Appendices

A-I. Wearable technology

A-II. Tommy x Wearable technology

Tommy Hilfiger & wearable technology

Together with their strategic partner Flextronics, PVH Corp. developed the smallest wearable device that is currently available in the market and goes under the name 'EVE' [image 4.1]. Hilfiger has been experimenting with wearable technology before [appendix A], but today without big momentum and positive brand awareness around it.

Eve by Flextronics

Eve is a small device that can be attached to or integrated into pretty much everything. The first product that Flextronics presented to Tommy Hilfiger consisted of a module (5.9x11.5x19 mm), a charger, a phone app and a web portal. The module has several features, being activity tracking, storage and notifications. In appendix G more detailed information on EVE can be found. EVE will be the first step in introducing a wearable device and Tommy Hilfiger is currently exploring the opportunities of integrating EVE in their collections, thinking of both clothing as accessories. In a second iterative step, the initial device was developed in an even smaller size, with the dimensions of a dime. The battery lifetime and dimensions of the module are dependent on the functionalities of the device. The aim is to integrate the device into the new Athleisure sportswear line that will be introduced in the collection of fall '18. The device will be positioned as a sports device,

tracking health and movement.

Technology push

The introduction of a wearable technology by Tommy Hilfiger can be seen as 'technology push'. A value proposition should be developed for this new technological resource. In other words: Tommy Hilfiger has a solution, which is the wearable technology, but is in search for the problem that it solves.

The reality is that a company is sometimes so excited about what they're doing and what they are working on, that it sometimes forget this simple thing of mapping back to the consumer for whom they are actually creating value. By means of this project a deep dive into the life of the consumer is taken to truly understand how a wearable device can add value to their lives and how Tommy Hilfiger can solve the problems they have.
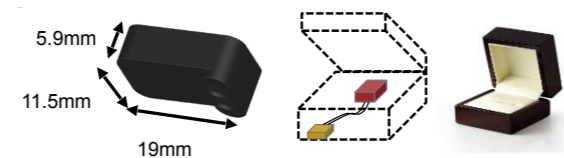

5.9mm
11.5mm
19mm

Figure 4.1: Smallest wearable device available: 'EVE' by Flextronics

Smartwatches

Via their licensing partner Movado, watches are designed, produced and distributed under the brand name. Movado is licensing several other lifestyle brands and has the knowledge on technology and watchmaking expertise in-house. By the end of 2016, they launched the Tommy Hilfiger 24/7 smartwatch that can connect to the mobile phone of the user, receive notifications on incoming calls and messages and even shows the received messages on the watch's screen. The watch tracks activity and the user can set activity goals. This first smartwatch was only partly interactive and the major part of the design was still analogue, such as the pointers and numbers. The Tommy Hilfiger TH24/7You, launched in August 2017, is a smartwatch with a completely interactive screen. However, compared to what is already on the market, the watch doesn't have any outstanding features or new technologies. It is the only one of Movado's new smartwatches to feature no NFC and it neither has heart rate monitoring or GPS. Working with Movado as licensing partner might have caused these decisions being not Tommy Hilfiger's and therefor leave them in less control over such features.

The solar powered jacket

In November 2014, Tommy Hilfiger released a solar powered jacket. Together with the solar manufacturer Pvilion, Tommy launched a jacket that has an array of solar panels attached to it to

collect solar power for charging devices. The solar panels are water resistant and flexible and snap on and off the jacket easily. A cable runs to the battery pack in one of the pockets, where a double USB port can be found to charge. The jacket was sold at a price of $599, with half of the proceedings going to support the Fresh Air Fund. It was available in two designs, for men and women. Although innovative, the design wasn't received without criticism. Among others, it was described as 'looking ridiculous' (Gizmodo.com). People claimed not wanting to wear a jacket when the sun is shinging and it was not clear where the rest of the materials came from or what the jacket was made of. This resulted in a confusing overall image of the jacket and eventually it didn't make it to a great selling success. Was it too early to introduce a technology alike? Or was it just not yet a complete product with a well thought-through innovation plan?

B-I. Company Structure

PVH Corp. Operates in a very hierarchic company structure, decisions are made from a top-down perspective. Product development roles are specific for the brands and leadership roles are build around the devisions, such as menswear and womenswear. Many functions are centralized under PVH Europe, for example Human Resources, that take care of as well the Tommy Hilfiger brand, as the Calvin Klein brand. The CEO of PVH Europe, Daniel Grieder, is also the CEO of Tommy Hilfiger. He reports directly to the management team

of PVH Corp Global. For innovation it is important that support comes from top management in company structures alike. Therefor, it should be mentioned that Daniel Grieder initiated the Innovation Department and highly values innovation, increasing the likelihood of passing through innovations. The innovation department falls under Business Development, the director of Business Development has to report to the CFO of PVH Europe, Martijn Hagman.

COMPANY STRUCTURE
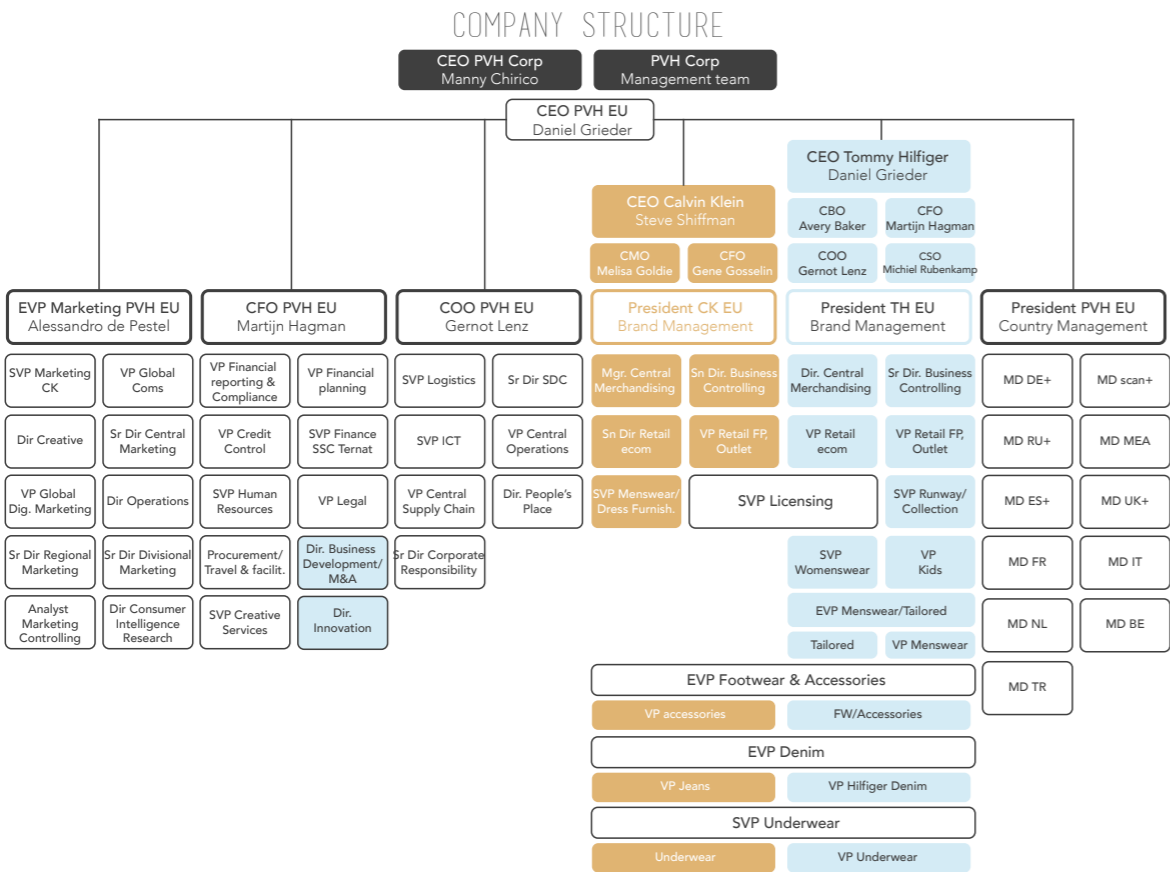
B-II. Stakeholders

To identify the key partners that have an influence on the brand and its position an overview of the stakeholders is created. Internal and external stakeholders are identified, each divided in people and parties [figure 4.10].

PVH corp.

PVH corp. as the mother company of Tommy Hilfiger has the final say in big changes or investments that Tommy Hilfiger does.

Employees, management & board of directors

The organization of Tommy Hilfiger is hierarchical, meaning that big decisions come from top-management. Almost every employee in the organization is subordinate to someone else in the organization, following the layout of a pyramid. Communication across different departments is not always effective resulting in divisions often take individual decisions.

In-store staff

The in-store staff represents the brand in the stores and is responsible for communicating the brand values and offering the brand experience in the store.

Suppliers & vendors

The fabrics are produced by suppliers. The different divisions all have their own suppliers and

therefor the supplier base is very big. The same goes for vendors: Tommy Hilfiger counts more than 600 vendors who manufacture the clothing.

Customer groups

Customers can be divided into B2B customers, e.g. wholesalers and B2C consumers, that buy the brand in retail stores or online. The last group directly interacts with the end product, where B2B customers form an intermediate between Tommy Hilfiger and the consumer.
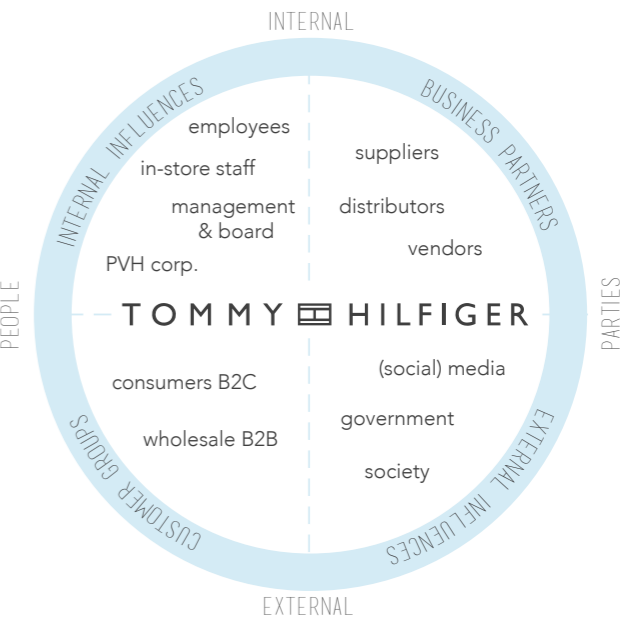

Figure 4.10: overview of Tommy Hilfiger stakeholders

C. Assortment

From the beginning of constitution, Tommy Hilfiger only sold Menswear. In 2000 womenswear and children's' wear collections were introduced and the product portfolio gradually expanded with additional in-house collections and licensed products [Appendix D]. Nowadays, Tommy Hilfiger sells 4 different brands, each with their own style, target group and distribution channels:

Hilfiger collection: the highest segment of the Tommy Hilfiger product offering, blending the brand's American heritage with contemporary influences and a playful fashion edge. The collection targets 25 to 40-year-old consumers and includes designs that premier on the runway during New York Fashion Week. The brand is distributed in global flagship and anchor stores, global tommy.com and select global wholesale

Tommy Hilfiger tailored: targeting 25 to 40-year-olds, this line integrates a sharp, sophisticated style with the brand's menswear heritage. From structured suiting to casual weekend wear, classics are modernised with precision fit, premium fabrics, rich colours and luxe details – all executed with the brand's signature twist. The brand is distributed in global retail, global tommy.com and global wholesale.

