Interactive shoppable video
The goal of this project was to develop a shoppable video format for the travel and leisure market. The project was divided into a research and design phase. The research phase was on the e-commerce market, interactive video and the travel and leisure market. The knowledge gathered during the research was input for a business-oriented design phase aimed at developing a first prototype and validating it.

The e-commerce has entered the era of ‘digital experience shopping,’ in which consumers expect online browsing to be fun instead of functional. Key e-commerce players are already working on changing the shopping experience by introducing innovative new concepts. An example of such a innovative concept is shoppable video. This is a powerful tool for customer acquisition, brand positioning, and awareness. Given such a wide range of growth-oriented possibilities, many brands and retailers stand to benefit from integrating shoppable video into their branding and marketing strategy. Ex Machina Group wants to jump on this train, and start developing shoppable video formats themselves.

This document provides an overview of all companies that already produce shoppable videos. This overview is used to identity critical factors to develop a successful. In the design phase, these factors are put into practice by designing a shoppable video format: Zengo. Zengo is an online travel & leisure solution that is multi-platform and multi-device with a daily interactive video magazine that is available 24 hours a day.

The proposed design is a great starting point, but it could benefit from multiple iterations. The design has been validated by potential clients, partners and employees from Ex Machina. All these people were positive but also pinpointed some disadvantages of the format. It would be interesting to start testing with end users to discover how they react on a interactive shoppable video.

SUMMARY
<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>PAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>4</td>
</tr>
<tr>
<td>Research</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>E-commerce</td>
<td>7</td>
</tr>
<tr>
<td>Shopppable video</td>
<td>8</td>
</tr>
<tr>
<td>Travel and leisure</td>
<td>12</td>
</tr>
<tr>
<td>Success factors</td>
<td>14</td>
</tr>
<tr>
<td>Design</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Shoppable video explained</td>
<td>16</td>
</tr>
<tr>
<td>Format</td>
<td>18</td>
</tr>
<tr>
<td>Prototype</td>
<td>20</td>
</tr>
<tr>
<td>Validation</td>
<td>26</td>
</tr>
<tr>
<td>Conclusion</td>
<td>27</td>
</tr>
<tr>
<td>Recommendations</td>
<td>30</td>
</tr>
<tr>
<td>Reflection</td>
<td>32</td>
</tr>
<tr>
<td>References</td>
<td>33</td>
</tr>
</tbody>
</table>
INTRODUCTION

PROJECT BACKGROUND
This report describes my graduation for the PDEng User System Interaction at the Eindhoven University of Technology. The project is executed over a period of seven months in close collaboration with the Ex Machina Group. During this period, Jeroen Doucet guided me from the company’s perspective, and Jun Hu and Daniel Tetteroo acted as university coaches.

COMPANY DESCRIPTION
The Ex Machina Group, from now on addressed as the company, develops innovative, interactive multi-screen solutions for brands and media companies around the world. The concepts, designs, apps and platforms reach tens of millions of users.
Ex Machina’s provides tools, platforms & services to make TV and online video more engaging.

For many years Ex Machina’s main focus was very much on the gaming and broadcasting industry. They are one of the world leaders when it comes to second screen apps and engaging concepts. As the eyeballs and focus of viewers are moving, also Ex Machina’s focus area shifted. In the past months they put their focus more on products evolving around video and live video.

PROJECT GOALS
The goal of this project is to design an interactive shoppable video format. Shoppable video is a relatively new concept and comes with multiple names; video commerce, shoppable media. There is not yet any methods to follow for a successful format. The goal is to develop a basic understanding and from there develop a solid design base that can be used for more shoppable video formats in the future.

Within the company there were multiple multiple shoppable video formats developed in parallel, and they all have some kind of overlap. However, the focus is on one specific format: Zengo
The format should serve as example to show clients the possibilities of shoppable video and as inspiration tool in brainstorm sessions with brands.

The final deliverables of this project are:
- A pilot episode of Zengo
- Promo video from pilot episode of Zengo
- Presentation for clients
- Presentation for university
- This report
TEAM AND MY ROLE
The core of the Zengo team consists out of Thomas Glas and me. Thomas is the Chief Creative Officer at Ex Machina and has 20+ years experience as content creator, producer, and business manager of interactive entertainment projects. I was responsible for all design and research for this project. Moreover, I have co-created the concept, co-produced the prototype and edited the promo video.

The Zengo team was supported by the rest of the shoppable team, which consists out the CEO, marketing director, senior marketing consultant, and four designers. In weekly sessions, every team presented their progress and the other people could provide feedback. I often used these feedback opportunities to validate my design decisions or organize a small workshop to collect different perspectives on the challenge at hand.

STRUCTURE REPORT
This report describes the development process of an interactive shoppable video format and provides background information about the design decisions.

The report is roughly divided in two phases: research and design. The research phase on the ecommerce market, the current state of shoppable video and the travel and leisure market. In the business-oriented design phase, the focus is on the development of a shoppable video format.

When applicable, I will suggest alternative approaches for steps in the process. These alternatives are mainly focussed on shifting the process from being business centred to a user centred approach.
RESEARCH

Research is performed on the e-commerce market, interactive video and the travel and leisure market. In this section, the development of e-commerce from the early 90’s until 2018 is described. After that the shoppable video landscape, both technology providers and brands, is mapped out. Technology providers to analyse how Ex Machina can differentiate themselves from other shoppable video developers. Brands are analysed for inspiration and to shape a foundation of what shoppable video is. See when it is successful. Finally, a trend analysis of of the online travel industry is performed.

E-COMMERCE

Over the last 25 years, e-commerce has been steadily developing. It all started with the launch of Amazon in 1994, when the company began selling books online. The ten years that followed were focused heavily on enabling consumers to buy products online, with e-tailers laying the groundwork: websites with shopping baskets, safe payment systems, warehousing, and shipping. On the front end, we cycled through Web 1.0 and Web 2.0. The first product categories that saw substantial growth in online sales were books, travel, and games/DVD’s.

