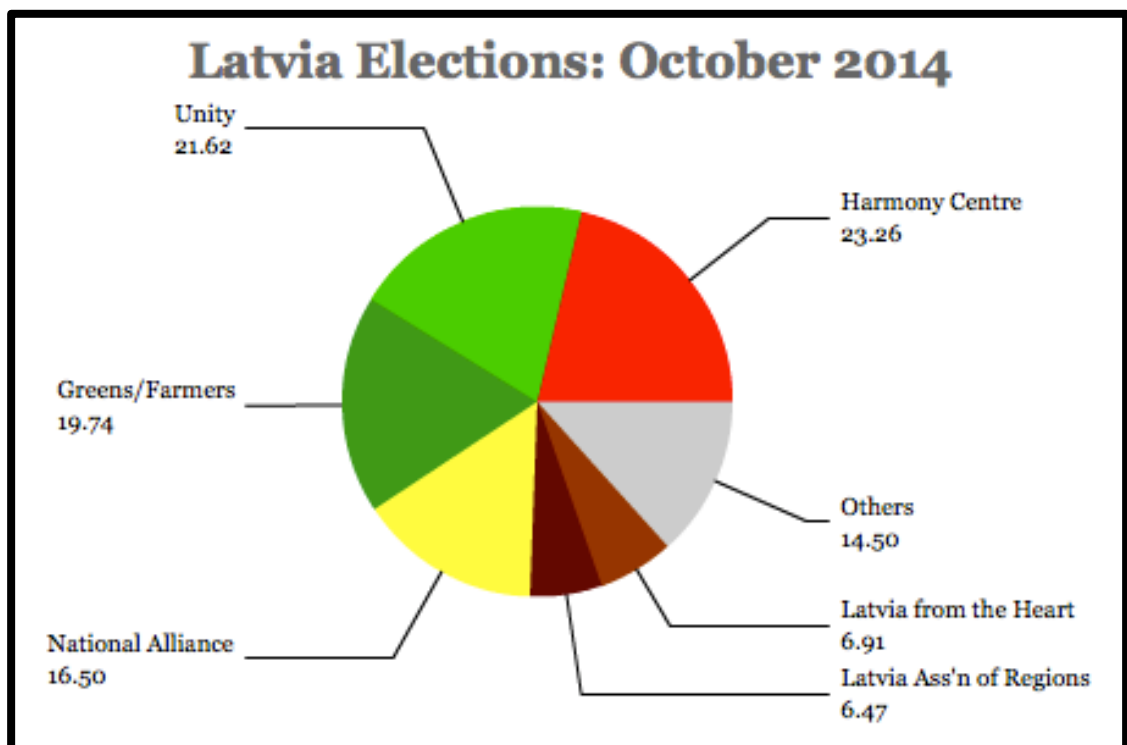


Figure 5: Latvian Saeima's representation after elections in 2014.⁶

Māris Kučinskis has been selected the new Prime Minister of Latvia. On Thursday 11th of February, 2016 Saeima with 60 votes to 32 approved Mr Māris Kučinskis as Prime Minister, along with his proposed cabinet. The coalition will remain unchanged and will consist of Greens and Farmers, Unity and the National

⁶ <http://suffragio.org/wp-content/uploads/2014/10/latvia2014.png>

Alliance. Mr Arvils Ašeradens (Unity) will serve as Minister of Economics and will also carry out the role of Deputy Prime Minister.⁷

The Republic of Latvia was founded on 18 November 1918. Independence was interrupted, though, during World War II. In 1940, the country was forcibly incorporated into the Soviet Union, invaded and occupied by the Nazi Germany in 1941, and re-occupied by the Soviets in 1944 to form the Latvian SSR for the next fifty years. The peaceful Singing Revolution, starting in 1987, called for Baltic emancipation of Soviet rule. It ended with the Declaration on the Restoration of Independence of the Republic of Latvia on 4 May 1990, and restoring the independence on 21 August 1991.



Latvia joined the European Union the 1st of May of 2004 and has as its official currency the Euro since 2014.

Latvia is a democratic and developed country with an advanced income economy, a high quality of life and a high standard of living. Latvia is a member of NATO, the European Union, the United Nations, the Council of Europe and Council of the Baltic Sea States (CBSS), the International Monetary Fund (IMF), the World Trade Organization (WTO) and Nordic Baltic Eight (NB8) among others and is currently in the accession process for joining the OECD (Organization for Economic Co-operation and Development).

The Ministry of Economics is responsible for implementing Latvia's foreign trade policy with the EU, the World Trade Organization (WTO) and other international organizations.

Its capital city, Riga, is one of the largest cities in Northern Europe (30% of Latvians live there), also being an important and strategic point, geographically, with a developed airport, port and a good railway network.

⁷ <http://www.latvia.eu/news/maris-kucinskis-appointed-new-prime-minister-latvia>

Therefore, Latvia is regulated by all the standards of the EU and belongs to a free market where there exist a free circulation of goods, services, people and capital.

Besides that, the recent emancipation from the Soviet Union is still present in Latvia and there has been an energetic dependence from Russia in all these years, which is slowly shrinking, as it will be discussed later in the environmental factor analysis.

3.2 ECONOMIC FACTORS

Although Latvia is a developed and modern country one of the most problematic factor that can found in order to introduce this product in Latvia is the economic situation in the country. Although the GDP of Latvia is positive and the growing rhythm is quite big, salaries and people's income is still very low. In the following tables it can be seen graphically and in numbers how the average income changes over the years in Latvia and how the incomes are lower than the European average⁸, which is in 2016:

Avg. Monthly income/ year	2010	2011	2012	2013	2014
Gross	633	660	685	716	765
Net	450	470	488	516	560

Table 1: Average income per year and person.

In order to see the development graphically for the past years, a look at this picture can be taken:

⁸ <http://www.csb.gov.lv/en/statistikas-temas/personal-income-key-indicators-30630.html>

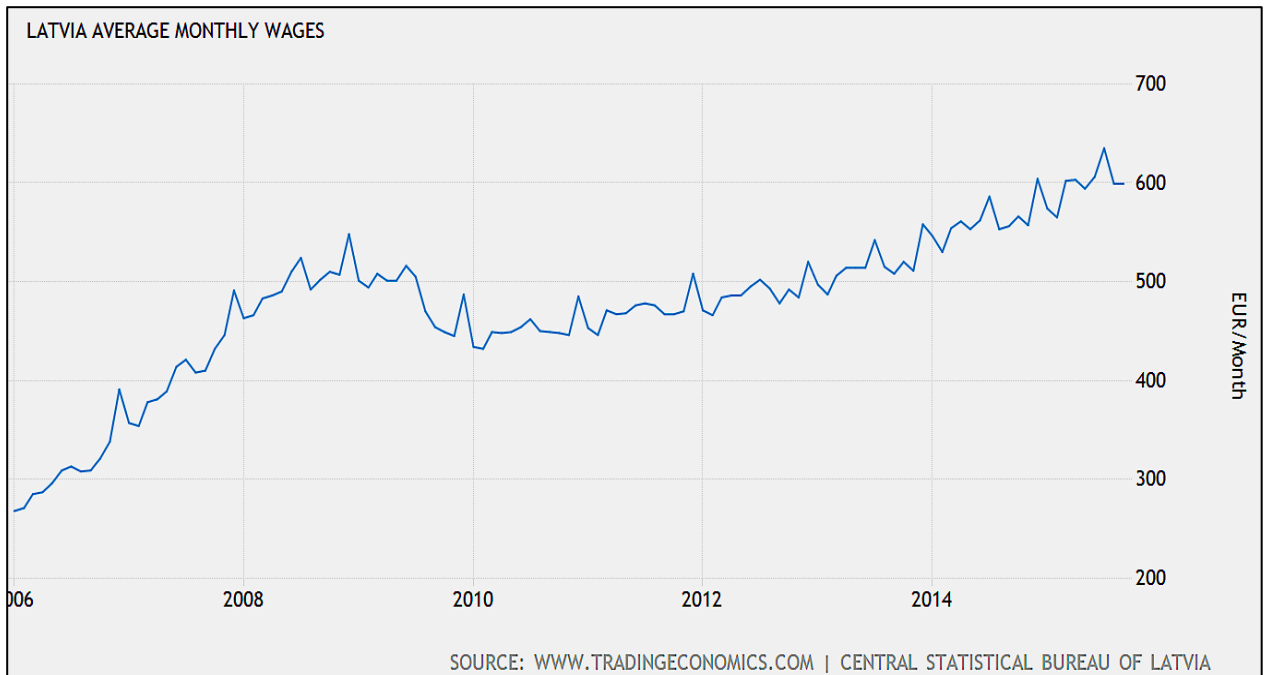


Figure 6: Evolution of the average monthly wages in Latvia.⁹

⁹ <http://www.tradingeconomics.com/latvia/wages>

If a comparison between the average of other European countries incomes and Latvia is made, it is to be seen that Latvia is among the last ones:

RANK	COUNTRY	EUR INCOME PER MONTH 2014	EUR INCOME PER MONTH 2015	GROWTH %
1	Luxembourg	3189	3149	-1,27
2	Sweden	2690	2551	-5,44
3	Denmark	3122	2307	-35,32
4	Finland	2330	2300	-1,3
5	United Kingdom	2597	2253	-15,26
6	France	2128	2180	2,38
7	Netherlands	2136	2158	1,01
8	Germany	2054	2155	4,68
9	Ireland	2160	2129	-1,45
10	Austria	2114	2124	0,47
11	Belgium	1946	2091	6,93
12	Italy	1923	2033	5,41
13	Spain	1615	1734	6,86
14	Cyprus	1833	1574	-16,45
15	Slovenia	1044	1092	4,39
16	Malta	1092	1021	-6,95
17	Greece	818	1004	18,52
18	Portugal	985	1001	1,59
19	Estonia	841	832	-1,08
20	Czech Republic	701	765	8,36
21	Croatia	710	735	3,40
22	Poland	678	705	3,82
23	Slovakia	683	704	2,98
24	Hungary	503	643	21,77
25	Latvia	557	601	7,32
26	Lithuania	524	544	3,67
27	Romania	398	417	4,55
28	Bulgaria	333	356	6,46
	Avg. Europe	1489	1469	-1,32

Table 2: EU-28 countries average wages.¹⁰

¹⁰ <https://www.reinisfischer.com/average-salary-european-union-2015>

Latvia has one of the highest **GDP** growth rates in Europe, mostly driven by expansion in consumption and credit. The main industries are: synthetic fibres, agricultural machinery, fertilizers, radios, electronics, pharmaceuticals, processed foods, textiles and timber.

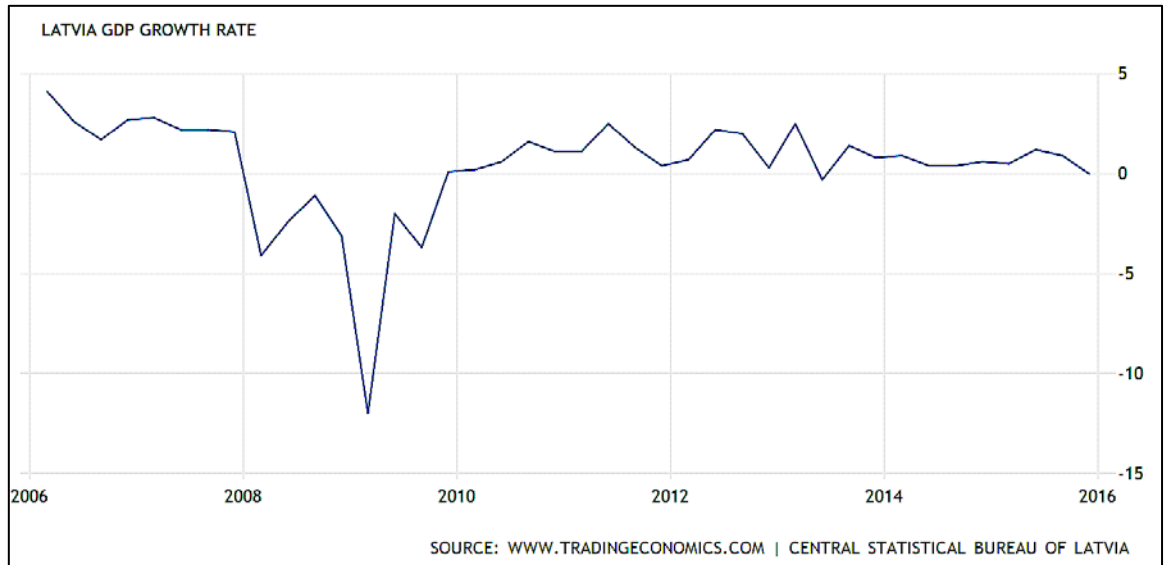


Figure 7: GDP of Latvia in the past ten years.

As the chart shows, after the World Crisis and the crash in Latvia, which was one of the toughest in Europe in 2009, the recovery of the country was one of the fastest as well and has now stabilized in an average of a 3% growth. This good news for the country will be a key point as well to introduce a new product of this character, a high technological and relatively high priced product.

It can be noticed the crash and the quick Latvian recovery in the next two graphics by seeing **unemployment's evolution**¹¹. As it can be seen, unemployment shrinks faster in Latvia than in the average of EU nations in a matter of youth unemployment.

11

http://ec.europa.eu/eurostat/statisticsexplained/index.php/Unemployment_statistics#Main_tables

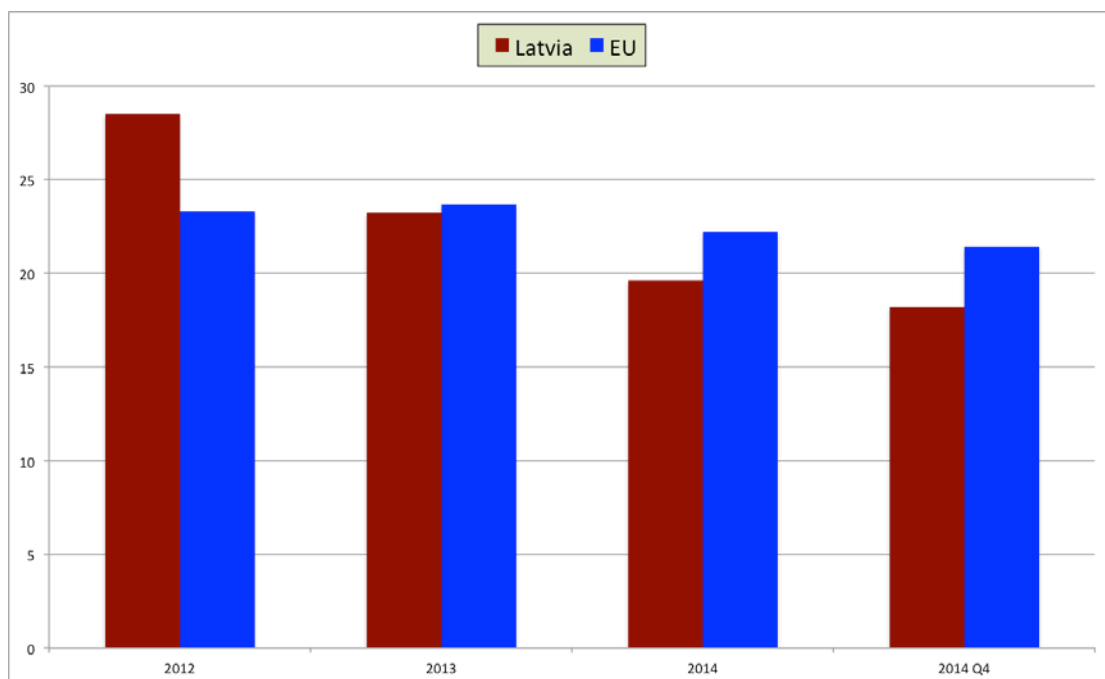


Figure 8: Latvia vs. EU youth unemployment. Author's original.

Although the unemployment rate is still higher than in the average of EU countries, as it can be noticed in the next graphic, it is very close and the evolution is promising.¹²

¹² http://ec.europa.eu/eurostat/statistics-explained/index.php/Unemployment_statistics#Main_tables

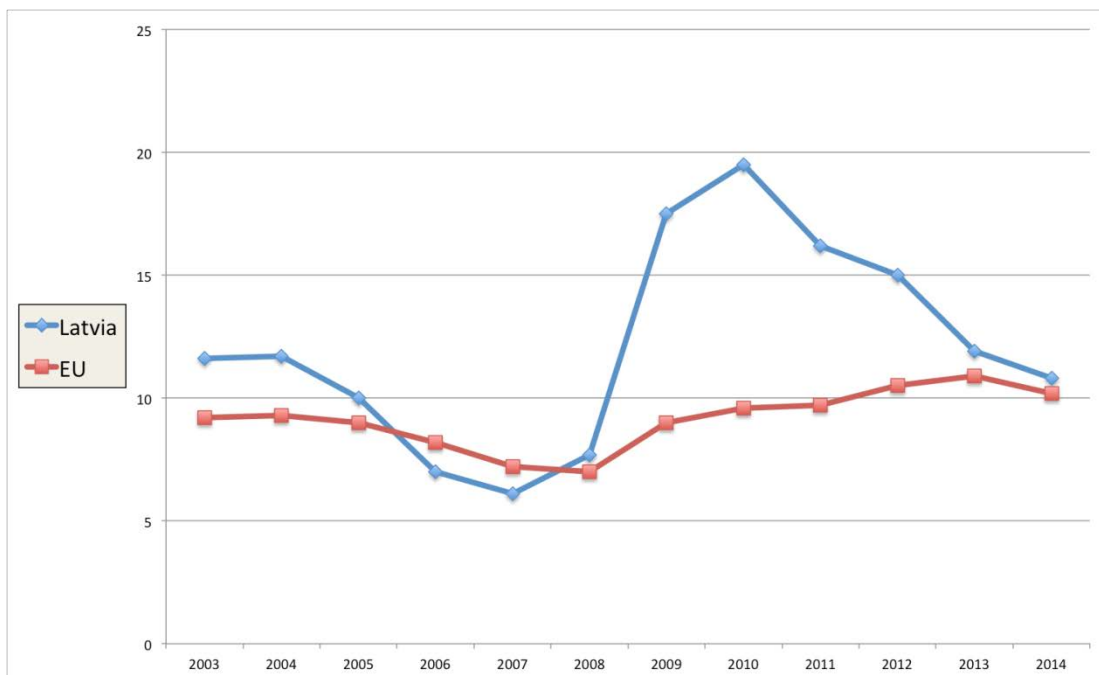


Figure 9: Unemployment rate EU vs. Latvia. Author's original.

In Latvia, **consumer confidence indicator** measures the level of optimism that consumers have about the performance of the economy.

Generally consumer confidence is high when the unemployment rate is low and GDP growth is high, like in our case. Measures of average consumer confidence can be useful indicators of how much consumers are likely to spend.¹³

¹³ <http://www.tradingeconomics.com/latvia/consumer-confidence>

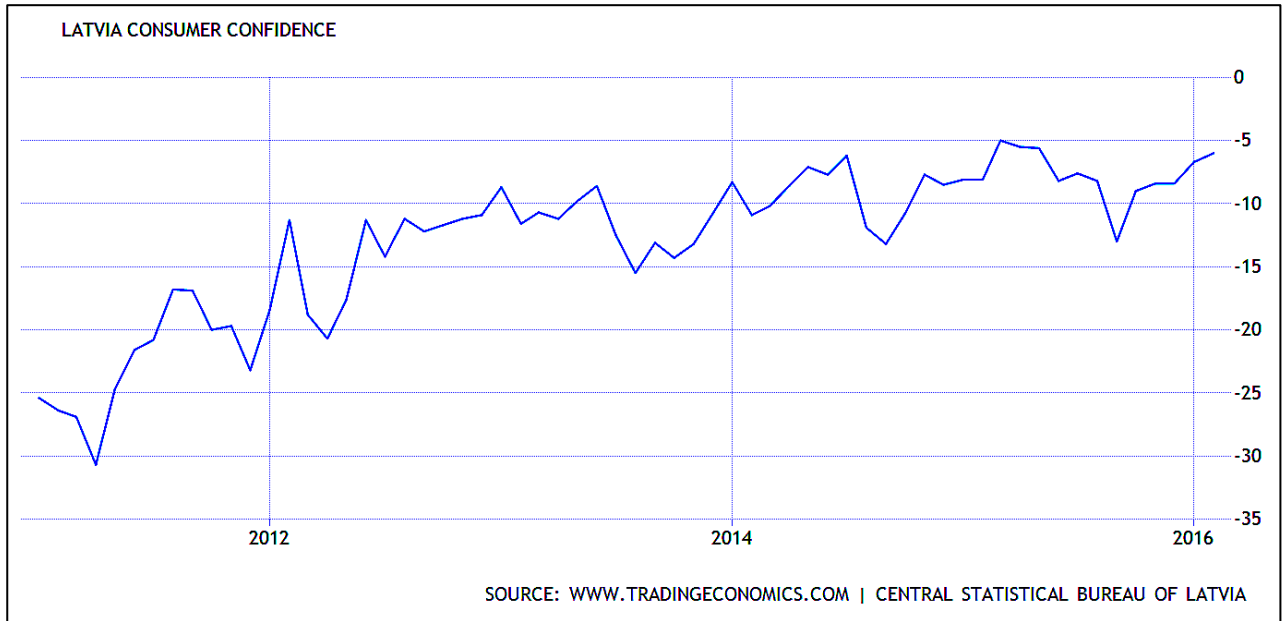


Figure 10: Latvia's consumer confidence.

Other aspects as exports of goods and services, account for 59 per cent while imports account for 62 per cent.

Otherwise, Latvia increased the minimum wage to EUR 370 in 2015¹⁴ by 10 euros. Another good new, which helps selling a new product in this country.

Another interesting fact is the **energetic development** in the country of Latvia. Latvia has started to shift to an energy policy that leans heavily towards green energy after the restoration of its independence. However, it is still heavily dependent on imported energy that accounts for 90 per cent of the country's needs¹⁵. Latvia's current government strategy outlines a path of energy transition from a heavy reliance on fossil fuel energy sources to an independent energy supply. It will also make sure that this opens up business opportunities for Latvian investors along with implementing positive climate policies in Latvia and worldwide. Having in mind this environment in which Latvia has the intention to grow, increasing the use of bikes is the perfect complementation.



¹⁴ <http://www.baltic-course.com/eng/legislation/?doc=110093>

¹⁵ <http://www.baltic21.org/energy/latvia.html>

This policy states that renewable energy sources should make up 40 per cent of overall consumption by 2020. Until this time, the main focus is to achieve more complete utilization of biomass¹⁶ without ignoring the potential use of wind energy after the year 2020.

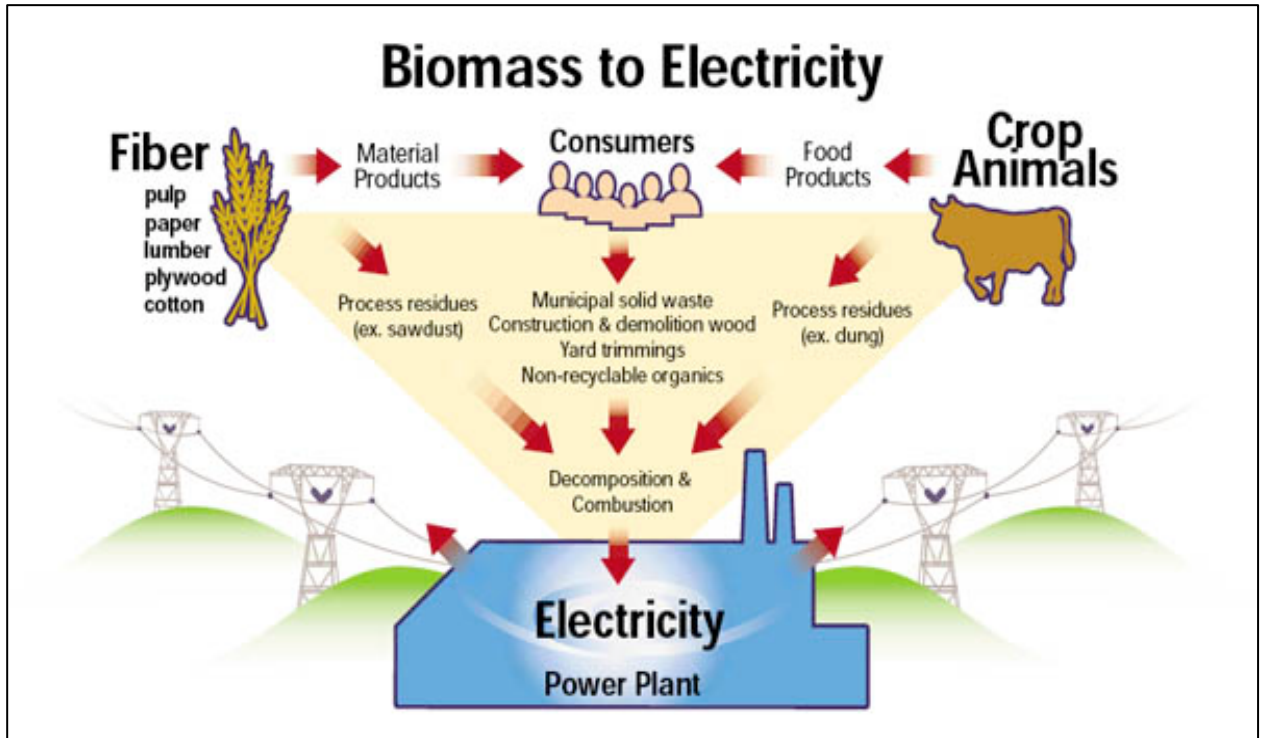


Figure 11: Biomass energy obtaining process.

¹⁶ <http://www.energy.ca.gov/biomass/>

3.3 SOCIAL FACTORS

3.3.1 Population of Latvia

With a population of 2.001.468 people¹⁷ registered by the 1st January of 2016, Latvia shows a little recover from the descendent number of people that has been usual in the country since 1990.

