



GROUP _035

STRATEGIC PRODUCT INNOVATION INTERNAL ANALYSIS: VANMOOF

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[13]

CONTENTS

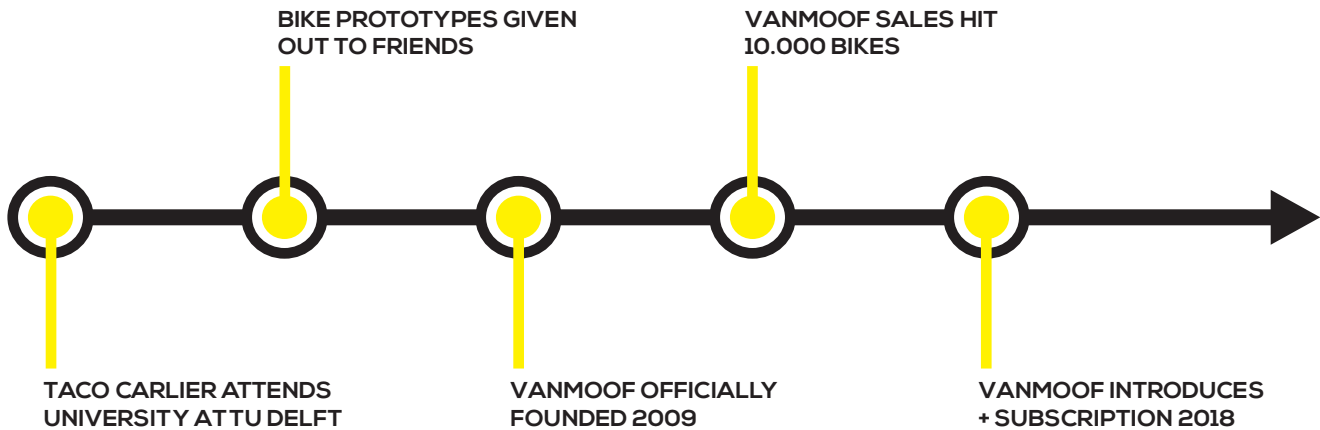
- 1. Introduction*
- 2. Company Background*
- 3. Company Scope*
- 4. Growth and Competitive Strategies*
- 5. Product Portfolio*
- 6. Marketing Mix*
- 7. Corporate Social Responsibility*
- 8. Sustainability*
- 9. Strengths and Weaknesses*
- 10. Conclusion*

INTRODUCTION

Carefully considered product design will encourage growth of the Dutch bike company VanMoof. By analyzing the portfolios, marketing strategies, and strengths and weaknesses of both VanMoof and their competitors an understanding of the company will be established to better advise VanMoof on further product development and marketing strategy. Moreover, a broad familiarity with the urban cycling market will serve as a foundation for product innovation that is pertinent and socially valuable.

2

COMPANY BACKGROUND



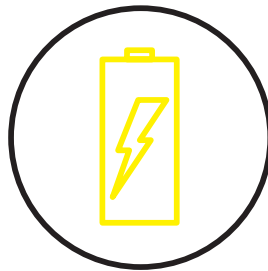
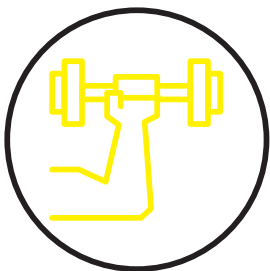
History

VanMoof was founded by two brothers, Taco and Ties Carlier in 2009. The journey began when Taco needed a bike to ride at university. He discovered that the bike he had chosen was not widely available in The Netherlands, and began a business importing them. Eventually, he got bored and started designing a bike of his own with the help of his brother Ties. They started with 100 prototypes,

which they gave to their friends. With the knowledge and reflection collected from these test drives they improved the bike, which led to the first VanMoof bike in 2008. In the time following, their company exploded. Sales jumped from 0 to 10.000 bikes in half a year [17]. More recently, they have expanded their company to multiple cities across the world, and sell both traditional and electric bicycles.

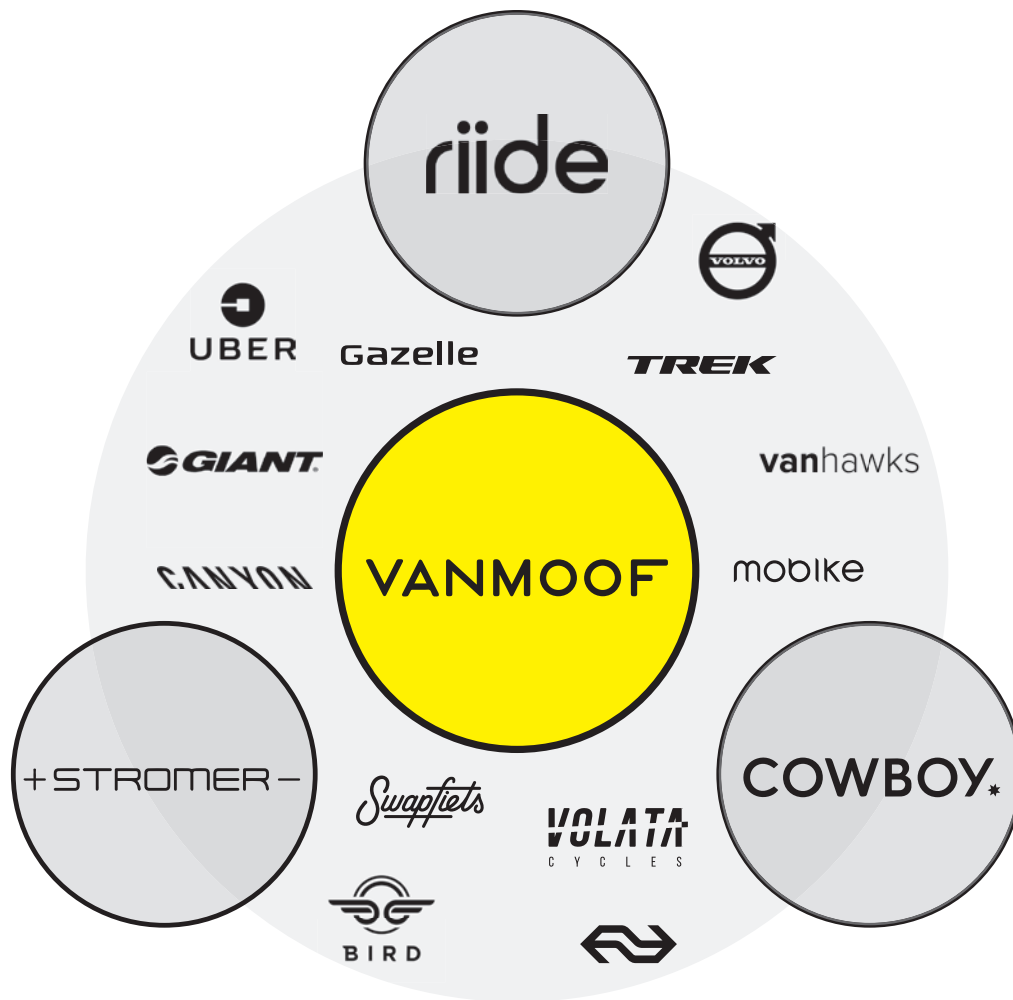
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COMPANY SCOPE



VanMoof's Scope

VanMoof is a fast-growing, city-oriented bicycle company with electric and smart bikes. Their goal is to get people, especially between the ages 25 and 45 years old, in cities all over the world riding a bike in a safe, eco-friendly and efficient way on bikes that are stylish and modern.



Competitors

The bicycle business is huge. It is expected that the revenue will grow to over \$62 billion by 2024 in which e-bikes will contain the biggest segment in the market according to a Persistence Market Research (PMR) report. This good news also brings about a lot of competitors for VanMoof.

Internationally, the three biggest bike stores in Europe are Bike Totaal, ZEG and Profile, based on total amount of stores. VanMoof's niche, rather, is there specialty stores. VanMoof currently has 8 proprietary storefronts. This allows them to sell directly to the customer. Canyon, a German bike manufacturer, employs this direct sales method as well. They however focus exclusively on race bikes and mountain bikes, whereas VanMoof specializes in city bikes. A few other companies also build integrated technology into their bikes, such as Vanhawk and Volata. Both are significantly smaller but could be serious competition in the future.

Most large bike brands, such as Batavus and Gazelle are racing to invest in the booming e-bike market sector. One such company is Stromer, a Swiss brand. It is about 5 times

larger than VanMoof and makes bike in a higher price range, but nevertheless can be considered a competitor. Based on portfolio and market analysis, the three main competitors within Vamoof's scope are Riide, Cowboy and Stromer because all three sell electric city bikes. Much like VanMoof, some of them even have similar services such as a renting system.

Riide is a company that sells e-bikes for urban commuters, and also uses a system where you can either rent or buy a bike. They currently only sell one bike: the Riide. Cowboy sells "electrical bikes for urban riders". This bike is very similar to VanMoof's electric bike as it also has integrated technology in the frame like a battery display.

VanMoof also introduced VanMoof+, what they call "a worry free monthly subscription to the world's smartest bikes." This way you pay to have access to a bike without the cost or responsibility of ownership. Other companies that have a option similar to this are Swapfiets, Mobike and OV-fiets and are therefore close competitors as well, operating within a slightly different fact of VanMoof's scope.

4 GROWTH AND COMPETITIVE STRATEGIES

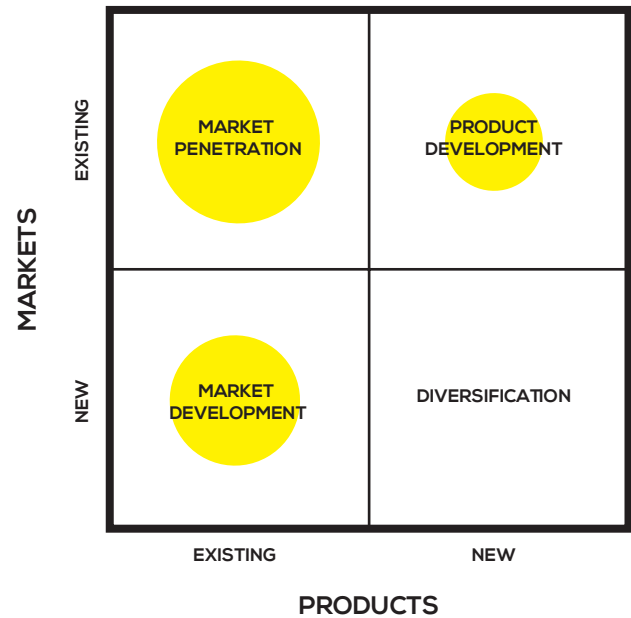
Ansoff Matrix

VanMoof belongs to the following categories:

Market Development: Their main product platform is a market development strategy where they sell the same five basic models of bikes to an increasing number of users. They encourage this market expansion by targeting existing cyclists with enticing prices and perks and by opening up new stores in different cities and countries.

Market Penetration: VanMoof also uses a market penetration strategy with their subscription model to entice consumers who already exist within their market (urban cyclists) away from other brands with low prices and tangible perks.

Product Development: The Market development strategy is supplemented by a product development strategy where VanMoof develops accessories to its bikes to create additional revenue from their existing market. Realistically, the strategy for their bike sales is also rooted in product development, as the way VanMoof gains customers is by developing new and exciting products.



Miles and Snow Competitive Strategy

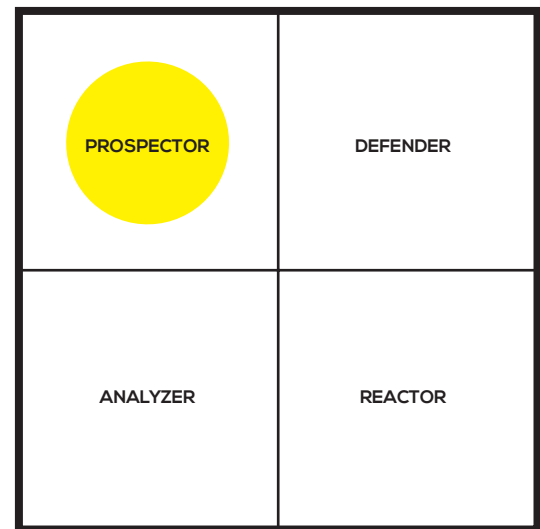
VanMoof is a prospector as analyzed by Miles and Snow's Competitive Strategies. They only sell a few main products, and differentiate this product as much as possible with technological advancements and premium services.

VanMoof creates a unique and desirable culture around their bicycles by elevating their durability, cost effectiveness, and maintenance. While each of these aspects of VanMoof product are groundbreaking, the competitive position is unstable.

Other companies, such as Stromer and Riide have already begun to catch up with smart locks and e-bike capabilities targeted at the urban commuter. Riide even has piloted a bike subscription service. VanMoof must continue to differentiate themselves with product advancements in order to maintain a competitive edge in the landscape.

