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# IKEA IS PLACING AR ON THE MAP

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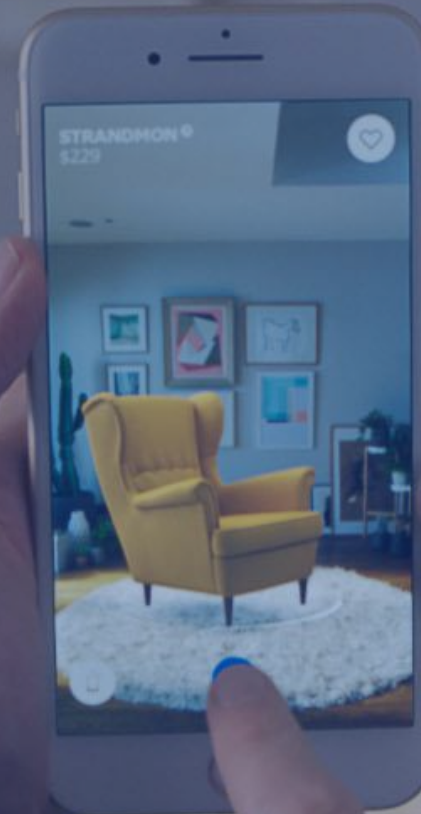
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## EXECUTIVE SUMMARY

The business case of IKEA shows how a company takes on the challenge of capitalizing on the promising augmented reality technology, which is expected to become mainstream in 5-10 years.

In-depth consumer interviews show that IKEA Place needs incremental improvements such as (hyper)realistic scaling and integration of product measurements before the app will be seen as a practical tool by customers. However, the technology offers a great opportunity to tackle customer issues such as the lack of online opportunities to visually test furniture and the time-consuming planning process.

The newly suggested feature, IKEA Design4U, is building upon IKEA's strong innovative brand character. Integrating machine learning to IKEA Place will make it possible to give customers personalized design advice. Not only does this feature allow run shopper type consumers to save more time and invest less effort in making design choices, it will offer fun shoppers an enrichment of their multi-channel shopping experience by allowing them to discover limitless inspiration ideas.

Through a social media campaign that centers around the fictive personas of Sarah and Tom, IKEA can tackle the concerns of the AR market. The campaign aims to reach the goal of increasing the trial rate of IKEA Place by April 2018 to 24% of the total target audience (259.200 customers). In short, IKEA Design4U has great potential to improve the customer experience during the inspiration and planning phase of the customer journey.

## AUGMENTED REALITY REVOLUTIONIZES THE CUSTOMER EXPERIENCE

Augmented Reality (AR) allows brick-and-click retailers to transfer the concept of physical showrooms to the online environment (Klamann & Krastev, 2017). The technology combines digital information with the user environment in real time as shown in Figure 1 (adapted from iTunes 2017) (Klamann & Krastev, 2017). The technology allows consumers to digitally see and try online products, potentially revolutionizing the online shopping experience. The virtual layer provides the possibility for improved communication, deeper engagement, and higher personalization (Augment, 2015).

*"Augmented reality and virtual reality will be a total game changer for retail in the same way as the Internet. Only this time, much faster,"* Michael Valdsgaard, Leader of Digital Transformation at Inter IKEA Systems (Peakint, 2017).

Today, only a few retailers have started to implement AR in their customer journey hoping to gain a first mover advantage. As the Gartner Hype Cycle for Emerging Technologies (2017) suggests, it is expected that AR will reach the start of mainstream adoption in 5-10 years. By then, the applicability, and the relevance of products and services using AR are expected to start paying off (Gartner, 2017). On one hand, this stage bears the risk that other technologies could replace AR until it reaches the phase of mainstream adoption. On the other hand, 5-10 years could be an opportunity for many retailers to get sufficient experience with AR and prepare for the future interest from early adopters.

In the future, companies will use AR to lead customers through four stages: creating awareness, increasing consideration, converting consideration to action at a key decision and purchase points, and building enduring loyalty (Strategy Business, 2017). As retailers move through these important steps in the upcoming years, they must experiment with key tactics and strategies focused on the latest consumer trends. As suggested in the Euromonitor (2017) report, the biggest consumer trends are a high need for convenience, because of the desire for immediate services, and real-time interaction with a brand. Furthermore, consumers want personalized solutions that fit their individual needs and save them time (Euromonitor, 2017).

Retailers that use AR to offer a higher convenience can be divided into three categories:

- *"What does it look like on me?":* retailers such as Memomi and Sephora allow consumers to try on their products virtually such as makeup (Baird, 2017).
- *"Tell me more about this product/how to use this product":* Sauza and Hornitos bottles shares cocktail recipes that appear when the AR phone app is used to scan the product label of their liquor bottles (Baird, 2017).
- *"What does it look like in my home":* Wayfair View is an app of online retailer Wayfair that allows the users to visualize furniture and home decor by virtually placing them in any room (Woyke, 2016).

## Introducing IKEA Place

While the furniture retailer Wayfair takes advantage of the Google Tango platform, IKEA is one of the few retailers with early access to Apple's ARKit technology due to their collaboration with Apple. This makes IKEA one of the first retail furnishing brands in the world to introduce this innovative technology to its customers (Home Furnishings News, 2017). IKEA makes use of AR with two apps: IKEA Catalog (2013) and IKEA Place (September 2017). The purpose of IKEA Catalog is to provide an extended version of the printed and online catalog by visualizing 3D versions of IKEA's furniture in their homes (Wired, 2013).

In September 2017, IKEA Place included more than 2,000 IKEA products allowing consumers to virtually place 3D IKEA furniture in their home settings (as seen in Figure 1) (Davidge, 2017).