Although, if looking at the statistics taken by the Central Statistical Bureau of Latvia the results are not positive and the decrease in population is still in course.¹⁸

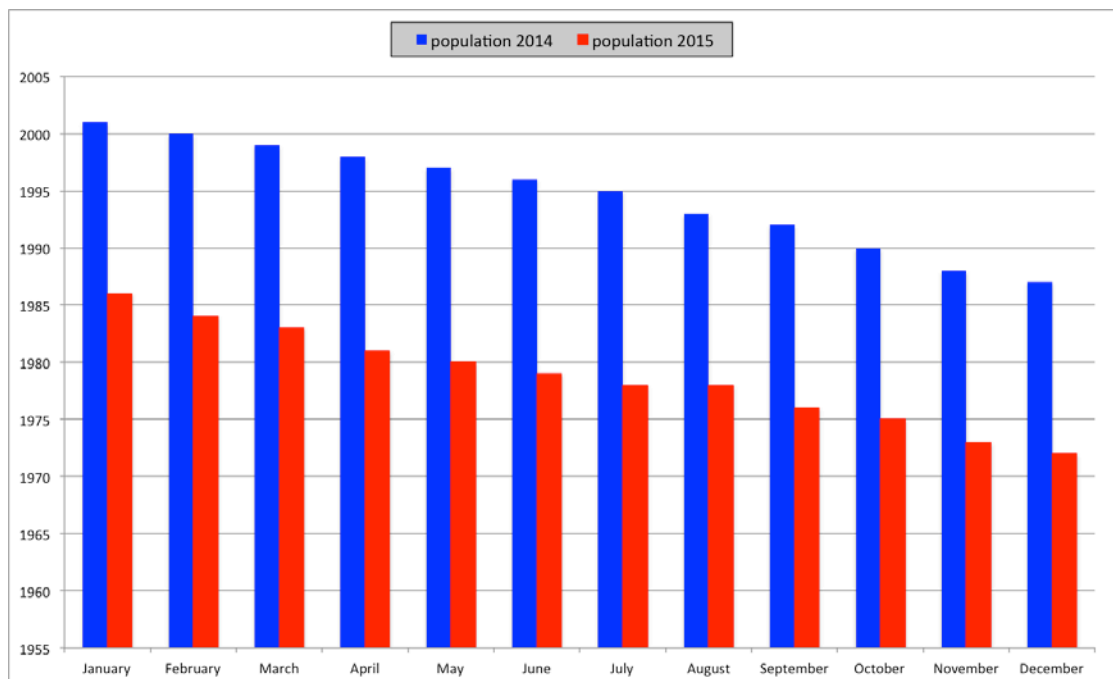


Figure 12: Population (in thousands) in time of Latvia. Author's original.

¹⁷ <http://ec.europa.eu/eurostat/web/regions/statistics-illustrated> "Latvia"

¹⁸ <http://www.csb.gov.lv/en/statistikas-temas/population-key-indicators-30624.html>

3.3.2 Demography of Latvia

Another important factor about Latvia's society is the big presence of ethnic Russians in the country, especially in the two biggest cities: Riga and Daugavpils (the first one because of the industry and the second one due to the proximity with Russia). The coast city of Jurmala is also the summer residence for many rich Russians. Although the most have a Latvian citizenship and "feel" Latvian, like first ethnic Russian major Nils Ushakovs has declared many times, there is a proximity and affinity to Russia¹⁹. That does not mean they support them in all their policies.

However, the complexity of Latvian society is reflected in the following graphics:

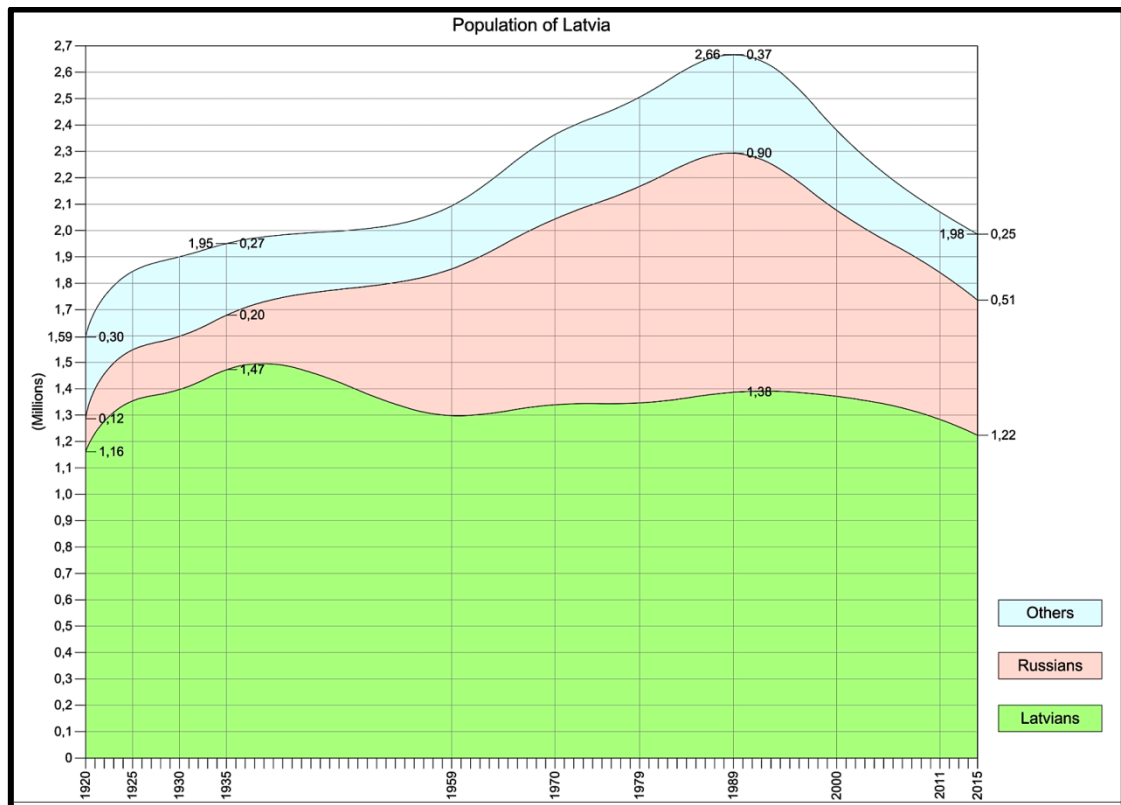


Figure 13: Population ethnics in Latvia.

¹⁹ https://en.wikipedia.org/wiki/Demographics_of_Latvia

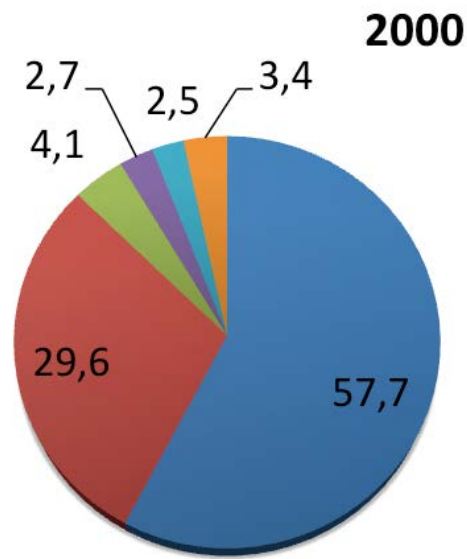


Figure 14: Ethnics in Latvia year 2000.

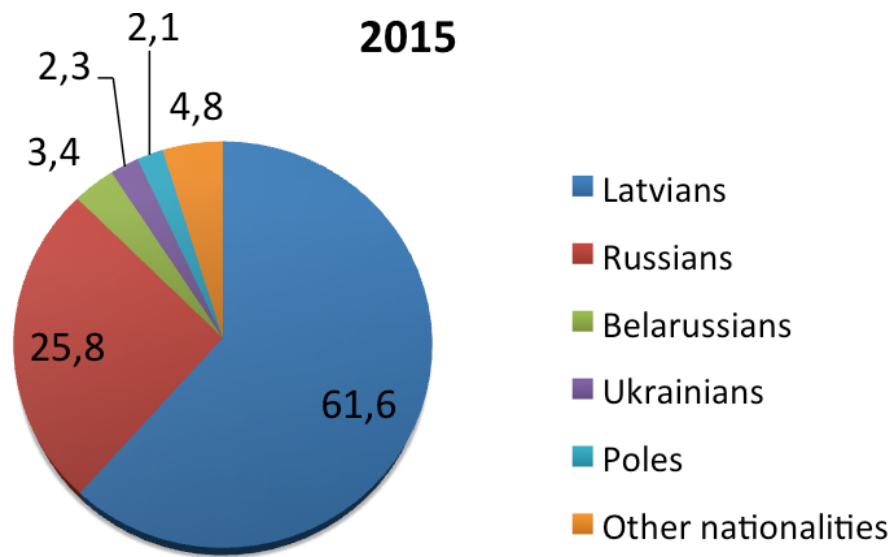


Figure 15: Ethnics in Latvia year 2015.

By doing a little research about social behaviours in the transport field, concrete statistics about bikes are difficult to find but since the Copenhagen wheel could be, in a bigger or smaller way, a competitor of mopeds and motorcycles, at least in the city centres where the speed limit is lower, the amount of new registrations for mopeds and motorcycles in Latvia as well as in Riga will be shown as interesting data:

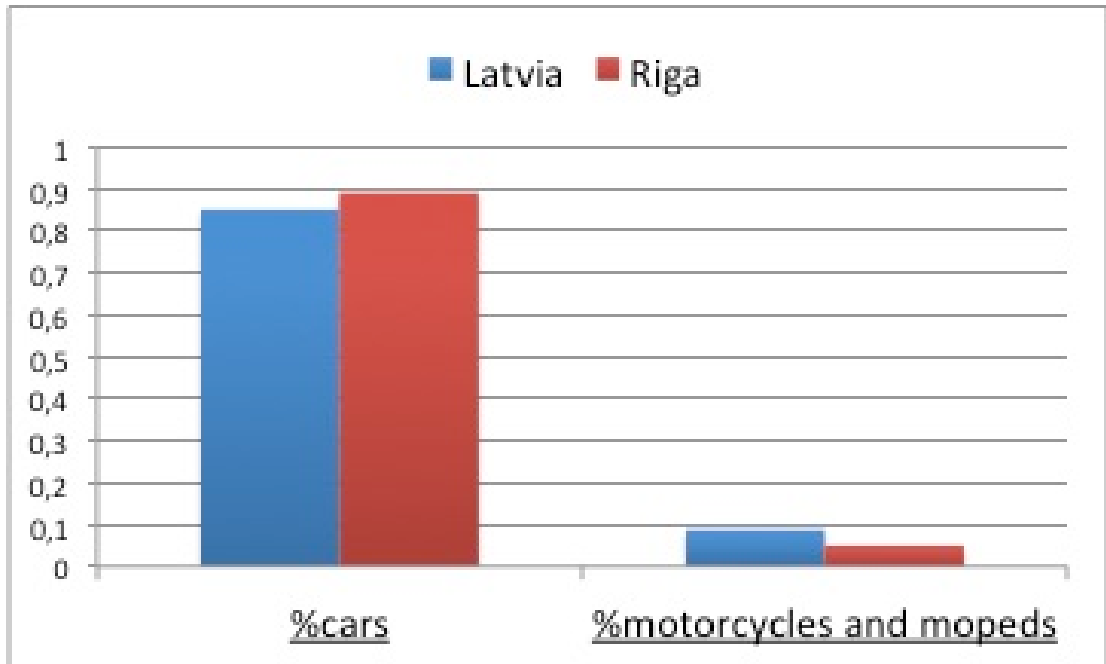


Figure 16: Amount in % for new registration of cars and motorcycles in the city of Riga and Latvia until 01.01.2016. Author's original.

As it is possible to see in the graphic, cars are still the most common type of transport registered in Latvia and Riga²⁰. Riga has a lower percentage of them registered than in the rest of Latvia, caused by a higher amount of people using the public transport and a higher number of new cars registered, probably caused by the better economic situation of people living in Riga. The total amount of new registrations for mopeds and motorcycles until the year 2016 is 63489 of those vehicles in Latvia, 9604 of them in Riga.

Looking at this behaviour would encourage a company to sell the Copenhagen Wheel in this country because electric bikes as direct competitors of mopeds and motorcycles could have a big number of potential customers.

Almost 75% of the people in the city of Riga goes to work by public transport, walking or with the bicycle. Approximately 8% of the people do it with the bike and the city of Riga has 0,10 km/km² length of bicycle lanes²¹. And although locals claim that Riga is not a good city for biking, the city is flat, you can ride on

²⁰

http://www.csdd.lv/lat/noderiga_informacija/statistika/transportlidzekli/

²¹http://www.siemens.com/entry/cc/features/greencityindex_international/all/en/pdf/riga.pdf

the wide pedestrian areas and the traffic is reasonable. The problem there is not a lot of bike roads and lanes in the city centre.

3.4 TECHNOLOGICAL FACTORS

Since the studied product is a high technological product and it requires downloading an app for a smart phone that works together with the wheel, a little research of how much people in Latvia use smart phones and have an Internet access will be done.

In this survey from March 2015 there is to see what the most common use that Latvian population give to their smart phones is²²:

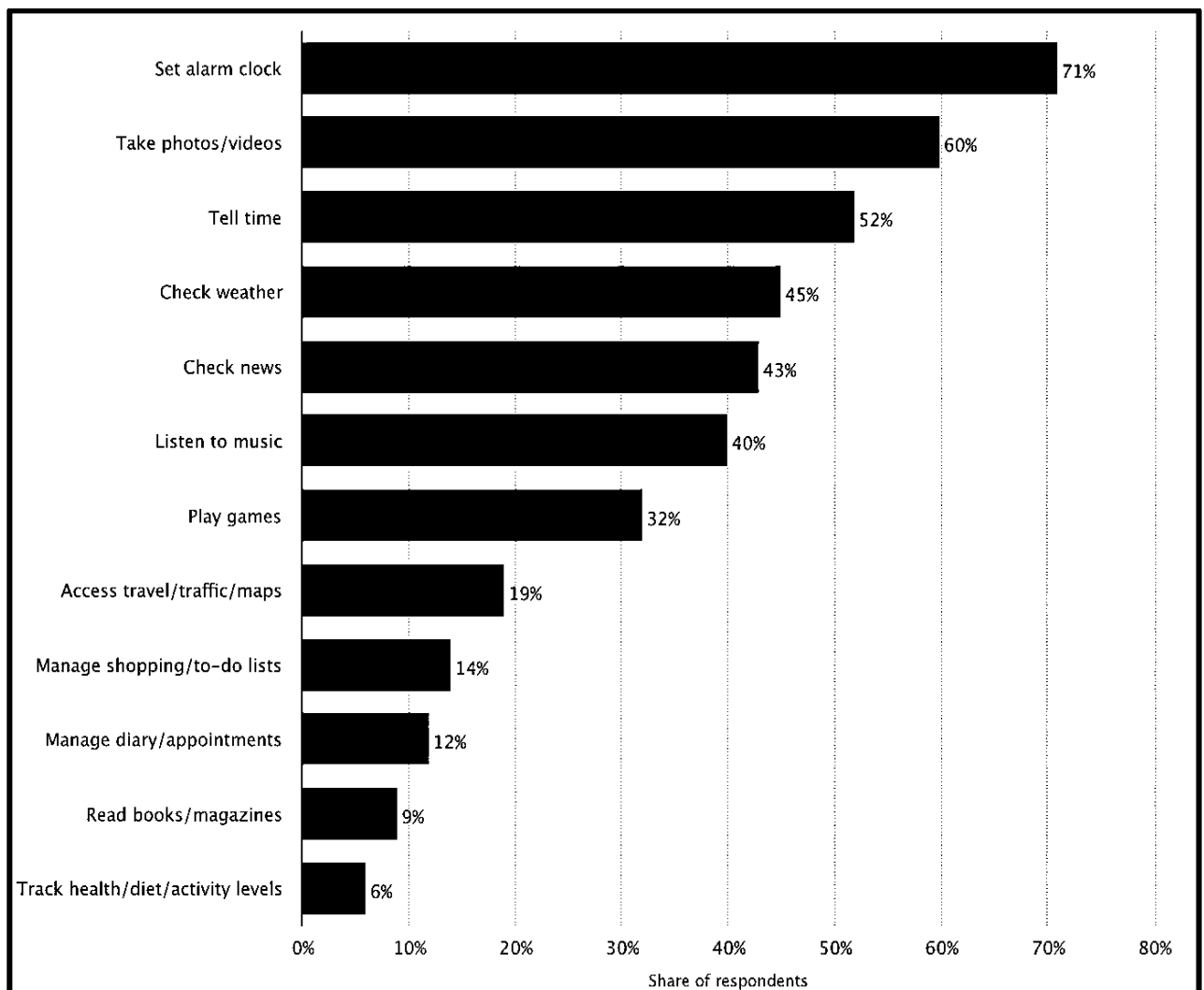


Figure 17: Most common use of smartphones in Latvia.

²² <http://www.statista.com/statistics/348363/smartphone-activities-latvia/>

3.4.1 Wi-Fi in Riga: Riga announced the European Capital of free Wi-Fi²³.

Free high-speed wireless Internet is now easily accessible in more than 930 locations throughout the Riga, including parks, city squares and other open-air spaces. There is now one free Wi-Fi network per 750 residents; three for each square kilometre.

The Mayor of Riga Nils Ušakovs and Chair of Board Juris Gulbis jointly presented another Latt telecom free Wi-Fi access point in Lucavsala and expressed their satisfaction and success in promoting Riga by providing the best access to more stable and fast Internet in the Europe.

Mr Gulbis also revealed the ambitious goals to see not only Riga but also whole Latvia becoming a power of free Wi-Fi.

To remind the unique status of Riga, symbolic road signs bearing an inscription “The European Capital of Wi-Fi” are placed next to Riga border on the five largest roads entering the capital.

Within the next map of the Riga’s city Centre, it is to see the hotspots for Riga’s free Wi-Fi points, a part from all the cafes, restaurants and other places that offer free Wi-Fi:

²³ <http://www.latvia.eu/news/riga-announced-european-capital-free-wifi>

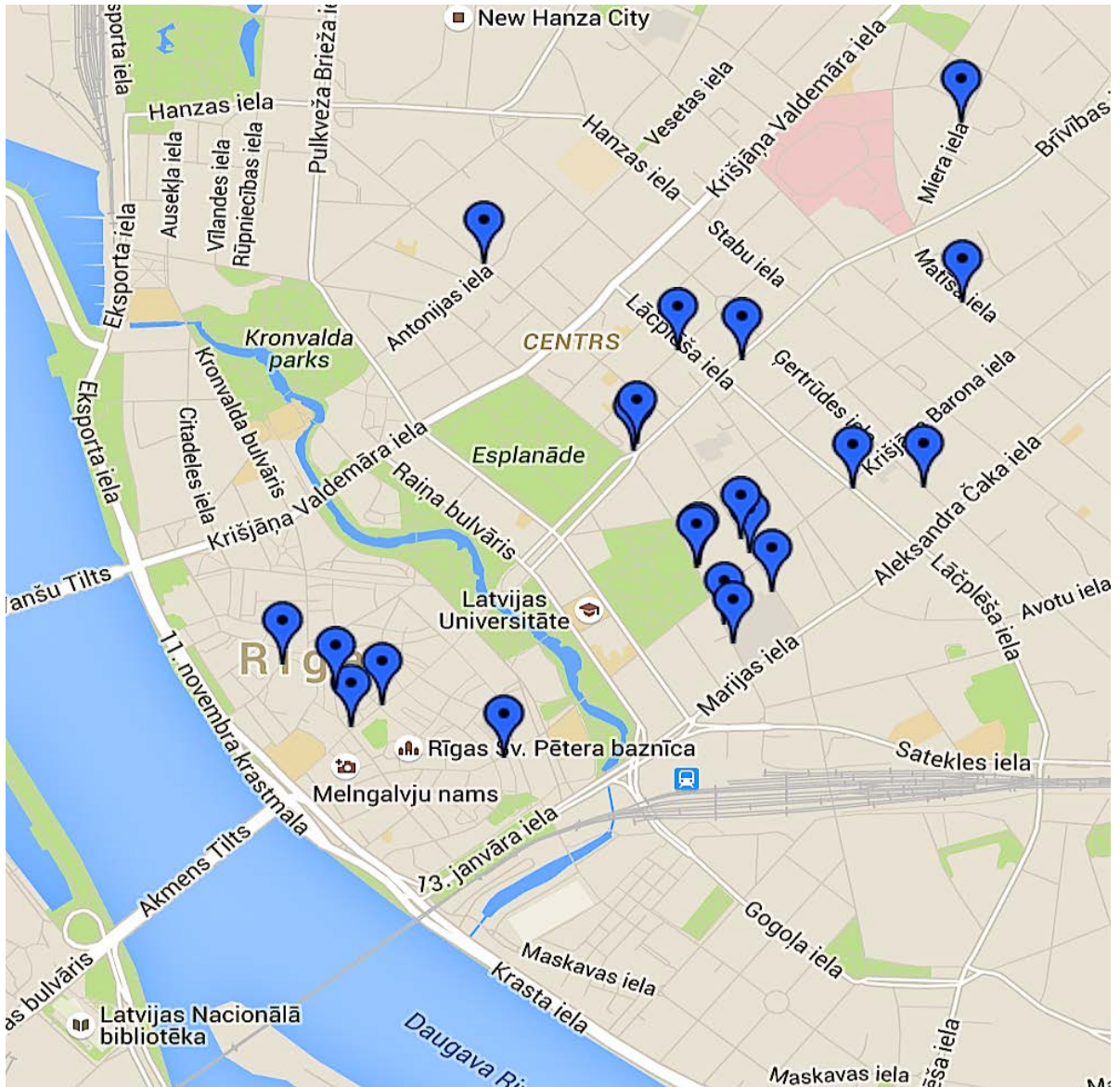


Figure 18: Wi-Fi points in Riga's Centre.

3.5 ENVIRONMENTAL FACTORS

As there was being said in the introduction of this project, Latvia's government and his citizens are willing to become a more and more respectful society with the environment. The analysis of this factor, the environmental one, is one of the most important factors in the external analysis, due to the character of this product and the mission and values that the company who is developing it wants to show.

The **Environmental Performance Index (EPI)** is a method of quantifying and numerically marking the environmental performance of a state's policies. It shows as among other things if the country is doing better or worse than before and there are also other indicators like how is one country doing in comparison to other countries in its area (e.g. Latvia would be compared with the Baltic countries, the Scandinavian ones, Russia, Poland, Belarus, etc.).

For the 2012 report, a new "Pilot Trend EPI" was developed to rank countries based on the environmental performance changes occurred during the last decade, allowing to establish which countries are improving and which are declining. It was created to replace the previous performance index, which at the same time released in 2006 the ESI (Environmental Sustainability Index). That year Latvia ranked in first position, which meant that in the past decade it was the country that most positively increased his environmental policies. The report of 2016 shows that Latvia is not doing that well anymore but is still among the best countries worldwide.²⁴ The report for 2016 is the next one:

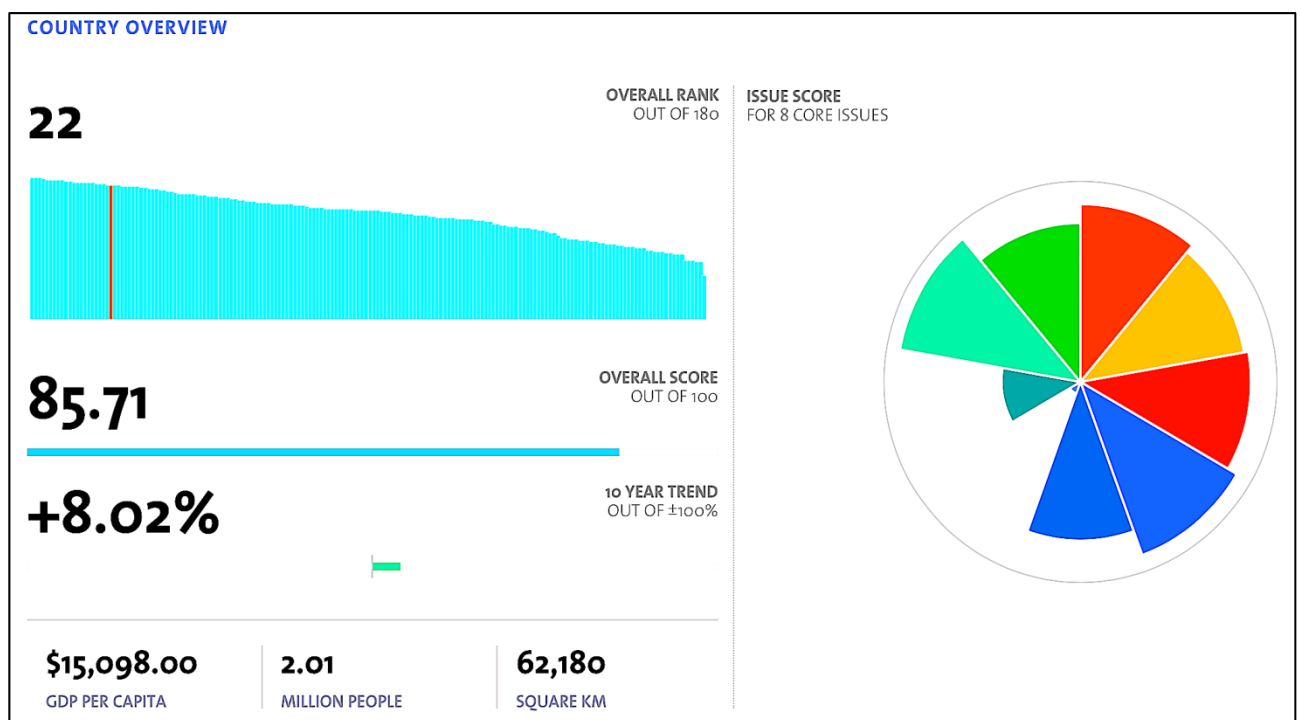


Figure 19: Overview for the Environment Performance Index (EPI) year 2016.

²⁴ <http://epi.yale.edu/country/latvia>

Each colour of the circle shows the different environmental indicators²⁵ or core issues they measure and the score they got. To resume this circle this image with numeric numbers of each of the indicators is shown:
















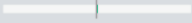


NAME OF INDICATOR	SCORE	RANK	10 YEAR CHANGE
 Health Impacts	93.11	22	
 Air Quality	88.77	50	
 Water and Sanitation	91.11	49	
 Water Resources	96.44	11	
 Agriculture	83.08	93	
 Forests	6.46	114	
 Fisheries	42.11	87	
 Biodiversity and Habitat	97.81	16	
 Climate and Energy	83.19	34	

Figure 20: Indicators and the forecast situation of the EPI.