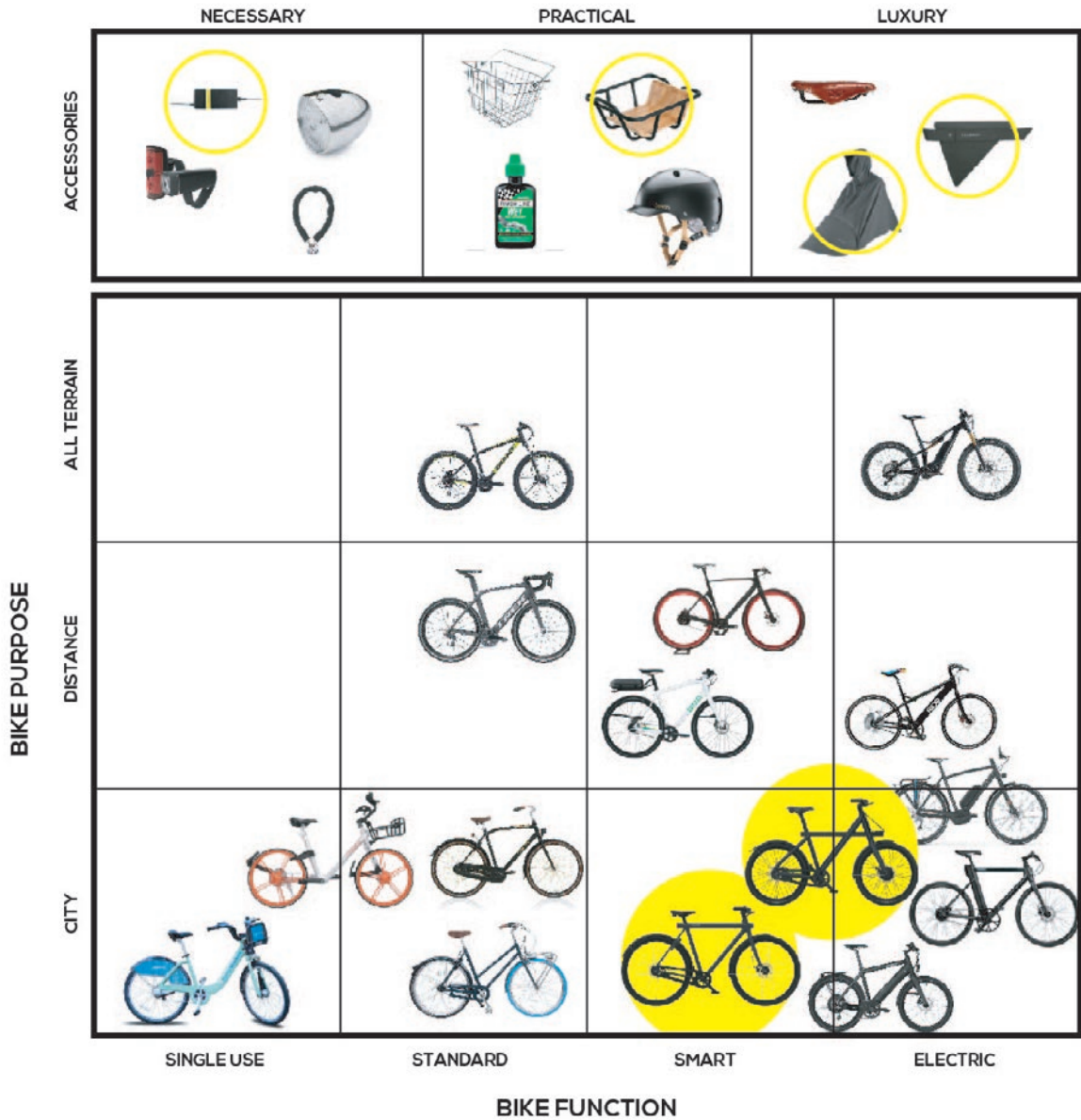
Overall Competitive Strategy

Overall, VanMoof thrives by offering a premium product experience at a low cost, establishing itself as prospector and creating customers primarily with product advancement and market penetration.



STRATEGY





[20,24,7,25,15,10,8,16,18,19]

Analysis

VanMoof and its competitors are divided over the parameters 'Bike Purpose' and 'Bike Function' to analyze their occupied space within the market. As seen in the portfolio, very few competitors are in the all terrain area whereas a lot of them are in the category city biking. VanMoof is in a Tactical position here, as the market space is relatively open. A few companies are into the daily rental bikes, but of VanMoof's direct competitors, most are in electric and smart bikes. This makes VanMoof tactical in the single use market and continuous in the city oriented smart and e-bike space. VanMoof appears only in this market space, which is quite crowded based on this analysis, but also is the DNA at the heart of the VanMoof brand.

Accessories are also analyzed as part of the product offering. This classification was made by whether accessories were necessary, practical, or luxury oriented. While the bike portfolio analysis included many brands, the accessory analysis takes a deep dive into the entirety of accessories available from each VanMoof, Riide and Veroletti. Based on this analysis, VanMoof is fairly continuous across all three categories of the accessory market. Each brand has a smattering of offerings in each category. Because of this, and because the accessories are a relatively small and low visibility part of the VanMoof brand, it is not imperative that VanMoof act in this market segment.

ELECTRIFIED X2



[13]

Product

When the two Carlier brothers noticed that there was no easy comfortable way to move through the city, they came with the idea of VanMoof. VanMoof is just that: a modern means of transport optimized purely for the cities. VanMoof has two different bike models, S and X, both of which are available in three different types: Smart, Electrified and Electrified 2. The bikes are of high quality which is largely due to the fact that VanMoof designs and manufactures over 80% of the bike by themselves. Moreover, the fact that all their models have the distinctive bar with VanMoof written on it makes their product unique from other staples of the e-bike market.

What distinguishes VanMoof from their competitors is not only their free shipping, but also the ready to ride bikes within minutes and a 30-days free return guarantee. They claim that their bikes are close to theft free: this is partly thanks to the 'Bike Hunters' that will track down the bike when it's lost or stolen. This is a service not offered by any of their competitors, although Cowboy does have a bike tracking service too. [4]

Additionally, VanMoof also offers the opportunity to rent one of their bikes and thus only pay a monthly amount to have access to one of their bikes. VanMoof+, as they call it, is VanMoof's answer to the latest trend in which having access to a product is more valuable than actually possessing it, the so called sharing economy. Another service they provide is the Bike Doctors, who will repair your bike for free when it's broken [13]

SMART S



[13]

Price

The VanMoof Smart series starts at €898, which is relatively cheap for a smart bike. [13] Other ordinary city bikes from Dutch brands like Gazelle and Batavus are around the same price range so comparing this to the VanMoof series it is easy to say that VanMoof gives you a much better deal. This is done to create brand awareness and quickly gain a big market share.

VanMoof's other 2 series, the Electrified from €2.998 to €2.098 is a closing sale and the Electrified 2 from €3.398 to €2.598 is an early bird introduction sale. The Electrified 2 does however have a reservation cost of €100. Three e-bike competitors, Faraday Porteur, Riide and COWBOY are selling their bikes for €3.000, €1710 and €1.790 respectively. VanMoof comes in as the most expensive of the brands up front, but offers services that competing brands do not which adds to the value exchanged for the steep price. Alternatively, VanMoof offers a subscription service to combat the potentially cost prohibitive effects of their pricing structure. The subscription service they provide, the so called VanMoof+, starts at €19 per month but is however only available for the Smart series. Despite that you still get a high quality bike for a monthly fee of €19. Similar subscription services such as Swapfiets, OV fiets or Mobike provide you with bikes of much poorer quality but are at the same time cheaper and more readily available. OV Fiets costs €3,85 for 24 hours but is meant to be for a one day use. This is confirmed by the fact that OV Fiets becomes even more expensive after using it 3 days straight: the price will increase to €5.00 per 24 hours. Swapfiets and Mobike which are €15 (€12 for students) and €10 a month respectively are clearly cheaper but do have drawbacks. VanMoof is more expensive, but also justifies it with premium service and product, creating exclusivity similar to brands like Apple. [23]



[21]

Place

VanMoof has retail shops globally as well as a on-line platform for product purchase. The retail shops focus on branding and offer extra services, including free coffee. The products are shown in an aesthetic way, which makes the shop look more like a showroom, and creates a luxurious and modern vibe. Using a showroom is unique in this industry: Of the three main competitors, only Stromer has such a branding retail store. VanMoof bikes can only be bought from the company directly, and company offices are always above the retail stores, offering unparalleled customer connection.

VanMoof offers on-line purchasing in most parts of Europe, USA, Taiwan and Japan. Outside of these areas it's currently not possible to order a VanMoof but on the website is stated that they are working on 174 other countries.[13]

Promotion

VanMoof focuses on product branding. The website is filled with aesthetically pleasing pictures and videos, creating a futuristic and trendy vibe. They don't use a lot of commercials: the brand focuses on attracting a crowd with a high quality design product. Around their "peace of mind" concept they upload a lot of fun to watch video content to YouTube with the "bike hunter squad" where a team hunts down stolen bikes. Besides, they promote their content on Instagram and Facebook, adding new content almost daily. Their Instagram focuses on showing aesthetic pictures catching the essence of the company's character. With Facebook their content is more in depth, containing newspaper articles, videos and their design vision. On Facebook they also communicate with their public and they reply fast. [25]



[13]

VanMoof

Corporate social responsibility is the responsibility of a company being conscious of the kind of impact they are having on all aspects of society including economic, social, and environmental. By doing this, businesses can benefit society while boosting their own brands.

VanMoof incorporates social responsibility by having a long warranty of 2 years that clearly states that one can truly trust the bikes of VanMoof. Furthermore they are aware that bike theft is an actual problem, especially with expensive smart or e-bikes, and take responsibility for this with their anti-theft system which also includes they previous named Bike Hunters.

To really point out that VanMoof makes it a lot harder for thieves, they even wrote an open letter to them. In which the thieves are apologized to and also thanked for pushing the company towards better anti-theft-bikes. At the end of the letter there is a job offer for the thieves to put their 'mechanical know-how' to good use. It's a brilliant promotion strategy, which includes humor, honesty and social responsibility.

Although VanMoof provides you with an army of experts, their shops/working places are still only located in a small number of cities, which makes it hard to use their maintenance services. This, however, is something that is being worked on, since the company is still quite new and still expanding.

VanMoof's subscription model transfers responsibility for the bike from the consumer to the company, and gives them an incentive to provide the customer with the highest quality bikes. Additionally, because of this model, consumers who couldn't otherwise afford a nice bike or were worried about theft are able to ride in quality and style.

Although the company wants to portray safety and provide a lot of accessories in their shop, a helmet cannot be found. Their bikes can reach high speeds and even though a lot of people will buy a helmet themselves, it would be a good option to actually sell them themselves.

Competitors

One of VanMoof's main competitors, Riide, has anti theft service and unlimited maintenance, similar to VanMoof. Cowboy on the other hand has brake lights for extra safety and a battery indicator to make sure you can always recharge in time, demonstrating value of customer safety and product transparency.

Stromer has incorporated environmental responsibility by only using solar energy, even for their own facilities. In addition they also have special employees who test if all the important parts for riding a bike safely work to make sure everyone riding their bike will have a safe experience. [5]

8 SUSTAINABILITY

A sustainable product is usually more expensive, that's why a lot of consumers still choose for the cheaper alternative, although this will be more expensive on the long run. One of the things that truly helps to also reach the consumers who have less to spend is the leasing of products, this helps to make it affordable and is also easy to overview. VanMoof is very aware of the fact that our resources are running low and thus focuses on keeping the same bike on the road for as long as possible. By offering a subscription service to their bikes, it is in the company's best interest to make them last as long as possible, as VanMoof maintains ownership of the bike. To help with this goal, the bike hunters and bike doctors play a big part [13]. Your bike can be maintained for free and separate parts can be bought if broken. By making sure the bike lasts longer, fewer parts have to be fixed and thus manufactured. The bikes are mostly made out of coated aluminium. This material choice makes the bikes highly sustainable [1]. It is so sustainable because it does not need much energy to be made and the material is recyclable. It fits perfectly with their motto: "We don't do disposable", as the material is durable and needs little maintenance. Another sustainable aspect of the VanMoof bikes is that they are electric. Changing to electric bikes versus cars reduces air pollution, because they have no gas emissions. It also reduces traffic jams because less big vehicles are on the road which therefore also reduces the gas emission. Because e-bikes help to reduce the carbon footprint, they are seen as one of the most sustainable modes of transport [3].

The competitors, Cowboy, Stromer and Riide are also manufacturing electric bikes which makes them in that aspect equally sustainable. The big difference between VanMoof, Riide and Cowboy is that VanMoof really cares about their brand being portrayed as sustainable, in contrast to the other three companies. On their social media VanMoof explicitly describes that sustainability is an important part of their company. Cowboy and Riide have little or no advertisement about how important sustainability is to them. Stromer does inform people that they only use solar energy, even for their own facilities, which shows greatly how responsible they are with earth's resources.

A future development for VanMoof could be in the manufacturing process. Currently they manufacture their parts all over the world, but primarily in Taiwan [13]. This causes air pollution, because they have to ship the parts around the world. If they manufacture their parts nearer to their customers, the gas emission caused by the shipment process to their stores will be reduced. Another option to make their company more sustainable is powering there electric bikes with green electric energy. They could do that by making solar panels on the bikes. This way the bikes does not need a charger and is always usable. They could also focus on the packaging of their accessories. They can reduce their packaging materials and make sure that they are recyclable. This way the company gets a little bit more sustainable.

[2]



STRENGTHS AND WEAKNESSES

In order to understand the brand and its products, a strength and weakness analysis is conducted.

What can be seen in the portfolio is that VanMoof is tactical in the area of single use city bikes. This is a weakness since they are not present in the market space but can be seen as a future opportunity because they can begin investing in it and start doing it. However, this does not necessarily mean that a move into single use bikes is the best strategy for VanMoof. Assessment will be made upon further analysis.

They are also tactical in the area of long distance and all terrain biking. They are not present in this area though this is intentionally, because they are focusing on city bikes. This could also be an opportunity to look into.

In the area of city bikes in general, VanMoof can also be seen as continuous. This is because their bikes aren't as easy to get as their competition. VanMoof only sells in their own stores, and the other bikes are more broadly available. This is therefore an opportunity as well.

VanMoof also is progressive in the renting aspect of the market. The bikes that can be rented at VanMoof are technically way more advanced than other renting bikes and have more services. For instance, the Swapfiets is a more basic rental bike and doesn't have the anti theft service. They are also progressive in the smart bikes, because their bikes are more technically advanced than competitors.

[12]



— +

SINGLE USE	●	
ALL TERRAIN	●	
CITY BIKING	●	
RENTING		●

CONCLUSION

Upon analysis of the company VanMoof, specifically in comparison to Riide, Stromer, and Cowboy, it can be concluded that they are a prospecting company within the city biking landscape that develops its market with product centered innovation and customer oriented service.

They distinguish themselves within this relatively narrow product market through quality of product and creating a premium, modern feeling bicycle and surrounding service package.

VanMoof is already quite conscious about the impact they have on the society. By owning their positive influence, VanMoof can continue to attract new customers, and by enhancing that image we aim to help them drastically grow their market.