The next phase was ushered in by Apple with the introduction of the first iPhone in 2007. Meanwhile, social media was beginning to make its way into the mainstream: this was the age of Social Mobile, or SoMo. Online shopping behaviour changed. People started buying products from their mobile phones, and social media was being used as key driver to direct traffic to online shops.

In the decade that followed, smartphones became our primary devices for accessing the internet. Boasting a larger screen, faster connection, and faster processor, the smartphone had evolved into a full-blown multimedia device. These technological advancements are a substantial part of the SoMo landscape.

In the first two decades that defined the rise of e-commerce, approximately 10% of American retail sales gradually shifted to online and mobile purchases. [1][See figure 1] In other countries, a similar shift was happening at a different pace due to differences in Internet and smartphone penetration. Despite these changes, 90% of US retail sales still take place in brick-and-mortar shops. According to KPMG [2], the ongoing prevalence of physical stores can be attributed to four main reasons: 1 - Lack of sensory experiences online, 2 - The shipping process is often complex and/or time consuming, 3 - The shopping experience is more enjoyable in-store, and 4 - Consumers want instant gratification.

These pain points can be eliminated by changing the online shopping experience, and the online retailers spearheading these changes are kicking off the next phase of e-commerce: Experience Shopping. This model creates a shopping model that is fun rather than functional. Not only should the outcome of shopping be exciting, but the process should be as well. The categories that are projected to see substantial growth during this phase are personal care, consumer electronics, and fashion.

Figure 1. E-commerce share of total global retail sales from 2015 to 2021 [1]
We established that e-commerce has entered the era of “experience shopping,” in which consumers expect online shopping to offer an experience that prioritizes fun over function. In response to this desire, an increasing number of brands are merging entertainment and online browsing using shoppable video solutions. These platforms allow consumers to buy products directly from live video streams from the moment the items are displayed on-screen.

Shoppable video is a powerful tool for customer acquisition, brand positioning, and awareness. Given such a wide range of growth-oriented possibilities, many brands and retailers stand to benefit from integrating shoppable video into their branding and marketing strategy. However, creating an interactive video that is able to both entertain viewers and sell products – facilitating the frictionless conversion of browsers into buyers – can be a real challenge.

SHoppable Video as Sales Tool

A sales funnel for shoppable video has been put together by the marketing team to identify different phases in the sales process and to design customer journey. The funnel consists out of four main steps: (1) awareness, (2) engagement, (3) conversion, and (4) retention.

The first step is to get the attention of consumers. These people can be reached via various channels: social media, television, native application and owned platform. Once, people are aware it is key to engage them. So, that they feel invested in the video. Closer connection. This is the point that viewers should be converted to buyers. It is important to keep all customers close. It is cheaper to retain customers than to acquire new ones. [3]
SHOPPABLE VIDEO AS ENTERTAINMENT

Videos have been serving viewers shoppable links for quite some time: they are mainly formatted as video ads that include a hyperlink leading to a product page, where the consumer has to continue the shopping process. One major drawback is that these hyperlinks take people away from the video feed, forcing them into the shopping funnel. These types of ad integrations often result in low production value content with superimposed interactive elements. [See figure 3]

Over the years, videos have become slightly more interactive: take the emergence of dynamic hotspots as an example. [See figure 4] While that is a step in the right direction, they are still too focused on the product itself instead of entertaining the consumer.

Ex Machina believes that creators should focus on building an entertaining narrative instead of emphasizing sales exclusively – the increase in organic reach will more than make up for the possible dip in conversion rates. The ability to make a purchase while watching the video will further elevate the viewing experience, and if the video is appealing on its own, then the product will sell itself. The live and interactive elements create a feeling of urgency, and thanks to the in-stream buying option adapted to multiple platforms, the consumer is encouraged to act on their impulses.

EXAMPLES

Two brands that have mastered the art of shoppable video are Ted Baker and Alibaba. These two companies are considered as precursors in the domain of shoppable video. [4,5] Ted Baker is one of the few fashion brands in the Western market that is integrating shoppable video into their global strategy, creating top-notch film productions as marketing fodder. Alibaba is also a great example of how shoppable video can drive commerce through increased sales, brand reach, and customer loyalty.
Ted Baker

The UK fashion label has already launched three high-quality shoppable video campaigns: #CURIOSITIES and ‘TedPresents’, Mission Impeccable, and Keeping up with the Bakers. [See figure 5 & 6] Each campaign provides high entertainment value that expertly embodies their brand’s identity. With each new video, Ted Baker experiments with new technologies and strategies to create an experience that is even more innovative than the last.

Multi-platform

Ted Baker’s content is on point across multiple platforms, including Snapchat, Instagram, and YouTube. Unique content was created for each individual platform, taking their specific capabilities and user experience options into account. Each brand story was built with digital and mobile viewing experiences in mind, and as a result, these campaigns were able to reach audiences across social channels and even in-store.

Interactivity

With Google on board as a partner, Ted Baker was able to integrate Voice Search to create an exceptionally immersive experience and draw people into their physical stores. People passing by a Ted Baker storefront could ask their voice assistant questions related to the spy narrative, then collect their prize inside the store. The fashion brand claims that their sales increased by 30 percent as a result of this initiative. [6]

A major component of the Keeping up with the Bakers campaign was an interactive window at the flagship store in London. People walking by the store had the opportunity to immerse themselves in the Bakers’ world by interacting with a kiosk in the window. [See figure 7]
Alibaba is by far the global leader in interactive shoppable video thanks to Singles Day, recently renamed the “Global Shopping Festival.” Each year on November 11, the e-commerce giant organizes an event that is dedicated entirely to online shopping. This commercial extravaganza has evolved into the biggest annual event of its kind worldwide. [See figure 8] More and more companies are now looking to follow Alibaba’s lead in light of their resounding success. [6]

Ecosystem
Alibaba prioritizes customer experience throughout their digital ecosystem. Both physical and online shopping experiences are seamlessly integrated so that consumers can buy their products in the fewest number of steps. Across all supported platforms, shoppers can directly purchase the items they see on-screen while watching a video stream or, in the case of traditional television, with Alibaba’s Tmall app that displays shoppable items in sync with the on-screen broadcast.