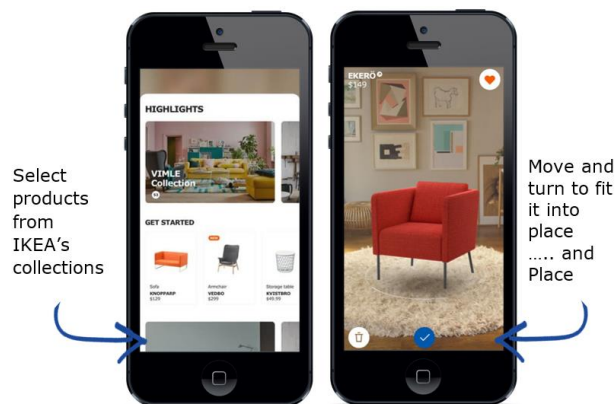


Figure 1. IKEA Place Functionalities (adapted from iTunes 2017)

It has the smart feature to automatically scale products depending on room dimensions. The users can also see how light and shadows are rendered to gain a more realistic impression (Davidge, 2017). IKEA Place appears to meet

IKEA's main values "constant desire for renewal" and "daring to be different" (IKEA, 2017a). The app also arguably contributes to the vision "to create a better everyday life for the many people" (IKEA, 2017b).

The leader of digital transformation at IKEA, Michael Valdsgaard, described a potential uplift in sales from AR as a "dream scenario" for IKEA, which is targeting €5 billion in online sales by 2020, compared to the €1.4 billion it generated in 2016 (Joseph, 2017). Valdsgaard also stated that IKEA has struggled for many years with e-commerce sales, due to IKEA's slow response to digitalization. Furthermore, Valdsgaard shared the concern that the majority of the people postponed their purchase of a new sofa because they were not able to make a decision (Joseph, 2017). They were not sure whether the color of the sofa will match with the rest of the room or if the sofa will fit the style. On that concern, he answered: "Now, we can give them those answers in their hands, while letting them have fun with home furnishing for free and with no effort" (Joseph, 2017).

## KEY CHALLENGES

AR offers great opportunities for retailers, yet some challenges remain to make AR technology a mainstream added value feature for companies. Retailers, such as IKEA, currently face the important task to pinpoint how AR can enhance its current customer value in a rapidly changing retail environment. IKEA is anticipating on changing consumer behavior by identifying ways to integrate AR technology into its customer journey. The use of AR will provide IKEA with highly relevant insights into people's digital needs in an early developmental stage of the technology.

Derived from IKEA's briefing and desk research, the following hurdles need to be overcome by IKEA to add value to its customer experience with the help of AR:

- People are unaware of the available AR apps
- Users experience the technology as a gimmick, rather than a value adding tool
- People lack the understanding of the value AR can add to IKEA
- AR in a retail setting is in its early phases. Hence, designers and users don't understand where and how to best make use of the technology.

This white paper touches upon all these aspects to share a market analysis surrounding the IKEA AR experience and key human insights regarding AR. This paper outlines how a newly developed feature of IKEA Place can be successfully integrated into its customer journey and communicated to customers.

## METHODOLOGY

Following IKEA's market research approach of visiting people in their homes to better understand their individual needs, this study conducted 17 one-hour long interviews with IKEA shoppers in their personal environment (see Appendix 1 for interview guide). The interviewees were selected based on the criteria of previous shopping at IKEA and being a digital native in the pre-family stage. The interviews focused on the inspiration and planning phase of the customer journey.



The interviews provided rich in-depth human insights on the interviewees’:

- relationship with IKEA,
- furniture shopping habits in the inspiration and planning phase of the customer journey,
- knowledge of and attitudes towards AR,
- experience with IKEA Place,
- frustrations and pleasure when shopping at IKEA,
- needs and wants an assessment for further extension of IKEA Place,
- feedback on future extensions of IKEA Place suggested by the research team.

Each interview ended with proposing a selection of potential user experience solutions to discover where the priority of each interviewee lays, which underlying reasoning makes them like/dislike an idea and to test the acceptability of the options.

Interviewees were asked to use IKEA Place (version 1.1.7) in the presence of the researcher in their personal environment to test the app under realistic conditions and to observe direct responses. In the cases where IKEA Place was not compatible with the interviewee’s phone, a phone was provided by the researchers. While interviews do not allow generalization of the whole range of IKEA shoppers, interviews were selected as they allowed to form an understanding of motives and feelings and to gain detailed descriptions of the customer journey. However, the study results are limited as the interviewees were not in the process of planning IKEA shopping and, thus, the findings rely on past experiences.

Based on demographic, behavioral and psychographic data of the interviewees, two fictional personas were built to visualize digital natives in the pre-family stage for IKEA Place. This allows solving frustrations specific customer segments face while taking into account their IKEA shopping habits and experience as well as technology affinity. In the description of the personas, a digital native is defined as “[a] person born or brought up during the age of digital technology and so familiar with computers and the Internet from an early age” (Oxford University Press, 2017). Based upon the “Diffusion of Innovation Curve”, a functional tech user is defined as a person who likes and uses a technology, but without any particular interest or excitement about it (early majority), and a tech enthusiast as a person who gets excited and shows immediate interest in new technology (innovators/early adopters) (Rogers, 1962). The knowledge of IKEA and AR is defined as awareness and usage of IKEA products and AR technology. The IKEA Goals and IKEA Challenges provide psychographic traits such as their opinions about IKEA, what goals the personas expect IKEA to fulfill, and what challenges they expect IKEA to offer support with. The behavioral segmentation includes the persona’s buying motives and process, which allows determining whether the persona focuses more on the inspiration or the planning phase of the buying phase.

## INSIGHTS

By transforming the interview data into the personal insights, it becomes clear how IKEA can add valuable changes in their AR concept.

Tom, the fun shopper, prefers using IKEA Place for “fun” to get inspired, while Sarah, the tech enthusiast, uses the app as a planning tool.

The most notable difference between Tom and Sarah is the variation between the customer journey phase where AR can add value. Tom prefers to get inspired by IKEA, which is reflected clearly in his shopping behavior. He likes spending a day in the store where he discovers new ideas. On the other hand, Sarah is an avid planner. She does extensive research before heading to the store to make the final purchase. While she is there, she prefers to buy the items she needs quickly and does not enjoy walking around. It is interesting to notice neither of the personas shops online. But both prefer visiting the physical store, regardless of their tech orientation. Also intriguing is the interlinkage between the tech usage and the type of shopper. Tom, the fun shopper, is also characterized as a functional tech user. This could indicate that he prefers using the app for “fun”, while Sarah, the tech enthusiast, uses the app as a planning tool.