SOURCES

- [1] Succesvolle ondernemers: VANMOOF. (2013, 24 january). Retrieved on 15 september 2018, from <https://dewerelddraaitdoor.bnnvara.nl/media/206852>
- [2] [Outsmart the City with our Smart & Electric Bikes]. (w.d.). Retrieved on 12 september 2018, from <https://www.vanmoof.com/>
- [3] Riide Bikes. (w.d.). Retrieved on 14 september 2018, from <http://www.riide.com>
- [4] COWBOY - Electric Bike for Urban Riders. (w.d.). Retrieved on 14 september 2018, from <https://nl.cowboybike>
- [5] Explore our unique design, power, range and connectivity (w.d.). Retrieved on 14 september 2018, from <https://www.stromerbike.com/>
- [6] Investment-sheetlobal Holding BV (w.d.). Retrieved on 14 september 2018, from <https://docplayer.nl/59888152-Investment-sheet-overzicht-bedrijfsnaam-vanmoof-global-holding-bv-website-contactpersoon-ta-co-carrier.html>
- [7] VanMoof wil 'Apple onder de fietsbouwers' zijn. (w.d.). Retrieved on 16 september 2018, from <https://www.bright.nl/nieuws/artikel/3917521/vanmoof-wil-apple-onder-de-fietsbouwers-zijn>
- [8] Aluminium Sustainability - Duration Windows. (w.d.). Retrieved on 15 september 2018, from <https://www.duration.co.uk/AluminiumSustainability.asp>
- [9] Are E-Bikes the Future of Urban Mobility Revolution? (2018, 14 february). Retrieved on 16 september 2018, from <https://www.technavio.com/blog/e-bikes-future-urban-mobility>
- [25] Facebook - VanMoof.(w.d.). Retrieved on 13 september 2018, from https://www.facebook.com/VANMOOF/?ref=br_rs
- [10] Vanhawks. (w.d.). Retrieved on 13 september 2018, from <https://www.vanhawks.com/>
- [11] just the vanmoof site (see up)
- [12] Volata cycles. (wd.). Retrieved on 13 september 2018, from <https://volatacycles.com/>
- [13] Full Suspension Trail E-MTB. (w.d.). Retrieved on 16 september 2018, from <https://www.canyon.com/en-nz/mtb/spectral-on/>
- [14] Amsterdam Bike Doctor - VanMoof. (w.d.). Retrieved on 15 september 2018, from <https://jobs.vanmoof.com/bike-doctor-ams>
- [15] Media kit - VanMoof. (w.d.). Retrieved on 17 september 2018, from https://vanmoof-nl.pr.co/media_kits/219382
- [16] Vanmoof – Store. (w.d.). Retrieved on 17 september 2018, from <http://www.joakimbergbom.com/vanmoof-taipei/>
- [17](w.d.). Retrieved on 14 september 2018, from <https://bicycledutch.files.wordpress.com/2013/04/gazelleking.jpg>
- [18] SMART WOMEN SAVE. (w.d.). Retrieved on 18 september 2018, from <http://www.smartwomensave.com/2013/08/>
- [19] just from the cowboy site see[4]
- [20] Howells, K. (2018, 4 july). Mobike enters Indian market. Retrieved on 17 september 2018, from <https://www.bikebiz.com/landscape/mobike-enters-indian-market>
- [21] vanmoof ([2])
- [22] Stromer ST1 Elite Electric Bike. (w.d.). Retrieved on 12 september 2018, from <https://newwheel.net/products/stromer-st1-elite-electric-bike>
- [23] Talon 3 (2017) - Giant Bicycles. (w.d.). Retrieved on 20 september 2018, from <https://www.giant-bicycles.com/us/talon-3-2017>
- [24] Trek Madone 9.0 C H2 2018 Road Bike. (w.d.). Retrieved on 17 september 2018, from <https://www.evanscycles.com/trek-madone-9-0-c-h2-2018-road-bike-EV311918>





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Figure 1: Bike Commuter

CONTENTS

Introduction

Part 1

- 1 Market Attractiveness
- 2 Industry Attractiveness
- 3 Swot Analysis

Part 2

- 4 Search Areas
- 5 Product Idea
- 6 Sustainable Competitive Analysis
- 7 Market Segmentation
- 8 Conclusion



INTRODUCTION

Internal analysis has been done in the first report. To get a broader look of the company an external analysis was done. The threats and opportunities of VanMoof were used to get to new search areas to create more opportunities. VanMoof cares about safety, hence the clear and strong lights that are integrated in their bikes. One of their strengths is making dull looking accessories/parts look neat and smooth. There are already some accessories available in their shop being more adapted to the neat look of a VanMoof bike, so this made a good search area, keeping in mind being safe is always important. Quite notable was that there are no helmets being offered. VanMoof would definitely be good in making a safe helmet look more appealing, since a lot of people don't really like a regular helmets. This helmet will also need to be safer and smarter, help you with directions or weather warnings for example.

SECT
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**EXTERNAL
ANALYSIS**

MARKET ATTRACTIVENESS

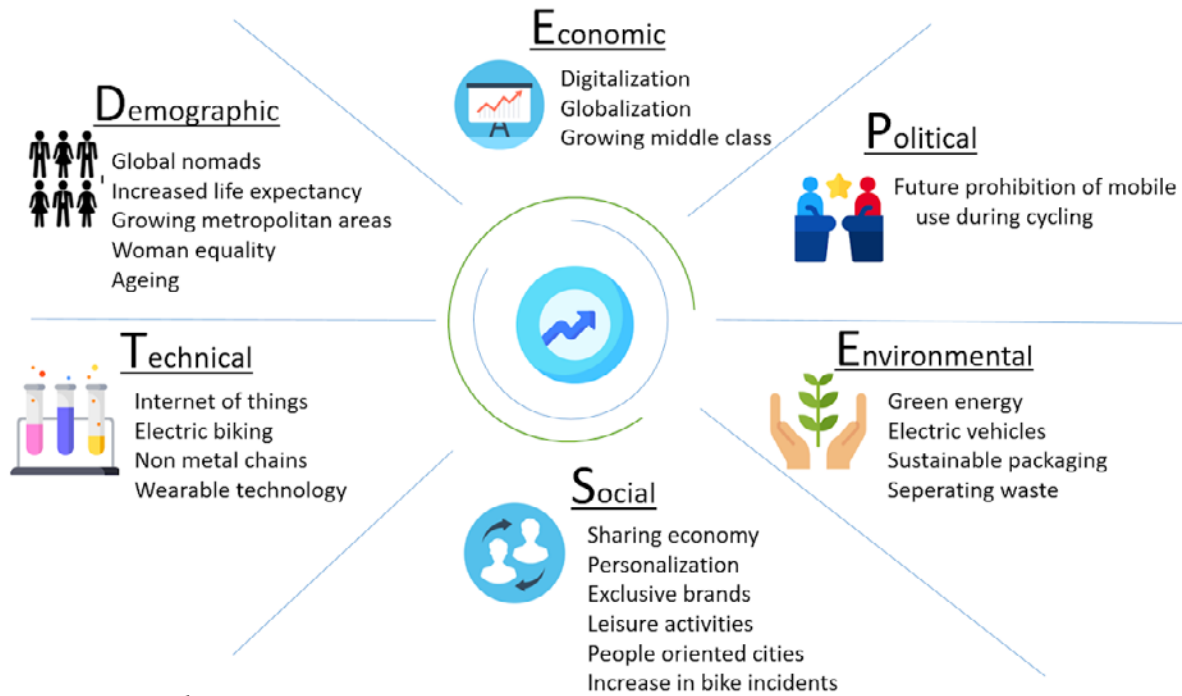


Figure 2: DEPEST Framework

Whether the bicycle market might be profitable in the future, also described as the market attractiveness of the bicycle industry, is analyzed through looking at the relevant trends and developments for VanMoof. The context of the bike company is studied according to the DEPEST framework. Using the DEPEST method, a list of trends per category (demographic, economic, political, environmental,

social and technological) was made. After making this overview, the trends that seemed the most relevant to VanMoof were picked out and analyzed by looking at their opportunities and threats. The chosen relevant trends all have a relation with the scope of VanMoof: they all have something to do with cities, integrated technology, VanMoof’s branding or their bikes and services.

INDUSTRY ATTRACTIVENESS

2.1 Industry Attractiveness

The industry attractiveness, better described as the magnitude and ease of making profit (BusinessDictionary, n.d.), in comparison with the risks involved in VanMoof’s industry is important as it tells them how to compete with major forces acting on the industry. VanMoof clearly belongs to the bicycle industry in which they produce most bicycle parts by themselves. VanMoof doesn’t have the image of being a bad employer or as a company that produces a lot of CO2 pollution. Their bikes are smart and/or electric and at same time though which keeps them on the road longer and are therefore sustainable. All in all VanMoof belongs to the sustainable,

environmental neutral smart/electrical bicycle industry.

The majority of the bicycle industry is located in China and Taiwan, where China is responsible for the more basic and cheaper ones and Taiwan is responsible for the more complex and more expensive ones. VanMoof mainly operates from its headquarters in Amsterdam but has its manufacturers in Taiwan. However, a big difference is that VanMoof designs the greater part of the parts by themselves which is a big advantage for having the Supplier power (see ‘supplier power’)

PORTER'S FORCES

FORCE	RISK
THEAT OF NEW ENTRY	● ○ ○ LOW
THREAT OF SUBSTITUTION	● ● ● HIGH
BUYER POWER	● ● ○ MODERATE
SUPPLIER POWER	● ○ ○ LOW
COMPETITIVE RIVALRY	● ● ○ MODERATE

Figure 3: Porter's Forces

2.2 Threat of New Entry

The general biking market is taken by the dominant biking brand we all know such as Giant and Trek both of which are hard to compete to, especially as a starting brand. Entering the bicycle market is easier by focusing on a specific niche such as just mountain bikes or e-bikes. Also, with the use of the internet and online shopping it has become easier to get new products to the customer. However, much knowledge is required for low production costs. Besides, bicycles are pretty expensive which does not only cause high start-up costs but also leads to buyers not quickly deviating from their previous supplier. Additionally, VanMoof is an e-bike/smart bike brand, a market that has been named the future for a long time now. This has caused a lot of companies to jump into the e-bike/smart bike market which has led to saturation of the market. So to conclude, we can say that the threats of new entry is low which is highly favorable for VanMoof.

2.3 Threat of Substitution

VanMoof has created a bike to have people in cities all over the world riding a bike in a safe, eco-friendly and efficient way. Their customers mostly use the bike for commuting purposes. But when the rain is hammering down on the roof or you're just extremely tired the bike can easily be substituted. Realistic alternatives can be the car, the bus or the train although neither of them is as eco-friendly as a bike. Nonetheless the target audience of VanMoof have a certain mindset in which they do not want to look for a parking spot, wait for a delayed train or having to stand in a too crowded bus. So although a bike can be easily replaced VanMoof targets customers that favor the advantages of a bike and in modern society where the environment is getting more and more important, this group is only expanding. Therefore the risk can be considered moderate.

2.4 Buyer Power

The bicycle industry is huge in which the companies have a lot of power, similar to the car industry. This because there is a limited amount of bicycle companies in a gigantic market which is only increasing and even replacing the car industry (McFarland, 2017) which leads to buyers having

limited amount of alternatives.

The composition of the buyers is mostly many individuals ordering a single bike and a few bigger companies ordering larger amounts. Having many individuals as your customer means a large reduction in sales will not happen fast which is an advantage. The lack of buyer power also means the customers are not likely to drive the prices down.

On the other hand it is not that hard to change to brands that sell a similar product in which case the buyer has the power again. VanMoof has to ensure buyers will choose their bike through showing the advantages it will give them.

2.5 Supplier Power

A company to manufacture its products requires raw material, labor etc. If there are few suppliers providing material essential to make a product then they can set the price high to capture more profit. VanMoof designs and manufactures almost 80% of the bike by themselves and therefore don't need a lot of suppliers to import parts. This makes VanMoof independent from suppliers. Also, there are a lot of companies selling the raw materials they need to manufacture their own parts. So to sum up, the suppliers do not have a lot of influence on VanMoof.

2.6 Competitive Rivalry

From the previous report it can be concluded that there are quite a few competitors despite not all of them being the same size. Also, another competitor can rise if a big existing tech company such as Samsung, Pioneer or LG comes with a similar product. With their knowledge of mass production, they can instantly be a giant competitor, something that also worries the founders. (van Asseldonk, 2018)

However, VanMoof has expanded its company to the subscription side as well in which they are still quite original. Moreover, the bicycle industry is rapidly growing and thus also the number of consumers. All in all the risk of rivalry amongst present competitors is moderate.

2.7 Conclusion

VanMoof is an independent bike brand, which is not dependent on suppliers and since they are gaining customers, mainly through their bike leasing service, also moderately dependent on buyers. Here it is good to take in mind that VanMoof is not that expensive in regard with the quality of their bike. It is hard to enter their market which creates a low entering power Furthermore there is a small risk VanMoof their bikes are being replaced by other transportation ways, such as public transport. This because the target audience favors, for example, being independent from the time a bus leaves.

So to conclude, there are risks, but VanMoof is constantly developing itself and finding new angles to approach the market to decrease the risks.



SWOT ANALYSIS

<p>S (STRENGTHS)</p> <ul style="list-style-type: none">• FOCUSING ON NICHE MARKETS• STRONG BRANDING• CUSTOM MADE PARTS• PUSHING TECH CAPABILITIES• UPSELLING AUXILIARY PRODUCTS• PROVIDING WHOLISTIC SERVICES• PROVIDING PROPRIETARY SERVICES• PRICE ACCESSIBILITY (SUBSCRIPTION)• DURABILITY	<p>W (WEAKNESSES)</p> <ul style="list-style-type: none">• PRODUCT ACCESSIBILITY (AVAILABILITY)• MARKET EXPANSION• COMMUTER FOCUSED ACCESSORIES• LOW PRICE RANGE BIKES• TRANSPARENCY IN ORIGIN OF MATERIALS AND PRODUCTION
<p>O (OPPORTUNITIES)</p> <ul style="list-style-type: none">• RISE IN BIKE COMMUTERS• BORING BIKE ACCESSORIES• IOT SMART DEVICES• WEARABLE TECH TREND• DIGITALIZATION OF EXPERIENCES• PERSONALIZATION• GLOBALIZATION• GREEN ENERGY TREND• SHARING ECONOMY• INCREASING BIKE ACCIDENTS	<p>T (THREATS)</p> <ul style="list-style-type: none">• EXPLODING ELECTRIC BIKE MARKET• INACCESSIBILITY OUTSIDE OF SPECIALIZED VANMOOF SHOPS• DAILY RENTAL SERVICES• MORE PROLIFIC SUBSCRIPTION SERVICES

Figure 4: SWOT Analysis

3.1 Analysis

Above is a breakdown of the strengths, weaknesses, opportunities, and threats identified as pertaining to Vanmoof. The SWOT analysis will be further referenced in section 2 of this report.