For example in this case, the Copenhagen Wheel's app shows in real time the air quality thanks to one of the numerous sensors it has. In these indicators it is to be seen how the air quality in Latvia is, either good or bad, but the 10 years change shows us a huge improvement in this area. With the incorporation of the wheel in this area, those expectations will be enforced.

3.6 LEGAL FACTORS

The number of bicycle riders in Latvia keeps increasing every year, and bike traffic becomes more intense. For many people, riding a bike is not only a hobby but also a mean of transport used every day. Unfortunately, bike riders also often experience rather unpleasant moments, such as injuries, accidentally damaging a

²⁵ <http://epi.yale.edu/country/latvia>

car parked at the curb, injuring a pedestrian, or being left without a bike due to theft.

It is interesting to know the traffic laws that rule in Latvia. The author obviously wants to focus in the bicycle laws more concretely.

For instance, helmets are only obligatory for children under 12.

Bikers are allowed to use the pedestrian areas together with the walking people.

If a look at the children traffic road accidents is taken, it is to be seen that Latvia belongs among the countries with highest number of victims in road accidents.²⁶

A survey sent to children until 19 years old reveals that only 8% of them always use safety devices and usually because they haven't thought about using them or are not afraid of injuries or accidents.

The company "Childsafetyeuropa" has promoted a road safety program with the aim of reduce children accidents by 70%.

The road safety regulations that want to be promoted are:

- Required to be at least 12 years old to ride a bike on the carriageway or the suburbs alone.
- If accompanied by an adult, younger children (from 7 years) may ride a bike on the carriageway or the suburbs but are required to wear a helmet.
- Certification of bicycle drivers from 12 years old.

The measures implemented to increase level of safety for children are the following ones:

-Road safety in the school:

- Diagnostic test for the 4th class.
- Road safety included in teacher's education.

²⁶ <http://www.childsafetyeuropa.org/archives/news/2012/info/latvia-jana-feldmane-moh.pdf>

- Methodological materials for teachers on road safety education for elementary school.
- Teacher's manual for road safety education.

-Strategies to change behaviour:

- Road safety week each September.
- Road safety competition for children from 10-14 years.
- Web page for children – cycling expert.
- Safety campaigns on cycling safety and driver awareness “See cyclist”.

-Speed reduction:

- Installation of speed thresholds or limits near schools and residential areas.
- Permissible speed limits to 30 km/h.

The city of Riga's Council wants to implement activities for a safe cycling by organizing these activities:

- Development of bicycle paths.
- Development of bicycle stands.
- Development of bicycle routes.
- Safety informative campaigns.

The tasks for the next period until 2020 are the implementation and enforce of new measures to:

- Reduce speed (more speed controls and limitation near specific areas).
- Increase of bicycle safety control.

- Educate school children on cycling safety.
- Increase knowledge and awareness through informative campaigns on cycling safety.

3.7 PESTEL SUMMARY

In conclusion, it can be affirmed that the current conditions are not optimal but they are getting better and better day for day. The stable economical growths, as well as the concern about a sustainable environment in the country, make the introduction of the Copenhagen Wheel affordable and realistic in Latvia.

The renaissance of the use of the bicycle as a mean of transport and the projects from the City Council to improve the bike infrastructure by creating better and new bike trails and stands as well as modifications in the law regulations for traffic in favour of bike users are also good news and a big encouragement to bring the wheel to this country.



Figure 21: PESTEL figure.

4. TARGET MARKET ANALYSIS

4.1 SITUATION OF THE COPENHAGEN WHEEL

Currently, the Copenhagen Wheel is on pre-sale. It is available on the webpage of the creators company: www.superpedestrian.com and has a cost of 949 US \$. They are testing all the models one by one in order to make sure the sensors; the battery and the motor don't get damaged from long use, bumping on the roads or loose calibration from the same reasons. The main purpose is to get the highest quality possible.

4.2 TARGET CUSTOMERS

4.2.1 E-BIKE GLOBAL MARKET SITUATION

This statistic represents the projected sales of electric bicycles worldwide in 2018, by region. In that year, some 42.4 million electric bikes are forecast to go to China. The country is expected to remain the most important market for electric bikes worldwide.²⁷

²⁷ <http://www.statista.com/statistics/255658/worldwide-sales-of-electric-bicycles-by-region/>

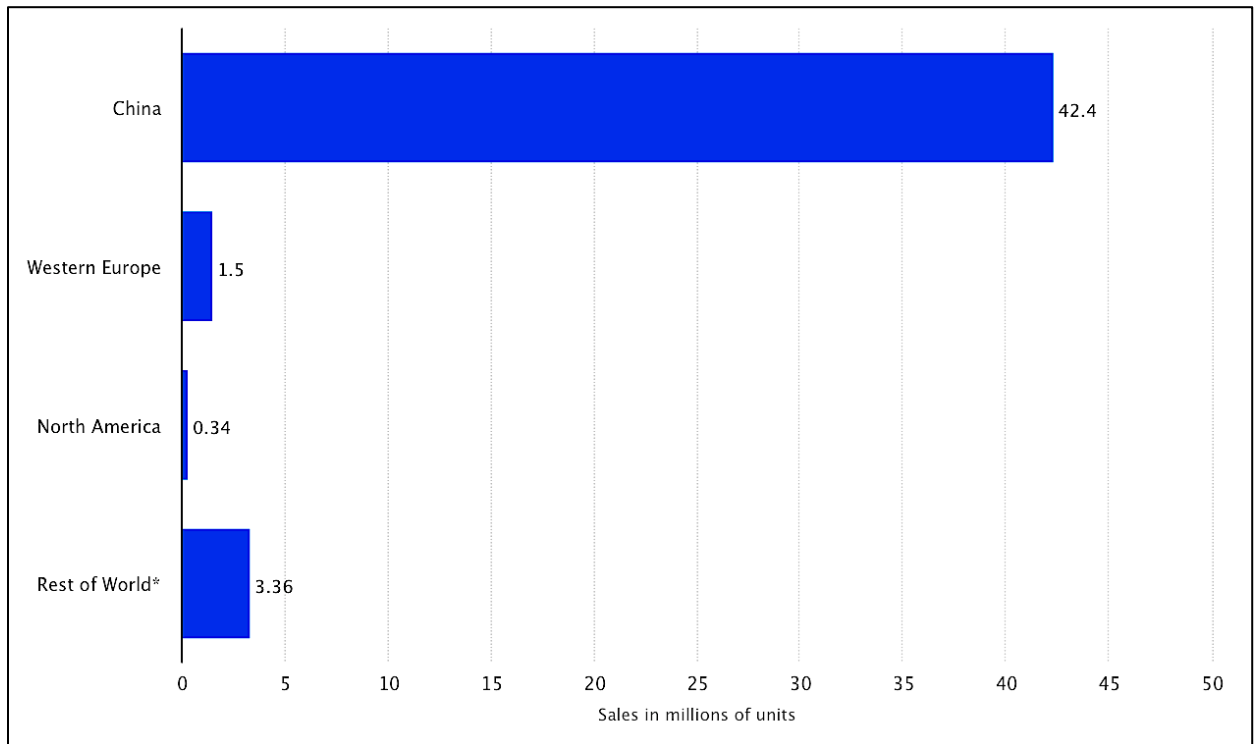


Figure 22: Forecast sales of e-bikes in 2018, by region (in millions).

Electric bicycles, also known as e-bikes or power-assisted bikes, have seen a constant growth in sales. China has been the largest market for electric bicycles since 2000. Here, sales have skyrocketed from about 300,000 in 2000 to almost 30 million units in 2012. E-bikes are used among the populace as an alternative to scooters and mopeds. Despite the amount of accidents caused by using e-bikes in the cities, sales continue to grow. China is also the largest manufacturer and exporter worldwide.

Although China continues to lead the world in production and sales of electric bicycles, Europe has begun to emerge as a relevant market during recent years, as over one million units were sold in 2012. In Germany, for example, postal employees use e-bikes.

Prices for electric bicycles usually reach the high 2,000 U.S. dollar range. The electric motor can be aided by pedalling (e-bikes that use pedals are called pedelecs) or is activated by a throttle. Pedelecs can reach speeds usually up to 25 km/h. More powerful pedelecs – called S-Pedelecs – can reach higher speeds, and are usually classified as mopeds or light bicycles.

4.2.2 E-BIKE EUROPEAN MARKET SITUATION

If a look at the size of the sales (in thousands of units) of electric bikes in Europe is taken, it can be seen that Germany has the leadership together with UK and France.

That is a relative evaluation because those three countries have a high number in what to population is referred. It can be seen as well that smaller countries like Denmark or Netherlands also have a big amount of sales.

This statistic shows the number of bicycles sold in the European Union (EU) in 2014, by country. Germany, the Netherlands, and Belgium were the three biggest purchasers of bicycles in the EU, together constituting almost 75 per cent of all sales.

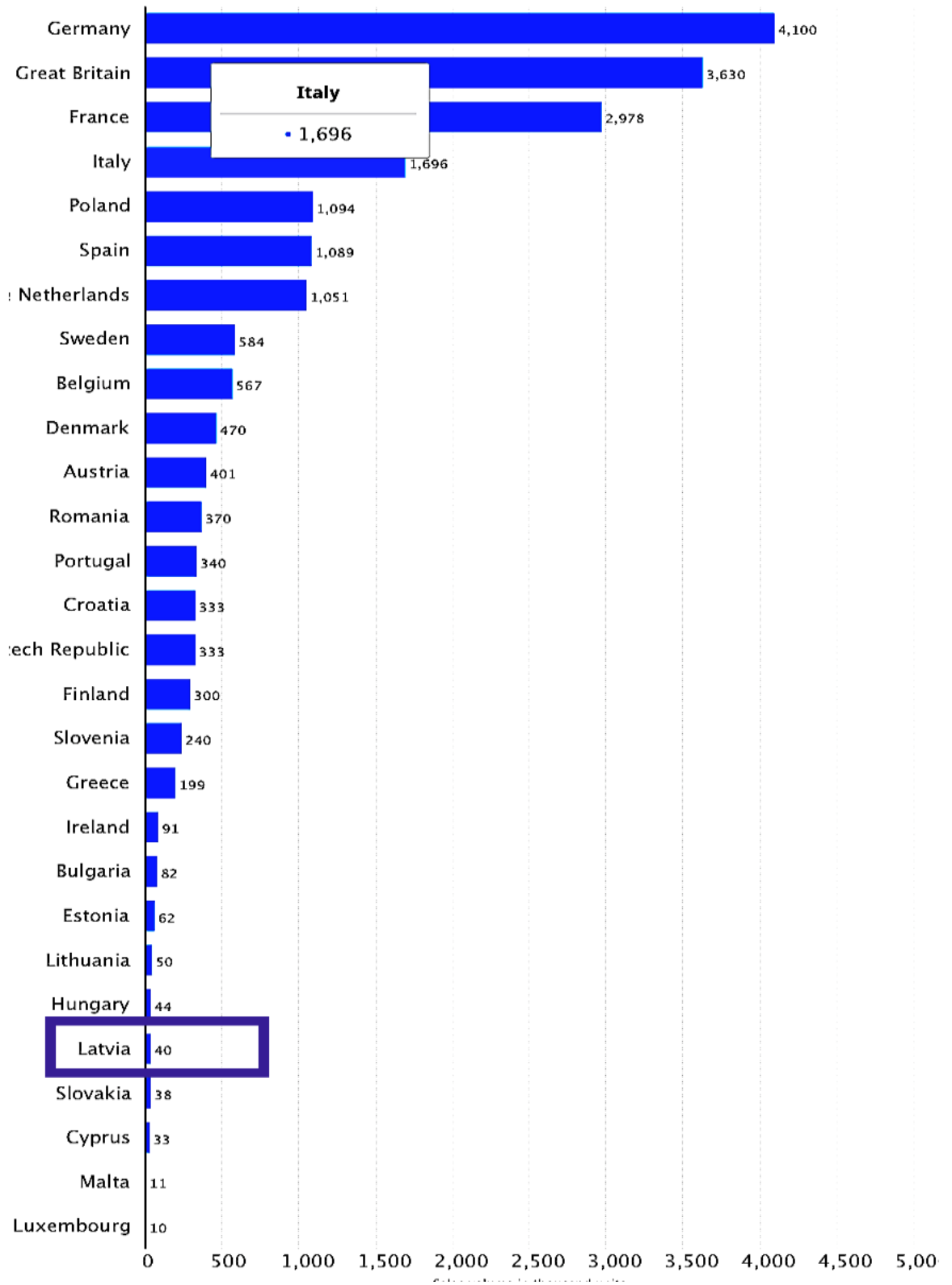


Figure 23: Sales of e-bikes until 2014 in EU countries.

4.2.3 BIKES AND E-BIKES IN THE COUNTRY OF LATVIA

This product can fit all the businesses related to bike transport. First of all, there are rental bike companies, which are quiet present in Riga´s day to day. Secondly, there are companies, which offer touristic tours by bike for the inside of Riga as well as for trips around all Latvia and even the Baltic countries. And thirdly and also very important for privet customers, normal people, that use bike everyday to go to work or school or just use the bicycle as his everyday mode of transport.

The different companies for bike renting in Riga are the following ones:

- **Rigabikerent.**
- **SIXT bicycle**, which is a self-service bike rental.
- **Bicyclerental.**
- **E.A.T Riga.**
- Air Baltic´s **Baltic Bike.**

They all offer as well bike tours as well, and bike trips around Latvia. This feature makes the Copenhagen Wheel perfect for these kinds of trips. Although some of the bike rentals already offer trips with e-bikes, our wheel is much more interesting. First of all, some bikers like sometimes to ride the bike with any help, only with their own power. That is possible with the CW.

Another facility this wheel gives us is the combination with the app for iOS and Android. With it, as it was said, the wheel can be managed to the customer´s own pleasure, making it help him more or less anytime he wants. A part from this, it has the sensors included in the wheel. They show the air condition and pollution, the location in real time allowing the customer to know exactly where he is in every moment and how much of his trip is left.

Other good options are to convince the City Council to introduce the wheel in post deliveries like they do in Germany, for instance.

Other target customers can be found. There are lots of companies that use some kind of delivery vehicles, for instance. In Latvia there are food establishments that

offer this service and use motorcycles or cars. A cheaper way to manage this service could be to use the Copenhagen Wheel.

4.2.4 REAL MARKET COMPARATION

4.2.4.1 THEORETICAL REAL MARKET SIZE

In a theoretical framework, the real market is calculated by first knowing the total population of the country studied. That would be, in the case of Latvia, 2.000.000 people more or less. Of course, in this market there is people too old or too young to use our product, there is also people that can't afford it and of course there is people that don't want to use it. After estimating that number, which must be realistic, and know that the target market is always a 10% of this population, after eliminating all that people whom isn't in the real market.

As it was being said, all this is theory.

By making the math the most optimistic market that can be shared is of 200.000 people.

After doing this, it is estimated that a 5% out of this first 10%, which represents the 200.000 people, will be the final target customers.

That would let Latvia with a total number and a real market size of **10.000** customers in now a realistic situation.

4.2.4.2 SELF-ESTIMATED REAL MARKET SIZE

In what is referred as for privet people, the range of ages that fits the wheel is big, cause it transforms the bike in an electric bike, so elderly people are also able to use it. It is to be seen that the distribution of ages²⁸ in Latvia is the following one:

²⁸ http://www.indexmundi.com/latvia/age_structure.html

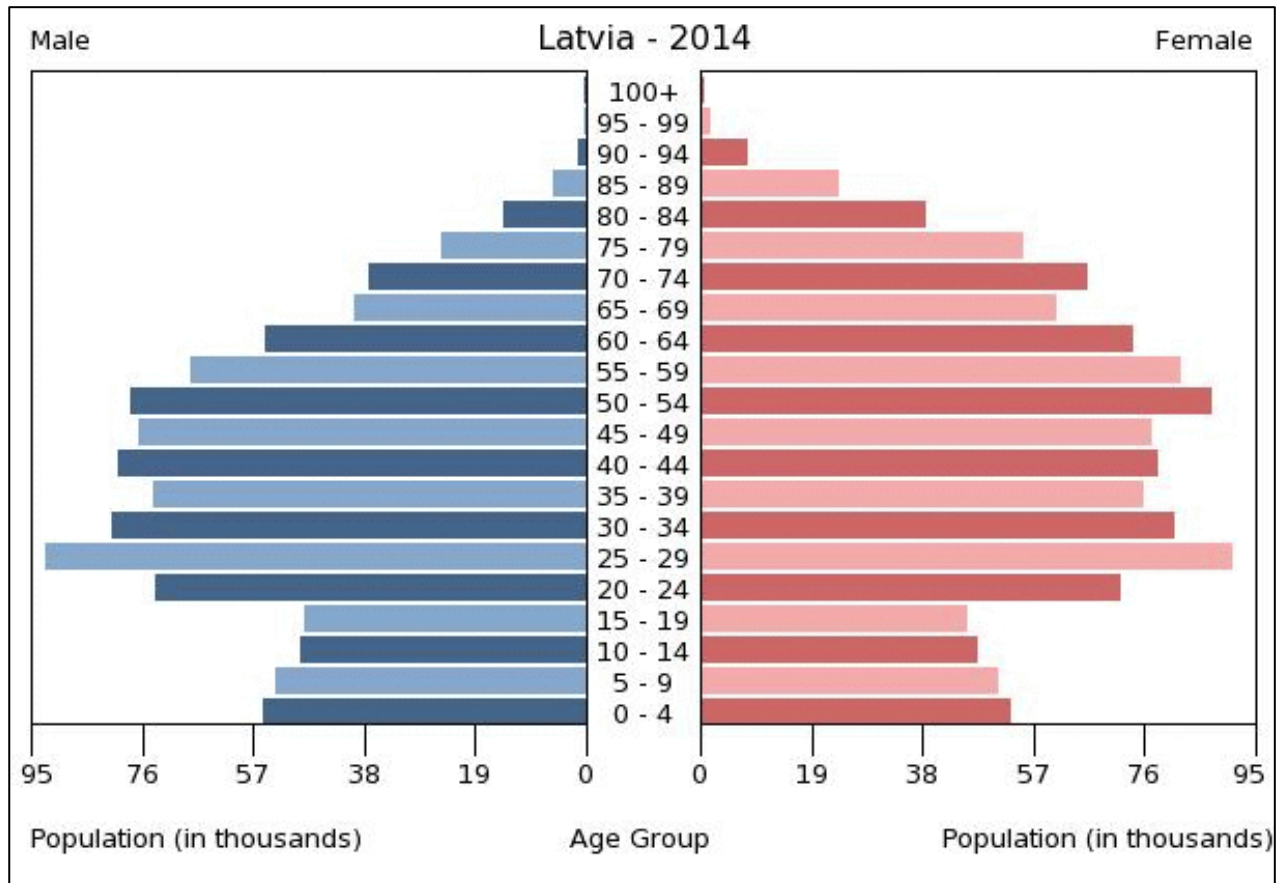


Figure 24: Population pyramid Latvia.

It can be supposed, knowing the nature of the bike that the target customers are all the people aged between 16 and 55 years old, depending on the physical condition. If + people between the ages of 16 and 55 years old is counted, then there is an active target population of **1,2** million habitants, which could use the wheel only counting the parameter of age.²⁹

The reason to choose these segments is that it is easy to identify the needs of those persons. For instance, younger people could have the need to get a mean of transport to get to school fast. Meanwhile elder people could use it to get fast to work. All of them at the same time could think about road trips, for example a longer family trip.

In all those cases it can be perceived a certain need of our product. That doesn't mean that these needs can be covered in some other way but what is needed is to

²⁹http://www.csb.gov.lv/sites/default/files/nr_11_demografija_2015_15_00_lv_en_0.pdf

achieve that people get convinced that this product is the better one. The author needs to think a way of differentiate himself in some manner to get advantage from the others.

If a look at the wages is taken, comparing years 2014 and 2015³⁰, it can be seen, as it I shown in the next graphic, that salaries are getting higher. That is good news because the product is not of high necessity and its price (949 \$, more or less 900€) is more than a high percentage of Latvians population incomes:

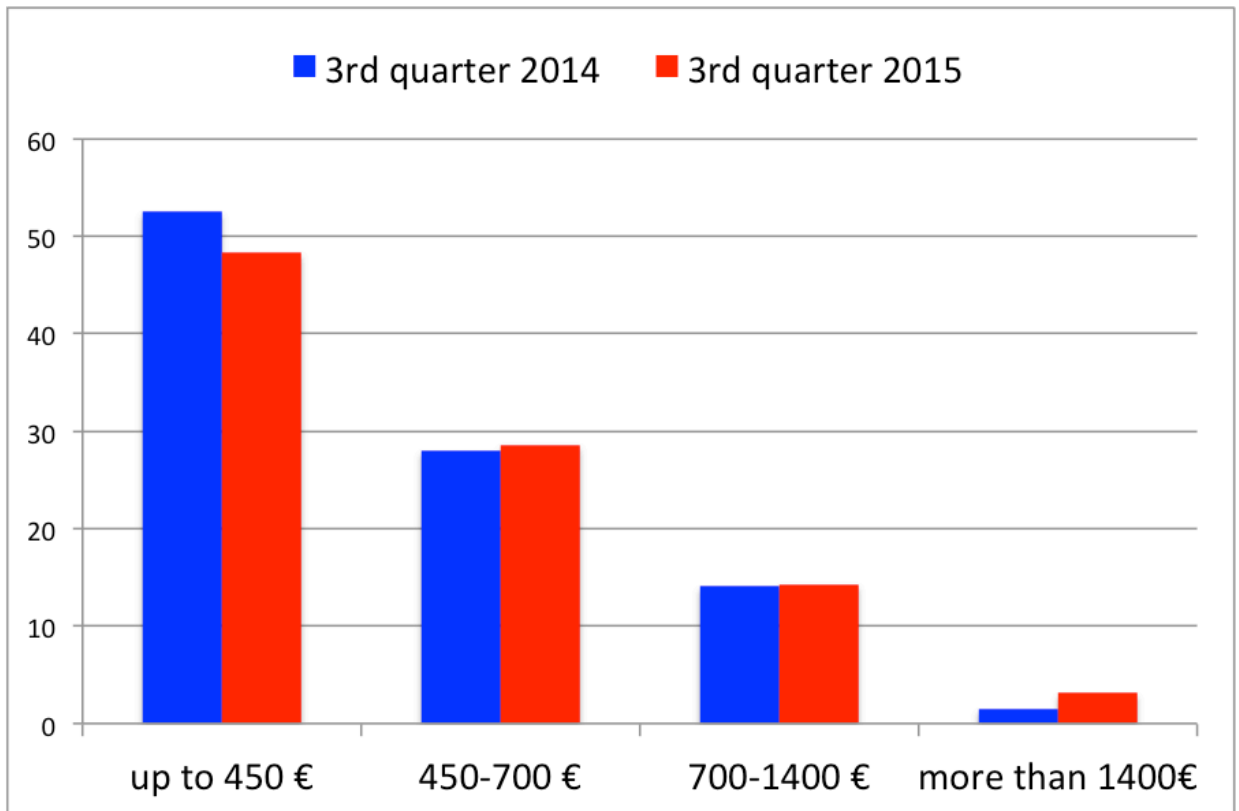


Figure 25: Wages segmentation years 2014 and 2015. Author's original.

These data were taken for people between 15-74 years. Approximately, this is range of ages that the author is interested in. People with an income of less than 450 € can be ignored, because it is people that can't afford this product. These are roughly 50% of the people in the considered ages. From people with an income between 450 and 700 euros only half of them will be considered, because not everybody in this group is going to spend his money in a bike under any case.

³⁰ <http://www.baltic-course.com/eng/analytics/?doc=112842>

There are a 28% of people in that segment, a 14% of people with incomes between 450 and 700 euros are potential customers.

On one hand, 60% of the Latvian population is aged from 16 till 55 years³¹.

Also it is determined that the interesting customers are all the people with incomes of more than 700 euros per month, plus half of the people that has incomes between 450 and 700 euros.

On the other hand, in a marketing research it is very important to have in mind a concept called “Market Penetration”.

The initial potential customers are only the relevant market population. From there, an estimation of how many people use bikes can be done, for instance, three times per week.

The number of potential customers can be estimated in the following way:

$0,6$ (percentage in the interesting ages) \times $2.000.000$ (people in Latvia) \times $0,3$ (people with enough incomes) \times $0,1$ (market penetration) = 36.000 potential target customers.

Although the intention and companies vision for this wheel is to change the car on behalf of a bike, it’s not that easy to change the lifestyle of people too fast. People don’t see this wheel yet as a car substitute, so the competing markets are all bicycle and electric bicycle related, as well as motorcycles or mopeds.

So, sticking to the idea that there is a target market of 36.000 habitants more or less, this takes us to another concept; the **market value**.

Estimations are being done, by multiplying the actual market size (now 36.000 people) with the price of the product (949 US dollars + 100 US dollar for taxes and fees for selling out of the United States boundaries). That makes the value of the market worth around 36 million euros (by having in mind also the exchange currency). Respectful quantities for a small country like Latvia, although the numbers and the math are not very accurate.

The theory tells us the market has a size of 10.000 people although it has been estimated mathematically that the market size is 36.000 people. That means either that the author is being too optimistic with his vision of the potential customers or

³¹ <http://www.csb.gov.lv/en/notikumi/age-structure-population-latvia-26908.html>

either the author needs to segment in other ways the market to make the final resolution more accurate.