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*Note:* there was no gender difference between the personas, and the qualification as male or female was done simply for visualization purposes.

## ABOUT SARAH

24  
Female  
Tech enthusiast  
Run Shopper  
She plans in advance  
Student/part-time worker



**IKEA thoughts:** Cheap, functional, stylish, stressful (the store)

**AR thoughts:** It's exciting, it's the future or the next big thing, but it needs more development

## RELEVANT QUOTES

- "I go on the website to check if the product is in stock. I take my measurements and go off to the store to quickly find my items."
- "I'm only motivated to buy something new when I need it. I am not super excited about furniture."
- "I don't feel like I ever really get inspired. For me being furniture is a functional need. When I miss something I think about it. I haven't lived in one apartment enough to replace furniture for the style. I move in, buy furniture"

## IKEA GOALS

- She appreciates IKEA for their practical approach to browsing, picking-up and paying for furniture
- She likes the website design. It is intuitive to use and it helps her prepare for the physical shopping trip.
- She greatly enjoys the food

## IKEA CHALLENGES

- She does not enjoy the physical stores. She often finds it stressful and crowded
- She would appreciate if there could be faster ways for her to shop
- She still appreciates seeing the furniture items before buying it, so ordering online is not really an option

## BUYING MOTIVES

- She normally buys when she has a need. She describes as having a need when she moves into a new, unfurnished apartment, dorm, etc, or if she needs to change existing furniture for a critical reason

## BUYING PROCESS

- She does extensive research before committing to buying
- She starts with measuring the space. Then looks online for furniture on Google, on the retailers' websites, in the IKEA catalog or Pinterest.
- She makes a detailed list with all the items and specifications and makes the purchase in the store

## ABOUT TOM

23  
Male  
Functional tech user  
Fun Shopper  
He gets inspired  
Student



**IKEA thoughts:** Cheap, nice design, practical, smart

**AR thoughts:** It's fun and interesting, but doesn't take it too seriously

## RELEVANT QUOTES

- "The store lets you experience the designed rooms you thought about. ..rooms that paint a picture of what you can have as your room. You only need personal touches such as photos."
- "I like to explore IKEA. I am there half a day. In IKEA I go through different rooms and designed spaces, it is not just your typical hardware furniture store."
- "Maybe for a person who is doing this for the first time show some arrows where you can turn, and how can you turn. User instruction like you have in games."

## IKEA GOALS

- He enjoys spending a half day or a day at IKEA. Usually looks online before for inspiration, but enjoys going to the store and discovering new designs inside the store
- He does not usually plan and likes to be surprised and entertained by his IKEA trip. He highly appreciates the rooms cutouts inside the store

## IKEA CHALLENGES

- He does not have many challenges getting inspired by IKEA
- His only challenges are practical ones, in the buying phase of the customer journey

## BUYING MOTIVES

- He buys furniture when he has a need, but buys other home decor because he gets inspired and wants to change something

## BUYING PROCESS

- He goes to the store because he likes spending time there
- He uses different apps, such as Pinterest, for inspirations

## Qualifiers

Most of the interviewees stated that before they would use IKEA Place, incremental improvements should be made. As one of the interviewees stated:

*"I do not really see how I can benefit from the AR app at the moment. I think they should improve it before it could be useful for me. I need to be able to export all the furniture I have placed in my room in the app and to save those in my wishlist, not only the piece of furniture but the whole design I have made."*

Based on the interviewees' frustrations with IKEA Place, the following qualifiers were derived:

- Ensure compatibility with all operating systems
- Integrate clear user manual
- Improve calibration
- Make scaling, positioning, and colors more realistic
- Show product measurements
- Integrate employee chat function
- Add a wishlist
- Connect with shopping cart
- Include whole range including home decor

*Note:* The suggested qualifiers are based on version 1.1.7 of IKEA Place. A new version (1.1.8) was released on 28th of November with some of those qualifiers improved.

## Consumer Adoption of AR

Most interviewees were familiar with the concept of AR and have used AR apps that are games, fun gimmicks or provide infotainment. While some interviewees had heard of AR apps supporting customer decision-making, none had actually tried such an app. In fact, 14 out of 17 interviewees had not heard about IKEA Place. Few interviewees, tech enthusiasts like Sarah, had tested more sophisticated AR apps as part of their work. This low awareness and trial rate is in line with the 'Diffusion of Innovation Curve', which suggests that a new innovation is first adopted by early adopters and only later by the early majority (Rogers, 1962). As a result, theory suggests that the market penetration rate is expected to be below 12% in the early stage of the market introduction of an innovation (Rogers, 1962). This is important to keep in mind as this suggests that adaptation of IKEA Place is expected to naturally increase when AR enters the next stage of the innovation diffusion curve and when functional tech users like Tom warm up to AR. IKEA could speed up the adaption of IKEA Place by increasing awareness and lowering the threshold to try the app. Easy to follow instructions and keeping the app basic at the start could represent such a lowering of the threshold making the app more suitable for functional tech users like Tom.

Overall, a great majority of interviewees shared a great enthusiasm for AR apps in general and perceived AR as an opportunity to save time, money and be entertained. The tech enthusiasts believed that AR is "the next big thing", but that AR technology needs further development until its benefits can be fully realized.

## CUSTOMER EXPERIENCE SOLUTION: IKEA DESIGN4U

Prior to the interviews, customer experience solutions were developed (see Appendix 1) in answer to current customer trends such as the desire for personalized solutions, need for convenience and perceived lack of time. As the first solution IKEA Design4U resonated most with the interviewees, we recommend for IKEA to implement this solution first.

This solution entices that IKEA Place provides IKEA Design4U using machine learning. Once the customer has scanned his room, IKEA Place suggests room colors, furniture, and decoration based on color schemes and furniture already in the room. This feature enhances customer value as it allows the customer to make new discoveries and helps him select corresponding IKEA product systems based on personalized advice. IKEA would benefit from this feature as it encourages customers to use IKEA Place more regularly, which increases the frequency of customer contact.