Tommy Hilfiger: the core line, which embodies the brand's classic American cool spirit and "preppy with a twist" designs, focusing on a 25 to 40 year-

old consumer. The brand is distributed in global retail, global tommy.com and global wholesale

Hilfiger Denim, from Spring 2018 'Tommy Jeans': inspired by American denim classics with a modern edge that is more casual than the Tommy Hilfiger label. Targeting 18 to 30-year-old denim-oriented consumers, the line focuses on premium denim separates, footwear, bags, accessories, eyewear and fragrance. The brand is distributed in global retail, global tommy.com, EU & international wholesale.

All brands offer products in the categories men's, women's and kids' wear, sportswear, denim, accessories, and footwear. In addition, the brand is licensing a range of products, including fragrances, eyewear, watches and home furnishings.

Price
The collections of Tommy Hilfiger are sold in three different prices ranges, varying form 'accessible': €20-€100, to 'premium': €101-€300 and 'affordable luxury': €310-above. The pricing of Tommy Hilfiger is aligned with other accessible brands like Maison Scotch and Marc O'Polo. 65% of the pieces that Tommy Hilfiger sells are bought in the accessible price range and only 2% in the affordable luxury. In [appendix D] an overview is presented showing the prices of key items in each category.

D. Assortment & pricing

Product portfolio:
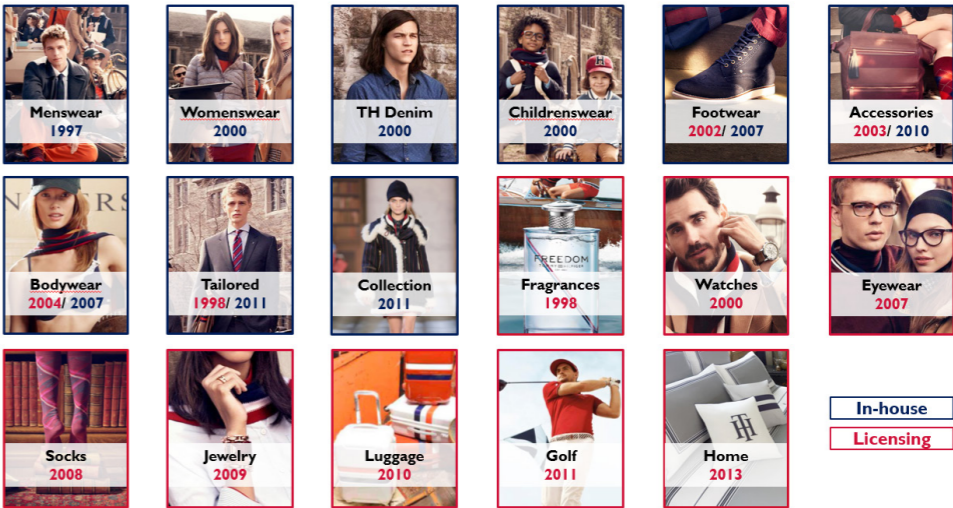
Pricing:

		Value		Accessible		Premium		Accessible luxury	
DENIM PANTS	SW	-	-	100-110	30%	120-150	65%	≥160	5%
	DENIM	-	-	100-110	38%	120-150	50%	≥160	12%
PANTS	SW	-	-	100-110	30%	120-150	60%	≥160	10%
	DENIM	-	-	100-110	45%	120-150	45%	≥160	5%
POLOS	SW	-	-	70-85	55%	90-150	40%	≥160	5%
	DENIM	-	20%	60-70	35%	75-90	38%	>90	7%
SWEATERS	SW	-	-	100-110	30%	120-200	58%	>200	12%
	DENIM	-	-	90-110	50%	120-180	42%	>180	8%
T-SHIRTS	SW	-	-	40-50	55%	60-80	35%	>80	10%
	DENIM	<40	20%	40-45	50%	50-70	25%	>70	5%
SHIRTS	SW	-	-	80-85	13%	90-100	70%	≥110	17%
	DENIM	-	?	70-85	?	90-100	?	≥110	?
OUTERWEAR	SW	-	-	180-270	52%	280-390	40%	≥400	8%
	DENIM	-	10%	180-340	45%	350-500	38%	>500	7%

Source: internal presentations

E. Product Development

F. Creating the collection
SPRING 2017

Creating the collection

Before a collection is created, an internal design brief goes out to all divisions. The design brief describes a global consumer relevant theme for the coming collection that is further specified into three directions. The theme brief is presented four times per year, for each season specific. The design brief consists of a theme name, a description of the target consumer, the link of the theme with the brand, key insights on which the theme is based and mood imagery to inspire. This is all input for the divisions to drop concepts in which they define colors, and bring up ideas for prints, details, fabrics and apparel silhouettes. After the concepts are dropt, three concepts are chosen to build upon and create the collection with. Divisions each make a final color card, key conceptual print, key fabric concept, key trim concept and key iconic pieces and images or sketches that define the silhouette. This process is led by the creative directors of each division who work together with the divisional designers. The Chief Brand Officer of Tommy Hilfiger has to approve each step before the next phase is entered. On the next page this process is visualized for the pre-spring 18 collection.

Innovation strategy

Over the years Tommy Hilfiger has experienced high peaks and deep drops. During setbacks the need for change was at some points highly present and the history of the company has proven that they were able to deal with this change. When the European market outperformed the U.S. Market, Tommy Hilfiger took the risk tom move the complete headoffice overseas. Change of strategy and reconnecting to the core of the brand pulled the company out of downturn when needed. Changing strategy can be considered as innovation in doing business and the history of Tommy Hilfiger shows that there was room for this type of innovation when needed.

The current CEO of PVH Europe and Tommy Hilfiger, Daniel Grieder, greatly values innovation and is determined to integrate innovation into the DNA of the organization. With their digital showroom Tommy takes the traditional wholesale buying process to the next level and in retail the newest digital technologies are used to maximize consumer experience. E-commerce and omnichannel transformation and the use of RFID technology and partnerships with social media to engage, involve and inspire consumers connect to their vision. However, innovation in the product offering is still not pursued extensively.

---

1. SEASONAL CONCEPT
Brand relevance, romance, inspiration

SUMMER OF LOVE
SPRING 2017

2 DROP CONCEPT
Overarching idea and concept for the drop

1960s PREP

1.

Consumer:
Celebrate individuality & self expression
Brand:
The freewheeling energy of America in the 60'
Key insight:
It's the summer of love

3 DIVISIONAL EXTENSION
How it is translated in the division

2.

Drop:
I Love the graduates
Silhouette, detail & print idea:
60's prep and classic collegiate styles, individual embellishments with love combined with rugby stripes

3.

Divisional interpretation WSW:
Cherries & stripes

Other divisional extension elements not visualized in this example

DESIRED OUTCOME: *final*
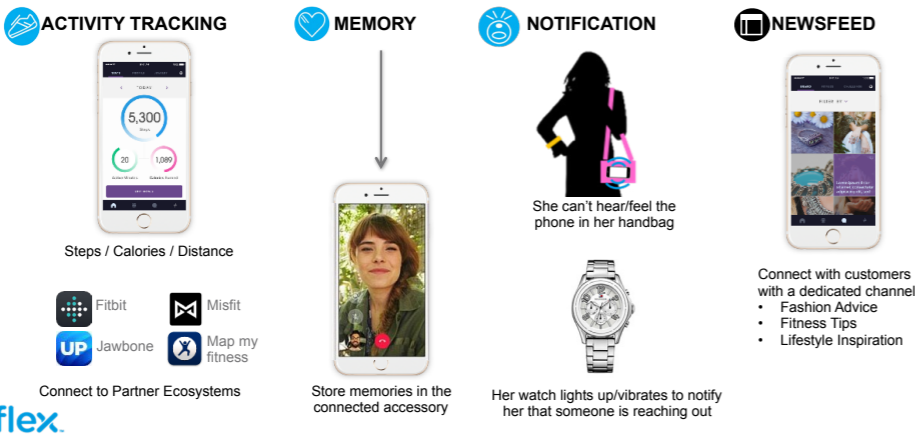

consistent development across executions and divisions

G. EVE by Flextronics

Module

5.9mm
11.5mm
19mm

Charger

Phone App

Web Portal

Turn key solution to introduce wearable technology

Feature	MINNOW - Hard Shell	MINNOW – Soft Shell
Accelerometer	Yes	Yes
Multi-color LED	Yes	Yes
Bluetooth Connection	Yes	Yes
Rechargeable Battery	Yes – 1 day use	Yes – 1 day use
Charging Contact	Magnetic Pins	Magnetic Pins
Waterproof	Yes	No
Consumer Removable	Yes – Multi-jewelry per module	No – Permanent inside Jewelry
Final Integration	Performed at Jewelry site	Performed at Flex site

Specifications:

ACTIVITY TRACKING

Steps / Calories / Distance

Fitbit   Misfit
UP Jawbone   Map my fitness

Connect to Partner Ecosystems

flex.

MEMORY

Store memories in the connected accessory

NOTIFICATION

She can't hear/feel the phone in her handbag

Her watch lights up/vibrates to notify her that someone is reaching out

NEWSFEED

Connect with customers with a dedicated channel
• Fashion Advice
• Fitness Tips
• Lifestyle Inspiration

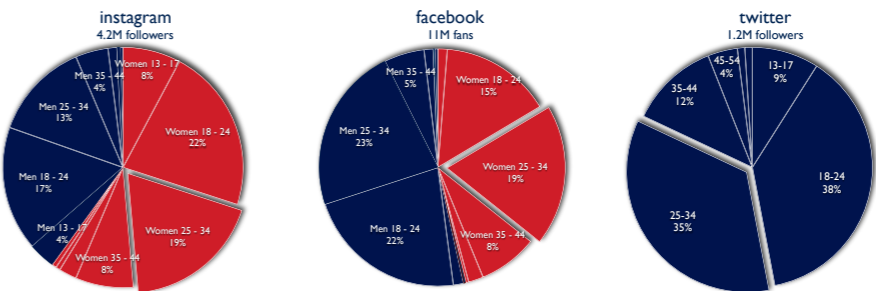# H. Social Media & Marketing insights

EXECUTIVE SUMMARY

- We gained **344K new followers** in the month of March, leading to a global audience size of **+16.9 million followers**.

- We have sent more than **512 posts** on our main channels which almost generated **379 million impressions** and has seen 5.2 million likes, shares and **comments (engagement)** on our posts. See performance details on channels, labels and gender content split on page 10-16 of this report.

- **Age / gender demographics** on our own main channels changes measured at the end of Q1, our audience on Instagram became younger and on Twitter the audience became slightly older. No significant changes in demographics on Facebook. More details on page 8.

- As per March 17 we started with **3 posts a day on Instagram**, this is a big change in posting strategy coming from 1 post per day. We are at the moment monitoring what the effect is on follower growth and engagement rate. **The effect on absolute total engagement is already very positive.**

- We reached the magical number of **4 million followers on Instagram**, with the same growth rate we expect to be at 5 million followers before the next runway event in September.