4.3 PORTERS FIVE FORCES

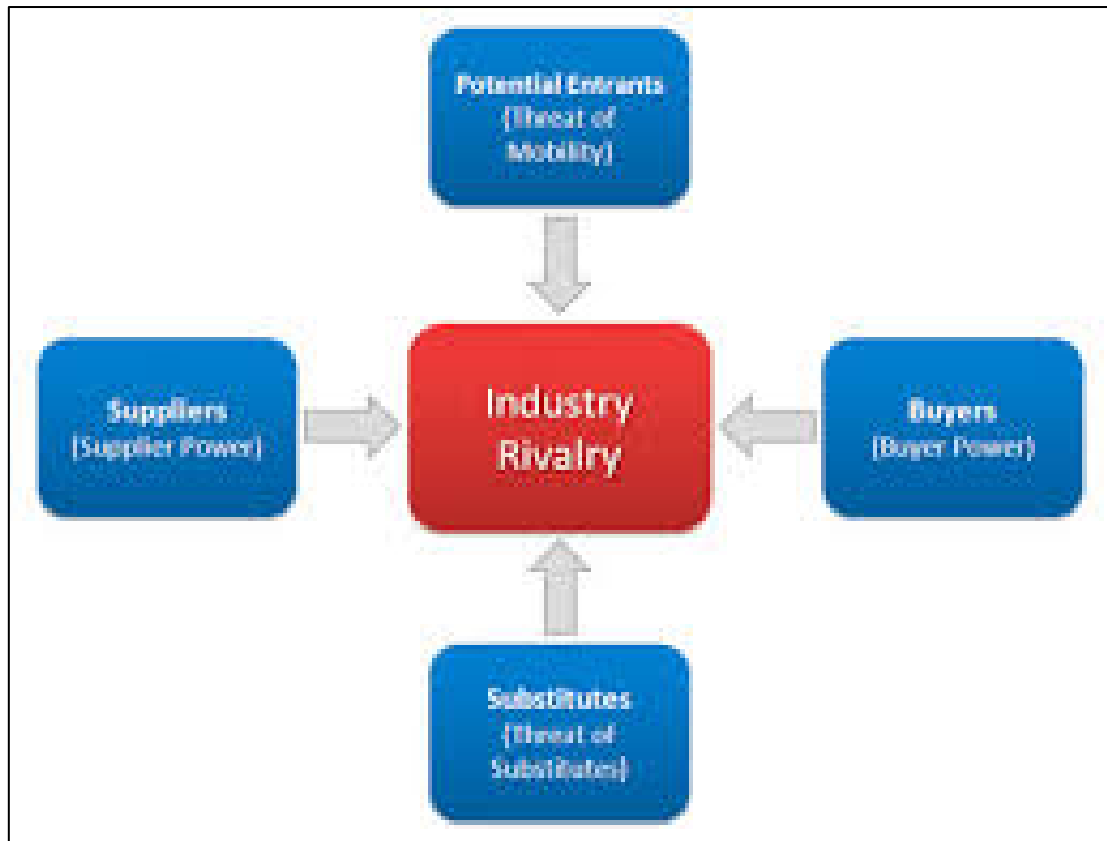


Figure 26: Porter's Five Forces.

Porter's five forces analysis is a framework that challenges to analyse the level of competition within an industry and business strategy development. It pulls upon industrial organization (IO) economics to develop five forces that determine the competitive intensity and therefore attractiveness of an Industry. Attractiveness in this context refers to the overall industry profitability. If the macro environment was analysed before, this forces attempt to analyse the microenvironment and all the facts that surround closely our business.

Porter's five forces include - three forces from 'horizontal' competition: the threat of substitute products or services, the threat of established rivals, and the threat of new entrants; and two forces from 'vertical' competition: the bargaining power of suppliers and the bargaining power of customers.

All these issues will be treated now for the case of our Copenhagen Wheel to help us decide if the product is going to be well accepted in the analysed market. It is nothing but a decision making tool.

4.3.1 HORIZONTAL COMPETITION

Threat of established products → it is needed to analyse carefully first who are the competitors, since the product is an innovative product and there is no market for it in Latvia. Although the intention and will of the manufacturing company is to achieve the Copenhagen Wheel to compete with cars, the reality is still different. The Copenhagen Wheel could have as competitors the electric bikes and in an optimistic point of view mopeds and motorcycles of low power, since it can only cover medium-low distances at moderate speed with this wheel. Speaking in urban areas exclusively the wheel can compete with cars, but there is still little people that rejects to have a car to but a bicycle. So, a car and this product could be complimentary but not substitutive products. The public transportation like tram, bus or trolley-bus could be considered substitutive products but, although there is people that prefer to take this kind of transportation instead of the bike, it is not considered in the same range of products or services cause the author is talking about people who consider to buy a bike, electric bike or motorcycle.

The threat of substitutive products → There are more and more companies creating electric bikes. Those are considered competitors so it is important to have an eye upon them and don't let them enter the market strongly or if they are already in the market don't let them gain field or developing fast. The advantage over the electric bikes is still big, price and design run a lot in the wheel's favour.

If the price is a matter, then people will choose normal bikes to use in the city, place where this product is more interesting. Also if there are some technological problems with the wheel and those are frequent and important, there is no specialized repairing shop and that will encourage the use of a normal bike instead of one with the Copenhagen Wheel.

The threat of new entrants → the threat of new entrants is low. It is a high technological product and the advanced development of the existing

companies takes back the possibility of the appearance of new similar products (since it is a very specific product).

The threat of having new products with similar characteristics in the market is already on in this case. The Copenhagen Wheel and his founders or creators already have found similar products in the market and direct competition, like the company *Flykit*, which has developed a comparable wheel. It is important to be the first company to enter a new market.

The Copenhagen Wheel has been pioneer in his field and that is always a positive point. Anyways, if you want to have success in a new country and there exist a risk of new products entering the market, it is important to have a good distribution channel, make good publicity and always have in mind the pricing of the product, because if there are similar products the wheel needs to be competent in prices too, since people want the product itself and there is no need for a necessary brand or company.

It is possible to have a higher price if the author creates a strong image of its company, for instance. But even this requires a high investment in marketing strategies and publicity.

4.3.2 VERTICAL COMPETITION

Bargaining power of suppliers → the Copenhagen Wheel is, as it was said before, a high technological product. Because of that, the number of suppliers and partners is very big (more than 100). Many of them produce custom parts to fit within the unique form factor of the Copenhagen Wheel. Some of these components require several years of development. As a result, the author depends on suppliers and their ability to scale their manufacturing process to high volumes.

Superpedestrian (the manufacturer company of the wheel) places very high requirements on the quality of the Wheel's components, a commitment that they will not compromise. They have been facing difficulty in finding sufficient supply that meets their specifications for several parts within the Wheel and they are facing challenges in ramping up production at their assembly facility.

As a result, they are ramping up a new production line in the US and they are ensuring the supply of some of the Wheel's internal components in this way.

Bargaining power of customers → the Copenhagen Wheel is in a phase of pre-order of the wheel, which means that people have to pay now, but the wheel is still in prototype and the purchases will not yet be sent. When the day comes to the company to sell the product, they have to be very careful with the total and perfect working of the product.

That is why they are being careful with the prototype; they want it to be a quality product, which means all the importance leans on the customer. They know customers are powerful and critical over their product and they need it to work perfect and according to the quality measure.

5. SWOT ANALYSIS

Another tool used in this marketing plan is the SWOT analysis. Where the author will be identifying the strengths, weaknesses, opportunities and threats of our product in a specific market. Specifically, SWOT is a basic, straightforward model that assesses what our product is good and bad for, as well as its potential opportunities and threats. The method of SWOT analysis is to take the information from an environmental analysis and separate it into internal (strengths and weaknesses) and external issues (opportunities and threats). Once this is completed, our SWOT analysis will determine what may assist us in accomplishing our objectives of introducing the Copenhagen Wheel in Latvia, and what obstacles must be overcome or minimized to achieve desired results.

5.1 INTERNAL FACTORS

5.1.1 STRENGTHS

In this internal factor analysis the author will examine which are the more powerful factors that determine that the Copenhagen Wheel will be well accepted in Latvia.

- The main advantage our product has is that it is an environmental sustainable product, which aims vision into the future revolutionizing the concept of biking and transporting.
- Although there are some similar products, the Copenhagen Wheel is pioneer in his field. Being the first one to develop an innovative product is very important in these days when everything develops so fast.
- As it competes with electric bikes, the Copenhagen Wheel is cheaper than an average e-bike and it makes you preserve the design of your own bike since you only change the back wheel. The rest of your bike remains the same.
- Quality is the biggest concern of the company that is developing it, this is a customer oriented product, which keeps the satisfaction of the

customer. That is an important fact in a new product, which has to work perfectly because if it doesn't it will not reach the Maturity stage in the Product Life Circle and it will 'die' in the early Growing stage.

- The wheel is customizable and compatible with a big range of bicycle models.
- Together with the app created for it and the incorporated sensors, you can control the speed, the level of backup the wheel offers, the path you are taking (via GPS) and all the features described in the previous pages of the marketing plan.
- Green policies and people involvement with them are also an important fact that makes our product more likely to be introduced in the country.

5.1.2 WEAKNESSES

- The price is still too high for the average wage they have in Latvia. Remember the monthly average wage being in around 600 € and the price of the wheel 900 € (after making the currency exchange).
- The wheel is still in a prototype stage and customers have currently made a purchase without getting the object right away. There is not a specific date of release of the product and that can make customers impatient or unsatisfied.
- The incorporated electric motor makes the total weight of the wheel be higher than normal.
- Not compatible with all the types of bikes and gearshifts.
- Lack of specialized shops that could fix the bike fast in case of breakdown.

5.2 EXTERNAL FACTORS

5.2.1 OPPORTUNITIES

- The entrance of Latvia into the European Union is a good opportunity due to the importance the EU government gives to sustainable and green policies.
- The will of the Latvian society to follow and support those policies and their will to become an environmental caring civilization.
- The little but continuous growth of economic factors like the growth of wages and Gross Domestic Product (GDP), as well as the decrease of unemployment rates.
- The lack of similar products and the high price and poor design of most of the electric bicycles, our products highest competitors.
- The revival of the use of the bicycle in the capital, Riga, due to the apparition of an old bicycle maker and the good image he has created of his brand, as well as a change of culture of young people and its growing use of this mean of transport.
- The existence of numerous bicycle companies that offer bike tours and trips in Latvia.
- The progression of tourism in Latvia along with the election of the city of Riga of European Capital of Culture together with Umea in Sweden in the year 2014.

5.2.2 THREATS

- The non-acceptance of the product due to the price of it and the low incomes in average of Latvian people.

- The preferable use of public transportation in the cities because of the low price and the better infrastructure of them than the bicycle trails and communications.
- The previous existence and use of electric bikes in companies that offer bike trips that may not agree in changing the existing e-bikes for the Copenhagen Wheel.
- Possible low use of the wheel because of the climate conditions of the country and the lack of improvement of the infrastructures.

5.3 REVIEW OF THE SWOT ANALYSIS

	BENEFICIAL	DAMAGING
INTERNAL ANALYSIS	STRENGTHS	WEAKNESSES
	<ul style="list-style-type: none"> ○ Environmental sustainable product. ○ Pioneer and innovative product. ○ Cheaper and better design than a conventional e-bike. ○ Customizable wheel for the owner's bike. ○ Offers a lot of features and possibilities together with the app. 	<ul style="list-style-type: none"> ○ Relative high price. ○ Product is still a prototype and in an early stage of development and production. ○ Weight increase of the bike due to the motor. ○ Not compatible with all bike and gear models. ○ Lack of specialized shops for fixing breakdowns.
EXTERNAL ANALYSIS	OPPORTUNITIES	THREATS
	<ul style="list-style-type: none"> ○ Entrance in the EU. ○ New green and environmental sustainable policies. ○ Growth of economical factors. ○ Innovative product. ○ More bike tourism in the country. 	<ul style="list-style-type: none"> ○ Good public transportation in the country. ○ Undeveloped infrastructure and bike trials. ○ Bike companies already using e-bikes may not change them for the Copenhagen Wheel. ○ Low sales because of the climate condition.

Table 3: swot analysis.

6. MARKETING MIX

The Marketing Mix is one of the most widely concepts accepted in the discipline of marketing, therefore his analysis will be very important in order to develop our marketing strategies and tactics.

It has been defined as the controllable variables our firm puts together to satisfy target markets and achieve our objectives.³² By this definition, the marketing mix includes all elements that may potentially satisfy the consumer and over which the firm has some kind of control.

Thereby, the author will first of all, analyse the strategic objectives to later develop the strategies:

6.1 MARKETING OBJECTIVES

Once the author has also understood the strengths and weaknesses and he has analysed the environment in which he is operating and working in, he has to set its marketing objectives in the first place.

Objectives should always be **SMART**³³:

- **Specific** → for example, he might set an objective of getting one hundred privet new customers in Riga.
- **Measurable** → whatever the objective is, he needs to be able to check whether if it has been reached or not when he reviews the plan.
- **Achievable** → you must have the resources you need to achieve the objective. The key resources are usually people and money.
- **Realistic** → all the objectives need to be logic and they cannot look for a bigger range that is not possible to reach.
- **Time-bound** → a deadline for achieving the objective should be set. For instance, the author might aim to get one hundred new customers within the next 6 months.

³² *“Service Quality: Multidisciplinary and Multinational Perspectives”* by Stephen Walter Brown.

³³ *“Notes from the Marketing subject in RTU”* by Aigars Laizans.

Thus, the author is going to set the objectives, having in mind all these aspects that they must have. The marketing goals are the following ones:

1. Enter the market of similar products having the bigger market share. That means that the author wants to be leader in the electric motor wheels, being more important than any other direct competitor that produces the same product as he does.
2. Within the first two years the author wants to have sold a number of wheels corresponding to a ten per cent of the total potential market. That means to have sold at least 1000 wheels in the first two years out of the at least 10.000 possible sales (the real market size) that was estimated in previous points.
3. Expansion in Latvia through the opening of more shops and reaching a bigger market, as well as the expansion to the Baltic States (Estonia and Lithuania) in the upcoming years, being present in the life of the people and trying to enter businesses like bike rentals, bike tours and delivery means of transport for small companies (like restaurants).
4. Be selling more Copenhagen Wheels than electric bikes in a five years time in the country of Latvia. This goal might be possible if the product is well accepted and it works well along the first years of use. The product's price is lower and therefore there is a big chance of a change of the e-bike to our Copenhagen Wheel.
5. In a time lapse of ten years, be selling more Copenhagen Wheels than normal bikes in the country of Latvia, when all the conditions are better in the country (as it is possible to see in the economic part of our PESTEL as well as in the increasing quality of the infrastructures and conditions for bikers) and the need of more sustainable policies make people choose first an electric powered bike than a car, which would low the sells of normal bikes in behalf of the electric options.
6. Having achieved a return of the initial investment within the first five years, including the potential rent of the shop, the webpage maintenance and the publicity and distribution costs.

6.2 THE 7 P's OF MARKETING (MARKETING TACTICS)³⁴

The author will make use of these broad categories of variables as an organizing concept both in planning the marketing strategies to make the most profit of the Copenhagen Wheel and formulating implementation plans for that same reason and achieve the specific marketing objectives, enumerated before.

Traditionally, there were 4 P's:

- Product.
- Place.
- Price.
- Promotion.



But to complete the 7 P's the author will make use of one of the most modern concepts including therefore:

- People.
- Processes.
- Physical evidence.

³⁴ <http://marketingiseasynew.blogspot.com/2013/01/las-7-ps-del-marketing.html>



Figure 27: 7 P's

6.2.1 PRODUCT

The Product should fit the task consumers want it for, it should work and it should be what the consumers are expecting to get.

In other words, you should find out the needs of the people and then come up with a product that satisfies those needs.

In this case, as in a very big number of cases, there is already an existing product and the author is trying to find a market for it. Right now, the country of Latvia. The author needs, therefore, to increase the need of his product, convincing people that his alternative is the better one. It will be discussed later, how to manage this situation, in the part dedicated to promotion.



The author has already spoken and discussed about the facts and characteristics that make the Republic of Latvia a good market and a bad market for this Copenhagen Wheel by analysing the environment and the advantages and disadvantages he can find in it.

As retailers that try to introduce this wheel into the market, he cannot make any direct changes in the product, because he is not the producer or developer.

He needs to find a way to offer his customers added value to the wheel. He could think about an extra service that gives the customers a better reason to buy. For example, he can give the customer a guarantee or he can try to get enough knowledge of the product to make reparations, as well as provide for maintenance of the product and the whole bicycle.

At the same time, he could open a space in his web page to let the customers write reports of how the bike works so that new customers can be influenced by the opinion of the others.

He doesn't need to worry about bad reports because the wheel is a quality product, oriented to the customer and it should have enough guarantees to work perfectly, like the developers said it would.

He made a segmentation of the market and he also discussed all the businesses that his product can fit in. The wheel is ideal for restaurants that offer food delivery, it could serve to post offices in the delivering of post and it would be a great product for companies that offer bike tours and trips, a part from the private and individual consumers that could purchase the Copenhagen Wheel.

6.2.1.1 THE FIVE LEVELS OF OUR PRODUCT

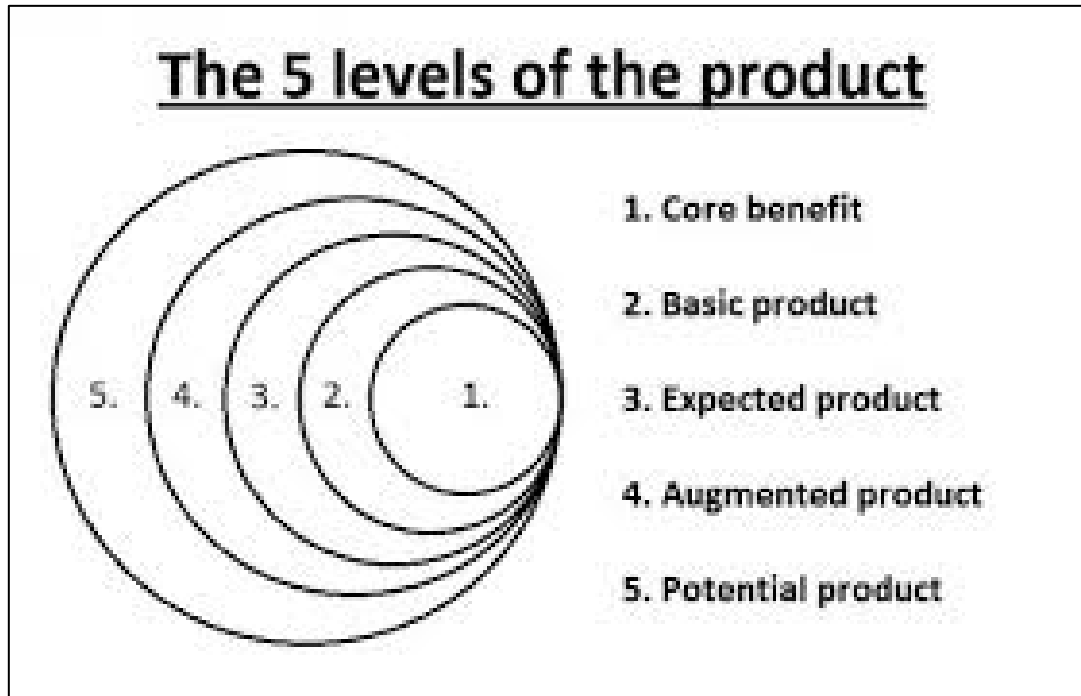


Figure 28: Five levels of the product.

1. **Core benefit** → it is what the customer buys. The customer buys us an electric motorized wheel.
2. **Basic Product** → this is the level which satisfies a need or a want. In our case this basic need or want is related to a mean of transportation, either for fun or sportive purposes or for duty.
3. **Expected product** → these are the attributes and conditions that come along with the purchase of our Copenhagen Wheel. These would be an eco-friendly and an environmental sustainable mean of transport.
4. **Augmented or offered product** → this is all what exceeds the customer's expectations. The achievement of Riga to become a more sustainable city as a whole, as well as the potential success in the environmental objectives that the new "green" policies that exist in Latvia.

5. **Potential product** → that last level means the future wants of the product, which can go along with the vision of the company that develops it. It is nothing else than replace cars for bikes in the cities and create a way of life in the cities that respects the environment as well as the population itself.

6.2.2 PLACE

The product must be available in the right place, at the right time and in the right quantity, while keeping storage, inventory and distribution costs to an acceptable level.

Our first concern as a retailer is to decide where to sell our product. There are two principal choices:

1. To sell in a retail store; that means opening a physical store or shop.
2. To sell in an online store; which means only selling via Internet. Ecommerce.

6.2.2.1 PRO'S AND CONS OF SELLING IN RETAIL STORE VS. ONLINE STORE

With the popularity of online shopping, theoretically, the author could avoid opening a storefront. That does not mean, however, that he doesn't have no longer a need for retail store or that his business ideas will work better online. If he is looking forward to open a store, he must consider his product, the consumers and his overall business goals when deciding whether a retail storefront or online store will work best for his small business.

- **COSTS**

Most important of all is to be consequent with the strategic objectives and the goals. The author has to choose the options that make his business economically possible.

In general, opening a business as an online store is much cheaper than a retail storefront. It could happen that he cannot afford to open a store cause the costs are

too high and he has to go for the online choice. Depending on his choice the delivering costs can vary as well. With an online shop he has to make this delivery to the customer either by himself, or using a third party. If he uses a retail store he could make the transaction in person and there would be less delivery costs.

Unlike a retail storefront, there is no rent to pay with the online option or other utility bills directly related to the store, except for web hosting and technical support. You do not have to decorate the inside of the store nor putting furniture. Since you can manage the work yourself, there is no need to hire additional employees that continuously stay at the store. With an online store, costs are directly related to the website, shipping and accepting online payments. The author must pay for the desired domain name and may pay someone to develop and maintain the website and e-commerce platform, which can be expensive, but is less expensive, however, than opening a retail storefront.

- **INVENTORY**

A study completed by the California Institute of Technology³⁵ found out that consumers pay significantly more for products they can view or try in person. For high-value items such as designer clothing, antiques, jewellery, furniture and cars, a retail storefront will appeal more to customers and generate a higher profit margin on individual items, reveals these investigations. As this product has a high price, at least for Latvian conditions (as it was analysed before) it is considered that sales would benefit and increase in this way. The only problem the author has to solve is to see if the price of opening such a retail store would increase too much the cost.

In addition to the price of items that can be sold, the number of items you wish to sell has to be considered. A retail storefront will perform better for a business that sells a select amount of products (like ours), while an online store may work better for a business that carries an extensive selection.

³⁵ <https://www.caltech.edu/news/consumers-will-pay-more-goods-they-can-touch-caltech-researchers-say-1650>

- **MARKETING**

Building a customer base is one of the most-essential components of starting a successful retail business, online or offline. With a retail store, our potential customer base is limited to the surrounding area, for instance the centre of Riga. On the other hand, selling a product in person is a way to create customer loyalty, which is also a fact to have in mind.

Online, the customer base is huge. Once you open up a retail store, your options for attracting new customers are limited. You are confined to the retail space that you chose and changing logos, signs, shelving and the overall marketing strategy can be expensive. When you work in the ecommerce way, changing signs and logos takes mere minutes and you can quickly and easily change the products that you sell and most of all the way you present them on your website. Our Copenhagen Wheel will always be the same but the appearance and presentation of it could be more easily changed if the author uses an online store only.

6.2.2.2 CONCLUSION

Having discussed the pro's and cons of both ways of selling, it is possible to come to the conclusion that it would be necessary to open a website. In that website, there will be the opportunity to purchase the Copenhagen Wheel online. The author will give all the information available of the wheel and he will also try to promote it in this website. He won't only talk about the characteristics or the features the product has but he will try to convince the customer that this is the best option for him.

In this online domain, the physical places where they can buy the product in person will be shown and there will be told if there is a discount if the purchase is made directly at the shop.

The author reached, therefore, the idea of open a retail store as well. This physical shop will also work as a showroom. There will be a little space for retailing wheels. He will keep the entire inventory in a database. The rest of the space in the shop is going to be like an exhibition of the wheel. All the explanation of the wheel and its history and of courses some trial models. The customer will be able, only in this shop, to have the chance of trying the wheel. One of the staff members or employees will offer the potential customer the possibility to go with him for a ride in the outside. This part is essential, because that is how the customer will experience all the feeling that riding this wheel give and so the bigger chance to make the purchase happen.

The author will also study the possibility to open little spaces in bigger shops like Elkor, which is specialized in all kind of sports including biking. The problem resides precisely in the bigness of these kinds of shops. They can easily become retailers too and that would mean not only that the author won't have that space in their room anymore, that would also mean more competitors. That is why he will choose the smaller bike shops. For instance, the firm Erenpreiss has renovated his old business. They now sell quality and designer bikes with a high influence of the past designs that made them famous.³⁶ A shop like this would be an interesting option for open a space in it for the wheel. They have the good critics and everyone in Latvia knows them. This enterprise is not a direct competitor because they are not in the e-bike business so both of the businesses can complement each other without problems.

In conclusion, at the beginning the author will own a web space for online promotion and purchase, a showroom, which is the only place to try the Copenhagen Wheel and he will study the option of renting a little space in the Erenpreiss shop in Terbatas iela, in Riga, as a way of promote the firm and reach a bigger range of customers.

This last option as a way to change the policy if things do not go well when the business is getting started and sells are low.

6.2.3 PRICE

Pricing is the only element of the marketing mix that generates revenue for us. Everything else represents a cost.

Marketing mix Price must support the other elements of the marketing mix. Getting Pricing correct can be tricky; pricing must reflect supply and demand relationship and Pricing a product too high or too low could mean a loss of sales for the business.

A product is only worth what customers are prepared to pay for it. The price needs to be competitive. Since, at least at the beginning the author and the firm is the only one selling the wheel, he can choose a price without looking to direct competitors. But there are many other factors to be considered.

Pricing strategies should take into account the following factors:

³⁶ <http://www.forbes.com/sites/amyguttman/2014/12/02/beloved-bicycle-company-gets-rebirth/3/#5b77092a67c5>

- Fixed and variable costs.
- Competition.
- Company objectives.
- Proposed positioning strategies.
- Target group and willingness to pay.

Small businesses, like our firm, can compete with larger rivals by offering a more personal service, value-adds or better value for money. People could ask for the wheel to the manufacturer but it is an American company and the personal service is almost non-existing.

That is where the author has to take advantage of it. He has to offer an added value to the customer and fix the price correct so that they are willing to pay an “extra” price for it. For example, a repairing or maintaining service.

When considering this price the author has to fix it is important to put himself in the customer’s perspective. The more he charges the more value is expected from the customer in return. He has to show that he is selling a high quality product covering all the customer’s expectations. The packaging, environment, promotional materials, website, letterheads, invoices, etc. All has to show the high quality of the Copenhagen Wheel and all has to work accorded to the expectations.