Reach & Entertainment
Last year, Ex Machina had the opportunity to take a look behind the scenes during Singles Day’s revered gala event. Alibaba knows exactly what their audience is looking for, and understands how to pump them up thanks to their expansive bank of consumer analytics. During the most recent gala, aside from an impressive collection of Asian superstars, celebrities including Nicole Kidman, Pharrell Williams, and Maria Sharapova made special guest appearances. Featuring songs with apropos titles like “Double 11” and “Price-tag,” the event’s shopping theme was very clearly represented.

During the broadcast, viewers can actively participate by purchasing items or saving them to a product wishlist, chatting with other viewers, and sharing or liking content. Alibaba has brought real-time interactivity to the next level: while purchasing an item is as simple as pressing a button, you can add items to your shopping cart by shaking your phone.
Most brands that publice a shoppable video do not produce it themselves. They partner up with companies that provide services such as video production, broadcasting, platform, and content creation.

Ex Machina want to produce these videos as well. Therefore, an extensive analysis has been performed to identify all potential competitors, analyse what those companies offer and get inspired by their portfolio.

All companies that appeared when searching with the queries: interactive video, interactive media, video commerce, shoppable video, and shoppable media. The companies that appeared could be divided into four categories: entertainment, commerce, informative, and marketing.

Ex Machina wants to mix commerce with entertainment. Therefore, the sweet spot is on the border between entertainment and commerce. For the rest of the analysis, all companies the categories will be analysed.

To find direct competitors, the scope of companies have to narrowed down. Based on criteria specified by the management of the company. According to them, shoppable video should at least meet three main criteria. The video should be live, interactive and multi-platform. So, I have analysed if the remaining companies meet these criteria. Only Alibaba meets them all three. Alibaba remains together with companies that can broadcast live video, and have multiple interactive elements. This is the final selection. These companies undergo a thorough analysis. The three main criteria will be specified further so that the companies can be rated on a 1 to 5 scale. [see appendix for exact criteria and scale.]

A couple of significant to emerge from this analysis:
1. No company offers a combination of live, multi-platform and relevant interactions
2. There is a lot to improve regarding usability
3. No companies are able to offer interactivity on multiple platforms
4. In general, technology providers do not have ownership over creative concepts. They partner up with content creators.
5. Most videos are not filmed, with the overlay in mind. Those overlays often conflict with the footage.
6. Most videos have low entertainment value, they are designed as infomercials.
Ex Machina sees potential in a shoppable format for the travel and leisure sector. The company decided to develop a format for travel and leisure for a couple of reasons. First, Ex Machina has many contacts in this sector, which provides easy access to potential partners and clients. Second, travel programs such as ‘3 op reis’ and ‘Floortje naar het einde van de wereld’ are relatively popular [7] but a call to buy something from the show is missing. Ex Machina sees this as a missed opportunity and wants to close this gap. The travel and leisure sector includes numerous sub-sectors from the tourism industry such as hospitality services, entertainment venues, booking agencies, and outdoor shops.

Multiple trends can be identified in the travel and leisure market. [8, 9]

Increase in online bookings and greater mobile penetration. Less people make use of brick and mortar shops from travel agencies.

Key influencers for decision making are reviews, informative content, and friends/family that have visited the place before. These influencers should be considered when deciding which information to show during the video. When people are booking a holiday they are mainly looking for the best deals and the best value for your bucks. So, Zengo should clearly communicate that people can not find better offers at competing parties. An example of how this can be achieved is to propose unique items.

The majority of the consumers take 1 to 3 weeks to decide. So, it is not likely that people will immediately book a holiday when they see the proposition in the video. Only products such as X, Y and Z are likely to be bought instantly. By alternating with products in different price ranges, there can be a balance between buying and saving for later.

When analysing these trends in the market you could conclude that it is worth trying to introduce a shoppable video format.

The customer journey serves two purposes: 1. identify which phases a consumer goes through so that we know which aspects to cover, and 2. identify in which phases of the booking process a video could be most relevant. [10]
1. Awareness & locate - Initial research for holiday
2. Evaluate & select - Compare different offers at various holiday makers. Value for your money
3. Shopping Experience - Does the experience of the shop fit the holiday?
4. Transact - Pay for holiday HOW? Cash, Online payment, loyalty scheme, mobile payment, rewards
5. Service & Advocacy - Contact with holiday maker to arrange everything for holiday
6. Share - Share experiences and influence others
7. Imagine - Finding inspiration to create ideas
The research phase set out to get basic understanding of shoppable video, and kickstart the design phase. Nevertheless, we are only just beginning to scratch the surface of online experience shopping, we can already identify at least three critical success factors: (1) entertaining video narrative that sells, (2) frictionless conversion, and (3) a strong commercial proposition. These factors are based on the market research and analysing the experiences from other interactive video formats.

**ENTERTAINING VIDEO THAT SELLS**

Most marketing efforts are designed to trigger consumers to seek more information and eventually purchase a product. Shoppable video has this function integrated within the entertaining elements: if the content offers no entertainment value, people will not consume the content. Most people are skipping pre-roll ads or changing channels during commercial breaks, which means that only a small percentage of the potential audience is actually viewing the content. By combining the right types of entertainment to attract your target group, retailers and brands can increase their viewership and create an even bigger opportunity to convert people from viewers into buyers.

To get there, you need to provide just enough information to entice people to explore the product further without feeling like they are part of an infomercial. The next step in the funnel depends on the product that is being sold. For example, a customer looking for a jacket can be directed to a product page, but when you’re looking to buy a car, the next step will probably be to book an appointment at the dealership.