- **The influencer effect -** Posts with one of our campaign influencers Gigi, Sofia, Lucky or Anwar resulted in March in a **79%** higher average engagement rate on Facebook, **43%** higher on Instagram and **67%** higher on Twitter compared to posts without an influencer. More details on page 18.

- Tommy Hilfiger scores **highest engagement rate and growth rate** in the month of March **compared to a wide range of competitors**. On page 33 we look at competitors from a style/product offer point of view but also at the brands which make the biggest 'noise' and visibility.

- "Messaging is one of the few things that people do more than social networking," says Mark Zuckerberg. We are happy to see our Facebook Messenger **TMY.GRL chat bot** being featured in the top 6 best bots for brands and businesses in the category fashion. Please find an overview of the top 100 best bots across all industries by www.topbots.com. [article]

MARCH OVERVIEW

Platform	Community / Followers	Change From Previous Time Period	Channel Posts	Posts Impressions	Channel Engagement	Average Engagement Rate
Facebook	11,046,959	79,390 (+0.7%)	49 timeline posts	8.2M*	83K likes & comments 707.964 views	0.52% (+0%)
Instagram	4,000,916	256,015 (+6.8%)	52 (-24%)	202M	3.4M likes & comments 1M views	1.7% (+0%)
Twitter	1,295,581	5,589 (+0.4%)	84 (-50%)	135M	54K likes & comments	0.04% (-10%)
Weibo	270,497	694 (+0.3%)	83 (+27%)	22M	3.5K favorites, reposts & comments	N/A
Google+	172,300	-50 (-0.03%)	25 (-56%)	4.3M	265 engagement	N/A
Pinterest	50,813	1,791 (+3.7%)	165 (+283%)	7M	2.7K likes & repins	N/A
YouTube	26,947	1.030 (+4%)	17	446K	35K views	N/A
Tumblr	18,401	270 (+1.5%)	37	677K	396 likes & comments	N/A
Global Total	**16,882,414**	**344.729 (+2.1%)**	**512 (+6%)**	**379M (-35%)**	**5.2M (-25%)**	**-**

AGE / GENDER SPLIT FOR MAIN CHANNELS

instagram
4.2M followers

Women 13 - 17 8%
Men 35 - 44 4%
Men 25 - 34 13%
Men 18 - 24 17%
Men 13 - 17 4%
Women 35 - 44 8%
Women 25 - 34 19%
Women 18 - 24 22%

facebook
11M fans

Men 35 - 44 5%
Women 18 - 24 15%
Men 25 - 34 23%
Women 25 - 34 19%
Men 18 - 24 22%
Women 35 - 44 8%

twitter
1.2M followers

45-54 4%
13-17 9%
35-44 12%
18-24 38%
25-34 35%

INSTAGRAM Women 25-34 went from 23% to 19%. Women <24 grew from 26% to 30%. **Our audience became younger.**

FACEBOOK Women 25-34 audience grew from 18% to 19%. No significant changes in demographics.

TWITTER 46% male / 54% female audience age group 25-34 went from 39% to 35%. Age group 35-44 grew from 9% to 12%. **Our audience became older.**

data compared to 6 months ago.

*Twitter doesn't provide data on age/gender slit

8

I. Store observations

Method

Store observations were done to get a better understanding of how the consumer interacts with the brand in real-life and to gain an understanding of the current Tommy Hilfiger consumer.

Participants and context

The Denim store mostly attracts younger consumers of an age group from between 18 and 35, where the regular store attracts older consumers, of around 40 and above. The ambiance in both stores is significantly different with Tommy Hilfiger being more chic and luxurious and Hilfiger Denim more urban and young. The total consumers that were ticked in a notebook. Also was noted if the consumers were alone or with their parents/friends.

Procedure

Two times 1.5 hours were spent in store to perform the observations. During the observations, there was no intervening in the natural behaviour of the consumer and only notes were taken to record the phenomena that was observed. No video or photos were taken, because of privacy reasons and to make sure that the people observed wouldn't notice the observations and as reaction would behave differently. The store observations were performed in the different brand stores that Tommy Hilfiger has in the Amsterdam. Tommy Hilfiger has two types of stores at the P.C. Hooftstraat, one where only Hilfiger Denim is sold and another one where

the consumer can buy Tommy Hilfiger and Hilfiger collection. There is also a store in the Kalverstraat in Amsterdam, where the regular collection and Hilfiger Denim are sold. One time 1,5 hour was spend in the stores at the PC Hooftstraat, during the week and one time 1,5 hour was spend in the store at the Kalverstraat during the weekend.

The feeling of the Hilfiger Denim store and the brand store is completely different [image x] and also the type of consumers they attract differ.

Analysis

For analyses, all data was grouped in combinations of remarks and quotes and qualitatively analysed. The findings were discussed with store personnel and sometimes the consumers were asked informal questions to clarify certain behaviour.

Tommy Hilfiger Denim store

- Consumers were often confused by the assortment when walking in the Tommy Hilfiger Denim store, while thinking also the regular brand was sold.
- Mostly younger consumers come for shopping, showing great interest in the Tommy Jeans label.
- Tommy Jeans label is seen on Instagram and worn by influencers, making it attractive to buy

Tommy Hilfiger regular brand store

- Area dedicated to Tommy Hilfiger Tailored, where men can buy tailored suits. Consumers of the regular Hilifger store enjoy a personal treatment and luxurious experience and high amounts are spend on complete suits supplemented with matching ties, socks and sometimes even shoes.
- Social class is high, all loyal consumers, or repeat consumers (own multiple items)

J. Questionnaire

Questionnaire Tommy Hilfiger

My name is Puk de Jong, student Strategic Product Design at the University of Technology, Delft. Currently, I am working on my graduation project, which is about introducing a new product for Tommy Hilfiger. Filling in this questionnaire will take you no more that 3 minutes. Thank you for your help!

*Vereist

1. **1. Gender** *
   Markeer slechts één ovaal.

   ◯ Male

   ◯ Female

   ◯ None

2. **2. Age** *
   Markeer slechts één ovaal.

   ◯ <20

   ◯ 20-25

   ◯ 26-35

   ◯ 36-40

   ◯ >41

3. **3. My favourite apparel brands are** *

   _____
   _____
   _____
   _____
   _____

4. **4. My recently purchased apparel brands are** *

   _____
   _____
   _____
   _____
   _____

5. **5. Brands that I wear now (when filling in this questionnaire)** *

   _____
   _____
   _____
   _____
   _____

6. **6. I buy Tommy Hilfiger apparel** *
   Markeer slechts één ovaal.

	1	2	3	4	5	
Never	◯	◯	◯	◯	◯	Often

7. **7. The last item I bought from Tommy Hilfiger was** *
   Markeer slechts één ovaal.

   ◯ Jeans

   ◯ T-shirt

   ◯ Dress

   ◯ Shorts

   ◯ Underwear

   ◯ Trousers

   ◯ Sweater

   ◯ Skirt

   ◯ Not applicable

   ◯ Anders: _____

8. **8. I own this many pieces of Tommy Hilfiger clothing:** *
   Markeer slechts één ovaal.

   ◯ 0

   ◯ 1-3

   ◯ 4-8

   ◯ >8

9. **9. Why I purchase Tommy Hilfiger items** *
   Vink alle toepasselijke opties aan.

   ☐ Habit

   ☐ Word of mouth

   ☐ Advertisements

   ☐ Social media exposure

   ☐ Brand

   ☐ Quality

   ☐ Style

   ☐ Fit

   ☐ I never purchase Tommy Hilfiger items

   ☐ Anders: _____

10. **Select the keywords that you associate with the Tommy Hilfiger brand (max. 4)** *
Vink alle toepasselijke opties aan.

- [ ] Influential
- [ ] Classic
- [ ] Cool
- [ ] Fashionable
- [ ] Sporty
- [ ] Creative
- [ ] Progressive
- [ ] Fun
- [ ] Young
- [ ] Decent
- [ ] Original
- [ ] Surprising

Keywords

10. Select the keyword that is most applicable

11. **What I associate with the Tommy Hilfiger brand** *
Markeer slechts één ovaal.

- ( ) common
- ( ) fashionable

12. **What I associate with the Tommy Hilfiger brand** *
Markeer slechts één ovaal.

- ( ) formal
- ( ) casual

13. **What I associate with the Tommy Hilfiger brand** *
Markeer slechts één ovaal.

- ( ) Serious
- ( ) Fun

14. **What I associate with the Tommy Hilfiger brand** *
Markeer slechts één ovaal.

- ( ) Innovative
- ( ) Uncreative

15. **What I associate with the Tommy Hilfiger brand** *
Markeer slechts één ovaal.

- ( ) Fashionable
- ( ) Sporty

16. **What I associate with the Tommy Hilfiger brand** *
Markeer slechts één ovaal.

- ( ) Old
- ( ) Young

17. **What I associate with the Tommy Hilfiger brand** *
Markeer slechts één ovaal.

- ( ) Cool
- ( ) Unfashionable

18. **What I associate with the Tommy Hilfiger brand** *
Markeer slechts één ovaal.

- ( ) Ordinary
- ( ) Preppy

19. **What I associate with the Tommy Hilfiger brand** *
Markeer slechts één ovaal.

- ( ) Cheap
- ( ) Expensive

20. **What I associate with the Tommy Hilfiger brand** *
Markeer slechts één ovaal.

- ( ) Classic
- ( ) Progressive

21. **11. Occasions to where I wear my Tommy Hilfiger clothes** *

_____
_____
_____
_____
_____

K. Contextmapping

Research questions
The main research question of the research was: what are the wants and needs of the target consumer for wearable technology: generation Z?

Sub-questions:
1. What do you experience in a day in your life?
2. How do consumers think about wearable technologies in general?
3. What do consumers think of the wearable technology that Tommy Hilfiger wants to introduce?

Sampling
For sampling purposive sampling (Sanders & Stappers, 2012) was utilised. Most of the dimensions of variation in the group are covered by Generation Z youngsters, living in the city, and one sample a bit outside the target group was taken to get a good understanding of the boundaries of Generation Z

The group session
For the session it was chosen to combine context mapping elements with the more structured approach of conducting a focus group. The first part of the session was about experiencing, where the second part functioned as a deep dive into motives and behaviour of the participants where they could react on each other's experiences. The

session was seen as a whole experience and not just as a series of tasks that were asked to perform. The aim was to find out what the values and needs are in the future and how these can be served by design through the development of new concepts for experiences, products or services around wearable technology. For the session, a session script was created in which was described how the session should go. The session script comes together with a clear description of the goal, objectives and stakeholders of the session and can be found in an overview in figure x. For the second part of the session in which research elements of a focus group were used, a topic guide was established to structure the course of the focus group.