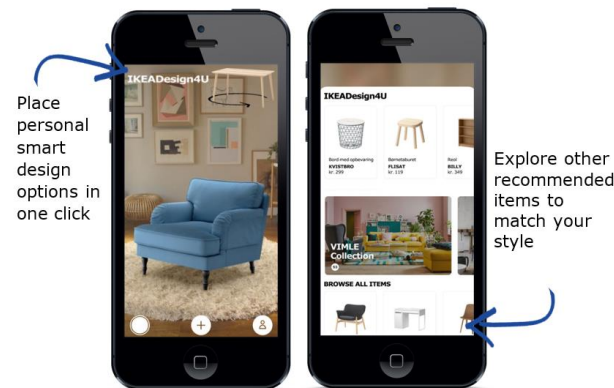


Figure 3. IKEA Design4U

The added feature IKEA Design4U is highly suited, as it picks up the consumers at the cross section of "AR as a gimmick" and "AR as a tool". Thus, this solution is expected to equally appeal to Tom and Sarah. Tom, the fun shopper who loves being inspired, will greatly enjoy that the new solution offers additional services in the form of personalized design recommendations, enabling him to become an interior designer, to test different design ideas. Sarah, who is rather a run shopper and planner, will, in particular, appreciate how the new tools assist her in her shopping planning as she can access measurements and save wishlists in one app. It will also help solve Sarah's lack of time issue, as it makes the full product range available "in one stop". As a result, the customer experience will be improved and one can expect both the customer and IKEA to benefit from these improvements.

IKEA is also expected to benefit, as fun shoppers like Tom are likely to visit the app more frequently to get inspired once home decor and personalized recommendations are included. This could potentially increase the number of touchpoints with fun shoppers and enable IKEA to become top-of-mind (Kapferer, 2012) when customers are looking for inspiration. Given a satisfactory buying customer journey throughout the remaining stages, IKEA Place might have great potential of becoming an indispensable element in Tom's shopping experience. This, in turn, could lead Tom to become attached not only to the app but to the IKEA brand.

At first impression, it may appear that enabling customers like Sarah to plan their shopping trip in detail and go in and out of the store quickly, would go against IKEA's model of



enticing customers to spend time in the shop and drive impulse buy. However, the findings suggest that a run shopper would become more likely to favor IKEA as their top retailer if they are enabled to shop as they prefer. Since customers like Sarah specifically dislike IKEA because of the association with a lengthy period of time needed for planning and going to the store, IKEA Place as a planning tool could eliminate such associations. Even though a customer like Sarah is motivated to buy only when there is a need, she does exhaustive research before committing to a purchase. IKEA Design4U would enable her to reduce the research and decision time, by aggregating multiple components into one app. This way, IKEA could increase the frequency of use and become a vital and trustworthy source of information for Sarah. The increase in the frequency of app usage and Sarah's increased interest in online shopping could also lead to a possible increase in organic traffic to the website. Although it is not within IKEA's current strategy (Antonio Ceballos, personal communication, 1st November) to divert traffic from the physical to the online store, establishing itself as a leader in online furniture retailing would enable IKEA to become a top-of-mind choice for customers like Sarah (Kapferer, 2012).

### **Assessment of Solution**

Finally, the selected solution IKEA Design4U was assessed based upon the criteria of suitability, feasibility, and acceptability. Within the report, suitability is defined as the ability to respond to current consumer trends and the congruence with the IKEA brand, whereas feasibility is based upon the likelihood for IKEA to fulfill technical prerequisites. Acceptability is based on how likely the established personas are to use the new feature.

#### *Suitability*

The solution IKEA Design4U scores high on suitability as it responds to consumer trends such as personalization as well as consumers' perceived lack of time and the corresponding importance of shopping convenience (Seiders, Berry, & Gresham, 2000). IKEA Design4U does so by making the full product range available "in one stop", offering additional services in the form of personalized design recommendations and saving the customer time by establishing a link to the IKEA online store.

As mentioned in the brand description, the app also arguably contributes IKEA's values "constant desire for renewal", "daring to be different" (IKEA, 2017a), and "to create a better everyday life for the many people" (IKEA, 2017b). The feature contributes towards this vision as it allows the everyday person to use a digital personal stylist, which helps them to create the style they desire in their home, without any stress or cost.

#### *Feasibility*

A prerequisite of this feature is the ability of machine learning to identify items in the room and identify matching IKEA products according to Reuben Dunn, fourth-year computer science student, (personal communication, 23 November 2017) as well as Hristo Petev, senior software developer (personal communication, 3 December 2017). Recognizing machine images for image search has already been done by, for instance, Pinterest (Zhai, 2017). The key difference with the technology behind the IKEA Design4U, which increases the risk of the solution, is that the computer needs to learn how to recognize

styles in order to give design advice. Even though there are 'design rules', style is a subjective topic, meaning that there is no one right or wrong option, making it harder to train the computer how to read styles instead of how to match an image with a similar image. Due to the innovative character of the features, IKEA needs to fuel this solution with manpower from its innovation center and software development, which makes up for the biggest financial investments, making the feature overall score medium on feasibility.

#### *Acceptability*

Acceptability is researched from a consumer standpoint and therefore is based on the IKEA shopping personas of both the run shopper and fun shopper. In the strategic assessment, it becomes clear that the personalized design inspiration is a highly suitable solution, as it enriches the inspiration and planning phases of both run shopper and fun shoppers in a highly innovative way.

### **Implementation**

The implementation plan of figure 4 gives insight into how the new IKEA Place feature can be developed in the upcoming years. Personalized furniture, decoration, and color suggestions can be achieved through the development of recommender systems using machine learning and image recognition according to Reuben Dunn (personal communication, 23 November 2017) as well as Hristo Petev (personal communication, 3 December 2017).