It is important to be aware of these different product categories to customize the funnel steps as much as possible for different product categories and user types.

The use of interactivity is intended to complement and reinforce entertainment value. Moreover, it leads to higher user engagement and generates more consumer trust. [10] Content-related games (i.e. trivia), choose your own adventure games, and many more entertainment tools provide an additional layer of entertainment that enriches and intensifies the content. As a retailer or brand, you can learn a lot from user input, and make your brand experience increasingly personal by taking these insights into account. For example, if you know any given user’s shopping preferences, you can show them only the most relevant products for their tastes. This can lead to increased engagement, which can in turn lead to higher conversion.
**FRICTIONLESS CONVERSION**

Many factors play a role in converting a potential customer into a paying customer. You need to reach the consumer, provide relevant content, trigger the consumer’s desire to purchase a product, and enable him or her to buy it on the spot. This process should be seamless in order to convert as many people as possible. Shoppable video offers opportunities to significantly increase your reach and make the conversion process as easy as possible.

Consumers are scattered all over the internet—they use different platforms and access them from a range of devices. This diversity makes it difficult to reach potential customers and convert them into buyers, because every channel requires platform-specific shops and touchpoints. It is easier for retailers or brands to get their shop in front of potential customers’ eyes, as opposed to pulling customers into their shop. Although people spend more than two hours per day on social media on average, [11] and customers can be reeled in with socially-integrated product tags and hyperlinks, it’s faster and more convenient to allow them to shop via the social platform itself (e.g. purchasing items via Facebook Messenger). [12][See figure 12]

Interactivity helps break down consumers’ resistance to purchase. Features such as chats, votes, and ratings enable people to co-create content and enhance their own experience. Interactivity encourages consumers to lean in and shift out of their passive consumption mode. By creating a path to purchase from the moment someone views a piece of content, the conversion process can be shorter than it is with regular online shopping. [See figure 13] In the past, when a video or post on social media piqued your curiosity, you had to identify the product and go hunting for it on the internet. Every extra step or click in the conversion process causes people to tap out, but when content is made to be shoppable, these steps can be eliminated. Both the consumer and the retailer benefit in this case: in our fast-paced world, the consumer does not have to put time or energy into browsing for the right product, while a shorter sales funnel can increase conversion.[13]

Retailers should be aware that consumer dynamics can change as a result of the shorter and quicker conversion process. In a seamlessly connected shopping process, all of the steps in the funnel should complement each other without being repetitive. In each phase of the process, consumers expect and require different information to make their decisions. Only showing a few images of a product is not sufficient anymore: consumers prefer more in-depth and peer-driven content (i.e. review video’s).[14]

**STRONG COMMERCIAL PROPOSITION**

For a video to be commercially relevant, it needs a strong selling proposition that suits the content. It should be commercial without being too salesy; consumers should not get the feeling that they are part of an infomercial. The proposition should therefore be unique, relevant, urgent, and exciting. For more tips on how to shape strong commercial propositions, keep an eye on this blog series.

Selling propositions can be strengthened with appealing offers, aggressive deals, limited editions, huge discounts, and interactive concepts like self-destructing coupons. These methods put more emphasis on urgency, which works especially well in combination with live video. Moreover, live video increases the ‘Know-Like-Trust’ factor, creating a feeling of authenticity. The majority of buyers claim to feel a greater level of trust after having seen a product video. [15]

Although, these success factors are based on a theoretical analysis, it can serve as input for the design process. After the design phase these principles, can be looked at with a critical eye and adjusted based on the experience gained.
DESIGN

During the design phase a shoppable video format for the travel and leisure market is developed. The approach during this phases was business oriented because the final goal is to sell the format to a client. First, to generate a common understanding of shoppable video within the company an infographic was created to visualize the basic working principles based on the research. The infographic is used to develop the Zengo format, a online holiday magazine. To showcase this format to potential clients, a pilot episode is shot and an interactive overlay is prototyped.

**SHOPPABLE VIDEO EXPLAINED**

A shoppable video consist out of two layers: **VIDEO** and **OVERLAY** [See figure 14]

The video is the primary layer and tells a story, which can be entertaining, fun, informative or editorial. The main goal of the video is to entice the viewer to purchase an item.

Viewers can purchase the items by using the interactive overlay. This secondary layer complements the items from the video, by providing detailed information or enable people to buy or save. In some cases, the overlay can take over the primary focus from the video. (i.e. making a transaction.

During the video there is a limited momentum to purchase. This momentum is the time the user needs to make a decision to buy the product. This differs per product type, type of sales, type of audience, type device, prize of product and pace of the video.

Some products can be bought immediately, but other products need additional selection (i.e. size or color) or extra information (i.e. passport details when booking a holiday).

The difference in purchase journey, can cause design difficulties. As a solution, some participations guidelines can be set. For example:

1. Users need to be registered to participate
2. Unregistered users can only view
3. When clicking the buy button, user commits to purchase
4. full completion of purchase afterwards (broadcast)
Figure 14. Shoppable video basic principles
ZENGO FORMAT

Zengo is an online travel & leisure solution that is multi-platform and multi-device with a daily interactive video magazine that is available 24 hours a day. The online travel & leisure program consists of various items and is focused on premium travel products, experiences and stories. Zengo differentiates through offering unique and complete travel packages. The different components in combinations with the offers should inspire viewers and entice them to complete a transaction.

Zengo has a weekly live broadcast on a owned website. The live aspect contributes to the feeling of scarcity and exclusivity. The people who are watching at that moment are the only ones that have instant access to that information.

The goal is to show potential clients what the possibilities of Zengo are. Therefore, we have chosen to include eight different items in the pilot episode. These items are inspired on other holiday websites and travel shows. Selection criteria for items were: opportunities for interactivity, premium and unique propositions.