Workshop with target user: Generation Z living in cities
Goal: Explore unmet needs and dreams of generation Z around wearable technology as a lifestyle device
Objectives: idea generation, inspiration for design, collaborative opportunity
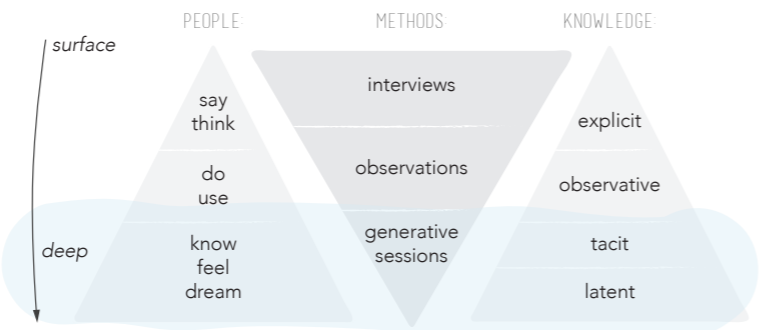

Image: levels of knowledge (adapted from Sanders, 2001)

mapping for future products and services around wearable technology for Tommy Hilfiger
Stakeholders: participants, Tommy Hilfiger, Puk

Analysis
After the session an analysis of the Analysis

After the session an analysis of the collected data was done. Right after the session all remarks were directly documented. Consecutively a transcript of all what was said during the session was generated based on the video and audio material. Finally all session material including transcripts, created collages and artefacts, was gathered and the different layers of information

were discovered. First by analysing the results on an individual level, including the results of the participants that didn't attent the session, and then by cross-comparing the individual results. All impressions and insights were written down on post its and in overviews to rearrange them, including important quotes from as well the booklets as from the session. The patterns were found and an overall view of the insights was created.
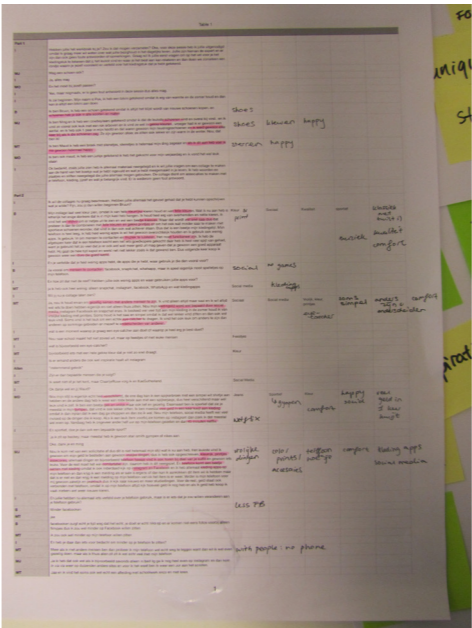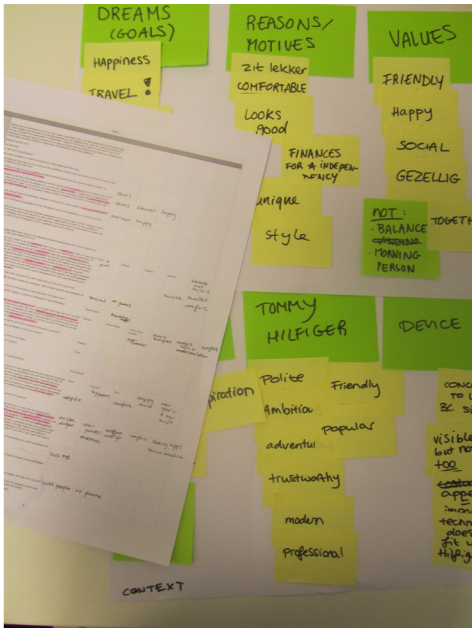

Image: analysis of session

K. Contextmapping

Overview participants

10 booklets filled in:
1. Maud O, 15 yrs
2. Maud T, 16 yrs
3. Tristan, 18 yrs
4. Bruun, 20 yrs
5. Ming, 22 yrs
6. Tijn S, 20 yrs
7. Tijn G, 19 yrs
8. Iris, 17 yrs
9. Sebastiaan, 18 yrs
10. Emilie, 22 yrs

5 participants in the session:
1. Maud, 15yrs
2. Maud, 16yrs
3. Tristan, 18yrs
4. Bruun, 20yrs
5. Ming, 22yrs

purposive sampling

Sensitising package

prior: pilot to validate content

Envelope:
1. Booklet: 14 assignments
2. Emotion stickers
3. Collage tools
4. Glue & scissors
5. Pens

Booklet

Session

Combination generative techniques and focus group

1. Introduction
   • Warm up: relate to clothing item
2. Collage making
   • Stimuli material
   • Your lifestyle: clothes and phone
   • Explain and discuss
3. Focus group
   • Topic guide

Results

Inspiration for design

Consumer Values

Input for consumer profiles

Align with stakeholders

Create value propositions   Input roadmap

Consumer profiles

Appearance   Worldly   Everyday

Value proposition directions

*Our wearable device, helps urban youngsters who want to **be unique** by **reducing their insecurities** and make them **feel confident and fashionable***

*Our wearable device, helps urban youngsters who want to **explore the world and meet new people** by **reducing the time they spend on their phone** and inspiring them for new experiences.*

*Our wearable device, helps urban youngsters wo want to **be happy** by **reducing their worries about the future** and **make them feel connected to others** and help them book personal successes*

Appearance   Worldly   Everyday

Analysis

Single case → Cross case → Building theory

Clustering insights individual booklets

1. Include session transcript
2. Initial coding transcript
3. Create categories

1. Structure insights
2. Create overview

L. Topic guide focus group

Introductie:
- Uitleg opdracht

- Vertrouwelijkheid:
  - "Vind je het goed als je wordt opgenomen? De film is vertrouwelijk en wordt alleen gebruikt voor mijn onderzoek"
  - "Alles wordt alleen voor onderzoek doeleinden gebruikt en we gaan vertrouwelijk om met je gegevens"
  - "Als Tommy Hilfiger gegevens van dit interview krijgt zijn deze altijd anoniem"

- Stimuleren open antwoorden
  - Er zijn geen foute antwoorden of opmerkingen. Jij bent de expert van wat je hebt meegemaakt en alles wat je zegt is relevant. Wees dan ook niet bang om te spreken.

Discussiëren collage:

Welke rol speelt je telefoon in je dagelijks leven?
Hoe vaak wordt de mobiele telefoon gebruikt en waarvoor?

Jullie hebben net in de collage al aangegeven wat er allemaal een rol speelt in het gebruik van je mobiele telefoon. Hier zou ik graag meer over willen weten, daarom heb ik een aantal vragen.

1. Welke mobiele apps gebruik je? waarvoor en waarom gebruik je deze? Wat vind je leuk aan deze apps?
2. Zou je iets willen veranderen aan jouw mobiele telefoon gebruik? Wat?

Time	Action	Checklist
5 min	Introduction	Goal is getting insight in your experience, "you are the expert" & "no wrong answers", is it ok if I record the meeting?
5 min	warm up	Relate to clothing item; each participant draws clothing item with which he/she can relate most an presents the item and himself to the group. Start with myself.
5 min	instructions collage	Use the images and words to make associations and bring back memories about what you use your mobile phone for, if you want to do this more or less or whatever. Think of **where, what, who when, situation, feeling, seeing, heading, scenting tasting, mood**
15 min	collage making **Your lifestyle: the clothes you wear and how you interact with your phone**	Clothing: where do you find inspiration, what do you find important, who's opinion is important, wat voel je als je bepaalde kleding draagt
20 min	present and discuss collages	explain your collage to the group. You can react to each others stories
5 min	explain focus group	
30 min	Focus group	topic guide
10 min	Fast pace HMW	5x 2 min How Might We….
5 min	closing	

De introductie van een wearable device door Tommy Hilfiger

TOPIC GUIDE

- Verloop sessie:
    - We gaan meerdere thema's bespreken
    - Ik zal als moderator de discussie een beetje stimuleren maar geef verder zelf geen mening
    - Is alles duidelijk?

- Rondje deelnemers, noem:
    - Heb je een kledingstuk van Tommy Hilfiger? Zo ja, wat?

- Stimuleren open antwoorden
    - "Er zijn geen foute antwoorden, alles wat je zegt en vindt is goed. Ik wil alleen graag jullie mening weten dus schroom niet om gelijk te zeggen wat in je opkomt".
    - Ik wil graag jullie mening weten en vind het juist interessant als er verschillende meningen zijn dus het is niet doel om een consensus te bereiken. Je hoeft het niet eens te worden met de anderen.

Sub-thema 1: Hoe ziet een dag uit je leven eruit?
Waar loop je tegenaan en wat zou je graag anders doen?

Tijdens het invullen van het boekje heb ik jullie gevraagd een dag uit je leven te beschrijven. Hier zou ik graag meer over willen weten, daarom heb ik een aantal vragen.

1. Wat is het verschil tussen een dag uit je week en een dag in het weekend?
2. Wat vind je belangrijk aan de kleding die je op een normale dag draagt en de accessoires die je draagt? *Hoe is dit in het weekend?*
3. Wat vind je van de kleding van Tommy Hilfiger? Waarom zou je het wel/niet kopen?

Sub-thema 2: Hoe denken consumenten over wearable technologies?
Introductie: wat is wearable technologie (voorbeelden).

1. Wat is jullie mening over de wearable technologies die hier te zien zijn? Waarom?
2. Wat vind je van wearable technologies? Waarom vind je dit?
3. Maakt iemand van jullie gebruik van een wearable? Zo ja, waarvoor?
4. Waarom hebben jullie overwogen om wel/niet een wearable aan te schaffen?
5. Waar zou je een wearable voor (willen) gebruiken?
6. Wat zou je belangrijk vinden als je gebruik zou maken van een wearable? (functies, connectie, toepassingen)
7. Hoe zou een wearable iets kunnen toevoegen aan je dagelijkse leven?

Tussen conclusie:
→ Meningen samenvatten, klopt het dat.. ? Is iedereen het hier mee eens?

Sub-thema 3: Hoe denken consumenten over de wearable technology van Tommy?

Introductie: de wearable technology van Tommy

1. Wat is jullie eerste gedachte over dit apparaatje?
2. Wat zou je ermee willen/kunnen doen?

3. Zou je willen dat het zichtbaar is? *Wanneer wel niet? Waarom?*

Conclusie:
→ Meningen samenvatten, klopt het dat.. ? Is iedereen het hier mee eens?
→ Wrap up gehele interview: Klopt het dat.. de grootste ergernis is.. , daarna .. en uiteindelijk is minder belangrijk …?

Laatste oefening: 5x HKJ
1. Hoe kun je met een wearable technology iets toevoegen aan je dagelijks leven?
2. Hoe kun je met een wearable technology iets toevoegen aan je kleding?
3. Hoe kun je iemand verrassen?
4. Hoe kun je een unieke ervaring bieden?
5. Hoe kun je op een leuke manier contact houden met je vrienden?

M. Trend Analysis: DEPEST

Demographic, Ecological, Political, Economic, Social and Technological trends are described. The trends give insight in the developments in society, market and technology and how these developments relate to each other and to the topic of research.

Demographic
On demographic level, the world population is rapidly growing and is expected to reach 8.5 billion by 2030 (worldbank.org). This growth will be driven by higher life expectancy and growing birth rates in Africa. Booming populations will increase economic potential of some markets, including India and Asia (PWC.co.uk). It is forecasted that India could overtake the US as the world's second largest economy by 2050. Urbanization, mass movement and aging drive questions around economic, social and environmental sustainability. These questions should be taken to play into the needs of the older consumer and design products and services that are suitable for an urban environment. The opportunity for brands with a global outlook and appetite for growth is undoubted. In 2030, two-thirds of the world's middle class will be living in Asia and 107M of the remaining one-third will be based in sub-Saharan Africa (OECD.org). Many opportunities lay in targeting this population.