The author also needs to have in mind that new customers are more difficult to catch than existing ones. The existing customers are generally less sensitive to the price. Hereby, he needs to be extra carefully with the new ones and offer some kind of discount or entrance promotion that convinces them to buy the wheel. The promotion strategies will be responsible to make this happen.

There are a few pricing strategies that he could adopt. He will try to find out which one fits better to his business and to the marketing objectives he has proposed.

He could consider the following examples for different strategies that could fit into the situation and the kind of product:

- **Penetration pricing** → Here he sets a low price to increase sales and market share. Once the market share has been captured he may increase the price. It could be a good option to reach a bigger market share.
- **Skimming pricing** → He sets an initial high price and then, slowly, he lowers it to make the product available to a wider market. The objective is to skim profits of the market layer-by-layer and segment-to-segment. Not a bad option because he can throw out the wheel as a new and exclusive product with a high price (the return would be higher too) and then if it works out he skims the price to widen the market. There is the problem that he doesn't reach the desired number of people because of that high price.
- **Premium pricing** → The price set is high to reflect the exclusiveness of the product. Very high price and only a few people would buy it although the revenue would be the highest.
- **Optional pricing** → He sells optional extras along with the product to maximize its turnover. Difficult because he is not the manufacturers but it is true that he can add other bike accessories or services along with the product itself.
- **Cost based pricing** → this strategy sets the price of the product by adding an additional amount (mark up) to the production costs. The mark up is based on how much profit he wants to make. Cost based pricing ensures that the costs are covered but it could place the company at a competitive disadvantage as it fails to consider consumer demand for example.
- **Psychological pricing** → The seller here will consider the psychology of price and the positioning of price within the market place. For instance, he can choose to fix the price of the wheel to 1199 euros. It is one euro away from being 1200 euros but people will still talk about 1100 euros.

Among all these options the author should choose the ones who fit with its objectives.

Some of the priority objectives are to be the market leader in electric wheels and get a 10% of the total real market within the first two years, which means to sell 1000 wheels. Also, it was pointed out as an objective the return of the investment within the first five years of existence and to sell more Copenhagen Wheels than other common e-bikes in a shorter term and more than usual bikes in a longer period of time.

6.2.3.1 CONCLUSION

Having in mind the objectives the author will choose the following pricing strategies. To achieve them he will decide to set a mix of the cost based strategy, which allows him to keep the costs controlled by covering them with the benefits of selling the wheels and the penetration pricing strategy which helps him to gain a considerable market share and at the same time when he obtains these market share he will increase the prices slowly to have more benefits per wheel sold. All this combined, if possible, with a psychological type of price as it was discussed before.

The idea is to set a price that respond to these two conditions. Not having losses considering the costs the author has and be having a market share that reaches 1000 customers within the first two years. The idea is not to fix a price already but think about the strategy and tactics that are going to be followed.

6.2.4 PROMOTION

This element of the marketing mix consists of showing our company communicates the customers and the rest of stakeholders what it does and what it offers to them.

It includes branding, advertising, PR, corporate identity, social media outreach, sales management, special offers and exhibitions. Promotion must gain attention, be appealing, send a consistent message and, above all, give the customer a reason to choose this product rather than someone else's.

A lot of times, the first opportunity of communication is the website. Here, there is only one opportunity to make a first good impression. Therefore, the author needs to be careful with the interface and the usability and mostly the whole image of it. It has to be fresh and up to date in any moment.

He needs to make sure he communicates the benefits o the Copenhagen Wheel and not only the features it has.

He needs to use the channels, which reaches to the target customers. The author can try a lot of different ways to do it. From the traditional printed ads or posters in the streets, which have to content a brief but clear image and message of the product till the promotion in social medias such as Facebook, where every modern business can reach a wide range of different customers.

A very important part in the promotion element is to promote as well as your staff or employees. If the author is able to communicate the knowledge to them, it will be easier that they pass it along to the customers. The message will be clearer to them and the objectives will be easier to achieve.

As the product is a new one and a technological one, it is important to organize trials in expositions to let people know the wheel and get a contact with it. In expensive products it is very important to have this direct contact (product – customer) to get better sales. All this, along with the trials that will be offered at the small retail shop or showroom.

As it is a new product, all the customers are new ones. To get a new customer it is important that the author makes special offers to him. It is another way of promotion. He can do that with temporary lower prices or he can make gifts with the purchase of the product.

6.2.4.1 PUBLIC RELATIONS

One of the most important parts for a small business like ours is to take care of our Public Relation or PRs. The author will, first of all, analyse who are the stakeholders he needs to take care of and make these good relations with. One way to establish who are the stakeholders and how important they are is to make a Stakeholder Map.

The author will establish the person, persons or organizations that have an interest, effect and can be affected by what the organization does.

This highlights why companies need to be able to identify their stakeholders and also judge the level of power they hold to affect the decisions and outcomes of the organization.

The author will do first a general Stakeholder Map with his firm in the middle and later he will classify them in three categories: Internal, External and Connected stakeholders.

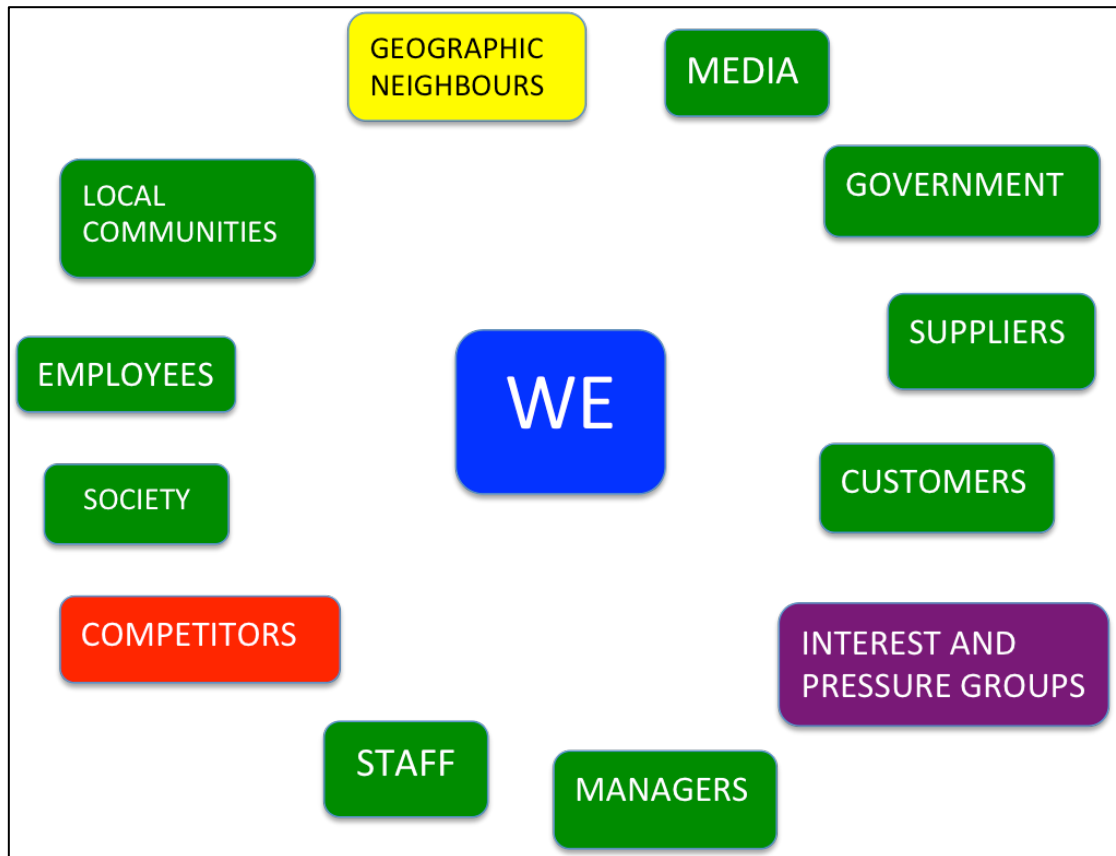


Figure 29: Stakeholder map.

6.2.4.2 INTERNAL STAKEHOLDERS

Internal Stakeholders are usually members of the organization. This category can include:

- **Directors** → that is the owner of the firm or someone elected by the author. In this case and at the beginning when this is still a small business he will be owner and creator as well as director.
- **Managers** → those are responsible for the different areas or departments of the firm. For example, distribution or public relations departments. They have total responsibility over the actions taken but need in last instance the agreement of the owner.

- **Employees** → working for the enterprise in the shop as sellers. The author also considers as employees an informatics specialist who takes care of the creation, control and update of the website.

6.2.4.3 CONNECTED STAKEHOLDERS

They are in between of the external and internal stakeholders. Also called primary stakeholders, these are all the stakeholders that have an economic or contractual relationship with the organization:

- **Customers** → the most important stakeholders for every company ours included. All depends on how well the author is capable to convince them to buy the wheel.
- **Distributors** → including the suppliers, these are all the people or external firms involved in taking the product from the manufacturer company to this enterprise and all the people or external firms involved in deliver the wheel to the customers. As he gives the customer the chance to buy in the Internet he needs to have a mean of delivery. At the beginning the firm will be small but, eventually, it will be needed to deliver the product to all Latvia. Thereby, the author will decide how he sends or delivers the product to the customer depending on how far he lives from the shop, which will be located in Riga. If it is close enough to not have a big transportation cost he can do it by himself.

On the other hand, if the customers live farther away he needs to consider the option of delivering with an external company.

- **Competitors** → other bike shops, electric bikes, other wheels like this company. The author needs to set barriers between his business and others and differentiate himself clearly. Depending on the way the customers develop themselves and how customers react to the different options, the author needs to have different strategies against them, whether some more aggressive and others more coordinated and complemented.

6.2.4.4 EXTERNAL STAKEHOLDERS

External or secondary stakeholders are those who are not directly connected to the organization. These stakeholders will have an interest in the organizations activities or they might be impacted by the organizations activities in some way.

The secondary stakeholders will be the following ones:

- **Government** → the parliament or *Saeima* will affect our firm by creating policies that affects our business, like green policies that could encourage the use of the bike or the opposite, approve policies or laws that go in favour of other means of transport.
- **Geographic neighbours** → all the shops nearby and the people leaving in the neighbourhood. It can affect the company in terms of security or it can affect in the way that there are more similar shops and there is a perfect competition.
- **Media** → the author needs to know how to take advantage from them to promote himself in the best way possible. As it was discussed before, radio, cinemas and printed adverts will be the first choices.
- **Society and local communities** → society can see the company like a firm that cares for Latvia's welfare and his environment, so it will be taking care of this stakeholder only by doing the business better. As well, local communities will probably like the fact that the mission behind the business is to reduce the amount of car in the cities and encourage the bike transport.

6.2.4.4 CONCLUSION

For our concrete product, medias like radios in Latvia will be chosen to promote the company. The author needs to be able, in a few words, to explain what the product is and which benefits it has. For a visual mean of advertising the author could choose TV but it is more intelligent to use the adverts at the cinema. The reasons why are logical. People who go to the cinema are usually people of well

fare who have, supposedly, enough money to buy this wheel. So it is a way of promotion that brings the advert directly to the target customers.

More on, it is a good way to show visually how it works without spending the amount of money it would be required to put our advert on TV.

Otherwise, the author can easily make an impact on the public by showing the benefits and the smoothness of the product, so that everyone in the hall wants to have one.

All that without forgetting the importance of Public Relation that was discussed before, which the author needs to have present at all time. The more stakeholders he takes in consideration and please, the better will the business grow.

6.2.5 PEOPLE

Everyone who has some kind of contact with the customers will make an impression. Many customers cannot separate the product or service from the selling member who provides it, so the people will have a profound effect, positive or negative, on the customer satisfaction.

Knowing that people buy from people that they like, skills and appearance of all the staff needs to be first class. People play an important part in the customer relationship.

Therefore, the author needs to be careful and train his crew, which at the beginning will be very limited in this case (our shop won't be big), to make them work with well-motivated and with a right attitude. The reputation of the brand rests in the image they show.

Moreover, in the age of social media, every employee can potentially reach a mass audience. The author can formulate a policy for online interaction and make sure everyone stays on-message. For instance, he could make available a contact in his webpage with an email direction or a telephone that helps with problems and doubts the customers may have. If he wants this to work well he needs to be quick and precise in his answers.

The author can also open a space for comments in his web page. A satisfied customer can be a great messenger to other potential customers. That is the real

power of this element of the marketing mix strategy and that is why he needs to make sure he pays the attention it needs.

A part from all this, the author has other “after selling” options like give the possibility to the customer to choose if they want updates for the wheel. Via email he can give advice to the customers as a way of providing a service that gives extra value to his wheel and has the consequence of having satisfied buyers.

6.2.6 PROCESS

This element of the marketing mix is useful for services. Although a wheel is being sold, the author offers as well some services like the delivering, the payment or the maintenance of the wheel. All those processes need to be optimized to minimize the costs and maximize the benefit. Waiting times or the information giving to the buyers are some of the things he needs to take in consideration and optimize.

The aim is to keep the customers happy. They don't care about how the business runs, they only want it to work efficiently for their own benefit.



The author needs to improve these processes from the point of view of the customer. This step is very important to take in consideration because it also adds value to the product. The delivery of the service is usually done with the customer nearby so, how the service is delivered is once again part of what the consumer is paying for. The process problems that are most annoying to a customer are those that are designed for the provider's convenience, not the customer.

The most important thing about processes is that they need to have a **continuous improvement** in all of them and constantly review and control them to never get them old and have them always updated for the better satisfaction of the customer.

A process is a bunch of activities and resources that transform elements that enter in the company into outcomes that create added value to it.

A good way to represent the processes is with a process map where the different processes of the company and their relationship are shown graphically.

Among the processes there are in this company there are the following types:

- **Key processes** → those who are necessary to develop the main activity or that influence mainly in the end product or service and therefore in the customers satisfaction.
- **Strategic processes** → the ones which operate within the business and that are established by the Management division of the firm. They define the aims and goals of the company. They affect the whole firm.
- **Support processes** → those who help to develop the main processes.

Now that this is known, the author can represent the process map:

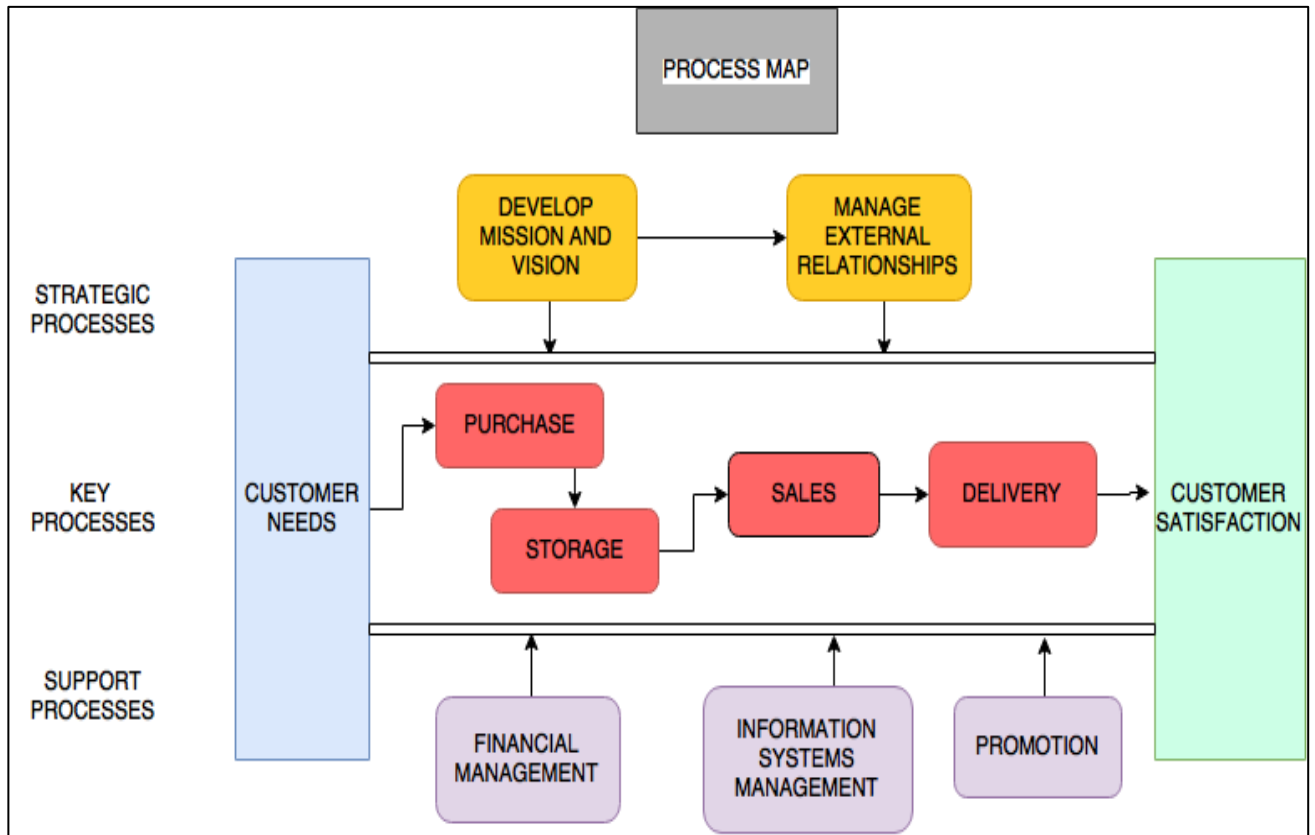


Figure 30: Process Map of our company. Author's original.

6.2.6.1 STRATEGIC PROCESSES

- **Develop mission and vision** → First step when the author thinks about creating the company. All the first level staff creates a document that will rule the behaviour as a company and will define the future objectives.

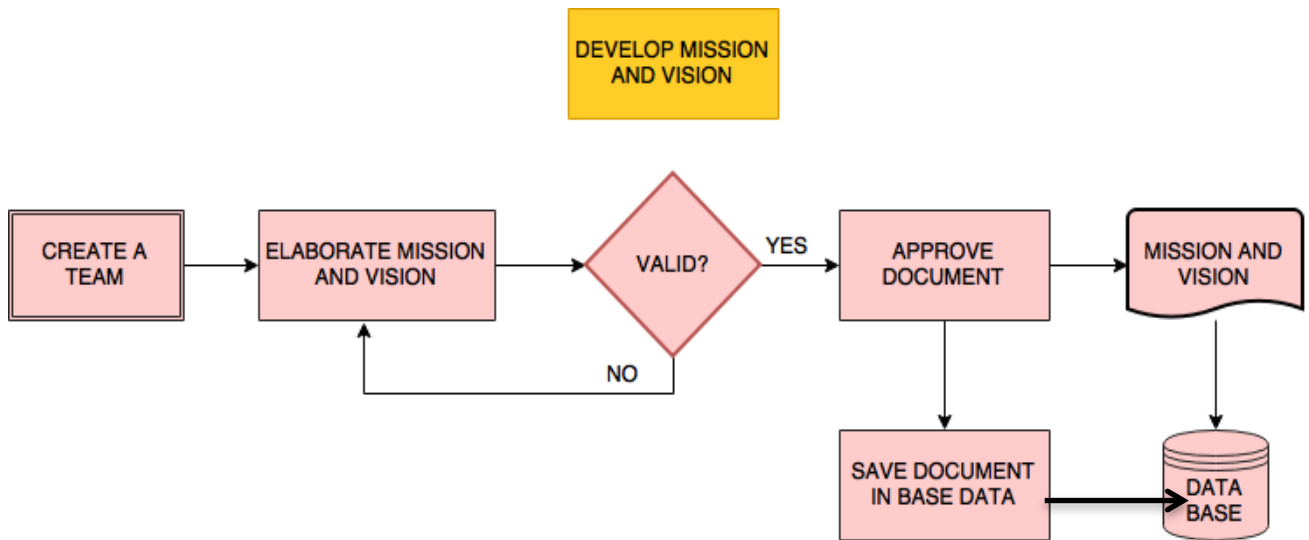


Figure 31: Mission and vision development process.

Manage external relationships → Managers need to take care of the relationship with all the main stakeholders, such as providers or the government.

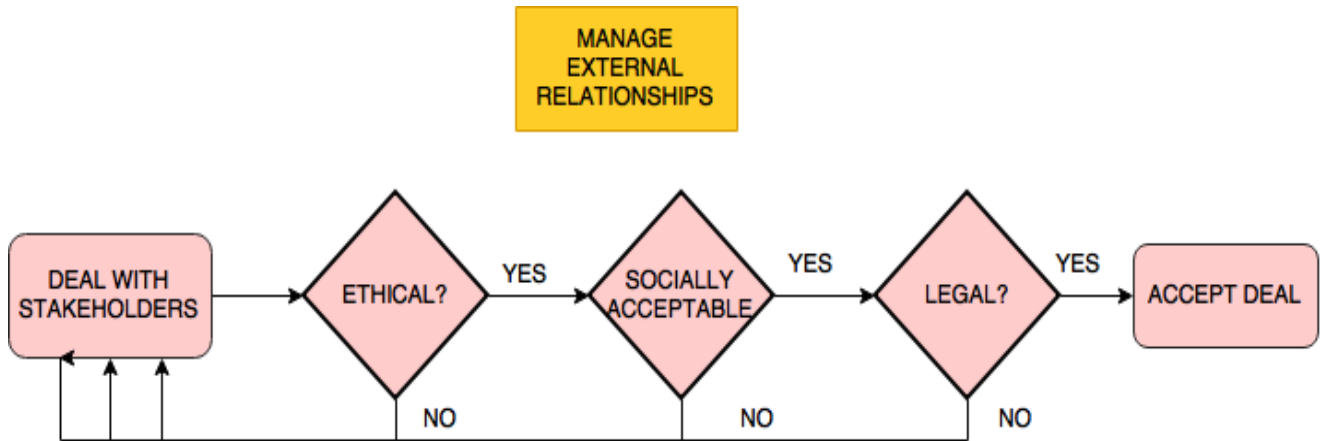


Figure 32: External relationship process. Author’s original.

6.2.6.2 KEY PROCESSES

- **Purchase** → The process in which the firm buys from the supplier his product with the aim of redistributing it in Latvia and get some benefit.

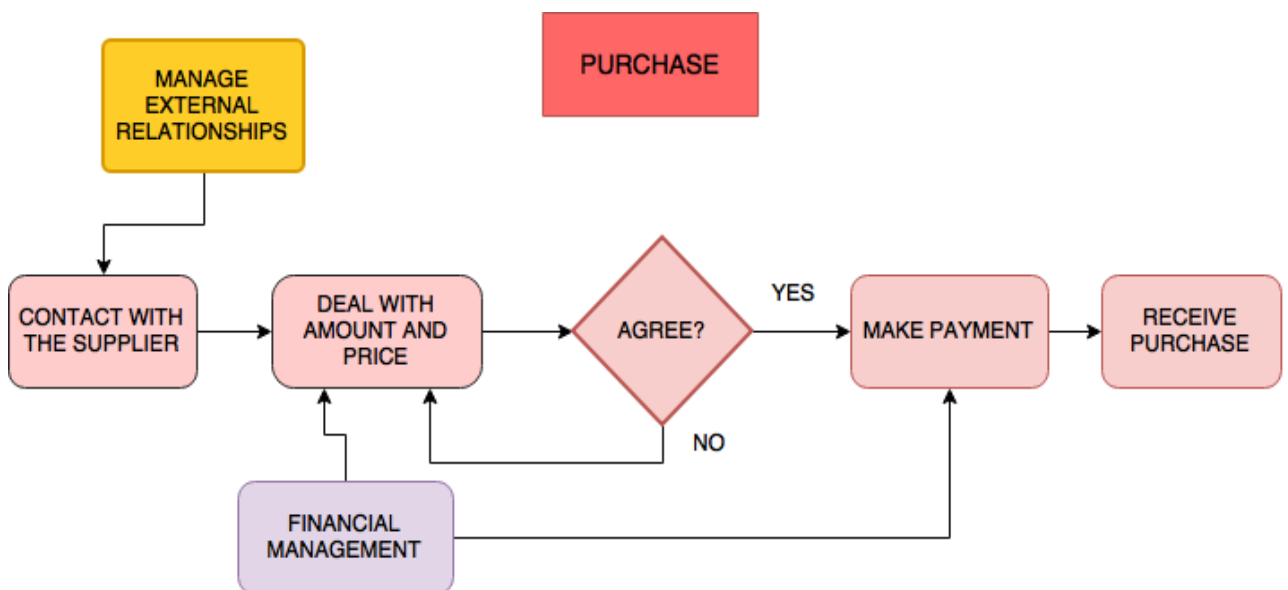


Figure 33: Purchase process. Author’s original.

- **Storage** → Process that defines the way the author keeps in storage the acquiring. He needs to have in mind, that keeping products in storage means costs. The more he keeps the more costs because he needs to insure the products among other costs of spacing.