One episode has a sequence of items, and each item has an unique proposition and type of interaction. The items that are included in the pilot episode are:

1. In ‘De speciale aanbieding’, the main sponsor puts together an special arrangement. In the pilot episode this is a two-day trip to the ‘Familie Racedagen’, including stay and meet & greet.

2. For ‘Net als in de film’, a movie is dissected and shaped into a trip with the movie's theme. In ‘Floortje naar het einde van de wereld’, Floortje makes a trip to Tonga. Zengo recreates this trip and offers it to their customers.

3. In ‘De winkel’, premium travel accessories are proposed to the viewers. (i.e. a bike) Depending on the sponsor and product types, the amount of product can differ per episode.

4. ‘De weekend trip’ is a weekend trip put together by one of the sponsors. (i.e. a trip to Keulen including stay, spa visit, and wine tour)

5. In the ‘Bazaar’ high quality travel accessories are offered with big discounts. In this items emphasize has been put on the scarcity of the inventory.

6. ‘Last-minute’ presents a proposition for a trip with departure within a week. Due to the last-minute character of the proposition, the price is significantly lower than usual.

7. ‘De koffer’ has a surprise element. Consumers have to pay a fixed amount for trip to a unknown destination. The destination will be revealed at the end of the item.

8. In ‘De Veiling’ viewers can make an offer on a unique and premium holiday put together by a sponsor. In this auction, only the person with the highest bid can purchase the holiday. In every episode, the winner of that week is announced and a new proposition is exposed.

All the propositions are presented by a host. The story told by the host is supported by editorial content to provide more context for the propositions. During each item, viewers have the possibility to buy, save or place an bid.
**TARGETGROUP**

Zengo does not have a pre-defined target audience because a partner has yet to be found. This partner will bring their own customer base. So, only when a partner is connected to the project user characteristics can be clearly defined. Until then, the video is designed for a as wide audience as possible to prevent exclusion from potential partners.

Characteristics that can be defined already:
- People that book a holiday online
- Age 16-64 [19]
- Dutch
- Pleasure travel, non business

**BRANDING**

The branding is important to sell Zengo as an complete format. Therefore, a lot of time is put in designing the logo, logotype and overall style of the product. [See figure 16 & 17]

Zengo brands itself as premium holiday provider and wants to communicate the holiday feeling to viewers. Inspiration from travel websites (i.e. Travelbird), tv show (i.e. Drie op reis), booking websites (i.e. booking.com), outdoor (web)shops (i.e.), holiday parks, ecommerce websites (i.e. Coolblue), online magazines (i.e. Quote).

These brands have been analysed. Essential elements, best practises look & feel, best practises functionality. From the analysis, the brand identity and functionalities could be extracted. The outcome was validated with fellow ux designers, the senior designer, marketing, business people. [Appendices]

Zengo stands for: playful, fun, young, premium, unique, and adventurous. This can be accomplished by using high definition photos, bright colors and playful logo’s. Moreover, it is important to have a engaging story, premium products and clear call to actions.

![Figure 16. Zengo logo](image)

![Figure 17. Zengo colour scheme](image)
PROTOTYPE

To demonstrate the interface possibilities and entertaining value of the video, a overlay has to be designed on a pilot episode has to be filmed. The prototype serves multiple purposes: demonstrate different possibilities of shoppable video to brands, show the Zengo format, and collect feedback from clients on the Zengo format, to open a dialog for further development for shoppable video. For prototyping purposed, all interactive elements will be animated.

OVERLAY

Before the interactive overlay can be designed, the functionalities of the video has to be determined. The goal is to limit the concept to basic interactive elements.

The functionalities can be derived from the shoppable videos analysed during the research phase. First, I have put together a list with all possible functions. To make a selection of the most critical functionalities.

A brainstorm sessions was organised with the team. Every member was asked to select all elements that they consider as critical for a shoppable video. In this way all irrelevant functionalities can be eliminated.

BASIC FUNCTIONALITIES

Add to shopping cart - Buy an item directly from the video.
Transaction - Pay for the item you want to buy.
Save - Save an item to your wishlist, to buy later.
Browsing/scrolling - Go back to items that have been shown earlier in the video.
More information - Access to more information about an item shown in the video.
User input - Possibilities to collect information from users. (i.e. Polls, email address)

OPTIONAL FUNCTIONALITIES

Log-in - Log in with your account
Sign-in - Make an account
Customer support - Easy access to customer support for questions

TOOLS

Several applications are used to build the prototype:
Adobe Premiere Pro - Editing the video
Adobe After Effects - Animating the graphic overlays
Adobe Photoshop - Designing the graphic overlays
Adobe Illustrator - Designing logos and graphic elements

DEVICE

Although Zengo is an multi-device solution, the prototype is focused on desktop. This is for demonstration purposes. Multi-device possibilities can be demonstrated by using static mockups.

COMPONENTS

The prototype can best be described by explaining all individual components. Most components are copied or inspired on the television industry.

The components can best be described based on four common characteristics: purpose, sub-components, visibility and placement. First, purpose gives the reason for the component to be part of the interface. Second, most components consist out of multiple sub-components. Third, most components are only visible for a x amount of time and under specific circumstances. Timed during two tv shows. Afterwards tested with two colleagues. Asked if they were able to read the text. (n=2) Last, placement, when applicable, describes the orientation of the components within the screen.

involved during several stages of the prototyping.
VIDEO PRODUCTION

To create a professional looking video we partnered with production company PPCRN. They were involved during several stages of the prototyping.

The collaboration started with a brainstorm session, PPCRN provided actionable tips as preparation for the video shoot. Based on these tips, we could start the preparation: design the set, attributes, find a host and actors, make a set list and a call sheet. I was responsible for all graphical elements during the shoot.

PPCRN was responsible for the production. Their team consisted out of a camera operator, first assistant camera, director, and light operator.