Ecological
The growing world population and urbanization put increased pressure on resources, creating social tensions and environmental concerns. Climate change is happening faster than predicted and environmental threats such as air pollution, floods and unsafe water are common concerns. With these developments environmental awareness and attention for sustainability rise. Also in the fashion industry the focus has shifted emphatically to sustainable and circular production. This influences material choice and production processes. However consumers don't always seem to be willing to spend more for sustainable clothing (BoF-McKinsey Global Fashion Survey, 2016). According to FashionUnited.com, only 3 percent of consumers are willing to pay more than 21 percent for more conscious products. Meanwhile, "higher prices for sustainable fashion is unavoidable due to more costs throughout the supply chain, retailers are urged to justify the high-price tags using design, innovation and quality to give consumers more reason to purchase."

Political
The political climate in the world is currently turbulent. The presidential elections of the United States in January 2017 resulted in the inauguration of Donald Trump as the new president of the United States of America. Bold statements of the president resulted in fluctuating stock markets and tension between the United States and the rest of the world. Recently America

stepped out of the Paris Agreement, initiated by the president and in the G-7 meeting in May 2017 fundamental differences between America and the other countries couldn't be hided. Europe's most influential leader, Angela Merkel, concluded after the meeting that the United States is no longer a reliable partner for her country and the European Union (New York Times, 28 May 2017). With PVH corp. as an American company and the Tommy Hilfiger headquarters located in Amsterdam, this could also impact the business.

In June 2016 a small majority of United Kingdom citizens voted for the UK leaving the European Union. The so-called Brexit causes uncertainty for UK citizens working in the EU and vice versa. Tommy Hilfiger Global has many employees from England who have to deal with this uncertainty. When the UK is truly leaving the EU, the organization has to be prepared to deal with changes in import/export taxes. Transactions to/from other EU states would become imports and exports with potential impacts on systems and cash flow. Fashion purchases are often emotional ones, and if consumers are feeling uncertain or scared, they are less likely to buy.

Economic

The uncertainty in the world has its impact on global economy and global debt has risen faster than GDP. The increased economic and geopolitical

uncertainty led to a decline in consumer and fashion spend across the board. One of the key growth markets for fashion since the financial crisis in 2008 was China. The market is large and important and Tommy Hilfiger just opened up a Joined Venture to utilise this. However, the growth of Chinese GDP as slowed down since 2010 and shopping patterns of Chinese consumers are changing: they are becoming more selective about what they spend and allocate more of their income to lifestyle services and experiences, trading up from mass products to premium products (McKinsey China Consumer report, 2016). Not only are consumers demanding more customized and personalized fashion, but they are also increasingly expecting it at lower prices. In 2016, off-price shoppers account for 75 percent of apparel purchases across all channels, and some retailers now have more outlet stores and discount stores than full-price shops. In China outlet malls are set to double in number by 2020.

Social

Health and fitness

Another big trend in human behavior is living a healthy and conscious lifestyle. This trend expresses itself in growing interest in healthy, 'clean', eating and exercising. Consumers prioritize health and fitness, signaling a cultural shift in the way people are dressing, eating and moving. Digital technologies help

consumers to track their lifestyle and adjust their way of living according to data insights. This healthy lifestyle movement has caused the emergence of 'Athleisure', which is defined as 'casual clothing that is designed to be worn both for exercising and for doing almost everything else' (Merriam Webster, 2015). The rise of Athleisure is paving the way for new players across fashion, food and technology.

Information is unlimited and choice is abundant, resulting in sometimes even too much choice. An online culture is emerging of comparing products and great value is awarded to reviews and recommendations of other consumers. In the digital age people are connected everywhere, anywhere and interact with each other via online social media

platforms. People form communities on these platforms and find it important to be part of communities. Connections are not only between human networks but also to brands, places, companies and products. Brands can utilise this by creating a connection with their consumers and connect their products to platforms that their consumers use, making them part of a community. The always connected society results in easy online contact with others and forms the foundation for, among others, the sharing economy. Instead of buying products, people share their products and service experiences. Reviews on users give insight in trustworthiness of people and form an important base of sharing platforms. When people do purchase products they
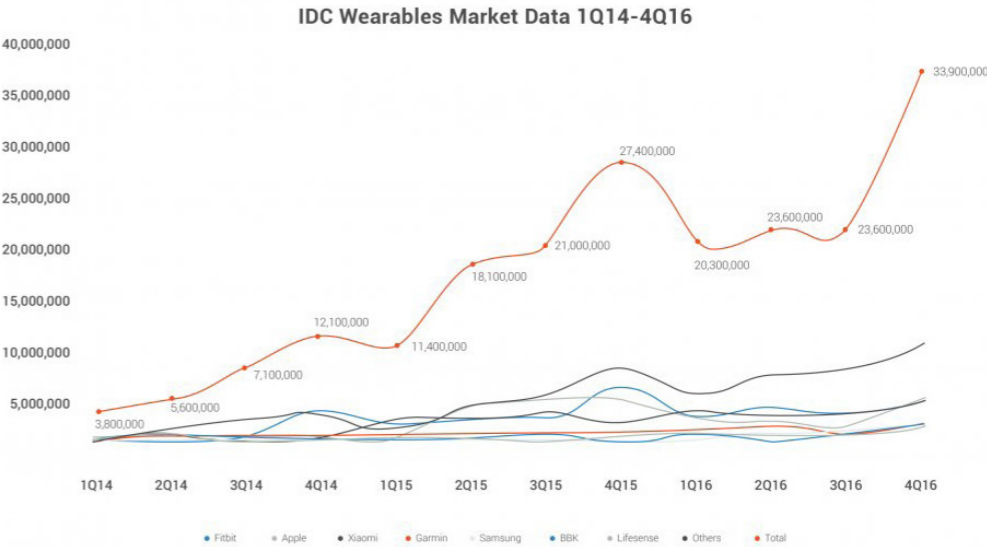

Figure: wearable technology market data source: https://www.idc.com/tracker/showproductinfo.jsp?prod_id=962

find it predominantly important that the product they buy is unique. Mass produced goods lack interest and the option for customization is increasingly valued.

Technological

The main technological trend is global digitalization. This results in the emergence of new technologies that open doors in every industry, including the fashion industry. Data can be gathered from a variety of sources, among which Internet of Things, and is used for analysis and as input for Artificial Intelligence. "In fashion, online shopping could become a conversation, where the shopper describes the dress of their dreams, and, in seconds, an AI-powered search engine tracks down the closest match" (BoF, April 2016). This is only one example of the possible uses of AI. Blockchain on its turn offers opportunities for more transparency in the fashion supply chain and can ensure privacy in gathered consumer data.

Image 6.2: 3D printed bra's by MeshLingerie

Also the production processes in fashion are subjected to technological change. Robotics take over production and garments have technology integrated, or are produced in a technological manner with techniques such as 3D printing [image 6.2] which are beneficial to the customization trend and enable rapid prototyping. Consumer experiences are digitalized and omnichannel experiences are utilized integrating brand, product, online and offline experiences of consumers.

Wearable technology

Current growth rates of the wearable technology market are promising for the future. The industry is expected to reach $14 billion in 2017 and according to a recent report by CCS Insight, the market for wearable technology will reach $34 billion by the year of 2020 and even $52 billion by 2022 (MarketsAndMarkets research report 2016) projecting promising growth. Nowadays, the fitness space is one of the largest markets in wearable technology, but the market is projected to become much more diverse in the future. The challenge for wearable technologies lies in the adoption by the users. Advances in materials sciences have the potential to make new forms and materials available for these type of electronics. While the mobile phone is now acting as the hub of the wearable technology, in the future the smartphone might even become obsolete. 40 percent of smartwatch users already interact less with smartphones today. As wearables get smarter, the smartphone may become a secondary screen (Ericsson research report, 2016). While interest in smart garments seems to be high (Ericsson research report, 2016), consumers also believe that smart clothing faces some challenges, with 43 percent concerned that having technology embedded in clothing means that they will not be able to replace the item as easily. As a result, most feel that such clothing might not appeal to the masses and will go mainstream only beyond 2020.

WEARABLE TECHNOLOGY
N. Developments

Bluetooth

In order to pair devices without the use of wires, Bluetooth connection is required. It is expected that developments in Bluetooth will provide less use of power and faster, whether or not instantly, pairing with devices. It is expected that Bluetooth will continue developing, focusing on maximizing the distance by which devices can operate and stay connected.

IoT & Blockchain

When wearable devices are interconnected through the Internet of Things the greatest challenge remains in privacy and trust. A future of billions –or more- devices communicating with each other efficiently requires that their interactions and transactions exist on an immutable database of shared, secure and highly permission access. What IoT requires more than any technological advancement is trust between stakeholders and the devices interacting with them. Blockchain can be a key enabler for the IoT because it has the potential to facilitate commerce between connected devices in scalable architectures and ensure repeatable outcomes/expectations. This is required to establish value and define trust between stakeholders and machines, both of which are essential for long-term value creation and sustainability (Tractica.com).

Artificial Intelligence

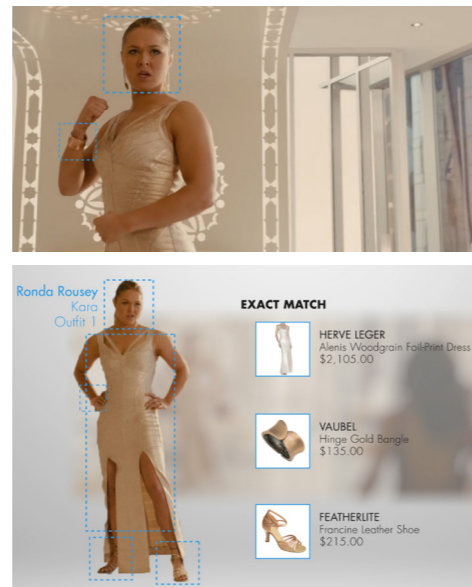Artificial Intelligence can find patterns in

Image : The Take, AI driven image and video recognition technology, directing the user where to shop for the clothes seen on screen.

personal data and enables to customize experiences and output through connecting data. Through machine learning extensive databases can be connected and analysed in no time. Using AI in combination with wearable devices can create new opportunities, such as connecting and comparing the data gathered from the wearer to existing data.

Near Field Communication (NFC)

NFC will play a growing role in wearable technology. Nowadays payments are already made with NFC chips in our banking cards. When integrating NFC in clothes and wearables it can be made possible to let us pay with our garments.

Beyond paying other opportunities arise such as sharing information through NFC integrated wearables or opening locks with it. NFC can interact safely with systems and adds a new dimension to the challenge of trust, mentioned before in the applications of IoT.

Virtual Reality (VR) & Augmented Reality (AR)

Virtual Reality can simulate or recreate a real life environment or situation. VR is achieved by wearing a headset, equipped with the technology and is typically used in gaming and simulation, for example to train people in real life environments. For VR the headset is the essential wearable technology to immerse the user in a virtual world. Augmented Reality on the other hand takes place in the 'real' world by making a 3D projection. AR typically pops out the device that is used to project. Mobile (wearable) devices can be used to let e-mails, photos or text messages pop out (Augment.com). Virtual and Augmented reality techniques are now gradually emerging in the retail environment where consumers can fit garments virtually our bring on make-up virtually.