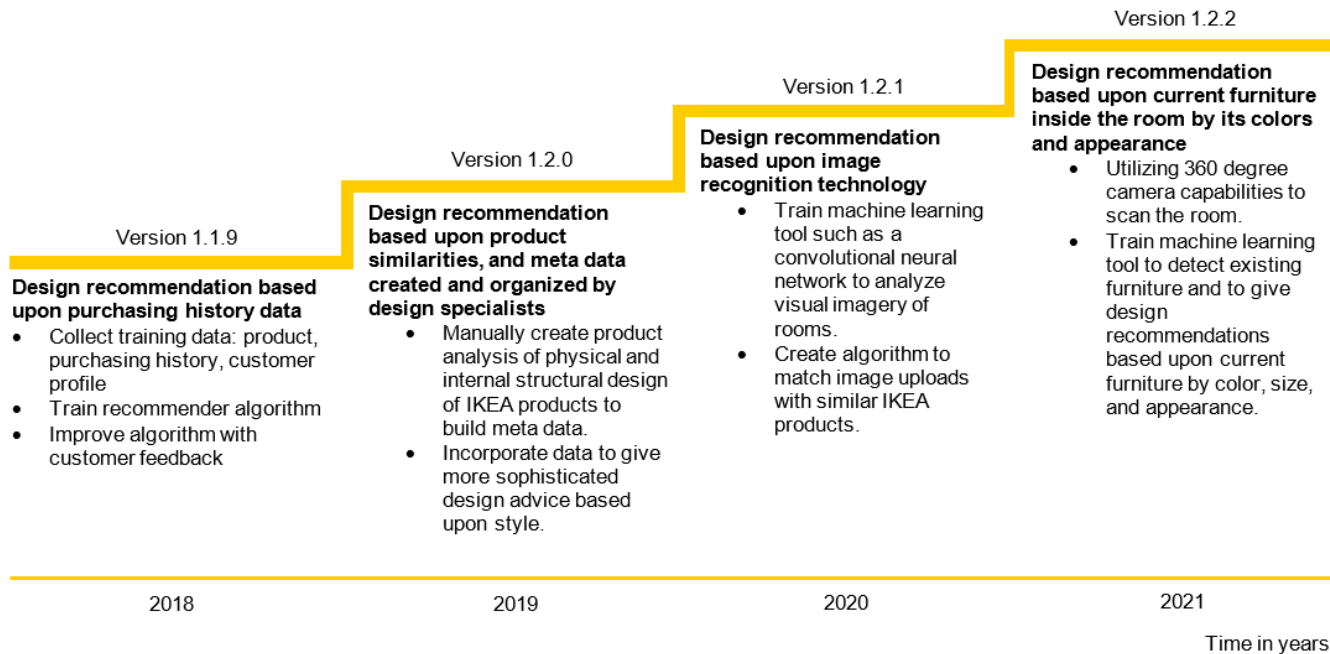


Figure 4. Technical Implementation Plan of IKEA AR Feature Personalized Design Inspiration.

## SOCIAL MEDIA CAMPAIGN

Based on the above insights, the following social media campaign was developed in order to market IKEA Design4U.

### Social Media Strategy

#### Target Audience

Based on the two fictive personas, the target audience for the marketing campaign will be young adults, aged between 18 and 28 years, in the pre-family stage, located in Sweden, with a yearly income of approximately €17.761 (Statista, 2017a). The total population included in this demographic segmentation adds up to approximately 1.350.000 possible audience members (Population Pyramid, 2016).

In terms of preferred devices for online research and shopping for furniture, the target audience prefers to use a combination of mobile and desktop, with mobile shopping on the rise (Audience Project, 2016). iPhone is a leading device provider amongst the target audience (Audience Project, 2016). In Sweden, Facebook and YouTube are by far the most popular social media use, followed by Instagram, WhatsApp, and Snapchat. Twitter and Pinterest are the least used (Audience Project, 2016).

Considering their digital affinity, 80% of the total target group can be included in the early adopters and early majority ("Diffusion of Innovation Curve") (Rogers, 1962). Assuming the whole target group knows and shops at IKEA, the target audience can be

approximated at around 1.080.000 audience members In Sweden. The same campaign can be extended to target the same audience in the rest Scandinavia at a low cost, increasing the target group to a total of 2.253.100 (Population Pyramid, 2016).

Overall, the target audience is easily and efficiently reached through online communications and are open to new technologies. This enables IKEA to take advantage of new technologies, knowing the target audience will be receptive. Their occupation and budget match well with IKEA's current product\price offerings, making it an attractive target group in relation to a new concept or product development costs.

### Campaign Objectives

The campaign objective is to have IKEA users try IKEA Design4U by creating awareness and understanding first, solving the key challenges of IKEA AR. The trial phase of the Duffy Brand Equity Cycle, therefore, represents a feasible campaign goal (DuffyAgency, 2017). 'Trial' was preferred over 'the first purchase' through IKEA Place as a campaign objective, since only very few interviewees would currently consider making a purchase through the app and, furthermore, AR technology is only expected to become widely adopted in 5-10 years (Gartner, 2017).

Specifically, the campaign objective is:

To increase the trial rate of IKEA Place by April 2018 to 24% of the total target audience (259.200 out of 1.080.000 people).