In the post-production, we spend two days editing studio in collaboration with film editor. The workflow in the rest of the editing days was sending the files back and forth between video editor and me.
**PARTNER TITLECARD**

**Purpose**
Provide visual support to storyline

**Visibility**
Continuously when in shot

---

**BUMPERS**

**Purpose**
Break from video
Introduce the next item

**Visibility**
3 seconds prior to each item
6 seconds prior to episode
PROPOSITION OVERLAY

**Purpose**
Display information
Call to action for buying and saving.

**Visibility**
Should not intervene with video. Expand to get attention on proposition and close to shift attention to video. Users should be able to manually close the box.

CART/LIST

**Purpose**
Direct to favorites/shoppingcart

**Visibility**
Always visible
**NAVIGATION BAR**

**Purpose**
Access information about other propositions.

**Visibility**
Continuously when in shot.

---

**LOWER THIRDS**

**Purpose**
Graphic overlay placed in the title-safe lower area of the screen to show names and graphic information.

**Visibility**
1-2 seconds in, 3 seconds visible, 1-2 seconds out.
TIMELINE

Purpose
Indication time elapsed, Indication different items

Visibility
Only visible when clicking the expand button
Disappears 5 seconds after hovering

TITLECARDS

Purpose
Break from video
Introduce the next item
Show information

Visibility
5 seconds prior to each item
The final prototype has been validated with three different groups: the Ex Machina team, a potential client and a potential technical partner. All groups were shown the video, and were asked to think aloud while watching and give their opinion afterwards.

The general reactions of the Ex Machina team were positive, they were really feeling the holiday vibe. Some people felt that the video was too similar to ‘Tell Sell’, which is a Dutch TV show in an infomercial format. A possible explanation is that the host used to be a presenter for a similar program and that viewers were too often asked to buy the product. The sales people were mainly interested in sponsor packages and exposure during the video. It was not clear to them whom would be the owner of the format.

The second validation opportunity was with Qurios, a company that rents out holiday homes in the Netherlands. Qurios is a close relation of Ex Machina and a potential client for this format. Their reaction was positive, but they brought up some negative remarks as well. Qurios was very enthusiastic about the interactivity and brand exposure opportunities.

but it was difficult for Qurios to place themselves as owner of the format. They were not able to think beyond the format presented, it took a lot of time to explain that they could co-create the concept. Moreover, they had questions about the conversion rate from the video. Since, this is a new concept, it is difficult to estimate the conversion rate and other companies are not transparent about these numbers. To conclude, Qurios sees potential in Zengo, especially if they can finetune the format to their desires.

Lastly, we validated the concept with Spot.tv, a technical partner. Spot.tv is able to produce a minimum viable product for Ex Machina, because they have already produced multiple interactive videos. The main goal of the this test was to check if all functionalities are technical feasible. After watching the promo video, Spot advised to eliminate some of the functionalities for the minimum viable product. Functionalities such as saving and buying directly from the video are not a problem. Elements that were considered as difficult were the custom timeline and the quiz-element. For these elements, technology should be further developed.

ENGAGING ELEMENTS

**Purpose**
Engage viewers

**Visibility**
1-2 seconds in
1-2 seconds out
Rest depends on questions or time.

VALIDATION

The final prototype has been validated with three different groups: the Ex Machina team, a potential client and a potential technical partner. All groups were shown the video, and were asked to think aloud while watching and give their opinion afterwards.

The general reactions of the Ex Machina team were positive, they were really feeling the holiday vibe. Some people felt that the video was too similar to ‘Tell Sell’, which is a Dutch TV show in an infomercial format. A possible explanation is that the host used to be a presenter for a similar program and that viewers were too often asked to buy the product. The sales people were mainly interested in sponsor packages and exposure during the video. It was not clear to them whom would be the owner of the format.

The second validation opportunity was with Qurios, a company that rents out holiday homes in the Netherlands. Qurios is a close relation of Ex Machina and a potential client for this format. Their reaction was positive, but they brought up some negative remarks as well. Qurios was very enthusiastic about the interactivity and brand exposure opportunities.

but it was difficult for Qurios to place themselves as owner of the format. They were not able to think beyond the format presented, it took a lot of time to explain that they could co-create the concept. Moreover, they had questions about the conversion rate from the video. Since, this is a new concept, it is difficult to estimate the conversion rate and other companies are not transparent about these numbers. To conclude, Qurios sees potential in Zengo, especially if they can finetune the format to their desires.

Lastly, we validated the concept with Spot.tv, a technical partner. Spot.tv is able to produce a minimum viable product for Ex Machina, because they have already produced multiple interactive videos. The main goal of the this test was to check if all functionalities are technical feasible. After watching the promo video, Spot advised to eliminate some of the functionalities for the minimum viable product. Functionalities such as saving and buying directly from the video are not a problem. Elements that were considered as difficult were the custom timeline and the quiz-element. For these elements, technology should be further developed.
In the beginning of the project I established that e-commerce has entered the era of ‘digital experience shopping,’ in which consumers expect online browsing to be fun instead of functional. I took a closer look at different types of shoppable video and explored the ways in which Alibaba and Ted Baker use it as a selling tool. To conclude this project, I will dissect the success factors as discussed in the research phase and split them up into eight actionable principles. These principles are based on the research and the experienced gained during the design process.

1. Know your customers
   The process of creating a shoppable video should start with the consumer. It may seem obvious to state the importance of understanding your target audience, but many companies still do not prioritize this crucial factor. Ignoring your target market’s preferences may lead to a broader reach, but it limits conversion due to a more generic design and interaction offering.
   There are many ways to research your user base, a handful of which are both low-cost and low-effort: you can find a wealth of information available in existing literature, send out questionnaires to your current customers, conduct interviews with people in your target environment, or use data analytics from other products that have already been studied.