SECT
ION
_02

**NEW
PRODUCT IDEA**

4 SEARCH AREAS

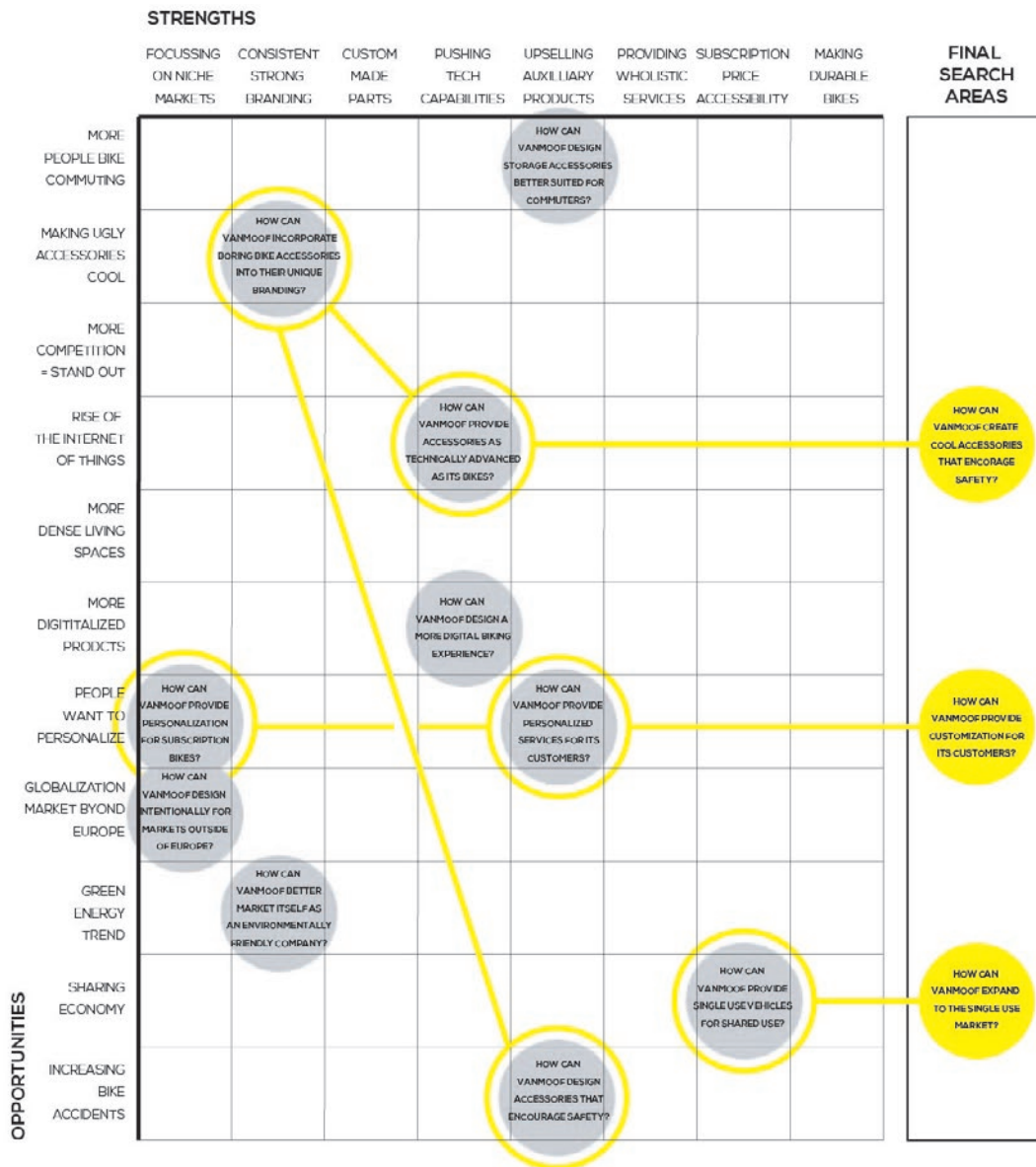


Figure 5: Search Areas

4.1 Analysis

The trends, opportunities and threats analyzed in the previous chapter were used for looking for search areas. The trends were put on a vertical axis, while the strengths of the SWOT analysis (Figure 4) were put on the horizontal axis of the search areas matrix (Figure 5). The matrix revealed ten search areas as seen in the figure. The conclusion was made that a few of the search areas could be combined, because they are similar.

The search areas: “how can we make safety accessories?”, “How can we provide technically advanced accessories?”, “How can we provide better storage to commuters?”, “How can we make the dumb/boring accessories fit VanMoof’s

branding?”, were combined to an overall similar search area: “How can we make dumb/boring accessories more technically advanced and modern like VanMoof’s style?”. The search areas: “how can we provide personalized bikes?”, “How can we give personalized bikes?” and “how can we give extra personalized services or features?”, were combined into: “how can we make VanMoof more personalized?”. Another interesting search area is: “how can VanMoof expand into the single use market?”

These search areas were chosen because most potential for VanMoof was seen in them.

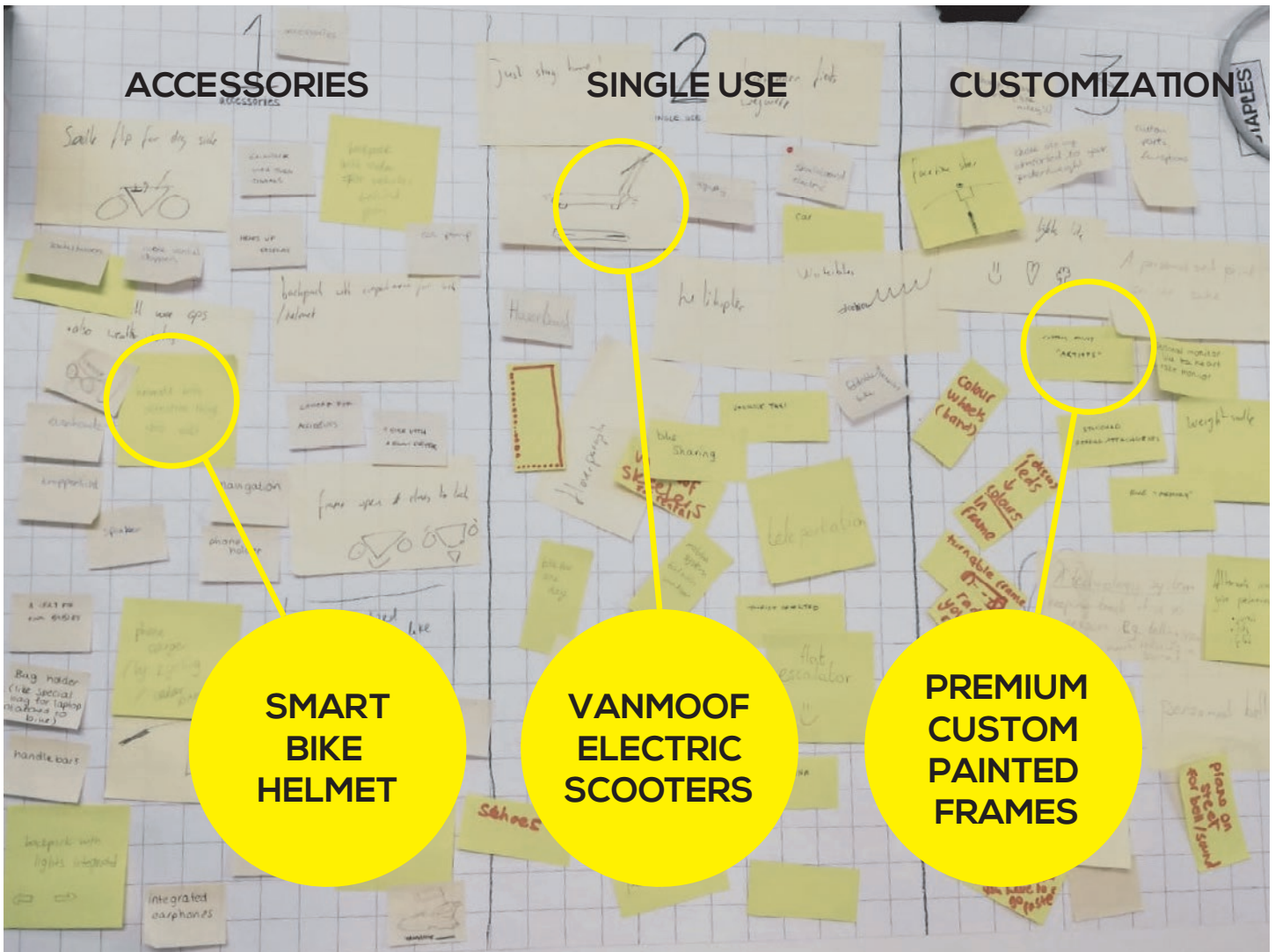


Figure 6: Brainstorm

5.1 Brainstorm

The final three search areas the matrix revealed were used to generate new product ideas. A brainstorm session resulted in several product ideas for each search area as can be seen in Figure 6.

The most promising idea for personalizing a VanMoof product was adding a personalized print to your bike or the idea that VanMoof would create a system that keeps track of the customer, for example where the bike tells you how many calories you burned. Nevertheless are these ideas not considered original enough and thus were dropped. How can VanMoof expand into the single use market? This question had one winning product idea as an answer: VanMoof introducing electric skateboards or electric scooters in a bike sharing program similar to Mobike. Although this is a promising idea for the future, especially

in the Netherlands, it was concluded that this idea does not fit with the vision of VanMoof, because . Besides, this idea is too big of a step for the company and therefore considered a big risk and thus not realistic.

The increasing amount of biking incidents, the old fashioned look of today’s biking accessories and the growing development of smart wearable technology combined with the internet of things created the following search area: how can we make dumb/boring accessories more technically advanced and modern like VanMoof’s style? This search area had the most potential as it followed a lot of trends. The product idea that followed from this search area was a VanMoof styled helmet. Much importance was seen in the increasing amounts of biking accidents so the helmet was a logical answer.



Figure 7: Product Idea

5.2 Final Product Idea

VanGuard is a connected smart helmet for the city commuter. To fit in the VanMoof style the helmet is cool and high tech. The overall look of the helmet is inspired by different helmets on the market as seen in Figure 7. VanGuard is made with a generative design which maximizes the strength to weight ratio to make it secure and easy to carry-on. The design has an open cell constriction that allows a cable lock to be passed through to secure your helmet safely to the bike. It also connects to the alarm system of the bike. When someone tries to steal the helmet, not only the user will get notified on the VanMoof app, but also the alarm of the bike will go off. The helmet can be set as a key which automatically activates and deactivates alarm when you walk away or to the bike. The rear lights have a LED dot matrix that will make the helmet more personalized as you can change the design and color in the VanMoof app. Moreover, the user will be more visible at night for extra safety. The helmet incorporates a micro USB-port for easy everywhere charging with

standard cables. The integrated technology will keep the user connected to their bike and phone. With a Bluetooth connection the user can connect their phone to the helmet and use it for navigation, updates, camera footage, data tracking and listening to music. A camera integrated in the helmet offers security for city riders. The helmet sends ride footage to the cloud for short term storage. In the event of an accident the users can collect this footage from the cloud. The built-in speakers use bone conduction technology, because this technology will not block out traffic noises. By connection your navigation to the speakers, the user will not have to look at their phones anymore and thus focus more on the road, which makes it more safe. The extra AI-assistance gives the user weather updates, meeting alerts, etc. This makes the helmet extra user friendly. The data tracking can track the user and indicates when and how much the helmet is worn. VanMoof can reward the bikers who wear their helmets more to encourage the safe biking habits.

6.1 Sustainable Competitive Advantage

Though cycling deaths are falling, serious injuries are increasing – and increasing at an alarming rate. Indeed, 3,401 cyclists were seriously injured last year on Britain’s roads, a jump of 8.2 per cent on the year before. (Wallop, 2015) This shows there is an increasing need for a safety feature such as a helmet. However the looks of common contemporary helmets are not aesthetically pleasing and as a result the majority does not wear a helmet in the Netherlands. Also, where to leave the helmet when entering the grocery store, the helmets are not storable. This all changes with the ‘VanMoof styled’ helmet, the safe, good-looking helmet that can be stored on the bike when needed. Being aware of the new technology trends of wearable technology and internet of things the helmet is also provided with blind spot detection, safety lights and guided navigation allowing it to be a smart product that goes with VanMoof’s style. This is besides a safety advantage also a convenience advantage as you don’t need to look on your phone for a route anymore, something that will be forbidden in the near future anyway.

VanMoof’s target audience; people, preferably between 25 and 45 years old, in cities all over the world will need the helmet for safety reasons and in addition will easily adapt to the technology in the helmet that provides real value to the customer.

From the three main competitors (Stromer, Riide and Cowboy) only Riide sells helmets in its accessories segment though it’s a basic helmet, no extra features and the old unaesthetically pleasing design. However there are several other companies you can get a helmet from. Nevertheless, the smart helmet segment is just getting started; they are no big smart helmet companies yet. With the advantage of the existing knowledge and budget VanMoof has they can instantly get a great market share of the helmet market.