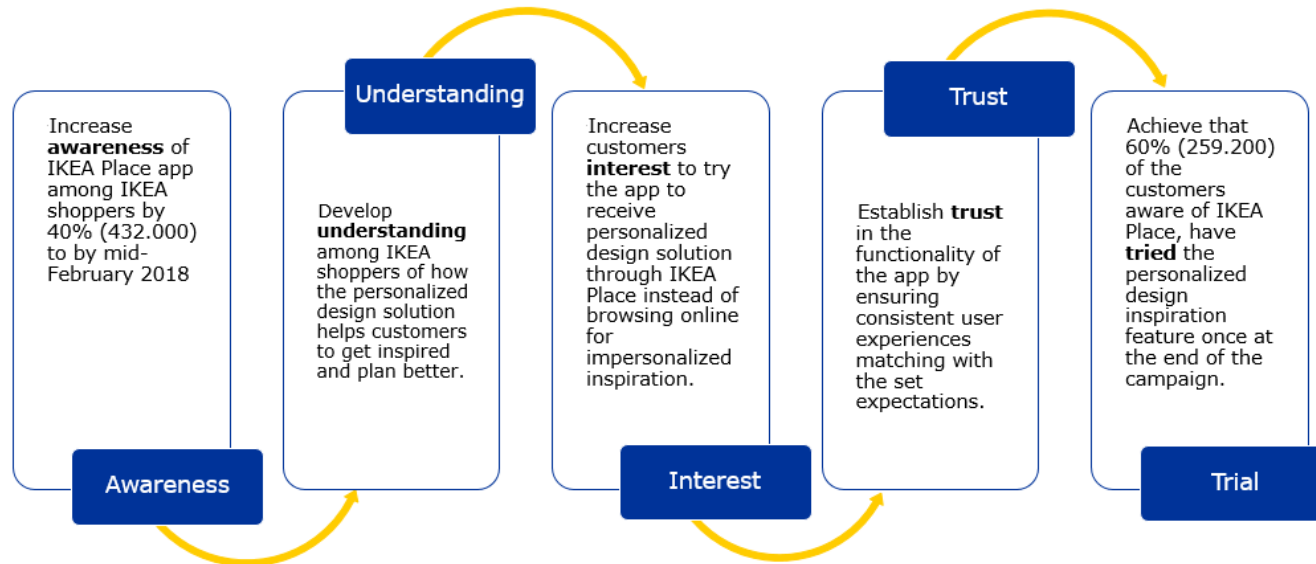


Figure 5. Milestones of the IKEA Design4U social media campaign

## Social Media Content

### Concept

The social media campaign will communicate the key message “IKEA Design4U: A personal design assistant for everyone” in line with IKEA’s vision “To create a better everyday life for the many people”, as shown in figure 6. Tom and Sarah’s personas will come alive in the campaign and will tell the story of them moving into their first student accommodation and how IKEA Design4U helps them to solve their inspiration and planning problems with two videos broadcasted on social media (see Appendix 2 for video scripts). A third video launched before Valentine’s Day will show how they move in together and encourage viewers to join a competition and submit their design ideas for Sarah and Tom’s first apartment on Instagram using the hashtag #IKEADesign4U (see appendix 3 for campaign schedule). In order to help Tom and Sarah design their new apartment with furniture and home decor, the

participants should post screenshots of their own “improved” design of their rooms. To generate those designs, they should use the new feature IKEA Design4U, which fulfils the campaign objective of stimulating the first-time use of IKEA Design4U. To encourage consumer participation, the prize will be €2,000 worth of furniture. To conclude the campaign, a fourth short video will be created starring the prize winner to show the before and after the redecoration with the use of IKEA Design4U, strengthening consumers’ trust in the feature.

### Campaign Assets

At the heart of the campaign are the first three videos showing Sarah and Tom’s story and the competition. Youtube appeared highly suitable to host the videos, as videos are easily accessible long-term, shared and commented

on (Weinberg & Pehlivan, 2011). The posted designs will be shared by consumers on Instagram, an image-based social media, allow for group images based on hashtags and encouraging engagement through comments and “likes”. Instagram is also widely used by the target audience (Statista, 2017b). Other media assets on various social networks integrate the elements through links and support the main campaign videos. In total, the campaign budget, with all its activities mentioned in table 1, sums up to a total of €89.765 (see Appendix 3 for budget specifications).

### Campaign Measurements

- **Awareness:** Measured through the amount of reach of the target audience.
- **Understanding:** Measured using View through Rate of videos.
- **Interest:** Measured by banner/ad/email Click-Through-Rate.
- **Trust:** The number of recommendations and referenced by the influencer, UGC, brand ambassadors
- **Trial:** Measured by the number of people that download the app.

## CONCLUSION

The business case of IKEA Place shows how a furniture retailer utilizes AR in their customer journey to enhance their customer value by building on its core values of IKEA Place appears to meet IKEA’s main values “constant desire for renewal” and “daring to be different” (IKEA, 2017a). The integration of IKEA Design4U as an extension on the current IKEA Place app allows consumers to take designing their room to the next level.