2. Make it fun
   The first of our three success factors [link] is ‘entertaining video that sells.’ This factor can be split into two parts: the video and the experience.
   The videos you create should be fundamentally fun to watch, serving up content that can compete with other videos that exist purely for entertainment (i.e. YouTube).
   The content should be packaged in such a way that viewers do not get the feeling that they are part of an infomercial. And while an entertaining video is a start, the viewers still have to be converted into buyers – that’s where part two comes in.
   The viewer experience can be enhanced by making each interaction fun. Try, for example, to entice people to immerse themselves in the experience by pressing a button. When they are directed from the video to another page, just remember that the engagement needs to continue to prevent people from abandoning their shopping carts.
   If this sounds like a challenge, that’s because it is – creating entertaining video that sells is not easy to achieve all by yourself! The key to success lies in finding the right partners for different project elements, collaborating with art directors to create compelling content, and bringing on interaction designers to design fun video elements or influencers to reach the right audience.

3. Work for it
   Some brands have already started experimenting with shoppable video. However, most of them have only made one or two videos, instead of committing to the medium for the long haul. If you really want to make shoppable video work for you, you shouldn’t expect it to be a silver bullet from the get-go. To create a successful shoppable concept, it must be fully incorporated into your digital content strategy.
   As discussed in our last article, there are multiple forms of shoppable media, each with different levels of interaction and execution. At its core, each new concept is the same, but when you are creating an entirely new way to showcase your brand identity, it’s important to take ownership and make shoppable video unique to you.
To start, you might want to take a lean approach, which will allow you to reach your customers in a whole new way at the lowest possible cost. Your existing customer base is a great playground for video creation: As a test, start by using low-fidelity video with minimal viable interactions, and share it with a select group. Take your customers’ feedback seriously, and slowly build upon each video using their comments and critiques. Fail fast and fail often.

4. Engage your users
Interactivity is the backbone of shoppable media. Without interactive features, people cannot make a purchase or be redirected to an ecommerce page from the video, making it equivalent to an ordinary stream or commercial. Interactivity leads to higher engagement with the content, a shorter customer journey, and higher entertainment value.

In contrast to older shoppable formats, users can now interact with the video player itself. This allows them to continue watching the video while enjoying its shoppable capabilities. Consumers can add an item directly to their shopping cart or even complete their transaction within the video player, streamlining the shopping process and increasing customer conversion.

There is also the possibility of integrating different kinds of games to engage users – for example, games or game mechanics that are directly related to the product or company, including trivia, guess the price, or guess the product. Engagement-based games are an equally valuable feature, such as spin the wheel, self-destructing coupons, or regular coupons. Each target group should be served different types of interactions that suit their preferences.

5. Create a consistent experience
Most companies are active on many different platforms in order to reach as many viewers as possible. For now, we are focusing on three types of platforms: Owned & operated (i.e. brand website), linear (i.e. TV), and social networking services (i.e. Facebook).

Most shoppable videos are published on an owned website, mainly because it is the easiest way to make interactions work: when broadcasting using your own platform, you have full control over all the elements you release to the world. In contrast, when you are using Facebook, you are completely dependent on their API. Videos are often also published on social networks to reach more people, however, the majority of these videos lose their interactive properties due to restrictions of specific platforms.

This means that when consumers want to interact, they first have to switch, while watching, from a third-party platform to the owned website. This extra step eliminates the advantages of a shorter conversion process.

It is possible to make your videos interactive and shoppable on other platforms as well, but the process requires another approach: You have to play by the platform’s rules and be aware of the limitations at hand. The good news is, there are many ways to work around them. For example, you can use Facebook Messenger to directly buy a product that is shown in a video. Moreover, second-screen apps that are normally used in conjunction with linear TV can also be used to buy products.

6. Use a live feedback loop
One element that can add lots of value to your strategy is live video. Live differs from on-demand video in its simultaneity, immediacy, authenticity, and unpredictability – all of which are important qualities of an engaging experience.

Simultaneity[16] is when the broadcast is being recorded while the viewer is watching, meaning that they can impact the show immediately. This can benefit both the consumer and the brand. The former can use the user input from polls or chats to produce a show that better fits the needs of their target group, while the latter can feel more engaged.
Immediacy is the idea that new information is being revealed while the event unfolds. The people who are watching at that moment are the only ones that have instant access to that information. Immediacy contributes to the feeling of scarcity and exclusivity, which can lead to more people buying the product.

Authenticity is the third defining characteristic of live video: it is real and unedited. Thanks to a more authentic interaction with your audience, viewers feel a stronger connection to the product and the brand. It feels much less like a sales video, and brings a much-needed human element to digital marketing.

The last characteristic is the notion of unpredictability. During an unscripted broadcast, anything can happen, which makes it more exciting to watch.

While live video presents many attractive advantages, there are a few disadvantages that are important to note. One major drawback is video latency, which is platform-specific and can vary from 2 to 15 seconds. (link exmachinaBg.com/playtrivia). This may cause trouble when you are streaming on multiple platforms at the same time. Although different platforms are improving their services by introducing low-latency streaming, you must take latency into account when designing interactive elements for your video, or deciding where to stream.

7. Make sure the tech is reliable
The success of your shoppable video relies heavily on the the back-end technology that supports it. This is one of the things that you absolutely need to have working properly, especially given the insane amount of videos that are available online. If you don’t prevent your videos from buffering for minutes on end, or troubleshoot buttons that are not working, viewers will simply navigate to another video, leaving yours behind.

There should also be a real-time connection between the products you’re displaying and the inventory at your disposal. It would be a shame if a customer was to see a product in the video, attempt to buy it by clicking on it, then find out that the product is actually sold out.

When you want to make use of live video, the technology behind it will need some extra attention. Your servers and software should be able to handle the extra load, since live streams create a huge influx of viewers all at once. Everybody is watching at the same time, in comparison to views that are more evenly distributed over time, as is the case with on-demand video.