Flexible OLED & LCD

OLED and LCD are both display technologies that enable beautiful and efficient displays and lighting panels, for example used in television or computer screens. Developments are made to make the next generation of these panels bendable and flexible. The

Image : Virtual fitting in the shop window

screens can be made lighter, thinner and more durable compared to glass based displays. In the future screens are expected that can fold, bend or stretch. This enables integration in fabrics for clothing and fashion creating new possibilities for wearable technologies (Oled-info.com).

Haptic feedback

Haptic feedback is a technology that through movement, vibration or forces communicates with the user. Buttons or screens can be replaced by this way of immediate feedback to the users' command. Wearable devices can directly communicate or respond to the user and communicate without the necessity of the user to look at or consciously interact with the device.

GPS & Tracking

This technology is now used often in wearables for sports to track distances but also for children's wearables to

ensure they are 'safe' when they're out of sight. GPS has become very accurate and precise positions of the wearer can be communicated.

<u>The evolution of the mobile phone</u>

Wherever we go, the smartphone is always with us. In this sense, it has long been the most personal device we interact with. However, as wearables become more common, they appear to be replacing smartphones as the most personal device. For most wearable technologies nowadays, the mobile phone plays the role of a hub that gives the user a visual platform to connect with the wearable technology. However, trends suggest that the mobile phone will be subjected to major developments during the coming years. Devices become thinner, faster and more intelligent. It is even expected that in the future people won't be carrying a phone anymore but have their devices implanted (Cnet.com).

<u>"Disappearables" or "embeddables"</u>

Wearables become smaller and smaller, within five years, wearables could be taken over by hearables, devices with tiny chips and sensors that can fit inside your ear. Technology is fit inside clothing or even inside the human body, making it invisible. Sensors will be built into every existing wearable device or apparel. (www.lfpress.com)

<u>Smart garments</u>

Smart clothing started to take of in 2015 and more companies are playing around with the concept of connected garments. Gadgets that the user straps to the body are substituted by smart clothing that can constantly track our heart rate, monitor emotions and even pay. All without using a phone or tapping a screen (Wearable.com). Technology is integrated and not only used for functional purposes, but also to decorate garments and make them more exciting. During the MET Ball in May 2016, celebrities were spotted in Smart gowns including LED (image x).

Image : supermodel Karolina Kurkova wearing a Marchesa/IBM dress at the Met Ball with 150 LEDs in handmade 3D flowers that lit up whenever anyone tweeted with the hashtag#CognitiveDress. IBM's Watson analysed and categorised the sentiment of each tweet (joy, curiosity etc) and then lit up the dress accordingly

O. Case studies

	Polo tech shirt	L'Oreal my UV patch	Levi's commuter jacquard	Tory Burch Fitbit	Under Armour	Mont Blanc E-strap
Price	$295	$0-15	$350	$195 (incl Fitbit: $295)	$160	$300 to watch price
Type & Category	Clothing – sports	Functional - outside	Clothing – outerwear	Accessory – fashion	Shoes – sports	Accessory – functional/fashion
Brand strategy	'Preppy tech' shirt, offering tailor made workouts.	Saying to care about the health of consumer. Wearable is used to indicate when to use L'Oreal sun product. Is used in combination with traditional product offering.	Integrating technology in one of their signature jackets.	Creating a nice design casing for a wearable technology that is already on the market to appeal to a new consumer group.	Operating on the forefront of sports technology. Under Armour aims to create products that deliver "Performance, innovation and advantages". With the vision to change the way athletes live through digital, mobile and innovative products including wearables and embeddables.	Not changing anything to the looks of the traditional product offering, but adding the wearable technology functionalities out of direct sight. Give consumer option to choose wearing the strap, by making it (de)attachable.
Design wearable	Typical 'preppy' Ralph Lauren design. Wearable technology is clearly visible & detachable	Tattoo design, coming in one version: heart shaped. Always visible when wearing and design is very feminine.	In first instance basic design which is typical for Levi's. Wearable is on the sleeve by the wrist integrated in the jacket at the same height as where a (smart)watch would be worn.	Designing the perfect appearance for the fitbit without interfering in the technology or functionalities of the wearable.	Wearable is perfectly integrated and invisible. The exact same shoe can be bought without the wearable technology.	Without building the technology in the clock, the strap contains the technology. Making two sides of the watch interesting and important for design. Design is similar to existing smartwatches but the choice of wearing a normal watch compared to a smartwatch does not have to be made.
Mobile Application	Application gives statistics and personalized work-outs. Works as a personal coach	App is very to the point and personalized. Tells weather conditions, time spend in sun, personal questionnaire about skin and gives information and notification on when to use sunscreen and stay out of the sun.	Not available yet	The application is the same as the normal Fitbit application, without redesigning for Tory Burch	Used in combination with the MapMyFitness app. App that stores routes, details of different trainings and tracks activity. App notifies after 400 miles that shoes should be replaced.	The app is clear and in the style of Mont Blanc. The app has a function to locate and find the watch and personal goals can be set. It gives insight in amount of steps and how active the wearer is throughout the day. Settings for notifications can be controlled via the app.
Technologies & functionalities	Mearsuring heart-rate, steps, breathing rate & tracking	Integrated NFC, measuring sun intensity.	Works as a remote to phone, no extra functionalities.	Casing for fitbit, not added technologies or electronics	Jump test for measuring fatigue level, long battery life, run without phone.	Works as a remote and screen shows notifications of mobile phone. Contains an activity tracker and phone can be found via the strap.
Positive reviews	App is your personal trainer that offers great work-outs Shirt is machine washable	Very personal advice due to questionnaire Relevant information based on location Notification when needed Clear and understandable application	No reviews yet, because not yet available on market. Though, pre-reviews are not very positive. Comments on the added value of the product, since it just seems to work as a remote	Does not scream 'fitness wearable' Chic improvement on fitbit options	Not visible/ unnoticeable Jump readiness for recommended training (personalized advice) Software updates on app can provide new info on the long run without having to buy a new shoe	Nothing changes to the classic design of the watch

Negative reviews	1. A lot of data is showed Difficult to take the shirt of (very thight) 2. Only for men & iPhone users 3. Always have to wear the shirt, so either have multiple (which is expensive) or wash immediately after use	Does not stick well Only one design that not really suits for men Does not measure the *exact* amount of sunlight		Does not come with the fitbit itself, have to buy seperately.	Only for cardio training When newer activity trackers come out, you have to buy new shoes	Quite big addition to the strap
Technology partner	OMSignal	MC10	Google	Fitbit	-	-

Polo tech shirt

Levi's Commuter Jacket

Under Armour GPS Shoe

Mont Blanc E-strap

Tory Burch x FitBit jewelry

L'Oreal UV patch

P-I. Competitor Analysis

Ralph Lauren
Ralph Lauren is the closest competitor to Tommy Hilfiger, offering the same products, in similar price class and focusing on the same type of consumer. Their brand image is similar to Tommy Hilfiger's, standing for American, classic and elite fashion. With their time-less and classic designs, Ralph Lauren is not known for their innovativeness. His fashion ideas have been criticized by some for not being particularly innovative while also embraced by scores of consumers who prefer more approachable looks. Currently Ralph Lauren is exploiting a 'Way Forward Plan', by which they are planning to explore new retail concepts, including leveraging Ralph's coffee and developing new store formats (April 2017, FashionUnited.com). With the introduction of the Polo Tech shirt they had their first move into wearable technologies and David Lauren, executive vice president for advertising, marketing, and communications at Ralph Lauren, said in an interview that women's smart shirts are on the way. The company is working on making more casual connected apparel — such a polo shirt that could be worn all day, not just during exercise. Lauren mentioned that a smart suit was not out of the realm of possibilities (August 2015, TheVerge.com).

Burberry
Burberry is operating in the luxury segment, with their brand Burberry Brit, being best comparable to Tommy Hilfiger in terms of style and target consumer. They radiate authentic British heritage standing for quality, function and modern classic style. Burberry signature brand symbols include a pattern of camel, black, red and white plaid and the Prorsum horse logo. Recently the brand is repositioned in a niche between cutting-edge fashion and classic fashion. By many, Burberry is seen as one of the most innovative in the industry at the moment. Burberry was the first to live-stream its runway shows, even in 3D, the first to offer Twitter-based live purchases, the first to have its own Apple Music radio show and the first to consolidate the roles of CEO and CD in one person. Burberry has an innovation division, called the 'What If Group' thinking about the intersection of fashion and technology. In 2012, Burberry attached RFID chips to accessories. When the accessories were brought near to the screens in the fitting room, content was showed with information on the specific product. Burberry seems to be fully embracing fashion technology. It has integrated physical and digital experiences in its flagship stores in London, Hong Kong and Chicago. There are about 100 screens and 500 speakers. There are no cash tills and you pay on devices. Intelligent mirrors become screens showcasing catwalk images, and show the outfit you're trying on as if you were the star of a catwalk show. In 2014 the CEO of Burberry suggested that the

company may be taking a closer look at the hardware used in wearable devices.

Michael Kors

Michael Kors is a luxury lifestyle brand that started with offering luxury sportswear. In 2016 they offered their first smartwatch by which they want to create tech accessories that are chic and glamorous. They are now only offering smart technologies in their watches and just introduced the Michael Kors ACCES line of wearable technology, with strong response of consumers. Michael Kors is using the newest digital technologies in their retail stores with their digital flagship store in North America delivering double – digit sales growth. They recently rolled out 'Custom Kors' online and in their digital flagship store where consumers have the opportunity to customize their own bag. Besides this they continue adding personalization options: customers can personalize their Michael Kors smartwatches through an app called 'My Social' app.

Levi's

Levi's is a jeans brand that positions themselves as a craft experience brand that builds confidence through durable clothing. They focus on young consumers, sponsoring and supporting musicians, bands and concerts. Levi's sees innovation as a synonymous of sustainability, which perfectly illustrates where their focus for innovation lays. In the so-called Eureka Innovation Lab, that is dedicated to design, research and creative development. They are creating advanced prototypes in the lab, such as the Commuter Trucker jacket (case studies), in collaboration with Google. The lab is a physical place in San Francisco that was established in 2013. Via the Levi's website you can explore the lab digitally. The Levi's Commuter jacket is the first wearable innovation of Levi's and it seems likely that Levi's will continue exploring this direction.

Tory Burch

Tory Burch is an American lifestyle brand for women with collections known for the color, print and eclectic details. Tory Burch does not have a men's wear collection. It doesn't seem that Tory Burch is truly willing to move into wearable technology and wants to innovate in technologies. The brand designed a fashionable casing for Fitbit wearables, but this can be seen as the same type of product as a customized phone casing of a brand. On wearable technologies they are not expected to become a new competitor that aspires to move into this market.