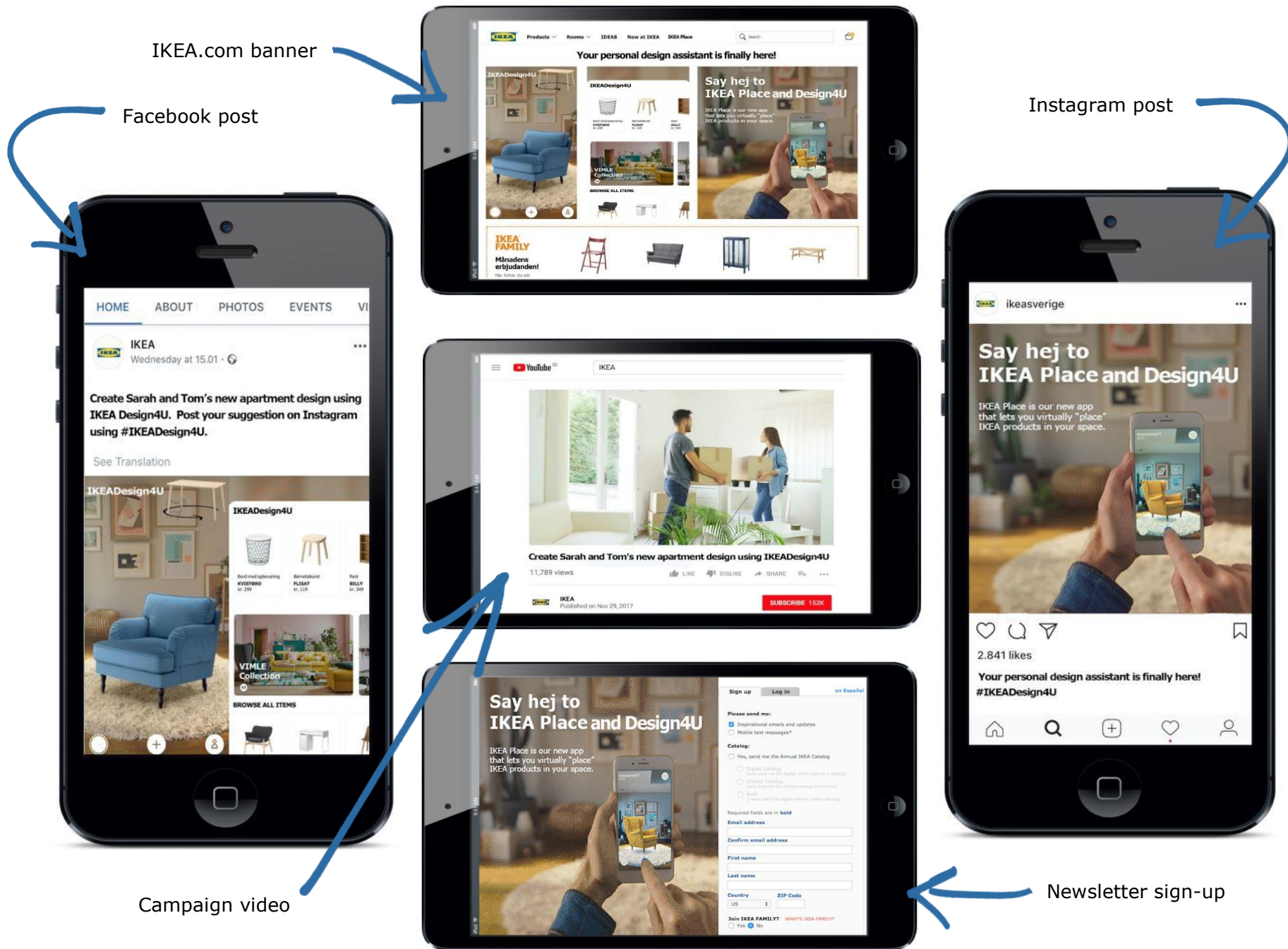


Figure 6. Campaign Assets example posts

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## APPENDICES

### Appendix 1. Interview Guide

#### Personal Information

- What is your gender?
- What is your age?
- What is your occupation?
- Would you consider to be a digital native?
- Can you explain what a digital native is in your opinion?

#### IKEA

- Do you know IKEA?
- Do you shop at IKEA?
- How does your shopping process at IKEA look like?
- How, when and where do you normally shop for furniture or home decor with IKEA?
- Why do you shop for furniture at IKEA?
- Which four adjectives do you associate with IKEA?

#### General furniture shopping

- How do you get inspired for what to buy when it comes to furniture?
  - Think about friends, Pinterest, family recommendation etc.?
- How do you normally plan for furniture shopping?
- How, when and where do you normally shop for furniture or home decor?

*Note for the interviewer:* If this process is the same as IKEA's shopping process state that. If not, write down the different locations and behaviors.

## Augmented Reality

Are you familiar with the term augmented reality?

- What in your opinion is augmented reality, can you describe it in your own words?
- What augmented reality apps have you heard of?
- Have you used any of them?
- Why/why not?
- What is your opinion about augmented reality?
- What do you associate augmented reality with?

## Previous Knowledge / Experience with IKEA Place App

- What do you know about the IKEA Place App?
- Have you used it before?
- When?

*Note for the interviewer:* if the case of having used IKEA Place version 1.1.7, move onto the next questions.

*Note for the interviewer:* in case interviewee has not used IKEA Place version 1.1.7, let him test the app now.

## General Feedback on Experience with IKEA Place App

- What do you like when using IKEA Place?
- What frustrates when using IKEA Place?
- What of the IKEA Place app can be improved?

## Recommendations for Further Extension of the App

- What do you enjoy about the current IKEA shopping experience regarding getting inspired?
  - It might help you to think about last time you shopped at IKEA.
- What do you enjoy about the current IKEA shopping experience regarding planning?
  - It might help you to think about last time you shopped at IKEA.
- Which problems or frustrations do you face during your IKEA shopping experience regarding getting inspired?
- Which problems or frustrations do you face during your IKEA shopping experience regarding planning?
- How do you think this app could improve your current shopping experience?
- How would you think this app be useful for you?
- How often would you use the IKEA Place app?
- In what circumstances would you envision yourselves using the app?

## Possible User Experience Solutions

- What do you think about current extensions of IKEA Place?
- What do you like about it?
- What don't you like?
- Which problem does it solve for you?
- Would you use the feature?
- Why? When?
- In case of dislike, how can the idea be adjusted in such a way that it does solve your problems or make your shopping experience related to inspiration and planning better?

*Note for the interviewer:* in case of total dislike or not seeing the added value of the feature move on.

*Note for the interviewer:* ask the questions under "possible user experience solutions" for the ideas:

1. **Personalized Design Inspiration:** This solution entices that IKEA Place provides personalized design recommendations using machine learning. Once the customer has scanned his room, IKEA Place suggests room colors, furniture, and decoration based on color schemes and furniture already in the room.
2. **Pinterest connection:** IKEA could use machine learning to suggest to Pinterest users IKEA furniture that matches the furniture they "pinned" on Pinterest. The user will then be forwarded to IKEA Place to see how the IKEA furniture would look in his home.
3. **Wishlist:** Connecting the IKEA Place app with the wishlist on your IKEA account to shop quicker and not to lose your favorite items.
4. **Catalog browsing:** Imagine if you could flick through the digital IKEA catalog in the IKEA Place app to from there on place your favorite items in the app.
5. **Showing full available range:** When you are in the IKEA store and the product you want to see is not on display in the right pattern, you can add an additional layer over it. In that way, you can see how the pattern you are interested in looks like through the app.
6. **Kitchen planning:** IKEA could build one empty display room in each store with moveable walls, where customers can visualize their new kitchen solution using AR technology.

## Appendix 2. Video Script

### Video 1: Sarah

*Setting the scene: First scene*

Sarah and Tom are two new bachelor students, moving in the university campus of Lund University, just across each other. They both have their doors open, while they're trying to set up their rooms. They know they will spend the next four years in that room, so they want to make it feel like their home as cozy as possible, whilst being on a student budget.

The scene starts by showing both students look at each other, say hi, and walk into their respective rooms. Next frame shows Sarah's story.

*Sarah's story: Second scene*

Sarah just walked into her student dormitory. The room was decorated with basic IKEA furniture: a bed, wardrobe and a small desk and a chair from IKEA. She is carrying her Management Accounting book. Her appearance shows well her pragmatic and composed personality. She appears anxious to get everything in her room ready before her courses start. So she starts planning.

She takes her laptop out of her bag and places it on the desk and opens it. Out of her luggage, she takes out her trusted measuring tape she brought with her and starts measuring the room. She opens an Excel file on her computer and starts inputting measurements with detailed descriptions. She researches out for some blank papers on the desk and she starts making a detailed list of all the items she needs to buy.