8. Establish design heuristics
Over time, leading usability experts have introduced heuristics to guide designers as they create user interfaces. The most popular ones are the ten usability heuristics from Nielsen. (https://www.nngroup.com/articles/ten-usability-heuristics/)

Existing usability heuristics are mainly focused on user interfaces for websites, apps, or other digital products, as opposed to video overlays. The good news is, there is quite a bit of overlap between these ‘traditional’ interfaces and the interactive overlays tailored to video content. In these cases, existing usability heuristics must be combined with specific design specifications. Given how dynamic and limitless creative video content can be, you should try to establish your own guidelines for your shoppable video application and use the existing lists as inspiration.
This project has resulted in a well-received first shoppable video format. Based on the feedback from different stakeholders, there are some areas for improvement. I want to complement their feedback with some UX recommendations.

To give well-founded recommendations about the UX approach within the company, I have assessed Ex Machina’s UX majority based on the model of Nielsen and Norman. [17] This model describes that as a company’s UX approach matures, they progress through a standard sequence of stages, from initial hostility to widespread reliance on user research. Companies can be assessed based on pre-defined characteristics such as: end user involved, budget, team, and understanding of UX across the business.

From my experience, Ex Machina did not progress much in the UX majority model yet. There was no end user involvement, no dedicated ux budget, a few ux specialists, and the understanding of UX across the company was scattered. Moreover, the process is mainly based on the waterfall model, which makes it difficult to iterate upon ideas. [See figure 19]

Considering these factors, Ex Machina would place themselves in the second ux maturity stage: developer-centered user experience. In this stage, the design team relies on their own intuition without analysing the end users.

A reasonable approach to involve more end-users in the process could be to work in a more agile approach. [See figure 20] This enables the team to stay close to the end-users and use more user-centered design activities.

There are many activities that could be integrated in the process. [See figure 20] I would suggest to prioritize the ux activities in the research phase. This phase can feed the decisions that have to be made in the design phase.

The first activity I suggest are user interviews to get a better understanding of behaviour and motivations to use a product. I prefer interviews over quantitative research methods such as a questionnaires, because that does not allow the researcher to ask beyond the obvious. With the information gathered in the interviews, you can make a persona, empathy map and/or a customer journey. These deliverables are a great communication tool for the design team.

The second activity, is a heuristic evaluation. The evaluation can be performed on both competing products and on your own prototype. This allows you to identity most of the usability problems (up to 80%). Moreover, when performing an evaluation on competing products, you will be able to identity the points that your product distinguish themselves. The only thing needed, is a set of heuristics that are applicable to the product or service that is being designed. The evaluation can be performed by a member of the design team with ux knowledge.

The last, and most expensive, activity is an user test. The goal of a user test is to identity strength & weaknesses and usability problems. By letting users think out loud, you enable them to verbalize their thoughts to gain insights in cognitive processes. User tests can be expensive because you need to build a prototype and prepare & execute the test. The prototype can vary from a paper prototype to a completely programmed prototype, depending on the phase you are in.
This was the first project within Ex Machina that I have experienced from the start. During the project I have encountered many hurdles, such as budget, time, team, and business processes. These hurdles caused a lot of stress but it was a great opportunity to learn. In this section I reflect on three of the biggest hurdles and suggest a plan to improve in the future.

The main challenge was to design without contact with the end-users. Normally, users are in the center of my design process and their characteristics influence many of my design decisions. Lack of this information caused a lot of confusion for me, because I did not know whom I was designing for. The ideal video interface for a 65-year-old looks completely different than for a 21-year-old. Elderly people are often less tech savvy, and aging causes vision and hearing to decline. So, if you want to design a interface for this audience make sure to avoid small font sizes, provide subtitles and give them more time to react on a call to action. All these decisions had to be made without knowing the user. Since, there was no opportunity to test with users, I had to gather information in another way. As an alternative I have tested with colleagues, got information from literature, and interviewed experts within the company. These resources provided me with a lot of valuable information but I believe that some critical functionalities can been overlooked. Such as, peoples behaviour, what is their attitude when entering the video. I believe that it is critical to involve the end users so next time I have to put more effort in advocating for user tests and interviews in the process. The first step of this approach is to set up a plan that include the ROI of different ux activities that involve end users. This plan can be presented to the project managers and management to convince them to schedule time for these activities.

The second challenge was the communication between the different shoppable video teams. To streamline the communication, we designed the infographic as can be seen at page 17. Unfortunately, the infographic was hardly used by other people, which led to inconsistencies in the different projects. Moreover, it resulted in having unnecessary conversations to explain concepts, which otherwise would be a basic understanding.

Next time it would be better to involve more people from various backgrounds in the process of creating a common understanding about an subject, not only people that approach a problem from a design perspective. Moreover, it would be beneficial for the communication to set up an Ex Machina dictionary to prevent confusion. Sometimes I experienced difficulties to meet the expectations from colleagues. I had a different understanding of terms such as mock-up, and draft. In future scenario’s, I have to better streamline the expectations, request help if i expect to have a time shortage, and be more transparent.

The third hurdle is regarding the process planning, which was often dependent of clients. A example is that one of the clients requested a mock-up within two days. That requests leads to designing without making well-found decisions. But once the design is out, it becomes then the new standard. That makes it difficult to take a few steps back and design in a proper way.

Additionally, it is sometimes difficult for me to estimate the time required for making a design. Sometimes it happens within a few hours and other times you need a week. Moreover, when you design is finished, many people have an opinion about your design, which leads to doing a few more iterations. For the next project I have to make a more conservative planning, schedule time for ‘unexpected’ feedback, and collect feedback in earlier stages of the process.
REFERENCES

[1] E-commerce share of retail sales worldwide, Statista, 2018
[2] The truth about online consumers, KPMG, 2017
[8] Travel hospitality outlook, Deloitte, 2017
[12] https://developers.facebook.com/docs/messenger-platform/payments/
[13] Primary reason for digital shoppers in the US to abandon their carts in 2016 and 2017, Statista, 2018
[14] 2018 content preferences survey report, Demandgen, 2018
[19] Online travel booking worldwide - market/age, Statista, 2018