Under Armour

Under Armour is a high performance sports brand that has the mission to make all athletes better through passion, design and the relentless pursuit of innovation. Under Armour has a strong focus on technology which is clearly expressed in their product portfolio. They offer a large variety of sports apps and they exploit a Connected Fitness line that helps consumers track their health and sports achievements. Under Armour believes that wearable technology is the next big thing in sport performance clothes and is making steps in seamlessly integrating these technologies in their product offering. Tommy Hilfiger should be aware of the fact that Under Armour has strong in-house capabilities to leverage wearable technology design in combination with sports. When moving into wearable technologies for the same purpose, without a strong positioning, Tommy is likely to be overruled by this 'new' competitor. "Through digital, through mobile, through innovative products including wearables and embeddables, Under Armour is changing the way athletes live. How they eat, how they sleep, how they gain intelligence about how to perform at their best" – George Hanson, VP of North America e-commerce.

Mont Blanc

Mont Blanc operates on the edge of being a category and generic competitor. Mont Blanc only offers accessories, such as watches, leather goods, and stationary and is therefore not a very direct competitor in the main offerings of Tommy Hilfiger. Mont Blanc is slowly moving into the digital space with techniques such as augmented paper that merges traditional writing into digital space. Besides this innovation in traditional memo-writing, Mont Blanc offers smartwatches and introduced the e-strap. It seems that Mont Blanc already has a lot of knowledge on technology in-house which make their innovation opportunities strong.

[image augmented paper mont blanc]

L'Oréal

L'Oréal is a generic competitor of Tommy Hilfiger and is looked at to see in which sense Tommy could learn from their way of approaching innovation. Their first wearable technology, the UV patch, was introduced to complement an existing product offering. The UV patch tells the user when to use the sunscreen offered by L'Oréal brand la Roche Posay. L'Oréal has a so called 'Technology Incubator' that operates as a start-up within their company. Since the incubator opened in 2012, five products have been developed outside the traditional scope of L'Oréal: a mix of wearables, objects and apps. The products are based on the vision of a future in which cosmetics are connected, customized and designed to meet each consumer's needs. When substituting cosmetics with fashion, this vision resonates with the vision of the Innovation Next department. For example, based on the insight that more than 50 percent of Google searches today in beauty are about hair, L'Oréal developed a connected brush under their brand name Kerastase (L'Oreal.com). The brush offers technical insights into the state of the user's hair, plus personalized advice on how best to care for the hair. The Incubator director built relationships with start-ups and universities over the past years. L'Oréal combines internal and external resources for innovation to come to successful solutions.

P-II. Porter 5 forces

The analyses and complete SWOT are finally used to apply the Porter Five Forces framework. Based on the framework a competitive strategy can be formulated for Tommy Hilfiger entering the wearable technology market. By assessing the combined effect of the five forces, insight in what is going on in the wearable technology industry is gained and the attractiveness of different options can be compared. The wearable technology industry is defined as any apparel company offering wearable devices and in terms of geographic scope global competition is considered, since Tommy Hilfiger is operating globally.

Threat of new entrants – moderate

To enter the wearable technology industry, technological knowledge is needed. For wearable technology industries buyer's willingness to pay for a company's product increases with the number of other buyers who patronise the company. Buyers are likely to trust larger companies with proven expertise in the field more. Wearable technology suppliers, who have proven to have the technical knowledge, moving into the apparel market, therefor also form a threat for Tommy Hilfiger. For wearable technology applies that the larger the volumes produced, the lower costs per unit are enjoyed. This forces aspiring entrants either to come into the industry at large scale or to accept a cost disadvantage. This entry barrier correlates with the need to invest large financial resources in order to compete in the wearable technology industry. However, competitors of Tommy Hilfiger that seem to move in the same direction, have capital available to make these investments and seem to be willing to do so, making this entry barrier less relevant. Since wearable devices are worn closely to the body and involve technology, rules and regulation around these topics can hinder new entry. When connecting the wearable devices to data collection, also legislation around privacy can obstruct market entry. However, the expected retaliation of incumbents seems low, because industry growth is fast (section 6.2, trends) and newcomers can gain volume without taking it from incumbents.

Power of suppliers-high

Currently there are not many companies that are as specialized in wearable technologies as Flextronics. This means that Flextronics as a supplier in the wearable technology industry can capture more value for themselves. Besides, there are very few substitutes available for the EVE, since it is claimed to be the smallest wearable device that is on the market now, offering a much differentiated product. However, they can offer their knowledge or products to other competitors and ask higher prices if their client don't want them to. Suppliers in the wearable technology industry can easily threat to integrate forward into the industry, since they have the technology and production knowledge about the wearable. This means that if industry participants, such as Tommy Hilfiger, make too much money relative to their suppliers, they will induce suppliers to enter the market. Altogether this results in high power of suppliers in the wearable technology industry.

Power of buyers-moderate

For wearable technologies the number of buyers is expected to exponentially grow (trend analysis), this means that the bargaining power of buyers reduces. In the wearable technology industry products are quite differentiated, making it less likely to play one vendor against another. In the apparel industry, buyers do not only purchase a product, but the brand also plays an important role. This means that if buyers want to buy Tommy Hilfiger for the brand, there is no equivalent available. However, when more apparel brands move into this industry, more alternatives will emerge, making the power of buyers grow.

The threat of substitutes-low

Since wearable technology in fashion is a recently emerging industry, there are not many substitutes available. Actually, the industry can be seen as a substitute itself, forming a threat for traditional fashion. It can offer an attractive

SWOT

STRENGTHS
Strong brand momentum - High brand awareness - Premium lifestyle positioning - Product development - Rich heritage - Broad portfolio - Social media and marketing reach - Global distribution - Geographic spread - Ability to adapt to change - Willing to change - Partnership with Flextronics

WEAKNESSES
Aging consumer base - Internal competition devisions - US brand positioning - Limited resources and knowledge on consumer insights - Not innovative - No knowledge on technology - Small innovation team - Support for innovation should come from top management

OPPORTUNITIES
Attract & engage new/younger consumers - Expand product opportunities - Accessories growth potential - Elevate brand relevance US - Create innovation momentum with Innovation Next - Many opportunities for wearable technology in fashion

THREATHS
Continued global economic and geopolitical instability - Adaption to the new world - Brand becomes less differentiated for mainly younger consumers - New competitors emerging in wearable technology - Aging consumer base

Figure 6.8: Complete SWOT

performance benefit to the industry's product. When wearable technology will not add significantly to the price of apparel, buyer's cost of switching will be low and therefor make it an attractive substitute.

Rivalry among existing competitors- moderate but on long term expected to be high

There are not many competitors in the market yet, but the competitors that are out there are roughly equal in size and power. Once apparel companies have moved into wearable technology, the exit barriers can be high, because of high investments in new knowledge and technology. Rivals in the wearable technology business will be highly motivated to, become market leaders and protect their market share. To dodge price competition, Tommy Hilfiger has to make sure that their product is different from their competitors' offering. Tommy Hilfiger especially has to be aware of those competitors serving the same consumer groups and should try to find a unique positioning.

Tommy Hilfiger should be aware that fast growing industries, like the wearable technology market, tend to mute rivalry (Porter, 1998). An expanding market offers opportunities for all competitors and can put suppliers in a powerful position. The five forces framework will be used in the next part to guide strategic choices and will form the foundation for product positioning.

OVERVIEW MARKET - FACTS AND FIGURES
Q. Wearable technology

1/6
consumers currently own wearable technology

48%
of consumers is between 18-35 years old

$34B
is the expected market value of wearable technology in 2020

71%
of 16-24 years old want wearable technology

When using smartwatches or wristbands:

67% exercise   55% travel   49% work   48% shopping   40% going out
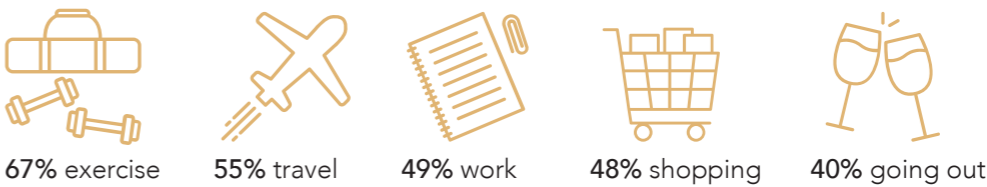
Current wearable technologies:

BENEFITS	IMPROVEMENTS
• Improved communication abilities	• Extending battery life
• Ability to analyze data	• Overall durability
• Enhance users productivity	• Size reduction
• Improve health and awareness	• Speed and distance at which devices connect
• Increase relationships	• Stand-alone connectivity: in built internet connectivity
• Reduce destraction of mobile phone	• Multi-level platforms
	• Invisible and autonomous
	• Fashionable
	• Accuracy data
	• Functionality and use

OVERVIEW SLIDES PRESENTED
R. Roadmap meeting 1

S. Empathy map

OVERVIEW SLIDES PRESENTED

T. Roadmap meeting 2

U. Raw data meetings

Tommy Dance & Twist

DEVICE
- WHITE = DANCE MORE!
- RED = DANCING QUEEN
- BLUE = OTHER TWISTER NEARBY
- WHEN SOMEONE LIKES YOUR STYLE: BLINK!

or

APP:
- 100 DANCEMOVES
- DANCE MORE! 360° DEGREES 30%
- PEOPLE WHO LIKED YOUR MOVES
- @ COLDPLAY — TWIST & CHECK IN — 20 TWISTS INSIDE
- CHALLENGE PEOPLE FOR A DANCE BATTLE
- DANCEFLOOR: TOM, SCOTT, VISA
- OTHER TWIST (OTHERS WILL LIGHT UP) — TELL SCOTT YOU LIKE HIS MOVES!
- GET MOTIVATED! TOMMY PLAYLIST
- WHAT TO WEAR:
- UPCOMING TOMMY EVENTS: 6 MARCH, 20 MAY, 2 SEPT.

- COMES WITH PLAYLIST (MUSIC)
- LIGHT UP AT CONCERTS & PARTIES → BUZZ & LIGHTS ON THE BEAT
- INSIGHT IN DANCEMOVES
- CHECK IN AT EVENTS TO CHALLENGE OTHERS FOR DANCEBATTLES & CONNECT
- MUSIC SELECTION BASED ON HOW YOU MOVE
- CONTROL: TAP DEVICE FOR NEXT SONG.

SPECIAL EDITION: CUSTOMIZED CHAINSMOKERS

TECHNICAL FUNCTIONALITIES:
- MOVEMENT TRACKER
- BLUETOOTH
- LIGHTS
- STORAGE

Tommy Twist & Pick

DEVICE:
- WHITE = ANSWER 1
- RED = ANSWER 2

"LIKE TOSSING A COIN"

APP:
QUESTION
ANSWER OPTIONS: YES, NO
- SCROLL FOR MORE OPTIONS
- ADD PICTURE
- ADD OWN TEXT
- SET THE BAR
- WHEN DO I WANT ANSWER
- WHO CAN ANSWER: - EVERYONE - SPECIFIC PEOPLE

TWIST YOUR STYLE
WHERE TO GET INSPIRED
ADVICE
PRESS & TWIST!
BACK

TWIST LIGHTS WHEN QUESTION IS ASKED TO YOU
TAKE OUT MOBILE PHONE TO ANSWER QUESTION
WHAT SHOULD I WEAR? A | B

TECHNICAL FUNCTIONALITIES
- BLUETOOTH
- LIGHTS

V. Concept 3 - Twist & Discover

TOMMY TWIST & DISCOVER

GO LEFT

> CONNECTED WITH GOOGLE MAPS:

SAVED SPOT!