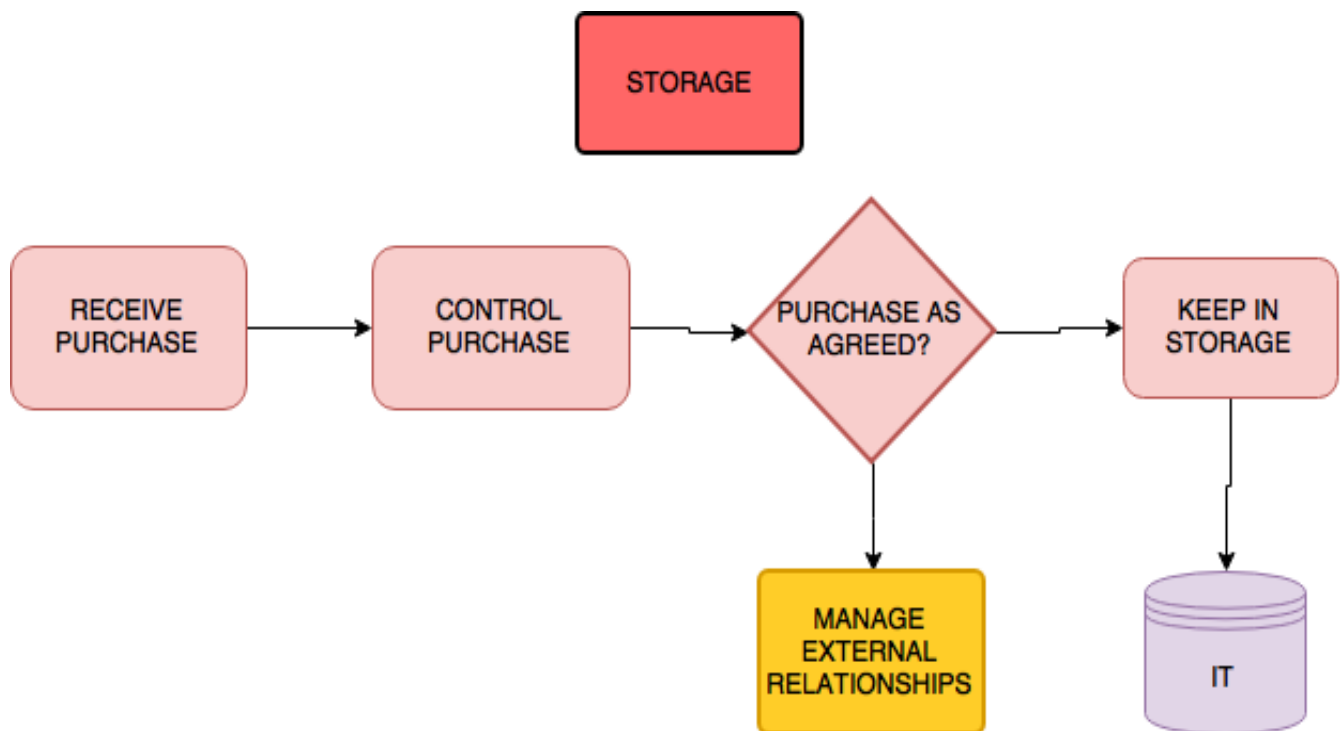


Figure 34: Storage process. Author's original.

Sales → Describes all the steps that a transaction need to make to pass the product from the firm to the customer.

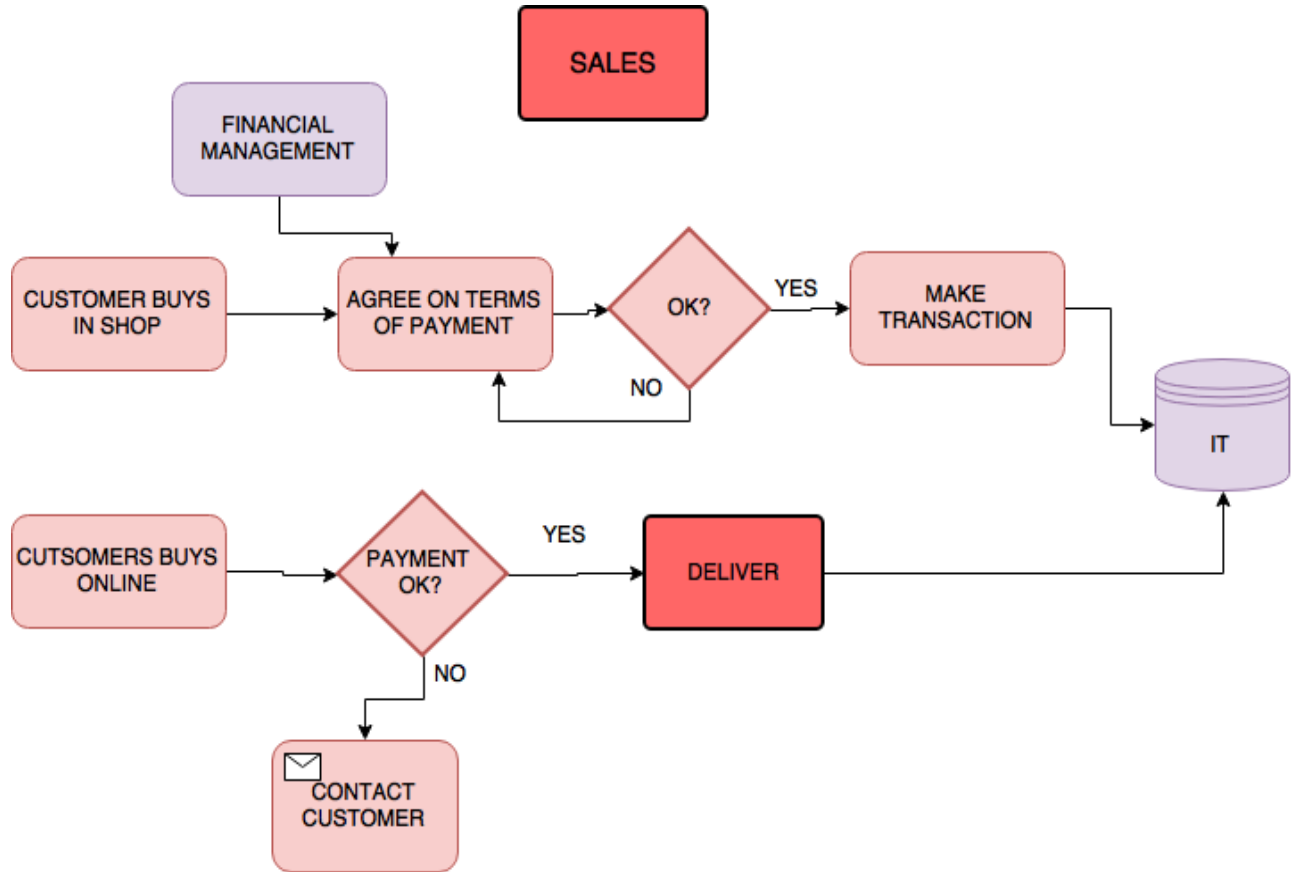


Figure 35: Sales process. Author's original.

Deliver → Process that shows the steps to make the deliver of the product to the customers.

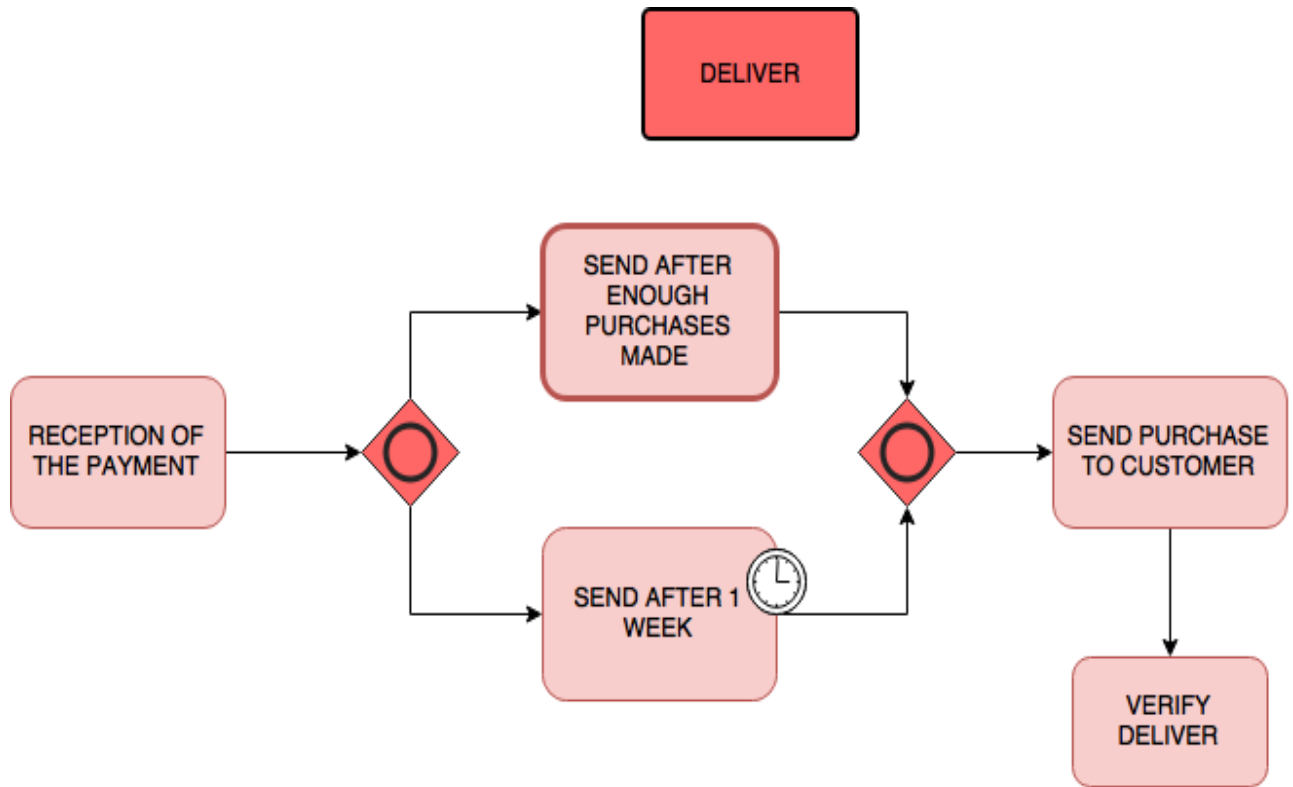


Figure 36: Deliver process. Author's original.

6.2.6.3 SUPPORT PROCESSES

- **Financial management** → Or how the firm controls the expenses, incomes and other costs of the company to make it profitable.

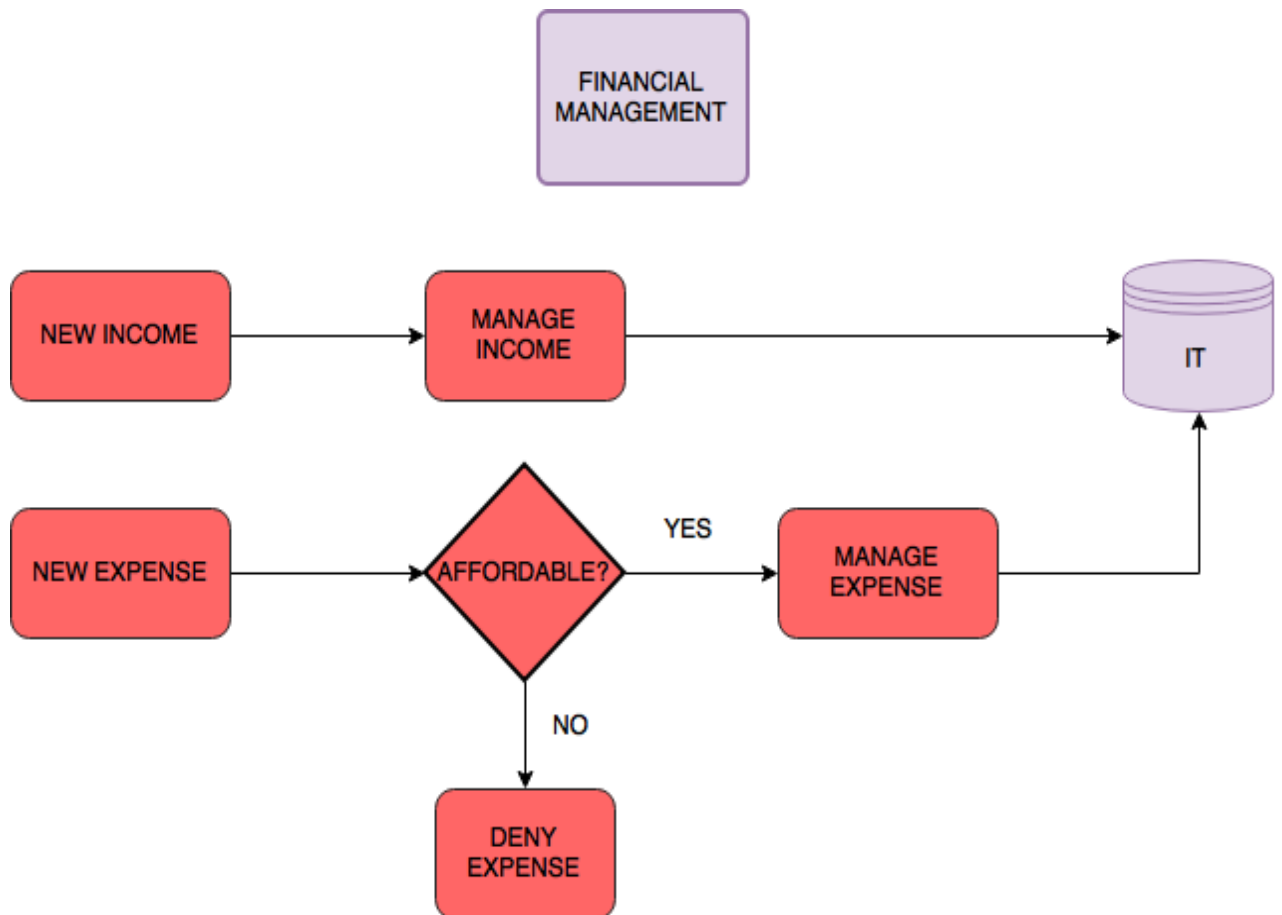


Figure 37: Financial management process. Author's original.

Information Systems Management → It consists in all the process of saving data into informatics systems to keep an efficient flow of information.

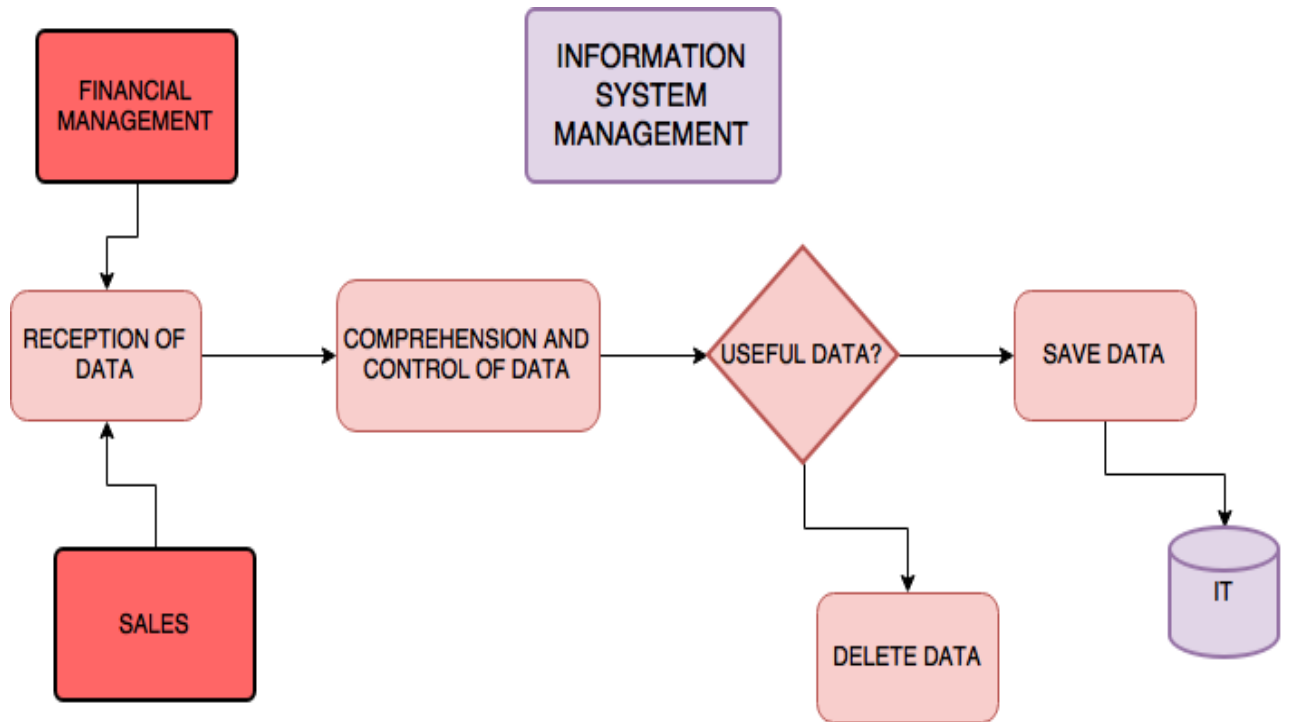


Figure 38: Information system management. Author's original.

Promotion → Process that shows how the company sells his product and step by step explains the strategy followed to increase sales and be present in the Latvian society.

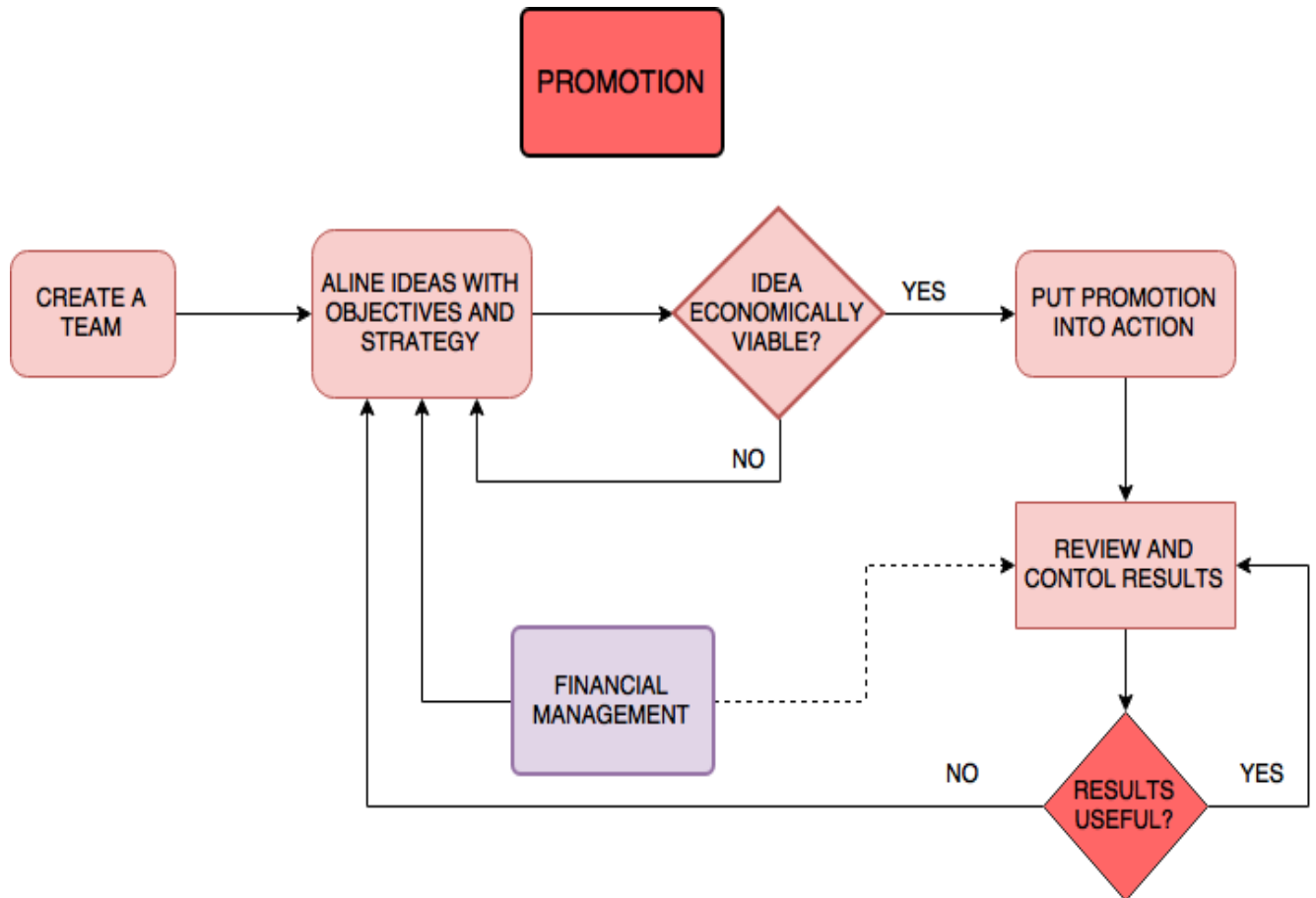


Figure 39: Promotion process. Author's original.

6.2.7 PHYSICAL EVIDENCE

This element is usually also more important for services. But it is as well important for retailer shops like in our case. Taking in consideration that our product also requires a high presence of the customer in order to experience the wheel before he or she buys it.

Such an innovative product and with such a considerable price must be tried before the purchase in almost every case. Not a lot of people will make the purchase with knowing the product or having tried it and even more in a country like Latvia with a relative low income of the people.

That is why there should be, as it was discussed in the promotion element of the marketing mix, trials or exhibitions to let people use the wheel and get them to like it as much as possible. The same reason why there should be opened a small shop. People walking by the shop could see the product and try it for free. That is a way of increasing the sales and thereby the benefits.

The retailing shop has, therefore, be characteristic. It should distinguish the firm from competitors and it should show a good image from the company, all according to the values it has.

The shop needs to look modern; because the product principal feature is the innovation and the evolution of the normal bike. For instance, the shop could have a few screens explaining the evolution of the bike until our time is reached and the appearance of the Copenhagen Wheel, explaining why it is an advance in the era of bikes.

The author needs to give the customer the opportunity to use the bike together with the app and for that he can have a little space with free Wi-Fi to explain the customer how to use it in his own phone.

Another important part is the showcase of the shop. It has to invite the customer to get into the shop. It needs to try to catch the eye of the people walking nearby and make clear that they can try the bike in the shop. A screen that makes clear the innovative nature would also be good.

The author needs to create an image of him. The wheel is characteristic because of the red case that covers the electric motor and people can easily identify it with the company as soon as this image has been created.

And last of all, the website also needs to be characteristic. It can, for example be creative rather than functional. It can talk about environmental data of Latvia and the rest of the world, data of bike usage and more facts that makes the website different, funny and interesting to visit, not only one time but more and more often. All that, of course, while telling the customer the advantages of using the wheel once again.

Moreover, there could be a few services going on too. That is why the author needs also some feedback from the customers in order to know if they are satisfied with the job. A good way is in the webpage. A space on it will be open to let people write comments. Surveys can also been made by sending emails or making phone calls to the customers.

6.2.8 THE EIGHTH 'P': PROTECTION

One extra 'p' should be included in order to be more modern in the analysis is protection. This word includes the protection of three different and equally important groups:

- Environment.
- Customers.
- Staff.

6.2.8.1 ENVIRONMENT

In a company like this that has environmental protecting values this part is especially important. A habit of work where the protection of the environment is always present has to be created.

Among the daily work habits, there will be included always the use of recycled paper in all the paperwork. In addition to that, the printers will be using special tonners that don't fill the entire letter with ink, which means considerable ink save.

All the staff will agree on the policy of coming to work always in a public mean of transportation in case to cannot come with a bike to work. In our retail shop, a point destined to recycle different types of substances that are not good in a regular trash, for example, batteries, can be created.

One last thing it could be done is to spend a small percentage of the benefits to non-lucrative associations related to environmental protection, which also shows the commitment with the nature.

6.2.8.2 CUSTOMERS

The way to protect the customers is through offering a good guarantee of the product. As well, a good customer relationship can be maintained while sending updates and information of value for them. An important fact at this point is the trust the customer has when he or she pays via Internet. The author needs to show that he protects his or her data. Trust is the base of every good customer relationship.

6.2.8.3 STAFF

Our way to protect the staff will be with good contracts that guarantee the respect of all working-people laws and rights. Salaries will be as good as possible with an improvement of it depending on the objectives reached or accomplished. One more facility that can be offered to the crew is to have good and clean machines. That means that the computers have automatic updates, have firewalls and spam stops to make the job of our staff easier. Also an increase in salary each year can be settled to keep the staff motivated and with motivation to continue.



Figure 40: Marketing mix review.³⁷

³⁷ <http://business-fundas.com/2011/the-8-ps-of-services-marketing>

7. RISK MANAGEMENT

The analysis of the risks in our company is a powerful tool that helps us in decision-making and differentiates the important from the trivial tasks in our business.

According to the ISO 31000 standards this can be said: Risks affecting organizations can have consequences in terms of economic performance and professional reputation, as well as environmental, safety and societal outcomes. Therefore, managing risk effectively helps organizations to perform well in an environment full of uncertainty.

It can be used by any organization regardless of its size, activity or sector.

Risks can be positive or negative. The goal is to improve the probability of the positive risks to happen and decrease the probability of the negative ones.

Once our risks have been prioritized and analysed, response strategies for each of them in order to be effective and have success need to be taken.

In the PMBOK Guide, there are these following strategies to manage negative risks:

- **Mitigate** → In this type of risk response strategy, the company tries to minimize either the probability of the risks happening or the impact. Of course, the costs of mitigating the risk have to be lower than the impact or costs of the difference between the mitigated risk and the original one.
- **Transfer** → In transfer risk response strategy, the company transfers the risk to a third party to manage it. The company needs to be aware that the transfer of risk does not eliminate the risk; it only transfers the responsibility of managing the risk to the third party. It is more comfortable but it might not be solved as it should or the company wished.
- **Avoid** → Here the author can try to eliminate the risk or its impact on his project objective. He does this by either changing the project management plan, by making some changes to the project scope, or by changing the schedule.
- **Accept** → This risk response strategy can be used with both kinds of risks, either positive risks or negative risks. Here the author doesn't take any action to manage the risk but he does admit it. He can accept the risk either

by actively acknowledging it or passively recognizing it. In active acceptance he keeps a separate contingency reserve from the budget to manage the risk if it occurs, and in passive acceptance he only notes down the risk.

The following strategies are used to manage positive risks:

- **Enhance** → It involves monitoring and emphasizing risk causes and identifying bases to increase probability of the opportunity realization. For example, the author could add more budgets to advertising to increase the sales.
- **Exploit** → This strategy involves making sure that the opportunity is realized. Actions are specifically directed to reduce or remove the uncertainty of the opportunity being missed. The author can reserve a small part of the budget to this purpose.
- **Accept** → Risk acceptance strategy for opportunities involves accepting them but not taking proactive actions to enhance chances of opportunity realization.
- **Share** → Risk sharing is a risk response technique for positive risks or opportunities that involves assigning partial or complete ownership of the risk to a third party who is in a better position to make sure the opportunity is realized.