With the ‘VanMoof helmet’ people ride in style and safe. As the helmet is designed with the ‘VanMoof style’, the commuters who ride the VanMoof bikes are more likely to get a helmet that fits their overall look. The helmet can be stored on the bike without it being stolen. With this feature people would not have to worry about carrying the helmet around. Also, VanMoof’s’ style is very exclusive. With the VanMoof helmet, customers get the same exclusive feeling what has drawn them to buy a VanMoof bike. This is a key element to the VanMoof helmet which puts them above all other helmets on the market. The VanMoof helmet is focused on the commuters who buy the VanMoof bikes and are willing to pay a little extra to ride in style, as they already do so by buying the VanMoof bikes. It is expected that the VanMoof helmets will not be the main income of VanMoof. Nevertheless it will give the company

free promotion as the people are riding around with the helmets. Which puts VanMoof in the eye of people who are not familiar with VanMoof. This can introduce VanMoof to a new customer base, the people who do not ride a VanMoof bike, but are interested in their advanced helmets. Therefore, the VanMoof helmet will continue to get a bigger customer base and continue to sell more and more. This makes the helmet profitable, feasible and sustaining.



Figure 8: VanMoof Store

6.2 Necessary Changes

To bring a new helmet concept into VanMoof’s brand, a few things have to be done by the company. From the product idea, a full concept has to be designed, where every detail of the shape, materials and possible electronics has to be integrated and prototyped. The development can be done by their own internal design team.

To produce the helmet, adaptations to the production process have to be made. As VanMoof produces the bikes themselves, a logical approach is to produce the helmets themselves as well. For this VanMoof needs to design the production process, the factory needs new machines and employees need to be educated on the production process.

This new helmet has to be brought on the market. For this, the products have to be added to their stores, which requires minor adaptations. Also, a lot can be done with the branding of this new helmet. All kinds of content can be created centered around the smart helmet.

As external advisors no explicit content is known about internal finances, the factory and the exact product concept. Therefore it is hard to make cost predictions, but in the lines before the elements are summed up that should be considered when making a cost prediction.

MARKET SEGMENTATION AND TARGETING

For selecting the right market segment, three market segments were identified: the city cyclists for leisure, the cyclists for sport and the cyclists for commuting. These segments are based on different needs of cyclists: there are basically three different group of cyclists.



Figure 9: Segments

The first group exists of people who bike primarily for commuting to their work or school. These people cycle in cities and need products whom they can take with them easily: ease of use is important, since they are always on their way and in a hurry. The helmets need to protect and prevent them from crashed with other vehicles (hard impact crashes).

The group 'cyclists for leisure' cycle less frequent than the commuters, and may need some more comfort. For instance, a helmet with extra services for helping them to explore areas would suit them. Cyclists for leisure are expected to cycle for longer distance, this may also contribute to the fact that their need of comfort is higher. The last group exists of people who cycle for exercise: for sports. They need helmets who may track their speed and route better, give them feedback on the way they cycle and protect them against injuries. Sports helmets need to ventilate well and be a bit more aerodynamic than helmets for leisure cyclists.

Competitive position	1	2	3
Competencies and resources of the competition ++ = competencies and resources are very high -- = competencies and resources are very poor	0	0	0
Point of differentiation ++ = our idea is very original -- =our idea is not original at all	+	+	0
Fit with vision and objectives ++ = good fit -- = not a good fit	++	0	--
Bargaining power of other industry players ++ = low bargaining power -- = very high bargaining power	++	+	--
Fit with existing competencies and resources ++ = good fit -- = not a good fit	++	+	--
Intensity of competition ++ = no competition at all -- = very intense competition	0	0	--

1=city cyclists for commuting 2= cyclists for leisure 3=cyclists for sport

Figure 10: Competitive Position

Figure 11: Attractiveness

Attractiveness	1	2	3
Unmet needs in segment ++ = a lot of unmet needs -- = very few unmet needs	+	0	-
Segment size ++ = very large segment -- = very small segment	+	0	++
Segment profitability ++ = very high profitability -- = very low profitability	+	0	++
Segment growth ++ = high segment growth -- = no segment growth	++	+	0

The three market segments were analyzed by using the attractiveness-competitive position table (Figure 12) In this table, the attractiveness of the segment, and the likeliness of having a good competitive position in the segment are analyzed and put onto axes. To determine if the competitive position is strong and whether the attractiveness is high or low, the criteria and factors of these axes are discussed in the tables above (Figures 10 and 11).

Figure 12: Attractiveness Vs. Comp. Pos.

		Competitive position		
		Weak	Moderate	Strong
Attractiveness	High	3		1
	Moderate		2	
	Low			

1=city cyclists for commuting 2=cyclists for leisure 3=cyclists for sport

As discussed in the trends (Figure 2), cities are becoming denser, more people are working in cities and populations are growing. Because of these trends, more people are expected to use bikes in cities for commuting use. This means that segment 1 (city cyclists for commuting) will grow over time and thus will get a bigger market share: the segment will become even more attractive.

Bikes are much more often seen as an attractive, cost efficient, healthy and convenient to get around. Besides, bike lanes are getting more popular all around the world. This makes it easier to explore the world on a bike. This is why the group of leisure cyclists is expected to grow larger as well.

Cycling as a sport already exists for quite some time: over the last couple of years this group hasn't become that much bigger: the growth, relatively to the growth of segment 1 and 2 will probably not be that big for the coming years. This means that it will be estimated to stay as attractive as it is now.

After analyzing the three market segments with the tables, the conclusion can be made that market segment 1 is the most attractive to serve. This segment also fits really well in VanMoof's scope. They already target people who live in big cities and are commuting everyday. This means that our product idea (name) will target on market segment 1: the city cyclists for commuting.

For now, the targeted market segment will be the city cyclists for commuting, but since the segment of leisure cyclists is growing, this segment might be more attractive in the future.

CONCLUSION

The purpose of this report was to do an external analysis of the company to create a new product idea towards a specific target group to gain sustainable competitive advantage. With this external analysis opportunities and treats for the company were determined. Strengths, determined in the last report were combined with opportunities looking for search areas to develop a new product idea. The following search areas were determined: “How can we make dumb/boring accessories more technically advanced and modern like VanMoof’s style?”, “How can we make VanMoof more personalized?” and “how can VanMoof expand into the single use market?”

These search areas were chosen because most potential for VanMoof was seen in them.

From these search areas we developed three product ideas: a VanMoof styled smart helmet, the option to add a personal print to your bike and an electric skateboard/scooter in a bike sharing program similar to mobike. From these three product ideas the smart helmet was chosen. A factor accounted in making this decision was the increasing amounts of biking accidents.

The smart helmet has the following features: a generative design, creating a high strength to weight ratio and a futuristic look. A hole so that the helmet can be locked with the bike. An alarm that is integrated with the bike alarm. Personalizable led lights, Bluetooth connecting to your phone and AI offering navigation and more, an integrated camera and built-in speakers with bone conducting technology. When the helmet is taken away from the bike, it sets the bike alarm.

Expected is that this smart helmet will gain VanMoof sustainable competitive advantage. There are a increasing amount of bike accidents and common helmets are not aesthetically pleasing. Furthermore, from next year on it’s prohibited to use your phone on the bike in Holland, so the smart helmet will bring a solution when navigation is needed. More countries might follow. The main competitors don’t have their own smart helmet concept and with the smart helmet market still being small, there is a lot of market share to get for VanMoof by creating a superior design. The most promising target group for the new smart helmet is believed to be the city cyclists for commuting.

SOURCES

Chamie, J. (2017, 17 december). World Demographics Are Changing Profoundly: What Does It Mean for the 21st Century? Retrieved October 3, 2018, from <https://truthout.org/articles/world-demographics-are-changing-profoundly-what-does-it-mean-for-the-21st-century/>

DeBenedetti, J. (2018, 25 juni). Environmental Trends in Business. Retrieved October 2, 2018, from <https://bizfluent.com/list-6656162-environmental-trends-business.html>

J. Walter Thompson. (2018). The future 100. Retrieved from <https://www.jwtintelligence.com/trend-reports/the-future-100-2018/>

MarketsInsider. (2017, 5 december). Global Packaging Market 2017-2021. Retrieved October 2, 2018, from <https://markets.businessinsider.com/news/stocks/global-packaging-market-2017-2021-focus-on-sustainable-packaging-solutions-&-growing-popularity-of-lightweight-packaging-1001594494>

McFarland, M. (2017, May 5). The case for bicycles' inevitable triumph over cars. Retrieved October 8, 2018, from <https://money.cnn.com/2017/05/05/technology/bikes-disrupt-cars/index.html>

Van Asseldonk, E. (2018, October 4). Taco Carlier van de Amsterdamse superfiets VanMoof mikt uiteindelijk op 1 miljard fietsen. Retrieved October 8, 2018, from <https://www.businessinsider.nl/vanmoof-taco-carlier/>

Wallop, H. (2015, June 28). The truth about cycling safety. Retrieved October 1, 2018, from <https://www.telegraph.co.uk/men/active/recreational-cycling/11702076/The-truth-about-cycling-safety.html>

What is industry attractiveness? definition and meaning. (n.d.). Retrieved October 7, 2018 from <http://www.businessdictionary.com/definition/industry-attractiveness.html>





GROUP _035

STRATEGIC PRODUCT INNOVATION INTRODUCTION PLAN: VANMOOF

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Abstract

A final design, including a name, marketing mix and introduction plan has been created. By this VanMoof is given the opportunity to start introducing the new helmet, called 'Jack', right away. To achieve these goals, it had to be clear which opportunities the market provides and what the consumer wants. This knowledge was gained by interviewing people within the target group and obtaining a large number of responses on a questionnaire about the different attributes a helmet has. Preventive safety and looks/design turned out to be the best market opportunities hence why these were the main focus when creating the final design of 'Jack'. Also an elaborate and clear introduction plan has been written accompanied with clear visuals.



Figure 1: VanMoof bike

CONTENTS

Abstract	1
1. Introduction	2
2. Positioning statement	3
1.1 Competitors of the VanMoof Jack	5
1.2 Determinant attributes	6
1.3 Consumer perceptions	6
1.4 Value curve and positioning	8
1.5 Positioning	9
2. Business strategy	10
2.1 New growth strategy	10
2.2 Competitive strategy	10
2.3 Strategy towards sustainability	11
3. Introduction plan	12
3.1 Product	12
3.2 Price	13
3.3 Place	14
3.4 Promotion	15
4. Conclusion	16
5. References	17
6. Appendices	18
6.1. Competitors	18
6.2. Full interviews	19
6.3. Questionnaire	23

3 INTRODUCTION

1 Since the number of bike accidents is increasing (Wallop, 2015) and the image of the current helmets is not that good, better head protection needs to be made. This is why we came up with the 'Jack': a VanMoof styled helmet.

2
3
4
5 In the previous papers an internal and external analysis has been done. The company VanMoof has been analyzed with the goal to develop a new product idea and to exploit the opportunities of this idea. The goal of this report is to advise VanMoof on positioning this new product idea and to configure the elements of the marketing mix for introducing the Jack on the market.

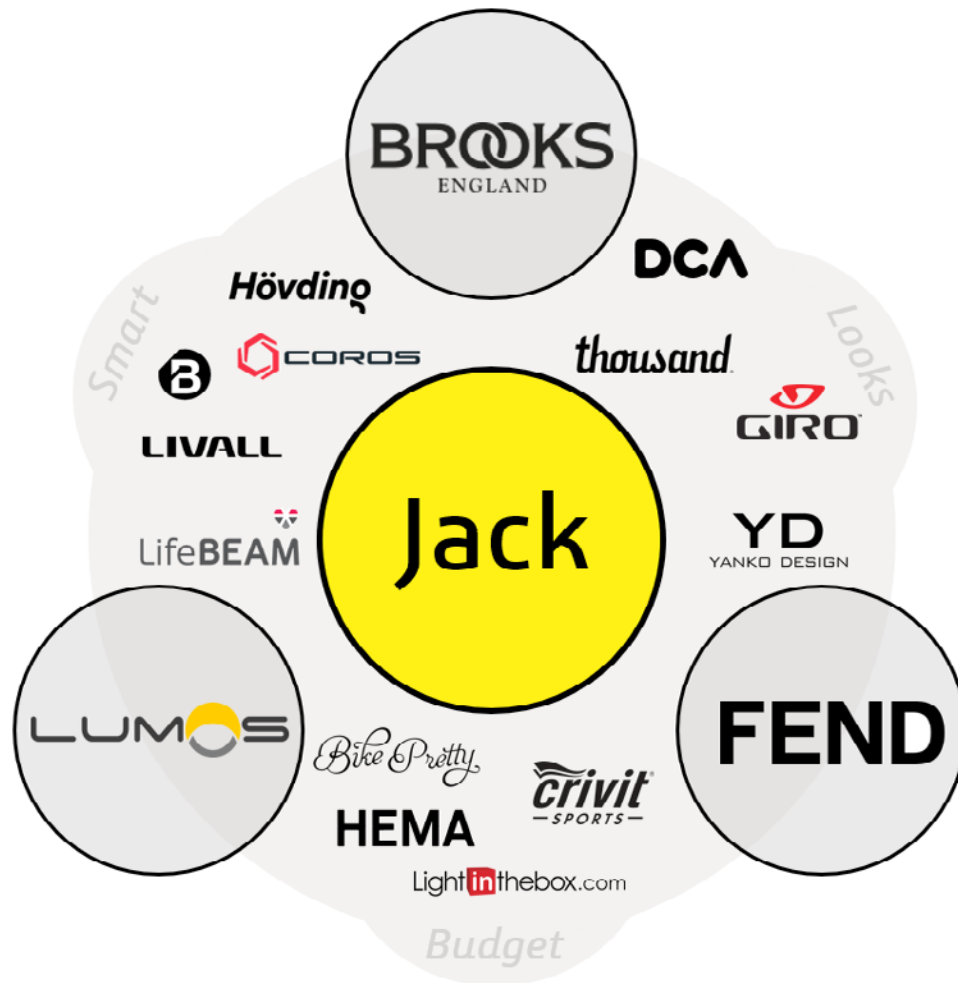


Figure 2: Competitors

2.1 Competitors of the VanMoof Jack

Even though there are a lot of helmet manufacturers, there are not many companies producing smart helmets. This is because the business idea of smart helmets is reasonably new. As a well established brand, VanMoof could therefore safely introduce the Jack. Nevertheless there are some brands up and coming such as Lumos and Classon, the latter who also focuses on cities.