GO RIGHT

FROM MY LOCATION

TO HOME

DISCOVER
TOMMY PLACES

LET'S GO!

PUT PHONE AWAY > WALK/RUN

ALL LIGHT UP = ARRIVED

GO LEFT

RIGHT

OVER VIEW TOMMY@PLACES

PEOPLE'S PLACE

PIZZA

JUICE BAR

BREAKFAST

ADD TO ROUTE & GET NOTIFICATION WHEN PASS.

SEE WHERE FRIENDS ARE

TOM — 50 M AWAY

ERIK — 100 KM AWAY

USA — 5 M AWAY

CONNECT WITH OTHER APPS:
- STRAVA
- FITBIT
} USE FOR RUNNING-/SPORTS

TECHNICAL FUNCTIONALITIES
- BLUETOOTH
- LIGHTS /VIBRATIONS
- ACTIVITY TRACKING?

W-I. Wireframes

The wireframes show the intended flow of use and screens through which the user will be navigating. With the wireframes a protoype is made, which is tested with users. The outcome of these protoype test can be found in appendix X.

My music
Twist playlist

Closer - The ChainSmokers ▶
Roses - The ChainSmokers ▶
The One - The ChainSmok.. ▶
Split - The ChainSmokers ▶
Don't Say - The ChainSmo.. ▶

⊕ Add songs

Home

Twist lights
Events
My moves
My music
Dress up
Dance battle!

Twist lights
Tap color to assign!

Disco mode:
OFF ⬤ ON

Twist lights
Tap color to assign!

off   on
on the beat
new message
incoming call

Twist lights
Tap color to assign!

off   on
on the beat
challenged
dance status

Twist lights
Tap color to assign!

off   on
on the beat
new message
incoming call

Events
planned:

11 November — Chainsmokers Concert Ziggodome — 30
6 Oktober — ADE Day 1 Event Paradiso — 5
20 February — DayBreaker #6 Event Club NYX — 10

Add event ⊕

Events

11 November — Chainsmokers Concert Ziggodome

This event is today!

Check in

30 Twisters plan to go

Events

11 November — Chainsmokers Concert Ziggodome

This event is today!

you & 10 others checked in

30 Twisters plan to go

Attendees

11.11 **Chainsmokers** Ziggodome

Overview attendees: Dance status:
Flore   ♫
Jeremy   🔇

Overview friends:
Tim   🌐
Erik   ♫
Sophie   ♫

Find friends

Dress Up!

Answer 5 Questions for style advise

Inspiration feed

@Amsterdam Open Air   Check out their insta!
Sunny day on a boat   Cotton Candyyyy!
show more

Dress Up!

Answer 5 Questions for advise

Chill   Party
Discrete   Colorful
Cocktail   Beer
Silk   Denim
Bar   Dancefloor

Dress me up!

Dress Up!

Your personal style advise:

Wear it like Gigi!

My moves

you're at 70% of your daily goal

70%

Check out more statistics ▾

Dance your ass off to hit the 100%!

Check out statistics
Set goals
Challenge others

My moves

you're at 70% of your daily goal

70%

Collapse statistics ▴

Dance status:
🌐 Rising star

Moves today: 250   Total moves: 100230
KCal burned today: 75   Total KCal burned: 30069

Weekly goal status:

Dance Status
overview

🔇 **Tone Deaf**
10.000 dance moves

♫ **Loose Hips**
50.000 dance moves

🌐 **Rising Star**
100.000 dance moves

🏠 **Boogie Bear**
150.000 dance moves

♛ **Dancing Queen**
250.000+ dance moves

My moves

Previous days

Mon.   2000   moves
Tue.   12000 moves
Wed.   14300 moves
Thur. 11903 moves
Frid. 5005   moves
Sat.   24080 moves
Sun.   2300   moves

Make 50.000 more moves to become a Boogie Bear

previous week ◀ ▶ next week

My moves

Set goals

Daily dance moves:

10 000

You will become a Boogie Bear in:

5 Days

Let's Go!

Dance battle

Overview friends:
Tim   🌐
Erik   ♫
Sophie ♫

Find friends

Today's event:

11 November — Chainsmokers Concert Ziggodome — 30

Dance battle

Tim   🌐

Challenge!

W-II Results prototyping

In figure x an overview of the proposed attachement options is showed.

General:
- How to go back to previous screen
- Back to homepage
- Link users: after dancebattle, meet the person with whom you danced
- Possible to create personal profile: connect to facebook/instagram? --> also shows saved outfits and inspiration and bought outfits: answer questions about your personal style
- What is next when you have reached the 'dancing queen' status? Can you lower or lose your status?
- Home: 'Welcome Puk!'
- Show in application if your phone is connected to the Twist or not.
- Would like to have more personalized recommendations

Twist lights:
- 'Tap the color on the icon, to assign this light'
- Maybe other name, since this is the main feature
- Show the device instead of a logo to make it clearer where you assign the lights
- Make it more of a flow: first switch on/of then assign lights. Show everything in the same screen

Events:
- Difference attendees and friends?
- Difference attendees and people who plan to go
- How can you add friends?

- Automatically attend event when there (based on GPS)

My Moves:
- Clearly show dance status here!
- Statistcis more clear: for which period are you checking it?
- Other name for overview statistics
- Talk only about weekly or daily goal, otherwise confusing
- Show a ranking of all Twisters and your friends

My Music:
- Connect with music apps to add music on device
- Leave out the storage, this is not needed since music is played from the phone anyways.
- This part of the application gives playlist recommendations and free downloads for songs when reaching certain dance statuses.
- Make free songs more special: Tommy playlist with catwalk show songs

Dress up:
- Be able to 'like' in dress up inspiration feed to get insight in what users find relevant info & what inspires them
- In personal style advice: tap and buy immediately
- Inspiration feed linked to instagram
- Advice on where and how to wear the Tommy Twist
- Connection to online shopping app and Loyalty programme app
- When clicking in inspiration feed, see where to buy the outfit.

- Inspiration feed: certain #'s automatically loading in.
- Also add inspiration for dance moves
- Add a virtual closet of styles that are worn by the user, based on which new styles are chosen and inspiration is provided.

Dance battle:
- Add screen for the winner of the dancebattle: overview dancebattle statistics
- How long is the dance battle? On device lights showing (like traffic light).
- On top: today you are on this event, underneath: nearby twist users.
- See the Tommy Twisters near you and all Tommy Twisters that you can battle with
- Consider if people can maybe only do

a limited amount of battles

Option 1: **Option 2:** **Option 3:** **Option 4:**

'maggies'

Button clip   **Velcro**   **Magnet**   **Pin or push button**
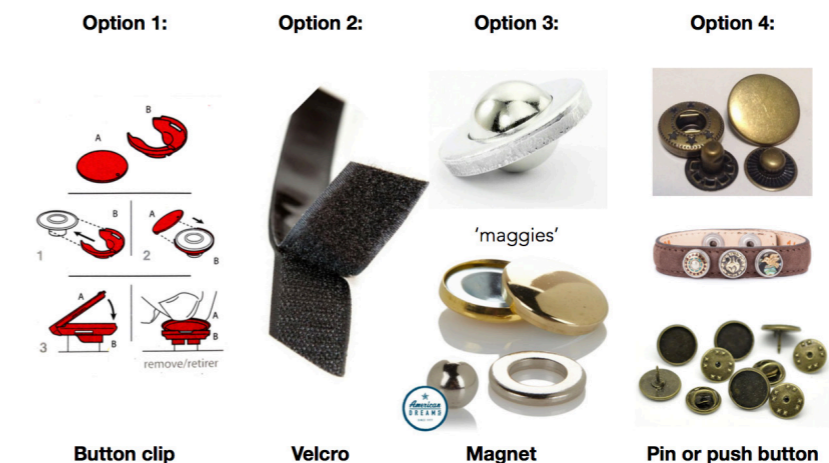
W-III Attachment options

Option 1: Button clip

customisable!

1
2
3
remove/retirer

Option 2: Velcro

Option 3: Magnet

customisable!
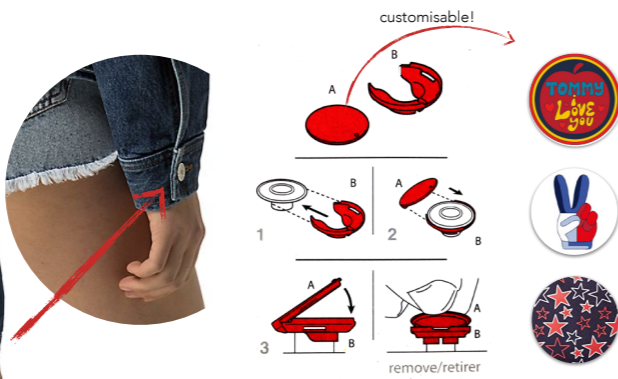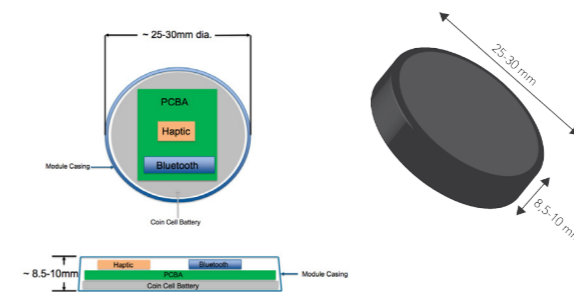
Option 4: Pin or push button

X. Consumer Journey

Stages	Aware	Join		Use				Continue
Moment in time	Pre-purchase	First use	Before event	During event	After event	Daily life		
Touchpoints								

ON LINE

Pre-purchase: See advertisements and marketing efforts on social media

First use:
- Login to system with social media account
- Create and finalize personal profile
- Explore the application

Before event:
- search event
- attend event
- fill in stylist Q's
- receive style advise
- get inspired
- buy Tommy outfit
- assign lights
- set dance goal

During event:
- check-in event
- see other attendees
- challenge Twisters
- upgrade dance status

After event:
- check dance status
- check dance moves
- listen to music
- add songs

Daily life:
- check dance status
- check dance moves
- set goals
- get inspired
- listen to music
- add songs

Continue: share pictures on social media wearing the Twist

OFF LINE

Pre-purchase: Billboards, stores, events, seeing others wearing the Twist

First use: Attach to clothing: try different options

Before event: feel confident while wearing the Twist

During event:
- steal the show with the Twist
- accept battles by tapping Twist
- get notified of Twisters who challenge you by Twist lights

After event: tap Twist to move to next song

Daily life:
- tap Twist to move to next song
- use Twist to get notified on calls & messages

Continue:
- buy the clothes as seen on inspiration feed
- share excitement about the Twist

Consumer experience

- "wow, I want this cool new thing!"
- "Nice, I can wear it wherever I want, matching my outfit"
- "Looking forward to event!"
- "Curious about other Twisters who are attending"
- "Feel confident about outfit"
- "Happy and enjoying the party!"
- "Feel very satisfied by the moves I made!"
- "Being inspired for new outfits"
- "Happy and enjoying the the music on my Twist"
- "Excited and inspired!"

Legend:
- Dress up
- My moves
- Events
- Music
- Battle
- Twist