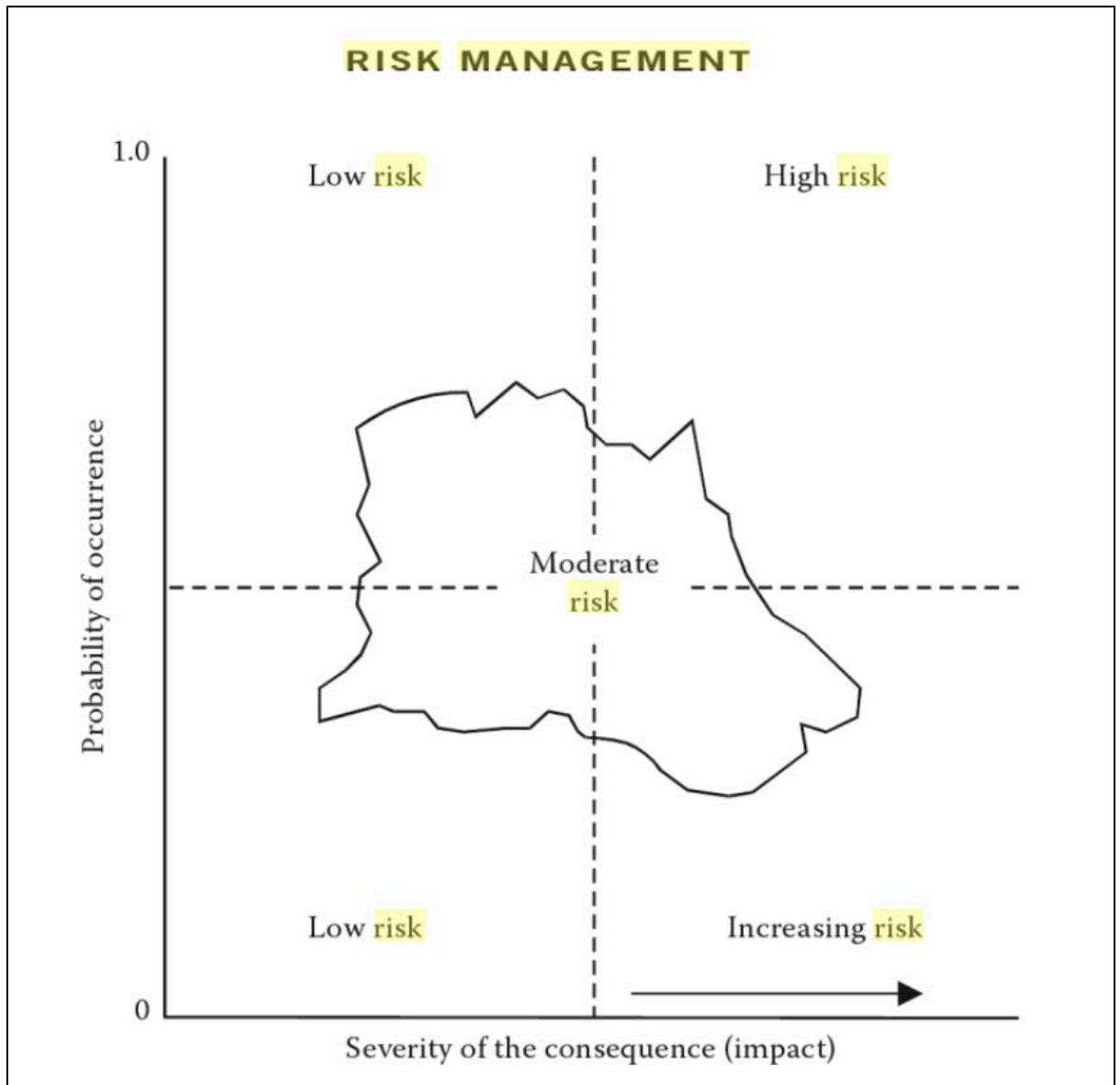






Figure 41: Risk management chart.³⁸

³⁸

<https://books.google.es/books?hl=es&lr=&id=soyZBQAAQBAJ&oi=fnd&pg=PP1&dq=pmbok+guide+risk+management&ots=LTvwnhY2Xf&sig=cKCfXmp39R3qaN71YNwUJijialE#v=onepage&q=pmbok%20guide%20risk%20management&f=false>

CAUSE	RISK	KIND OF RISK	IMPACT	PROBABILITY	IMPACT LEVEL	IMPORTANCE	RESPONSE
MISTAKES IN ANALYSIS	NO BENEFITS		NO SURVIVAL	LOW	HIGH	IMPORTANT	REDEFINE OBJECTIVES AND ANALYSIS (AVOID)
NO ENTRANCE WALLS	ENTRANCE OF COMPETITORS		LESS MARKET SHARE	LOW	MEDIUM	SECONDARY	WAIT AND SEE IF IT AFFECTS US (ACCEPT)
POOR ADVERTISING	LOW SALES		LOW USE OF OUR WHEEL	MEDIUM	HIGH	MATTER OF PRIORITY	REDEFINE MARKETING MIX STRATEGIES (AVOID)
BAD PHYSICAL EVIDENCE							
TOO HIGH PRICE SET							
OTHER TRANSPORT PREFERENCES	UNWELCOMING IN THE MARKET		CUSTOMERS DONT BUY	MEDIUM	HIGH	IMPORTANT	SEARCH FOR NICHES (MITIGATE)





CORRECT DEVELOPMENT OF EXPECTATIONS	STAFF AND CUSTOMERS SATISFIED		OBJECTIVES REACHED	MEDIUM-HIGH	MEDIUM	IMPORTANT	KEEP DOING THE SAME (ACCEPT)
LACK OF QUALITY OF THE BIKES	UNSATISFACTION OF THE CUSTOMERS		SALES NOT GROWING	MEDIUM	VERY HIGH	MATTER OF PRIORITY	CHANGE BIKES FROM SUPPLIER (MITIGATE)
SALES VERY HIGH	DEMAND TOO HIGH		LOOSE EXTRA BENEFITS	LOW	HIGH	IMPORTANT	BUY MORE FROM SUPPLIER/OPEN NEW SHOP (EXPLOIT)
BAD DELIVERY CHOICE	DELIVERY DELAYS		CUSTOMERS UNHAPPY	MEDIUM	HIGH	IMPORTANT	CONTRACT A NEW DELIVERING COMPANY (TRANSFER)

Table 4: Risk management. Author's original.

8. ECONOMIC PLAN

In this part of the marketing plan, an economic plan will be developed, by linking it up with different steps of the business development. All according to the marketing objectives set at the beginning of the marketing mix.

8.1 COSTS

The author will work on the accounting taking in consideration the activities, where he will analyse the different costs of each task until he reaches a final statement. This way of working will help him to recognize which tasks or steps are more expensive for him. In order to develop this plan he will operate in the following way:

1. Calculate the effective annual hours of work and the ratio per hour of the salaries.
2. Calculate the amortization of our assets.
3. Costs related to contingency and starting budgets.
4. Indirect costs per month.
5. Purchases from the supplier. Main activity.

8.1.1 EFFECTIVE ANNUAL HOURS OF WORK AND RATIO PER HOUR OF THE SALARIES

CONCEPT	DAYS/HOURS
AVG. YEAR	365,25
-SUNDAYS: 365*(1/7)	-52,18
-HOLIDAYS	-20,00
-FESTIVITY DAYS	-11
-AVG. DAYS LOST BY ILLNES	-15
-TRAINING COURSES FOR STAFF	-4
EFFECTIVE DAYS ESTIMATED	263
TOTAL EFFECTIVE HOURS/YEAR (8 HOURS/ DAY)	2104

Table 5: Effective annual days. Author's original.

CONCEPT	WEEKS
AVG. YEAR (WEEKS)	52
HOLIDAYS AND FESTIVITIES	-5
ILLNESS	-2
TRAINING	-1
TOTAL WEEKS	44

Table 6: Effective annual weeks. Author's original.

Now the author needs to take in consideration the cost that our staff represents per week and per hour. He will keep in mind that the contribution rate for compulsory social insurance is 35.09% of gross salary, where the employer pays 24.09% of it and 11% by the employee. The employer is responsible for paying these contributions; he automatically subtracts the percentage laid down in legislation from the employee's income.

The permanent crew will consist in the following persons (not counting the author as owner an director of the business):

- **Two people working in the retail shop or showroom** → they will work the six days of the week that the shop is open but each of them will have one extra free day, which means that each of the workers will work five days a week for eight hours each day, making a total of 40 hours per week. They also will be able to make a delivery in case it is needed under the conditions discussed in the marketing mix.
- **One computer technician** → he will start full time at the beginning and preparation of the business until he finishes creating the website. After that, when the business runs, he will only be paid for one day a week. His job then will consist in preserving the website up to date with all the news, special offers and last software updates.

For the rest of specialists needed, such as workers that helps setting up the shop, painters, a lawyer that helps to deal with the paperwork and legal issues that creating a new company in a foreign country like Latvia are required and delivery specialist in case of need (long distance to deliver or big amount of products needed to deliver), for all of them, the author will reserve a contingency money and save a budget for it. It will be reflected in the accounting as starting money.

The requisites that all the members of the staff need to have are the knowledge of Latvian, Russian and English language, as indispensable and experience in handling with electronic devices. Later on, the author, when he expands the firm, will figure out other ways on how to translate the webpage so that he can reach all the customers.

So having all this in mind the costs of the long-lasting workers are the following ones:

CONCEPT	WORKER 1	WORKER 2	COMPUTER TECHNICIAN
SALARY	564,1	564,1	236,36
SOCIAL SECURITY	135,9	135,9	56,94
TOTAL (MONTH)	700	700	293,3
COST /HOUR	4,375	4,375	10
COST /YEAR	8400	8400	3520

Table 7: Costs from the staff per month. Author's original.

The **total expense** in paying the workers wages is **20320 euros**.

The hypotheses considered to make that table are:

- All quantities are expressed in euros.
- Social security paid by us is 24,09 %. The rest until the 35,09 % that must be paid, is taken directly by the worker. That means the author is spending 700€ for each worker. The worker will receive 564,1€ net before taxes (his own taxes) and the author will pay the part of social security that correspond him.
- A working day has eight hours.
- One month consist in four weeks.
- The computer technician only works one day a week (eight hours) and each of the workers five days (40 hours a week) as it was explained before.

- The computer technician will only be paid for 44 net working weeks, while the workers will be paid for all 52 weeks including the ones in holidays and illness.

8.1.2 AMORTIZATION OF ASSETS

For the amortization of the computerizing assets a lineal amortization within five years will be considered. First of all, the author needs to put down a list with the assets he needs. He will consider the rest of assets, like tables, chairs, etc....in the starting budget, like the non-permanent professionals that will help him start the business.

The list with the computerizing assets is the one showed in the following table:

CONCEPT	COST (€)	QUANTITY	TOTAL COST (€)
Computer Asus M32Ad I5-4460 4GB/1TB	600	1	600
Scanner HP 5200	275	1	275
Printer HP Deskjet 720	275	1	275
	Microsoft Windows 10	1	150
Software licenses	Microsoft Word 2011	1	90
	Microsoft Excel 2011	1	120
TOTAL AMOUNT TO AMORTIZATE			1510 €

Table 8: Cost of the computerizing assets. Author's original.

TYPE	AMORTIZATION (€)
WEEKLY	5,8
MONTHLY	25,167
PER YEAR	302

Table 9: Amortization per periods. Author's original.

8.1.3 STARTING BUDGET AND MONEY FOR CONTINGENCIES

A table that shows us the estimated cost of all those activities that are required to make our business run will be created. The author will consider a global budget but he will break it down with the aim of explaining the end amount of money designed for it. The hypotheses taken are:

- There are three people in the staff, not considering the author within the estimations. The salary will be taken from the benefits. The author is the owner and he can decide every time how to distribute his money.
- Shop builders are a global statement for painters, carpenters, electricians and builders in general that will prepare our shop. They will be paid only once but the author will include them in this budget and calculate the money spent on them reordering it in costs per week, making an average.
- After the first year he will lower this budget because the shop will already be finished and set up. He will also lower the spending on marketing and promotion.
- This estimation is only valid for the first year, as it was said before, because of the changing cost after the shop and the business in general are set up.
- The marketing costs, which include promotion and advertising, are all put together in the following table because the marketing strategies the author follows are explained in the marketing mix. The author cannot make a precise estimation of how much money he will spend on each mean of advertising but he can set up a budget for it that he will not exceed.

- The author of this document will save another amount of money for ‘other’ costs. Here he will include screens for the shop to make it look more modern from the outside, for instance, or any other little cost that he cannot manage to calculate (contingencies).

The activities and their costs are reflected in the following table:

CONCEPT	COST / WEEK (€)
INK AND PAPER	10
SHOP BUILDERS	100
LAWYER	30
MARKETING AND PROMOTION	100
OTHERS	100
TOTAL	340
TOTAL/DAY	48,57
TOTAL/YEAR	17680

Table 10: Budget for parallel activities. Author's original.

8.1.4 INDIRECT COSTS PER MONTH

Here there are considered all those costs that are referred to basic costs like electricity, heating, water or garbage service and others like telephone, Wi-Fi or the rent per month of a small showroom in the centre of Riga³⁹, etc. The costs are showed in the following table:

CONCEPT	€MONTH
BASICS	170
INTERNET	11
TELEPHONE	10
RENTAL	400
INSURANCE	200
TOTAL PER MONTH	791
TOTAL PER YEAR	9492

Table 11: Indirect costs. Author's original.

8.1.5 PURCHASES FROM THE SUPPLIER

Obviously, the main expense will be the purchase of the business product the author wants to sell, the Copenhagen Wheel. He also needs to keep in mind that he needs to have a small stock, so that these costs are not too expensive. He should set a security stock. The security stock has always to be of at least of ten wheels for the first year, when the selling is still growing. He will have an insurance that covers at least this security stock.

First of all that, the author needs to have an idea of how much he is going to sell so that he can make an estimation of how much to buy from the supplier. He needs to take a look at the demand an estimate it as accurate as possible.

The following graphic represents the selling expectations:

³⁹ Data of the indirect costs from: http://www.numbeo.com/cost-of-living/country_result.jsp?country=Latvia

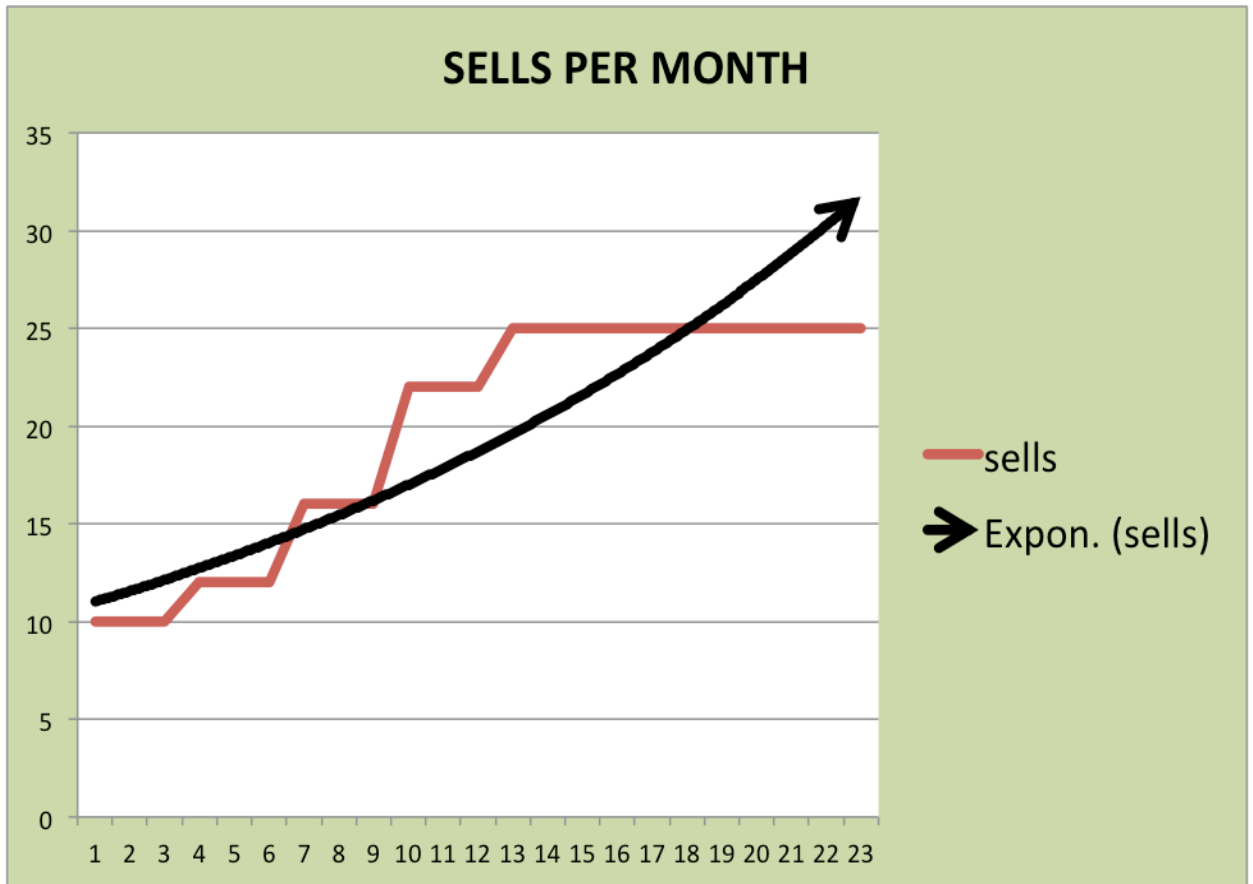


Figure 42: Selling expectations for the first two years. Author's original.

Knowing all this, the author can make an estimation of how many wheels to buy at the beginning. Although this first estimation of the demand of the product is exponential, after the first two years he will have a different kind of demand.

The numbers will settle down and sells will be more constant. The average of sells after that first two years per month will maintain steady in around twenty-five wheels sold per month.

If for the first six months (first half a year) there will be selling expectations of around fifteen wheels per month in the average, the author will make a first purchase from the manufacturer of 80 wheels. With such a purchase, the manufacturer will make for the company a 30 % discount (the usual for retailers) and the author will cover the security stock.

	MONTHS					
	1	2	3	4	5	6
STOCK (Units)	80	65	50	35	100	85
SECURITY STOCK: 10						
DEMAND (Units)	15	15	15	15	15	15
BUY FROM SUPPLIER (Units)	0	0	0	80	0	0

Table 12: Forecast for the first two years. Author's original

The average of sells in the second half-year will be considered 20 units. As the security stock will be reached in the seventh month the author needs to make a new purchase in the sixth month, cause he will need to consider that the deliver will take a few time. And to keep the demand satisfied he would get more supply with enough time.

For the second half of the first year, the demand, stock and the number of products he needs to buy from the manufacturer are the following ones:

	MONTHS					
	7	8	9	10	11	12
STOCK (Units)	70	50	30	10	90	70
SECURITY STOCK: 10						
DEMAND (Units)	20	20	20	20	20	20
BUY FROM SUPPLIER (Units)	0	0	0	80	0	0

Table 13: Forecast for the second six months. Author's original.

So, as it is to be seen, the first year the author will buy from the supplier a total of 240 wheels. This will be the main expense, as it was said before.

On the other, hand this is the way the company makes his profit. Now, the author can manage to calculate his incomes.

Lets say he covers the demand (which is shown in the past tables approximately) and he sells this first year around 210 wheels, which he has estimated with the demand curve. He knows that the manufacturer sells to a retailer like him bigger amounts of his product, in this case the Copenhagen Wheel, with a 30 % of discount. He has a security stock that is not too big so the estimations are correct.

The expense to cover this demand is the following one:

CONCEPT	QUANTITY	PRICE (-30% INCLUDED)	TOTAL EXPENSE
WHEELS BOUGHT	240	700	168000

Table 14: Expense from our main activity. Author's original

Now he can put together all the costs and see what is the final amount of money he needs to spend the first year, with only one filial in Riga. Later he will calculate the incomes and in the end he will make the account balance and see if he has a positive or negative balance.

Note that the total amortization will be calculated later together with the estimations of the following year's amortization so that the author can show a balance sheet differentiating costs from amortization. Right now he will only consider the rest of the costs.

The summary table with all the costs of the first year, year of starting to run the business, is the following one:

CONCEPT	€/ YEAR
SALARIES	20320
STARTING BUDGET AND CONTINGENCY MONEY	17680
INDIRECT COSTS	9492
MAIN ACTIVITY: WHEEL PURCHASE FROM SUPPLIER	168000
TOTAL	215492

Table 15: Summary cost's table first year. Author's original.

8.2 EXPANSIONS AND FURTHER COSTS

As it is already said, one of the objectives is the expansion towards other parts of Latvia first and later on towards the other two Baltic States, Estonia and Lithuania.

8.2.1 SECOND YEAR, FIRST EXPANSION

The first expansion will take place in the second year. Our aim and concern will be focused on opening two more shops in two different cities with the intention to reach a bigger market and be more present in the whole country of Latvia, increment sales and lower distribution and delivery costs due to the minor distances needed to cover. The chosen cities are Liepaja and Jurmala.



The reasons of choosing these cities are:

- These are two of the most populated cities in Latvia after Riga. These two cities are populated with a total of 130.000 people and carrying on with the same estimations that have been made with Riga, the author will have a market that increases his size in 2.000 potential customers. He estimated when the market was studied that Latvia would have between 10.000 and 15.000 potential customers and Liepaja and Jurmala will add those 2.000 potential customers to complete that amount.
- Both cities are in the coast. Many bike routes cross therefore these two cities.
- Both cities are destination in holidays for many Russians and Latvians with welfare.
- Weather conditions are better in those cities and the use of bike is higher therefore.

For the two new shops in Liepaja and Jurmala the costs are:

CONCEPT		€/ YEAR
SALARIES	WORKER 1 (x2)	16800
	WORKER 2 (x2)	16800
	MANAGER (x2)	33600
STARTING BUDGET AND CONTINGENCY MONEY (x2)		30000
INDIRECT COSTS (x2)		15000
MAIN ACTIVITY: WHEEL PURCHASE FROM SUPPLIER		140000
TOTAL		252200

**Table 16: Costs from the following two shops open in Latvia in the second year.
Author's original.**

- Salaries are calculated for all the new workers from the two shops without the increase of the 5 % because it is the first year for them.
- Starting budget and indirect costs are also calculated for both shops and round out lower cause the cost of living is lower in the new cities than in Riga.
- It is considered that the author sells 100 wheels in each shop with a total of 200 wheels sold in this year in those two shops. Hereby, he calculates the cost of buying from the supplier in 140.000 € (Price per wheel 700 € including the discount of 30 % for retailers).

The next table resumes the new costs from the first showroom opened in Riga the first year, which will vary a little bit. The new costs and the explanation of them are reflected in the following table:

CONCEPT	€/ YEAR
SALARIES	21336
STARTING BUDGET AND CONTINGENCY MONEY	2000
INDIRECT COSTS	9492
MAIN ACTIVITY: WHEEL PURCHASE FROM SUPPLIER	210000
TOTAL	242828

Table 17: Costs shop in Riga for the second year. Author's original.

For the elaboration of this table the next hypotheses have been taken in consideration:

- All the salaries of the two workers and the computer technician have been increased in 5 %.
- The starting budget does no more exist because the business here has already been started. There is still small contingency money though, where the marketing costs are included, which will be lower than the first year as well.
- Indirect costs are the same as the first year.
- 300 wheels will be bought for the second year for this shop taking in consideration that there will be around 25 wheels sold per month.

8.2.2 THIRD YEAR, SECOND EXPANSION

Once settled in Latvia, with three shops and showrooms open in three of the most important cities, the author will look forward to expand himself to the country of Estonia, the Baltic State right in the north of Latvia.

From Estonia it is known that it is a developed country with an advanced, high-income economy and high living standards. Its population is 1.300.000 people. Estonia ranks very high in the Human Development Index and performs greatly in measurements of economic and social liberties. Estonia has been among the fastest growing economies in the European Union, together with Latvia, and is a part of the World Trade Organization and the Nordic Investment Bank.



Estonia is often described as one of the most internet-focused countries in Europe, which makes this country perfect to continue our expansion. The acceptance of our Copenhagen Wheel might be even better than in Latvia, due to the road and infrastructure conditions as well.

The cities chosen to open new showrooms are Tallinn, the capital city, Tartu and Pärnu. Tartu is a well-known city with a high number of students and Pärnu lies at the coastline of Estonia and is, like Jurmala in Latvia, the holiday destination for a lot of people. These three cities together make almost half of the population of Estonia with 600.000 people. By doing our estimations of the market, the target customers will be around 8.000 people, which makes it worthy to enter this market. Sales will be increased and the author already has the experience of entering Latvia's market, so he knows how to estimate and control the costs that come along with this expansion.

The costs of expanding the company towards Estonia are reflected and explained in the following table:

CONCEPT		€/ YEAR
SALARIES	WORKER 1 (x3)	25200
	WORKER 2 (x3)	25200
	MANAGER (x3)	50400
STARTING BUDGET AND CONTINGENCY MONEY (x2)		30000
INDIRECT COSTS (x2)		20000
MAIN ACTIVITY: WHEEL PURCHASE FROM SUPPLIER		280000
TOTAL		430800

Table 18: Costs for opening three new shops in Estonia. Author's original.

For the elaboration of this table the next hypotheses have been taken in consideration:

- Salaries of the four workers are the base salary set for the past shops without the increase.
- 400 wheels will be bought for these two shops for the second year from the supplier. 200 of them will be sent to Tallinn and for Pärnu and Tartu 100 for each shop.

^

The new costs for the rest of showrooms in Latvia are these:

CONCEPT		€/ YEAR
SALARIES	WORKER 1 (x2)	17640
	WORKER 2 (x2)	17640
	MANAGER (x2)	35280
STARTING BUDGET AND CONTINGENCY MONEY (x2)		2000
INDIRECT COSTS (x2)		15000
MAIN ACTIVITY: WHEEL PURCHASE FROM SUPPLIER		210000
TOTAL		297560

**Table 19: Costs for the second year for the two shops in Liepaja and Jurmala.
Author's original.**

For the elaboration of this table the next hypotheses have been taken in consideration:

- Salaries of the four workers have been increased in 5 %.
- The starting budget does no more exist because business here has already started. There is still small contingency money though.
- Indirect costs are the same as the first year.
- 300 wheels will be bought for these two shops for the second year that this shop is open, taking in consideration that there will be around 25 wheels sold per month between both shops (150 wheels in each one in the average per year).

For the shop in Riga the costs are these for this year:

CONCEPT	€/ YEAR
SALARIES	22403
STARTING BUDGET AND CONTINGENCY MONEY	2000
INDIRECT COSTS	9492
MAIN ACTIVITY: WHEEL PURCHASE FROM SUPPLIER	252000
TOTAL	285895

Table 20: Costs for the shop in Riga for the third year. Author's original.