The ordinary helmet business is huge, so there are also several indirect competitors based on other criteria such as the price, looks, ease of use and comfortability which lead to a tougher competition (figure 2).

The three chosen competitors for the quantitative research are Lumos, Brooks and Fend, because they show the most resemblance with the Jack in regards to integrated technology, aesthetically pleasing looks and ease of use. For more information per competitor see appendix 6.1.

2.2 Determinant attributes

To find the determinant attributes of the smart helmet a small qualitative research with five people in the target group was conducted. These five people, all city cyclists for commuting, were interviewed by different group members. The full interviews can be found in appendix 6.1. Before taking the interviews, a few example questions about attributes of helmets were made. During the interviews, the example questions were used, as well as the interviewer improvising to get more in dept answers of the respondent. To get an even more in dept and reliable view on the determinant attributes, the research group could be expanded.

After analyzing the interviews, the conclusion can be made that the following attributes are determinant: preventive safety (for instance brake lights, features that make you more noticeable), reactive safety (how the helmet protects you when having an accident), comfort, looks/design, ease of use, price, extra features and portability.

2.3 Consumer perceptions

After finding the determinant attributes, the consumer perceptions were identified by using a quantitative research. A survey was made, in which respondents could rate the determinant attributes for the main competitors of the Jack and for their ideal smart helmet. In the table (figure 4) and the graph (figure 3) the importance of each attribute according to the score of the ideal product is visible. The complete questionnaire can be found in appendix 6.2. See figure 5 for the demographics of the respondents.

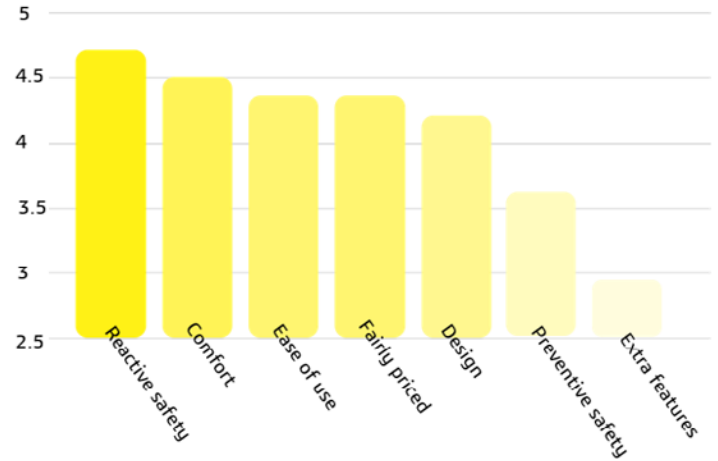


Figure 3: The importance of the attributes - based on the rating of the respondents in the questionnaire=

Attribute	Reactive safety	Comfort	Ease of use	Fairly priced	Design	Preventive safety	Extra features
Importance	4.7	4.5	4.3	4.3	4.2	3.6	2.9

Figure 4: The importance of the attributes

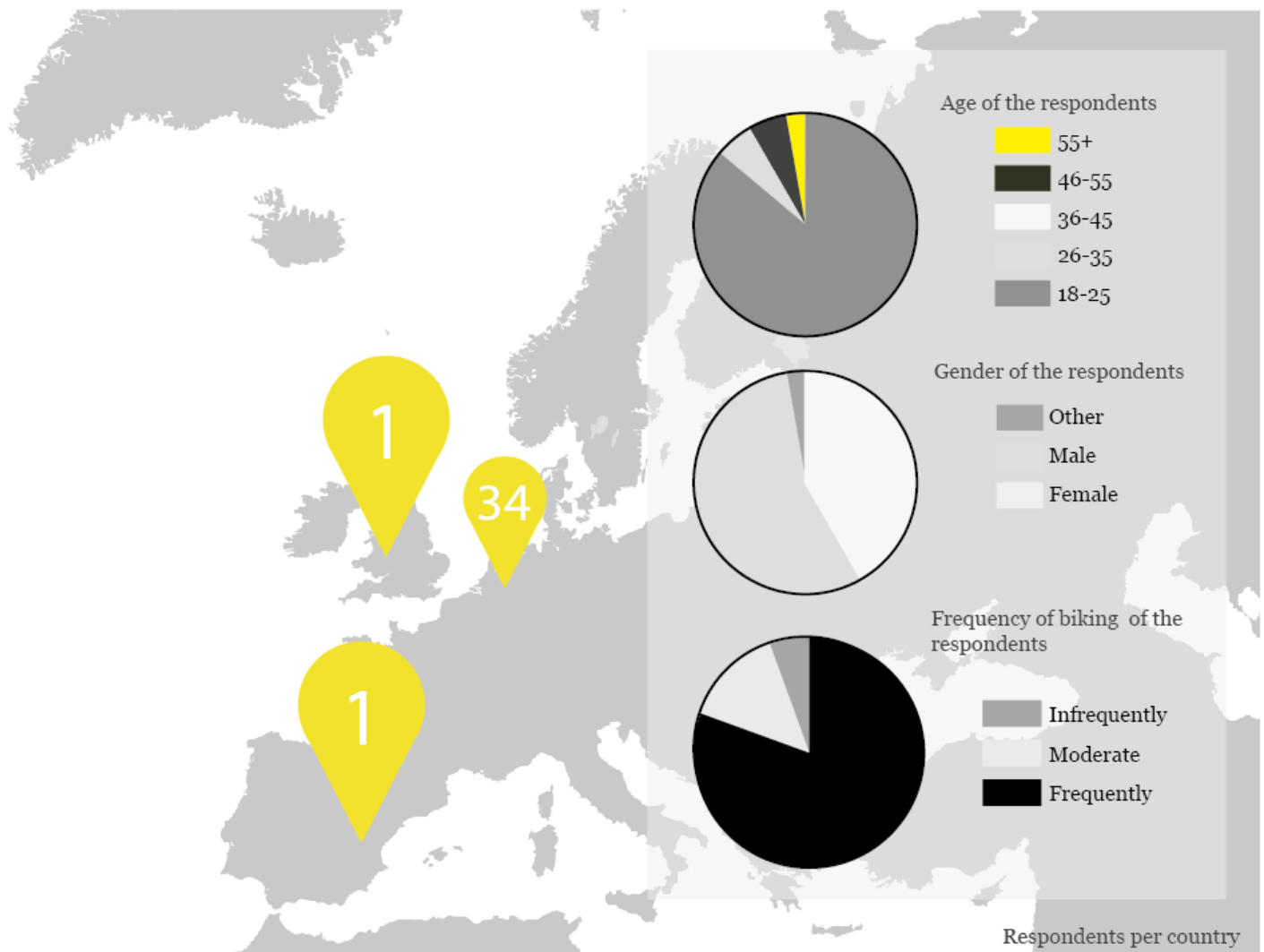


Figure 5: Demographics

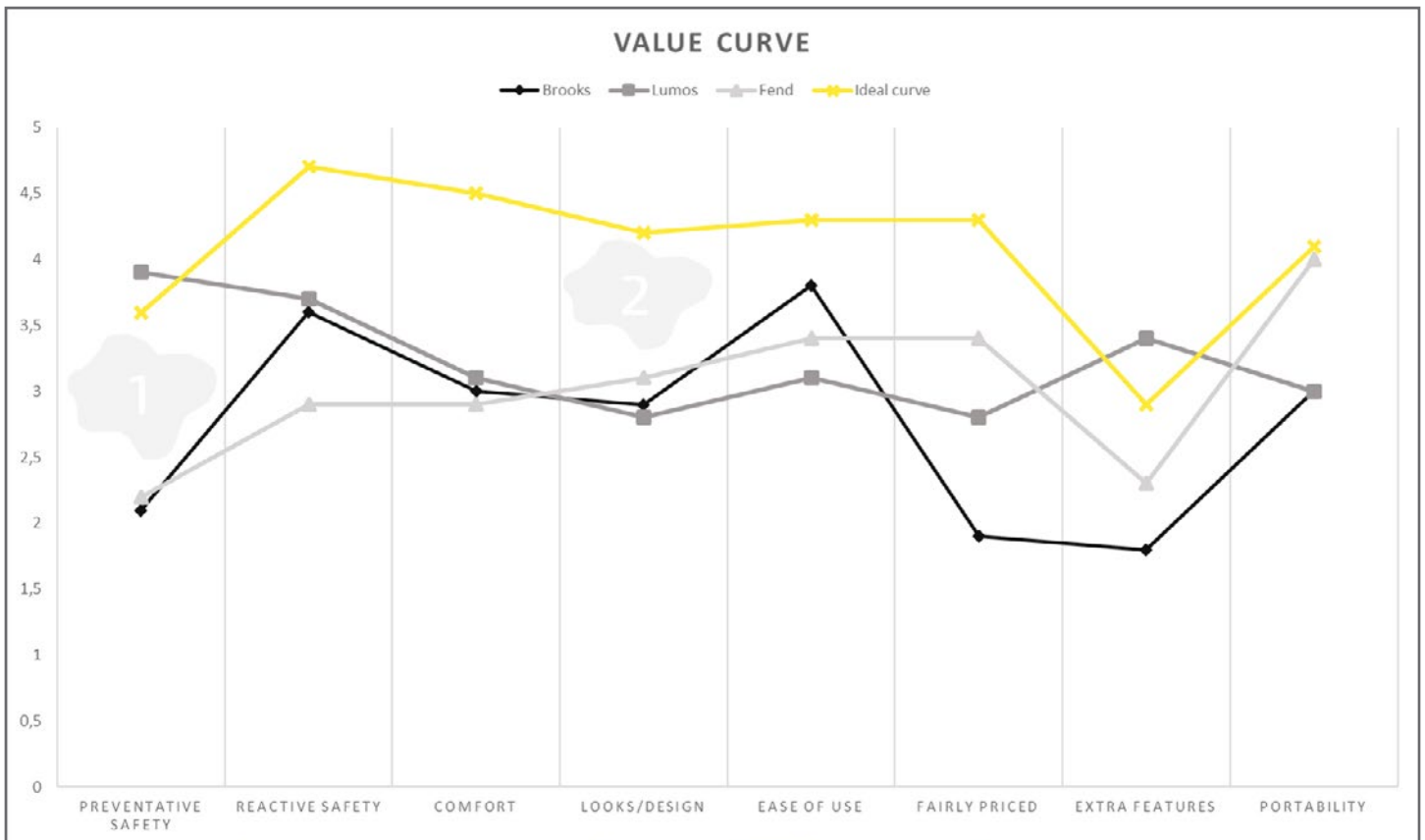


Figure 6: Value curve

2.4 Value curve and positioning

The outcome of the questionnaire can be plotted into a value curve (figure 6). The Jack does not exist in the market yet so only the competitors and the consumer's ideal points are plotted.

The value curve gives a clear visual overview of how the consumers view the competitors in regard to their ideal points. Moreover it shows exactly what they want per specific attribute. All the analyzed competitors score pretty similar and average. Only the scores of preventive safety, fairly priced and extra features are quite diverse. However it can be concluded from figure [...] that these attribute are not seen as important. Based on the value curve two attributes are selected to position the new product idea on.

Preventive safety (1)

In the value curve, on the left, it can be seen that the ideal score for preventive safety and the score of Lumos (a smart helmet) are relatively high compared to the other two competitors. The regular helmets score lower, so by creating a smart helmet which stands out in the preventive safety we can differentiate.

Looks/Design (2)

Also, a clear gap can be seen at the looks and design attribute where the ideal curve is higher than the current competitors' products curve; the competing products do not meet consumers' ideal points. This can therefore be seen as an opportunity for VanMoof and aligns with the brand as it is perceived as a company that makes aesthetically pleasing products.

Noteworthy

Worth noticing is the low point in the ideal curve at the extra features attribute. This is inconvenient since the Jack is designed as a helmet with several smart functions such as build in navigation or brake lights. Nevertheless do these brake lights score relatively high as the preventive safety attribute. Same goes for build in navigation that makes cycling easier; ease of use scores high. This all is quite contradicting which led to the conclusion that the consumers don't exactly know what they want. Therefore how to get the job done is not what the user tells u, it is the innovator's job.

Another interesting point is that the respondents perhaps didn't know what the extra features would result in. As developer of one of the first automobiles Henry Ford once said: "If I had asked people what they wanted, they would have said faster horses." For this reason it is an innovators job not to design what people want but what they need.

2.5 Positioning

Resulting from the product positioning for the product, the following positioning statement has been formulated: "For the urban bike commuter in the digital age, VanMoof's Jack is the smart helmet that keeps you safe, stylish, and connected on the go."

3 BUSINESS STRATEGY

Determined is which strategies form the best fit with the new product idea, the Jack. Based on the analysis of the current growth and competitive strategies in the first report the consequences of the new strategies are reflected.

3.1 New growth strategy

By introducing the Jack helmet VanMoof is introducing a new product. Also, since VanMoof doesn't sell any helmets or other safety accessories yet, VanMoof is entering a new market. This means the new growth strategy for VanMoof is diversification. This can be considered a risky growth strategy. However, VanMoof is a company with a successful portfolio plus the smart helmet market is just getting started; there are no big smart helmet companies yet. With the advantage of the

existing knowledge and budget VanMoof has they can instantly get a great market share of the helmet market (Wijsman et al., October 2018). VanMoof's current primary growth strategy is market penetration in which they entice consumers who already exist within their market (urban cyclists) away from other brands with the introduction of their subscription model together with low prices and tangible perks. A secondary strategy is VanMoof's product development strategy where VanMoof develops accessories to its bikes to create additional revenue from their existing market. By introducing the Jack helmet as a new accessory a shift towards diversification can be easily done and have profitable consequence.

3.2 Competitive strategy and marketing mix

As analyzed by Miles and Snow's Competitive Strategies in the first report VanMoof is a prospector. They only sell a few main products, and differentiate this product as much as possible with technological advancements and premium services. By introducing the Jack helmet VanMoof will remain on the forefront of innovation and development and therefore stay a prospector. See figure 8 for the strategy.