While she is measuring and planning, she takes a break to search for "IKEA" in order to ensure she can find everything she needs and plan ahead. She continues doing this for the next two hours. She now has put together 10 different A4 papers to create a mega plan, which she tapes to the wall.

She notices Tom across the hall doing his thing (to be read in the next commercial), and she thinks to herself: "What an idiot, he will never get anything done in that way. He doesn't even know if the furniture fits together or even if it fits in the room".

*Setting the scene: Third scene*

In a different scene, Sarah meets James, a hallmate. Sarah is confiding in him about her furniture research planning issues and how she can't wait to be done with it. James introduces her to the IKEA Place app and explains how it solved the same problems for her when she moved in last semester.

*Setting the scene: Forth Scene*

The camera is moved to Sarah (to be zoomed in and show features). She is browsing all the IKEA furniture in one place, placing the different selections in the room and paying close attention to their measurements. She also saves everything to a wishlist.

*Fade Out.* Super (on-screen text): IKEA Design4U - Your personal design assistant now available in your app store

### Video 2: Tom

*Tom's story: First scene*

Meanwhile, across the hall, Tom also just walked into his student dormitory. He is happy the room contains only the basic IKEA furniture since he can already imagine the design possibilities. He's simply dressed but wearing an accessory like a bracelet, which barely shows his artistic side. He is carrying his Communication and Psychology books. He takes a moment to look around, almost daydreaming. He notices all his boxes he had sent out prior to his arrival. He leaves his luggage next to the entrance and lays on the bed dreaming of his new room's design possibilities. The audience can now see what is going inside Tom's head and how he imagines placing around all sorts of furniture and room accessories. The camera comes back to reality and shows Tom frantically taking out all of his clothes from the boxes, throwing them around. After he has an empty box, he models and cuts it the shape of a lamp, which he wraps in a blue scarf in order to mimic the desired color.

He continues doing this over the next two hours. He now has a big pile of clothes and what looks like a box shelf, a lamp, a pot and some pillows, all made out of cardboard cutouts and wrapped in clothing items to envision the color.

Tom also notices Sarah briefly doing her thing and thinks to himself: "I feel sorry for that girl, no imagination, just planning and measuring, and measuring and planning. She has no inspiration".



### Setting the scene: Second scene

Fast forward to a few days later when Tom meets James, a corridor hall mate, at the dormitory. Tom explains the issues he's having with running out of space to place his cardboard furniture cutouts and how he can't use his favorite t-shirt because it's now hanging on the wall, supposedly as a painting. James introduces IKEA Place and how it solved the same issues when he moved in last year. Tom is downloading the app right away and is excited to go back to his room to try it.

### Setting the scene: Third Scene

Tom goes back to his room and the camera zooms into Tom and shows him using the Personalized Design Assistant: IKEA Design4U (the camera will zoom in and show features) to get inspired and get different furniture recommended so he can finally visualize all his ideas and pick the best ones. He also browses for inspiration.

### Setting the scene: Forth Scene

The camera zooms out of the individual rooms and shows both Tom and Sarah in one frame. Sarah and Tom notice each other using the app and realize they finally have something in common. They start talking about how the app solved their different problems and decide to get a coffee together. The scene closes with them walking away still talking about the app. In this scene, the IKEA Place app is the focus and should be visually emphasized. Both characters should use the app on an iPhone.

*Fade Out.* Super (on-screen text): IKEA Design4U - Your personal design assistant now available in your app store

## Video 3: Sarah and Tom

### Setting the scene: First scene

The audience is given a forwarded rewind of the previous two commercials. It is now 4 years later and Tom and Sarah are shown with a lot of luggage in front of an apartment door. They are about to move in together after they finished their Bachelor. The camera shows Tom and Sarah excited to start their new life together. The next frame is a focus of both their hands on a key turning into the knob and the door slightly opening. The screen turns black and the competition ad is displayed.

*Fade Out. Voice Over:* Help Tom and Sarah design their new apartment based on your own style using IKEA Design4U for a chance to win €2000 worth of furniture of your pick. Download IKEA Place, take a screenshot of your design and share it on Instagram using the hashtag #IKEADesign4U. Scan this QR code to download the app, or find it by searching IKEA Place in the App Store.

Table 1. Campaign schedule IKEA Design4U

#### Description\*

**IKEA Place:** notification of feature update IKEA Design4U

**IKEA.com:** IKEA Design4U content integrated in a new IKEA Place app page

**IKEA.com:** IKEA Design4U homepage banner

**IKEA digital newsletter:** announcement of IKEA Design4U

**Social media launch:** video 1 (Sarah)

**Social media launch:** vlog 1. AR design life hacks for 'Sarah' customer type

**Social media launch:** video 2 (Tom)

**Social media launch:** vlog 2. AR design life hacks for 'Tom' customer type

**Social media launch:** video 3 (Launch of IKEA Design4U competition)

**Social media:** share #IKEA Design4U user images

**Social media:** Announce #IKEA Design4U competition winner

**Social media launch:** video 4: IKEA Design4U winner story, results

**Sponsored micro-influencer post (12x):** reviews of IKEA Design4U

**Facebook sponsored post:** announce launch of IKEA Design4U

**Facebook sponsored post:** video 3: announce competition IKEA Design4U

Social media are: Instagram, Facebook, YouTube of IKEA Scandinavia.

**Owned** and **paid** media.

## Appendix 3. Campaign Specifications

### Budget Specifications

- Developing 4 videos each with a duration of 30 sec. The total costs would be 42,000 € (Frederiksen, 2017).
- The design of the homepage banner will be 425 € (Diseno Advertising, 2017).
- Facebook sponsored post: The target audience is 1.080.000 people and 78% of those are Facebook users. Based on the campaign objectives, awareness should be gained by 40%, and the call to action pursued by 60% of the ones aware. That results in total of 202.176 and a budget of 46,500 € (McLeod, 2017).
- The average price for micro-influencers with fewer than 1,000 followers is 70€ per post. The campaign will consist of 12 posts in collaboration with 12 micro influencers (12.000 people reached) (Heald, 2017).