For the elaboration of this table the next hypotheses have been taken in consideration:

- Salaries of the workers have increased another 5 %.
- Indirect costs are still the same as the first year and second year.
- 360 wheels will be bought for this shop for the third year in consideration that there will be around 30 wheels sold per month.

8.2.3 FOURTH YEAR, THIRD EXPANSION

On the fourth year the expansion will continue towards the country of Lithuania, the biggest and most populated country of the Baltic States, located in the south of Latvia.

With almost 3 million people living in Lithuania the market size grows importantly and the author will increase in 15.000 people the target customers.

From this 3 million people Vilnius, its capital city has 550.000 people and is the most populated city in this country.



The author will open a shop in this city as he did in the other capital cities.

The other two cities where will open a shop are Kaunas and Klaipeda. Kaunas has a large population of 300.000 people and has an important student population, which is good for our business. Klaipeda is the most important city at the Lithuanian's coastline and as in Jurmala, Liepaja and Pärnu they are chosen for this reason, as well as for its condition of big cities.

The author already has experience in expanding himself and the costs will be similar as in Estonia and Latvia for opening new showrooms and promote our product.

The costs of expanding the company towards Lithuania are reflected and explained in the following table:

CONCEPT		€/ YEAR
SALARIES	WORKER 1 (x3)	25200
	WORKER 2 (x3)	25200
	MANAGER (x3)	50400
STARTING BUDGET AND CONTINGENCY MONEY (x2)		30000
INDIRECT COSTS (x2)		20000
MAIN ACTIVITY: WHEEL PURCHASE FROM SUPPLIER		280000
TOTAL		430800

Table 21: Costs for opening three new shops in Lithuania. Author's original.

For the elaboration of this table the next hypotheses have been taken in consideration:

- Salaries of the four workers are the base salary set for the past shops without the increase.
- 400 wheels will be bought for these three shops for their first year from the supplier. 200 of them will be sent to Vilnius and for Kaunas and Klaipeda 100 wheels for each shop.

The costs of the showrooms in Estonia are reflected and explained in the following table:

CONCEPT		€/ YEAR
SALARIES	WORKER 1 (x3)	26460
	WORKER 2 (x3)	26460
	MANAGER (x3)	52920
STARTING BUDGET AND CONTINGENCY MONEY (x2)		2000
INDIRECT COSTS (x2)		20000
MAIN ACTIVITY: WHEEL PURCHASE FROM SUPPLIER		350000
TOTAL		477840

Table 22: Costs of the Estonian shops for their second year. Author's original.

For the elaboration of this table the next hypotheses have been taken in consideration:

- Salaries of the workers (for each shop) are the base salary set for the past year with the increase of 5 %.
- There is no starting budget anymore but still small contingency money.
- 500 wheels will be bought for these three shops for the second year from the supplier. 300 of them will be sent to Tallinn and for Pärnu and Tartu 100 wheels for each shop.

The new costs for the rest of showrooms that are set in Latvia (Liepaja and Jurmala) are these:

CONCEPT		€/ YEAR
SALARIES	WORKER 1 (x2)	18522
	WORKER 2 (x2)	18522
	MANAGER (x2)	37044
STARTING BUDGET AND CONTINGENCY MONEY (x2)		2000
INDIRECT COSTS (x2)		15000
MAIN ACTIVITY: WHEEL PURCHASE FROM SUPPLIER		252000
TOTAL		343088

**Table 23: Costs for the third year for the two shops in Liepaja and Jurmala.
Author's original.**

For the elaboration of this table the next hypotheses have been taken in consideration:

- Salaries of the four workers have been increased in 5 %.
- Indirect costs are the same as the first year and second year of expansion.
- 360 wheels will be bought for these two shops for the second year for this shop taking in consideration that there will be around 30 wheels sold per month between both shops (180 wheels in each one in the average per year).

For the shop in Riga the costs are these for this year:

CONCEPT	€/ YEAR
SALARIES	23524
STARTING BUDGET AND CONTINGENCY MONEY	2000
INDIRECT COSTS	9492
MAIN ACTIVITY: WHEEL PURCHASE FROM SUPPLIER	294000
TOTAL	329016

Table 24: Costs for the shop in Riga for the third year. Author's original.

For the elaboration of this table the next hypotheses have been taken in consideration:

- Salaries of the workers have been increased in a following 5 %.
- Indirect costs are still the same as the past years.
- 420 wheels will be bought for this shop for the fourth year that this shop opens, taking in consideration that there will be around 35 wheels sold per month.

8.2.4 FURTHER EXPANSIONS

The author has already planned the short and middle term expansion. From the fifth year on, the following expansion could be focused on different possibilities, depending on how the business is developing:

- Opening new shops in new cities of the Baltic States.
- Opening more shops in cities that already have one of the showrooms, like Riga, Vilnius or Tallinn. The bigger cities more preferable.
- Introducing the company in new geographical markets or new countries. More likely countries next to Latvia like Poland, Finland or Sweden which are bigger and more developed countries than the Baltic States and could offer bigger expansion possibilities although there will be also more competitors.
- Change the business plan if the expectations and estimations are wrong and the business is not as profitable as it should. For instance, creating a bike renting company that uses the Copenhagen Wheel. Offering short as well as longer bike tours in cities or countryside. The author would continue buying wheels from the supplier but the main goal wouldn't be to sell them but to keep them to provide a service. Although the author is still using the wheel the concept of the business is totally different.

8.3 INCOMES

The selling price that has been decided, according to the marketing strategies used, is for the first half year 999 euros and from after that first half-year on 1099 euros. This is part of the strategy that helps to get more sales at the beginning or start of the business. It is a type of promotional discount. The income will be shown in the following table:

CONCEPT	QUANTITY	PRICE (€)	TOTAL (€)
WHEELS SOLD 1 ST HALF-YEAR	90	999	89910
WHEELS SOLD 2 ND HALF-YEAR	120	1099	131880
		INCOME	221790

Table 25: Income table for the first year.

According to this, the further purchases will cost the customer 1099 € The author can, now that he has studied the selling forecast, easily make a summary table with the incomes for each year, which will later help him to see the viability of the business plan.

The following table reflects these income expectations:

INCOMES			2017	2018	2019	TOTAL PLACE
RIGA ⁴⁰		221.790 €	329.700 €	395.640 €	461.580 €	1.408.710 €
LATVIA	LIEPAJA	-	219.800 €	329.700 €	395.640 €	945.140 €
	JURMALA					
ESTONIA	TALLINN	-	-	439.600 €	549.500 €	989.100 €
	PÄRNU					
	TARTU					
LITHUANIA	VILNIUS	-	-	-	439.600 €	439.600 €
	KAUNAS					
	KLAIPEDA					
TOTAL YEAR		221.790 €	549.500 €	1.164.940 €	1.846.320 €	3.782.550 €

Table 26: Incomes per year and place and total sum. Author's original.

8.4 SUMMARIES AND BALANCE SHEET

8.4.1 EXPENSES SUMMARY

This summary will reflect the costs for each year of expansion in the short and middle term studied before. The next hypotheses have been taken in consideration:

- For each shop open there will be three people working in it with the same conditions and policies the company had in for the first shop in Riga. That means there will be two workers members of the staff, which work five days a week and forty hours and one manager whose salary is higher and who works as well forty hours per week. The requisites for them are the knowledge of the language of the country where they work plus Russian and English.
- There will be one computer technician, the same who begun to work in Riga the first year but he will get help from another subcontract worker in order to translate the webpage and make it useful also for Lithuanian and Estonian language speakers. The money to pay this subcontract translator worker will be taken from the contingency money reserved for each year.
- Salaries will increase in 5 % each year for all the members of the staff.
- The office supplies will be the same as in the first shop and the budget reserved for marketing and contingencies as well as the starting budget will also be the same.
- The indirect costs will be the same as well in the three countries because in the average the cost of renting and other basic costs like electricity will never be higher than in Riga.⁴¹
- The amortization table will be done a part later, also year for year, considering that every shop makes the same expenses as the first one in Riga.

⁴¹ <http://www.manasfinanses.lv/en/2014/04/02/latvians-and-lithuanians-spend-nearly-a-half-of-their-income-on-groceries-housing-bills-and-transportation-whereas-estonians-spend-a-third-of-their-income/>

EXPENSES		2016	2017	2018	2019	TOTAL PLACE
RIGA ⁴²		215.492 €	242.828 €	285.895 €	329.016 €	1.073.231 €
LATVIA	LIEPAJA	-	252.200 €	297.560 €	343.088 €	892.848 €
	JURMALA					
ESTONIA	TALLINN	-	-	430.800 €	477.840 €	908.640 €
	PÄRNU					
	TARTU					
LITHUANIA	VILNIUS	-	-	-	430.800 €	430.800 €
	KAUNAS					
	KLAIPEDA					
TOTAL YEAR		215.492 €	495.028 €	1.014.255 €	1.580.744 €	3.305.519 €

Table 27: Summary table of costs with total amount of costs. Author's original.

⁴² *This cost has already been calculated before for the first year.

The following chart shows the comparison between incomes and costs for each year. That lets the author see if he has benefits or losses easily:

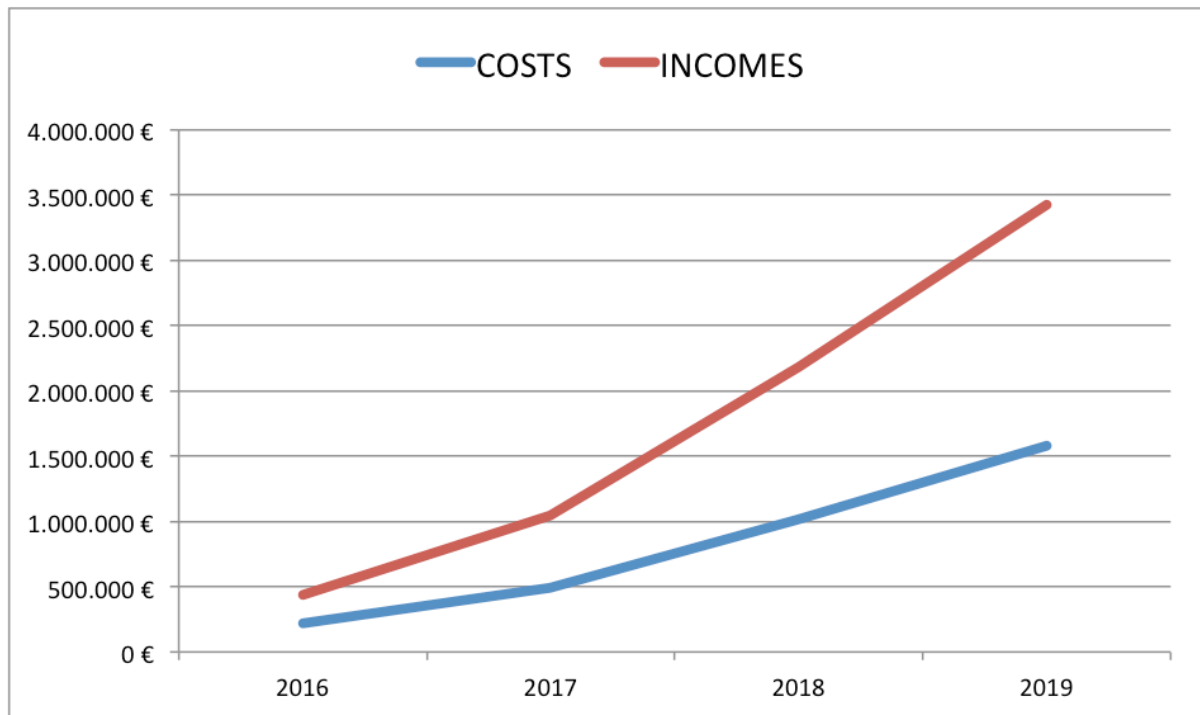


Figure 43: Costs vs. income chart. Author's original.

It is easy to see that the difference between both evolutions grow exponential year by year and although the expenses are high, the author needs to remember that he operates with an expensive product and that the benefit comes from the margin between purchase and sell. He is operating with high amounts of money to be a small company but that permits him obtain bigger benefits.

If the author sees the projection of the benefits he is supposed to obtain after 4 years of expansion it ascend to 400.000 € which means in the average a benefit of 100.000 € per year. All that money is the net sum he gets from his business and his salary is included there. As he is the only owner he can manage his benefits, as he wants. Either he saves it or he continues his expansion in other fields or completely different businesses.

Now that the author has estimated the total costs for the first years and he covers in this way the study for the short and middle term business plan, he now needs to get funding.

8.4.2 LOAN AMORTIZATION

The author does not want to have private investors who he needs to pay dividends to; therefore, he will only consider the option of taking a loan from a bank. Two good options for a loan are Swedbank and NorvikBank, since they operate in all the Baltic Countries. The amount needed to loan will be of 200.000 € (two hundred thousand euros). The kind or type of amortization asked for is a four-year linear amortization. That means the author will have interests decreasing every year as he keeps paying the principal of the debt. The interest taken by the bank will be a 5 %.

The next table explains how this linear amortization and the interest are going to be giving back all along the first four years. The author needs to keep in mind that these are also costs that are not reflected together with the expenses but they will affect the treasury chart, which he is going to show at the end of this summary point once he has all the estimations needed for it.

LINEAR	2016	2017	2018	2019
PPAL. DEBT	50.000 €	50.000 €	50.000 €	50.000 €
INTERESTS	10.000 €	7.500 €	5.000 €	2.500 €
OVERALL BANK	180.000 €	172.500 €	165.000 €	157.500 €
OUTSTANDING DEBT	150.000 €	100.000 €	50.000 €	0

Table 28: Loan amortization. Author's original.

The interests are important because the company needs to take them into consideration in the chart which permits evaluate the cash flow year by year. The

author must remember that the amortization is linear and for five years. After that time he needs to get new equipment. In case he continues using it, its value is zero:

8.4.3 AMORTIZATION OF ASSESTS

AMORTIZATION	2016	2017	2018	2019
RIGA	302 €	302 €	302 €	302 €
LATVIA	-	604 €	604 €	604 €
ESTONIA	-	-	906 €	906 €
LITUANIA	-	-	-	906 €
TOTAL	302 €	906 €	1812 €	2718 €

Table 29: Amortization each year and total sum. Author's original.

In order to fill this table it will be considered that all the shops buy the same equipment that the first showroom opened in Riga. The amortization per year for that first shop was 302 € Hereby, for each shop that will mean the same cost. So, the author only needs to take in consideration the amount of shops opened in each country.

As a result of all these charts and tables he can now give the final result in a summary chart that shows the cash flow the company will get at the end of all the years studied:

RESULTS	2016	2017	2018	2019
INCOMES	221.790 €	549.500 €	1.164.940 €	1.846.320 €
EXPENSES	215.492 €	495.028 €	1.014.255 €	1.580.744 €
OP.MARGIN	6.298 €	54.472 €	150.685 €	265. 576 €
AMORTIZATION	302 €	906 €	1.812 €	2.718 €
EBIT*	5.996 €	53.566 €	148.873 €	262.858 €
INTERESTS	10.000 €	7.500 €	5.000 €	2.500 €
EBT	-4.004 €	46.066 €	143.873 €	260.358 €
TAXES	-	6.909,9 €	21.580,95 €	39.053,7 €
NET PROFIT	-4.004 €	39.156,1 €	122.292,05 €	221.304,3 €
CASH FLOW	-3.702 €	40.062,1 €	124.104,05 €	224.022,3 €

Table 30: Result chart and cash flow balance per year. Author's original.

In order to fill this table the following data has been considered:

- Incomes and expenses are calculated in previous parts (8.3 and 8.4).
- EBIT is Earning before Interests and Taxes, which means the Operational Margin minus the Amortization.
- EBT is Earnings Before Taxes, which is the result of remove the interests from the EBIT. Those interests come from the loan the bank has given the company, which are explained in the part 8.4.2.
- The actual corporate tax rate in Latvia is right now of 15 %⁴³. In Latvia, the Corporate Income tax rate is a tax collected from companies. Its amount is based on the net income companies obtain while exercising their business activity, normally during one business year. The benchmark used refers to the highest rate for Corporate Income. Revenues from the Corporate Tax Rate are an important source of income for the government of Latvia.

⁴³ <http://www.tradingeconomics.com/latvia/corporate-tax-rate>

8.5 FINANCIAL VIABILITY

With all the available charts, the author can now see if his business is profitable. The author will figure out the IRR or Internal Rate of Return, which is another metric commonly used as an NPV (Net Present Value) alternative. Calculations of IRR rely on the same formula as NPV does, except with slight adjustments. IRR calculations assume a neutral NPV (a value of zero).

The discount rate of an investment when NPV is zero is the investment's IRR, essentially representing the projected rate of growth for that investment. Because IRR is necessarily annual, it refers to projected returns on a yearly basis, which in a gross study like this is perfect.

Therefore, the author will calculate both Net Present Value and Internal Rate of Return. The Net Present Value tells if it would have been better to put the initial money (year 0) into a bank account and earn the interests (which the author will consider of 5 %) or if the business is a better opportunity and it is possible to get more benefits in comparison.

If the NPV is positive then it is better to invest in this business than to put the money into a bank account and earn the interests.

YEAR	CASH FLOW	PRESENT VALUE
0	-200000	-200000
1	-3702	-3525,71
2	40062,1	36337,51
3	124104,05	107205,74
4	224022,3	184303,70
	NPV	124321,24

Table 31: Net Present Value. Author's original.

As it is possible to see, the result of summing all the present values year for year gives a positive number in the end. That means that the investment in this business is profitable and a good option. The values have been calculated with excel and the following formula:

$$N.P.V = \sum_0^t \frac{cash\ flow_t}{(1 + i)^t}$$

Where:

- t : is the year.
- i : is the interest.

If the interest that the bank gives for the initial investment would be higher, then the NPV would be lower. That means, that there is a value for the interest that makes the NPV zero. That point is the IRR.

Now, with excel, the function to calculate the IRR and the result is:

$$\mathbf{IRR = 20,8 \%}$$

This means, that if the author finds another investment option that gives him an interest bigger than 20,8 %, this business is no longer the most profitable and there is a better option. In this case, the bigger interest to get from the bank is 5 %, which means that this business is a good alternative for investment. All along with this, this business possibility gives no positive cash flow in the first year, but the progression is so good, that the following years (second, third and fourth) allows to get the losses back and turn them into profit. This IRR tells that this business is high profitable.

It possible to say now, that this investment is **financially viable**. To demonstrate this, the author will put together one last table, which shows the treasury account:

TREASURY	2016	2017	2018	2019
CASH FLOW	-3.702 €	40.062,1 €	124.104,05 €	224.022,3 €
PPAL DEBT	50.000 €	50.000 €	50.000 €	50.000 €
SHAREHOLDERS CF	-53.702 €	-9.937,9 €	74.104,05 €	174.022,3 €
TREASURY	-53.702 €	-9.937,9 €	74.104,05 €	174.022,3 €
CUMULATIVE TREASURY	-53.702 €	-63.639,9 €	10.464,15 €	184.486,45 €

Table 32: Treasury chart. Author's original.

The most important thing in this table is not that the treasury is positive each year but it is important that the cumulative treasury shows positive results at the end of the study.

9. CONCLUSIONS

The aim and goal of this marketing plan was to make a study of the performance that becoming a retailer of the Copenhagen Wheel in Latvia and the rest of the Baltic Countries would become.

Taking in consideration the kind of product that is being sold (high in its price and completely innovative in the technologically way), the study of the external environment, which involves these countries, has been a key point of this work. While exploring this area, the author has noticed some positive facts and some negative ones.

In the positive side, these countries have recently entered the European Union and they perform very well in environmental performance indexes. Green policies are present in the day-to-day of the people of these countries and the willingness of society to maintain a sustainable environment as well as have a healthy way of life is high.

On the other hand, the economic facts are not yet the most optimal ones. Wages and people's income are still one of the lowest in the European Union. Looking at it in the positive way, the Copenhagen Wheel is meant to be the substitute of the car inside the city as well as for middle-long distances. If society manages to create a way of life where the car is not indispensable, the Copenhagen Wheel appears as one of the less expensive options.

Getting into the closer environment, the internal environment, it can be affirmed that there is no similar product like this in the Baltic market and that the Copenhagen Wheel can easily be differentiated from the rest of competitors, like normal bikes or common electric bikes. This wheel is, actually, a union of both normal and electric bikes and that is the fact that makes this Copenhagen Wheel satisfying a bigger range of customers.

But, to have success in introducing this product into the Baltic society and make a profit out of it, the author had the need of linking his business with the potential customers in the best way possible. For that, marketing strategies have been selected carefully.

The price chosen has been set enough high to let the author overcome the cost that starting a business carries but enough low to be attractive for the biggest number of potential customers. In order to add value to the product for the customers and

convince them to choose it, the promotional strategy has to be effective. Social networks and specific advertisements in the right place to get the attention of the target customers need to be up to date. Important as well is the way on how the product is shown to the customers. It is important to get the customer to try out the product in order to catch his eye and make the sell easier. That is what the author is trying to do by taking part in showrooms from technological start-ups, etc. High priced products need to be tried first.

A meticulous planning of all the details that involve the business and the continuous improvement of the way of working will lead the author to analyze better all the new opportunities and threats that will surround him in the future. All that will let him make profit more easily.

No marketing plan can be complete without an economic plan that sustains with numbers all our external and internal studies. It is necessary to carefully study all the costs that involve creating a business like this and the author has studied the demand of his product by estimating a logical number of sells in relation to the population of the cities chosen for the implementation of the retail store or showroom. The balance is positive and the strategic expansion planned for the middle term makes the profit bigger year for year.

The final statement is that the introduction of the Copenhagen Wheel in the Baltic countries is a profitable business and a little step forward in the goal of making the world a more sustainable place.

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12. APPENDIX

12.1 LIST OF FIGURES

Figure 1: Marketing plan step by step.....	12
Figure 2: Why the CW was invented.....	15
Figure 3: Technical specifications of the CW.....	19
Figure 5: Latvian Saeima's representation after elections in 2014.....	23
Figure 6: Evolution of the average monthly wages in Latvia.....	26
Figure 7: GDP of Latvia in the past ten years.....	28
Figure 8: Latvia vs. EU youth unemployment. Author's original.....	29
Figure 9: Unemployment rate EU vs. Latvia. Author's original.....	30
Figure 10: Latvia's consumer confidence.....	31
Figure 12: Biomass energy obtaining process.....	32
Figure 12: Population (in thousands) in time of Latvia. Author's original.....	33
Figure 13: Population ethnics in Latvia.....	34
Figure 14: Ethnics in Latvia year 2000.....	35
Figure 15: Ethnics in Latvia year 2015.....	35
Figure 16: Amount in % for new registration of cars and motorcycles in the city of Riga and Latvia until 01.01.2016. Author's original.....	36
Figure 17: Most common use of smartphones in Latvia.....	37
Figure 18: Wi-Fi points in Riga's Centre.....	39
Figure 19: Overview for the Environment Performance Index (EPI) year 2016..	40
Figure 20: Indicators and the forecast situation of the EPI.....	41
Figure 21: PESTEL figure.....	44
Figure 22: Forecast sales of e-bikes in 2018, by region (in millions).....	47
Figure 23: Sales of e-bikes until 2014 in EU countries.....	49
Figure 24: Population pyramid Latvia.....	52
Figure 25: Wages segmentation years 2014 and 2015. Author's original.....	53
Figure 26: Porter's Five Forces.....	55
Figure 27: 7 P's.....	69
Figure 28: Five levels of the product.....	71
Figure 29: Stakeholder map.....	80
Figure 30: Process Map of our company. Author's original.....	86
Figure 31: Mission and vision development process.....	87
Figure 32: External relationship process. Author's original.....	88
Figure 33: Purchase process. Author's original.....	88
Figure 34: Storage process. Author's original.....	89
Figure 35: Sales process. Author's original.....	90
Figure 36: Deliver process. Author's original.....	91

Figure 37: Financial management process. Author's original.....	92
Figure 38: Information system management. Author's original.....	93
Figure 39: Promotion process. Author's original.	94
Figure 40: Marketing mix review.	98
Figure 41: Risk management chart.	102
Figure 42: Selling expectations for the first two years. Author's original.	114
Figure 43: Costs vs. income chart. Author's original.	137

12.2 LIST OF TABLES

Table 1: Average income per year and person.	25
Table 2: EU-28 countries average wages.	27
Table 3: swot analysis.	64
Table 4: Risk management. Author's original.	104
Table 5: Effective annual days. Author's original.	107
Table 6: Effective annual weeks. Author's original.	107
Table 7: Costs from the staff per month. Author's original.	109
Table 8: Cost of the computerizing assets. Author's original.	110
Table 9: Amortization per periods. Author's original.	111
Table 10: Budget for parallel activities. Author's original.	112
Table 11: Indirect costs. Author's original.	113
Table 12: Forecast for the first two years. Author's original.	115
Table 13: Forecast for the second six months. Author's original.	115
Table 14: Expense from our main activity. Author's original.	116
Table 15: Summary cost's table first year. Author's original.	117
Table 16: Costs from the following two shops open in Latvia in the second year. Author's original.	119
Table 17: Costs shop in Riga for the second year. Author's original.	120
Table 18: Costs for opening three new shops in Estonia. Author's original.	122
Table 19: Costs for the second year for the two shops in Liepaja and Jurmala. Author's original.	123
Table 20: Costs for the shop in Riga for the third year. Author's original.	124
Table 21: Costs for opening three new shops in Lithuania. Author's original. ...	126
Table 22: Costs of the Estonian shops for their second year. Author's original.	127
Table 23: Costs for the third year for the two shops in Liepaja and Jurmala. Author's original.	128
Table 24: Costs for the shop in Riga for the third year. Author's original.	129
Table 25: Income table for the first year.	131
Table 26: Incomes per year and place and total sum. Author's original.	132
Table 27: Summary table of costs with total amount of costs. Author's original.	135
Table 28: Loan amortization. Author's original.	138
Table 29: Amortization each year and total sum. Author's original.	139
Table 30: Result chart and cash flow balance per year. Author's original.	140
Table 31: Net Present Value. Author's original.	143
Table 32: Treasury chart. Author's original.	145