For VanMoof to stay a prospector, the product should be modern and on top of all the new technologies. It should be approachable and well promoted otherwise potential customers might be afraid to try the new product since they don't know anything of it yet and may not trust it. To make it approachable, VanMoof can sell the Jack in a deal together with the bike; they have to make sure people get to know the product.

Figure 7: Ansoff Matrix

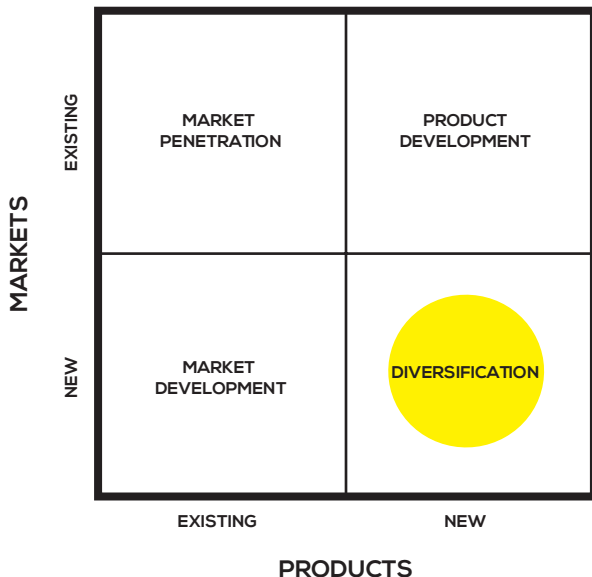
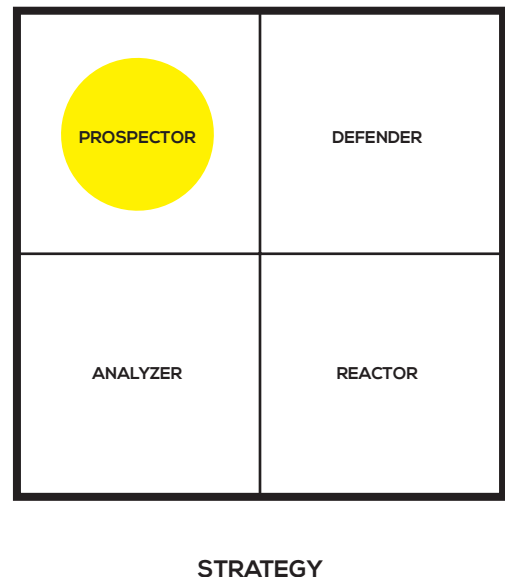


Figure 8: Miles and Snow's strategies



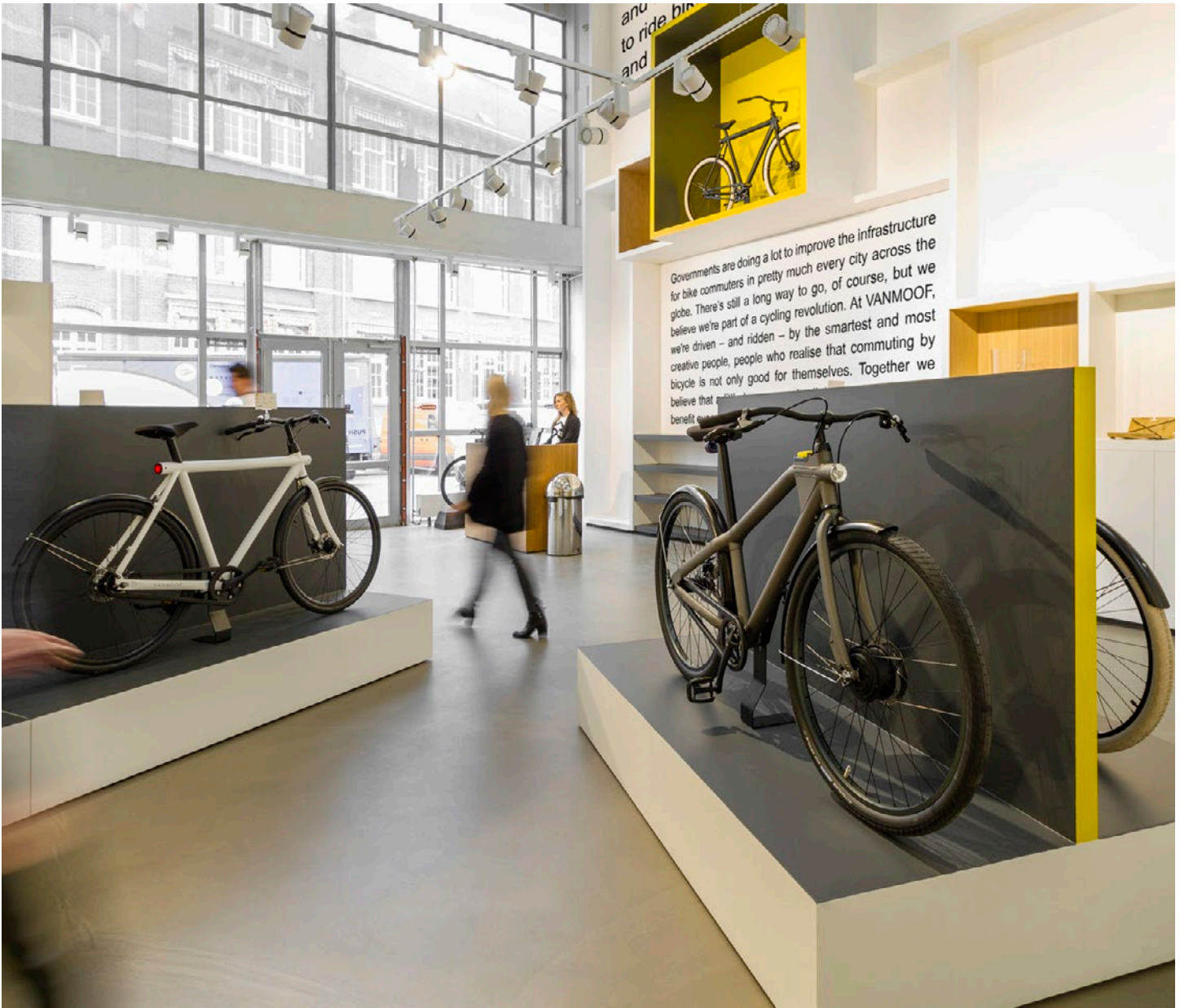


Figure 9: A VanMoof store

3.3 Strategy towards sustainability

Creating and keeping a sustainable advantage is important for VanMoof to compete against competition for a longer period of time. By differentiating and making a smart helmet that stands out, VanMoof will create such advantage.

The problem with most current helmets is that their style doesn't fit the style of modern and young city commuters. By making a helmet in VanMoof style, which is modern and trendy, this problem will be solved. Another problem with current helmets is that they are not storable: you have to take the helmet with you, for instance when you want to make a stop at the grocery store. The Jack solves this by it being attachable to the bike itself.

As stated in Wijsman et al., October 2018, the Jack won't be the biggest source of income: the bikes are VanMoof's main products. Nevertheless, the product will create more promotion and awareness of the brand VanMoof, which helps the company to grow.

The Jack fits well in VanMoof's own product portfolio of high tech and modern products. If the Jack is promoted as a modern and trendy product, the Jack will hopefully get a more modern image, compared to the current helmets. In this way, VanMoof will be progressive in the product portfolio of accessories: VanMoof has products where the competition lies, but they are differentiated and better.

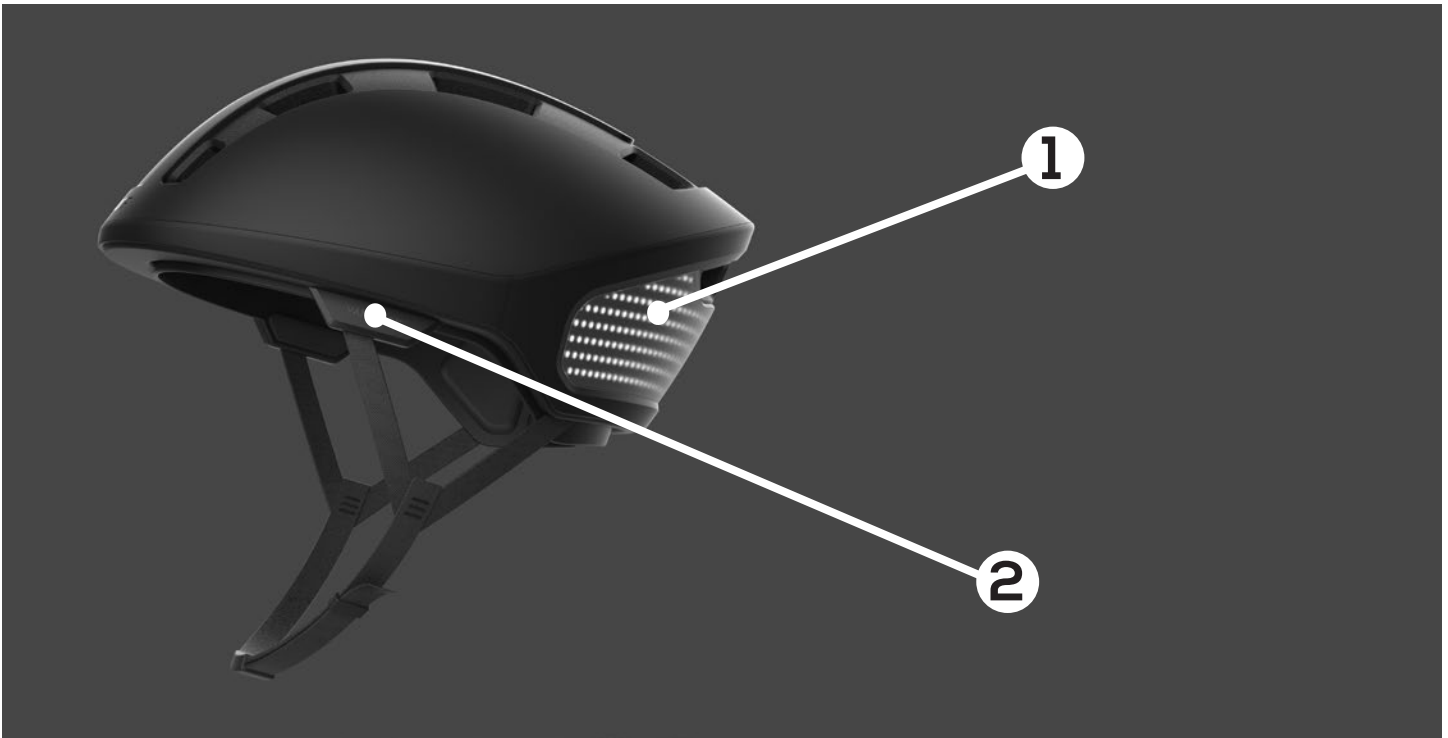


Figure 10: Features of the Jack

4.1 Product

The helmet is designed with an open cell structure which makes it light, but the user can also put their lock trough their helmet to safely store it on their bike. The helmet has an LED dot matrix on the back which makes the user visible at night (see 1). The user can also personalize these lights by putting their own design in it via the VanMoof app. This aligns with the current trend of personalization (Oulasvirta & Blom, 2008) (figure 10). The helmet also features bone conduction speakers that play audio from a bluetooth connected phone. Bone conduction technology makes sure the users can safely listen to music. This technology does not cancel out surrounding sound such as oncoming cars because it converts the music through the skull instead of the ears, and keeps the rider from looking at a phone for navigation.

The helmet is connected with the users' phone through Bluetooth which gives the user interaction while using it. The speakers can give the users directions without them looking at their phone. This way, the user is saver on the road because they do not have to look at their phone while riding on a busy road. The same goes for notifications. When the user gets a notification, for example for a meeting, the helmet will read it out. To interact more with the user, the helmet will tell the user to, for example hurry up if they are late for their meeting or when it is going to rain. As icing on the cake a system will

be introduced in which the cyclist is rewarded for wearing the helmet through either discounts or compliments.

The helmet is fitted with a micro USB port for easy everywhere charging. The battery is a long lasting battery so the user does not have to worry about their helmet being empty after only one ride (see figure 10).

VanMoof currently does not sell helmets, but they do sell several safety items such as locks, lights, child seats and bells. Jack is also a safety item and has integrated technology which VanMoof also has in their bikes. Therefore Jack fits perfectly in their current portfolio. Children helmets will not be designed for now, since this is not the target group of VanMoof; VanMoof doesn't sell children bikes. It is however something VanMoof can look into later.

The helmet will be sold in the shops and on their website. The helmets will be packed in cardboard just like the bikes of VanMoof. To secure that the helmet will be delivered without damage, the delivering process of the helmets has the same strategy as the bikes. The bike's boxes have a big TV on it to make the carriers believe that the inside is very fragile. The boxes of the helmets will have a picture of glasses on it because the boxes are smaller. Consequently the helmet will not get damaged in the delivering process.

4.2 Price

The price of the Jack is €170.- When bought separately and €100.- When bought together with a VanMoof bike. For determining the price a few factors were considered.

First the current portfolio of VanMoof and their prices were analyzed. The current portfolio consists of bike accessories in a price range of 0 to 140 euros however none of these products are smart products. The Jack is very different from the current accessories so these accessories are not taken in consideration for determining the price.

The cheapest smart bike (the Smart S) costs €900.- When the Jack is sold together with the Smart S (as a package deal), the smart helmet relatively doesn't increase the price too much. Chosen is to follow a value based pricing strategy, the same strategy as for the bikes. Here a clear estimation is made what the customer is willing to pay for the value of the helmet. To make this estimation, competitive products and their prices are compared. When looking at competing (smart) helmets the price ranges from €86.- For the fend Helmet to €250.- For the Classon smart helmet.

The production costs of the helmet are estimated by adding up the individual elements of the Jack. The battery, internal chip and bone conducting speaker system are the dependent variables in the manufacturing cost. The total production cost is estimated to be €60.-. What needs to be said is that this is a very rough estimation as we have no insight in VanMoof's current factories and production facilities. Together with shipping and branding the product price of €170.- will gain VanMoof a good profit.

The decision to give a big discount when bought together with the bike is to encourage customers to buy the helmet together with the bike. The consequences will be that more people will buy the helmet when buying a bike and that the Jack will be associated with the brand VanMoof more often.

4.3 Place

The Jack will only be sold in the VanMoof's stores and online. This is in line with their current vision to only sell their products directly to the customer themselves. The consequences of this will be that the helmet will be sold in less stores, and therefore will be less available. However, all the profit goes to VanMoof itself since there is no second retailer.

In both sale channels the features of the helmet, such as the connectivity, should be noticeable and clear. Besides, in the first period of selling the helmet should get a prominent place in the shops and on social media to introduce the helmet.

In the retail shop, the helmets will be placed directly above the bikes in the showroom. At a prominent place through a projector the smart interaction between the bike the helmet and the user as well as the different functions of the



Figure 11: Separate and combination price

helmet will be visualized. During this animated interaction different parts of the helmet and bike will be highlighted by a spotlight. The projector will visualize the internet of things connection between the user, helmet and bike.

On the website the helmet will be introduced on the main page with a promotional video, showing all the features during a ride.

4.4 Promotion

It should be more accepted to wear a helmet and it should even be stylish to have one on top of your head when riding through the city. People should be more aware of the fact that even though you ride your bike everyday without being in an accident, you still are very vulnerable in traffic. Definitely with bikes being able to go faster every day, helmets should be worn.

By using the SMART method the objective of introducing the Jack is determined.

The objective is to have at least 40% of the people riding VanMoof bikes wear a helmet in ten years and decrease the amount of serious injuries in a time span of 5 years. This can be achieved since VanMoof first of all has the resources to make the helmet but also has the knowledge to create a very successful marketing campaign for this helmet. Additionally the helmet is stylish and equipped with several smart functions which will make the Jack a trendy gadget.

The target audience of the promotion plan will be the city cyclists for commuting, but since the segment of leisure cyclists is growing, this segment might be more attractive in

the future (Wijsman et al., October 2018). VanMoof doesn't really promote their products through actively participating in commercials or billboards but they are however active on social media platforms such as Instagram and YouTube. Therefore the target audience for the Jack will be reached through social media marketing too.

In line with the positioning statement a communication message has been introduced. "Hit the road Jack, but don't let the road hit you!" This slogan will be used in the promotional plan to introduce the helmet. The phrase alludes to safety when cycling and giving the helmet a human like name ensures it's not seen as a dumb gadget but rather a stylish item.

Firstly the helmet will be introduced on the website. This is done by having the current pictures of people cycling the bike replaced by pictures of people riding the bike with the Jack helmet on in the same trendy picture style. Moreover the Jack will be introduced on the homepage as their new weapon against cycling injuries.

To drive the target audience to their website a large social media campaign is launched for which a poster has been designed. All together the promotion will instantly create recognition in the target audience and so achieve its objective.



Figure 12: Bicycle with helmet



Figure 13: Product colorways

CONCLUSION

Better head protection had to be created since the number of bike accidents is increasing as stated in the introduction. This helmet had to be stylish to be able to improve the current image of wearing helmets. The solution for this is Jack; the VanMoof styled helmet.

According to the conducted research in the target group, the opportunities for a helmet are in the design and preventive safety aspects. The Jack provides these attributes and is the answer to the present day problem: a helmet is a dull accessory.

Due to its high tech and modern design the Jack fits into the product portfolio of VanMoof. They will however enter a new market, since it will be their first safety product.

The smart helmet market in general is also new and this gives the opportunity to immediately be one of the top brands in this market.

The Jack is a light and easy to use smart helmet with safety as top priority. The price will be €170 when bought separately and €100 when bought together with a VanMoof bike. This is a competitive price whilst it will be one of the better helmets available. The Jack can be bought in VanMoof stores and on their website. With introducing the Jack also comes a promotional plan with the focus on social media.

To conclude, for the urban bike commuter in the digital age, VanMoof's Jack is the smart helmet that keeps you safe, stylish, and connected on the go.

SOURCES

Apple. (n.d.). Fietshelm van Lumos. Retrieved on October 19, 2018, from https://www.apple.com/nl/shop/product/HLXM2VC/A/fietshelm-van-lumos?afid=p238%7Cs9yrJ8Og1-dc_mtid_187079nc38483_pc-rid_81847252247_

Brooks England. (). HARRIER HELMET BLACK. Retrieved on October 19, 2018, from https://www.brooksengland.com/en_eu/accessories/helmets/harrier-helmet-black.html

FEND. (n.d.). FEND | The Foldable Bicycle Helmet. Retrieved on October 19, 2018, from <https://www.kickstarter.com/projects/fendhelmet/fend-the-collapsible-bicycle-helmet>

Oulasvirta, A., & Blom, J. (2008). Motivations in personalisation behaviour. *Interacting with Computers*, 20(1). <https://doi.org/10.1016/j.intcom.2007.06.002>

Wallop, H. (2015, June 28). The truth about cycling safety. Retrieved October 1, 2018, from <https://www.telegraph.co.uk/men/active/recreational-cycling/11702076/The-truth-about-cycling-safety.html>

Wijsman, M., Boon, A., Platenburg, M., Miller, D., Roest, M., & Te Lintelo, T. (2018, October). STRATEGIC PRODUCT INNOVATION EXTERNAL ANALYSIS: VanMoof. Retrieved on October 24, 2018. Available for coach.

Wijsman, M., Boon, A., Platenburg, M., Miller, D., Roest, M., & Te Lintelo, T. (2018, September). STRATEGIC PRODUCT INNOVATION INTERNAL ANALYSIS: VanMoof. Retrieved on October 26, 2018. Available for coach.

APPENDICES

1. Competitors

Lumos

Lumos is a company with a smart bicycle helmet existing out of lighting, brake lights, direction indicators and iOS app. The helmet has bright LEDs on the front and back. When the helmet is connected to the app on your iPhone your cycling activities are automatically recorded and uploaded to the Apple Health app or the Strava app. (Apple, n.d.)

Brooks

A racing helmet for sportives, cyclocross, criterium or off-road, Brooks offers the Harrier in the distinctive Brooks road helmet design. An aerodynamic and light helmet with a sleek appearance for a safe and comfortable helmet on road or off, thanks to four cooling channels for ample airflow. Key features include size adjustable fit system, a polycarbonate outer shell and attractive Brooks branding. (Brooks England, n.d.)

Fend

The foldable bicycle helmet designed to bring safety and convenience into your life. No more carrying around a bulky helmet. No more overheating. No more excuses. FEND was designed with the urban commuter in mind and can be incorporated into any lifestyle. Whether you're riding to work, to class, or to meet up with friends, you can simply fold the helmet and store it in your bag until it's needed again. (FEND, n.d.)

2. Full interviews

Guiding questions

What do you want in a (normal) helmet?

As one of the first questions: what do you think a smart helmet is and what would you expect of this helmet?

Why do u prefer a bike over a car to go to your job?

Why do u think a lot of people refuse to wear helmets, although it is a lot safer to do so?

Would you choose a smart helmet over a normal helmet?

Something with not feeling the wind when having a helmet, while you might enjoy it.

What gadgets/tools do you think would add to your biking experience, both fun and handy stuff.

Where would u store your helmet?

What is your favorite colour

Interview 1

What do you want in a (normal) helmet?

Dat ik het goed kan meenemen. Vaak op het kantoor ligt hij in een hoekje of in de weg. Ook vind ik dat de meeste helmen er stom uitzien, dus het uiterlijk vind ik ook belangrijk.

Do you wear a helmet?

Niet vaak. Ik heb een helm en gebruik hem soms, maar zoals ik al zei ligt hij vaak in de weg en vind ik het er ook niet fraai uitzien. Ik heb wel een elektrische fiets dus soms wanneer ik verwacht het drukker op straat te zijn (ochtend) doe ik hem wel op.

As one of the first questions: what do you think a smart helmet is and what would you expect of this helmet?

Ik zie een smart helm als een helm met meerdere technologische functies, zoals bijvoorbeeld iets met geluid of beeldscherm of iets dergelijks. Ik verwacht dat deze helm dingen makkelijker kan maken.

Why do u prefer a bike over a car to go to your job?

Voor mij is het voordeliger om met de fiets te gaan omdat ik zelf niet ver van mijn werk woon. Ik ben langer onderweg met de auto, omdat ik vaak in de file kom te staan of moet wachten voor mensen. Met de fiets kom ik overal tussendoor en ben er dus sneller.

Why do u think a lot of people refuse to wear helmets, although it is a lot safer to do so?

Ik denk om dezelfde reden als ik. Omdat het er minder fraai uitziet en omdat het moeilijk om te bergen is omdat het best groot is. Je kan het moeilijk in je tas doen omdat het zoveel ruimte op neemt.

Would you choose a smart helmet over a normal helmet?

Ja dat denk ik wel.

Why?

Omdat ik denk dat de technologie de helm er beter uit laat zien en het ook handig is in gebruik.

What gadgets/tools do you think would add to your biking experience, both fun and handy stuff.

Ingebouwde route zou handig zijn, omdat het vaak te druk op de weg is om op mijn mobiel te kijken. Ook te gebruiken om te bellen zou handig zijn. Ik weet niet of ik het vaak kan gebruiken omdat ik niet lang onderweg ben, maar als ik langer moet fietsen zal ik het wel prettig vinden.

Where would u store your helmet?

Vaak ergens in een hoekje op mijn werk en thuis leg ik het in de kast bij de schoenen.

Conclusion: Looks, easy to carry, safety, gps, handsfree calling, storage.

Interview 2

What do you want in a (normal) helmet?

First of all in needs to protect your head, that is the most important thing. Also comfortability is nice.

As one of the first questions: what do you think a smart helmet is and what would you expect of this helmet?
Probably a helmet with some technology in it such as a light or so, can't think of any useful technology to put in a helmet really

Why do u prefer a bike over a car to go to your job?

I don't use a bike to get to work, it's too far and impossible hence I need to get through the tunnel. However I'd love to go to work by bike if I could but probably only when the weather is nice.

Why do u think a lot of people refuse to wear helmets, although it is a lot safer to do so?

I guess it not really part of our culture. When growing up nobody is taught to wear a helmet or whatever. Now, if we see people wearing helmets we automatically think they are stupid German.

Would you choose a smart helmet over a normal helmet?

Depends. It has to be worth it also because it's probably more expensive. Plus I should be able to easily start using it.

Something with not feeling the wind when having a helmet, while you might enjoy it.

-

What gadgets/tools do you think would add to your biking experience, both fun and handy stuff.

I only bike for fun and as a sport so I'd love to have a helmet that tells me where to go on how far I am already and perhaps at what speed etc. As a commuter I imagine a navigation or a calling tool is useful.

Where would u store your helmet?

On the shelf above the bike in the garage.

Conclusion: protection, comfortable, not too expensive, easy to use, gps, user interface.

Highlights interview 3

Wanted in a normal helmet: it to be functional, be comfortable, be warm.

She doesn't expect more out of a smart helmet, it must look good and fits you properly.

She thinks people don't wear helmets because they stand out too much and they aren't that pretty. He would wear one if everyone wears one.

She would not choose a smart helmet over a normal one, but she was also late with buying a smartphone.

Protecting the head is less important than hearing everything (covering the ears).

Hands Free calling would be handy, announcing faster ways (routes) or the weather predictions

Conclusion: safety (incidents), comfort, warmth, good looks, good fit, image
protecting the head < hearing everything

Highlights interview 4

looks for safety and good looks in a helmet

in a smart helmet he would expect it to tell him if he goes too fast, or dangers around the corner: safety (prevention)

the dutch don't think they need helmets, they are cycling since they are little

he hates the fact that helmets will mess up your hair

Something that covers you when it's going to rain would be fun (that appears from the helmet)

He would like to be able to lock it to my bike.

Conclusion: safety, prevention safety through speakers, good looks, extra fun features (rain cover thing)

Highlights interview 5

She doesn't think we need them in Holland

Maybe a bit more in Amsterdam, but it's not really needed

She would wear a smart helmet more often IF they aren't too expensive. If she could buy it in combination with the bike, that'd be easier.

Important in a normal (non-smart) helmet:

It's safe and it protects you

It fits you properly

It can be cleaned easily

It looks good (aesthetically pleasing)

It's not too heavy

In a smart helmet it would be nice to have...

lights, so that people will see you. Maybe moving lights

the speakers, for calling / music / your route

a modern, city look

something with different colours or prints

People in cities might wear helmets earlier if...

The importance of helmets were more stressed

there was a campaign by the government (like the 'rijd mono' campaign)

if you show people helmets are cool

If you get it for free with the bike and it looks nice

Conclusion

Safety (for incidents), safety (for prevention: e.g. the lights), the fit, cleaned easily, coolness (image), looks, comfort.

3. The questionnaire

What bike do you use? *

- Normal bike
- Electric bike

How often do you bike?

- Infrequently
- Moderate
- Frequently

Do you wear a helmet whe

- Yes, always
- Sometimes
- Never

What bike do you use? *

- Normal bike
- Electric bike

How often do you bike?

- Infrequently
- Moderate
- Frequently

Do you wear a helmet when you bike?

- Yes, always
- Sometimes
- Never

Helmets for bicycles

*Vereist

Brooks helmet

A standard bike helmet, priced at €150,-

Please rate the product in the pictures based on your own perception from the information provided



Preventative safety (for instance, brake lights) *

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Invasive safety (protection during accident) *

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comfort *

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Looks/design *

1	2	3	4	5
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Ease of use *

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Fairly priced *

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Extra features (for instance: gps, lights, speakers)

1	2	3	4	5
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Helmets for bicycles

*Vereist

Helmets for bicycles

*Vereist

Fend helmet

A foldable helmet, priced at €86,35

Please rate the product in the pictures based on your own perception from the information provided



Helmets for bicycles

*Vereist

Ideal helmet

For the last question, we ask you to give your perfect score for each attribute. In other words, what would be the perfect level of each feature?

