MRD Outline: Virtual Home Decor

Team:Group 6

List all students who actively worked on this Assignment:

1. Name: Pranjali Prakash Doiphode

2. Name: Apoorv Dudhe

3. Name: Bhashmi DineshBhai Fatnani

Vision

Sometimes, people buy furniture online but they have to return the items because it's not a good fit in their place. Our vision is to resolve this problem by providing visualizations for their place. Using our app, customers can see how any particular item will look in their house and they can buy the best suitable item.

Motivation

Customer Segments

Decorating your own house is one of the most fun but one of the most tedious jobs that everyone has to do and with the need of conveniency and time efficiency, there is a vast and fast growing market of data visualisation via AR that we have narrowed down the most likely and top target customers into three segments

Segment 1: Interior Designers(People with a profession of designing houses) These segments are people who are Interior designers by profession and who struggle to convey their ideas to their customers. Customers usually find it difficult to understand what the Interior designer is trying to visualise and the Interior designers then have to make a 2D plan which is very time consuming. So this app will help customers to understand exactly what the Interior Designer is trying to make them visualise. Also, it will save the time and efforts of Interior Designer.

Segment 2: TechSavvy people(People who prefer/enjoy online shopping) These are our tech-savvy customers who are made for the digital era. Technology freaks and Social media influencers are the two subcategories that we are targeting in this segment.TechFreaks are the

digitally confident and active shoppes meanwhile the power of social media increases exponentially so does the power of the social media influencers that can help us market about the product in an entirely different way and on a whole different level.

Segment 3: Retailers (Most underrated consumers) This segment includes the shops who want to increase their sales by investing and therefore being a part of the app itself, we believe that this will help them reach out on a digital level and on the other hand, this will help us with resources. This is a two-way segment focusing on targeting a larger customer segment.

Sandra stays with her family of 5,

She has 3 kids, Sandra and her husband both work from 8 am to 5 pm. Both of them are busy and only on weekends they had time, but that time they utilize it by going out with their children and helping them in their homework. So they prefer an app which while helping their children doing their homework with some clicks will show them via AR the furniture that can fit into a particular space, which saves their time and money.

Footballer Brown,

Brown loves playing football. And he is a TechSavvy student so he doesn't earn much to afford to hire an Interior Designer to decorate the house so an app which will show him the cheap and best quality options via AR would save his money.

Unmet Needs

According to the report, 83% of the citizens are online shoppers and nearly 20% of the sale is of furniture items. But, around 49% of the furniture items are returned because they don't fit well in the house. What might be the reason? This is covered in our unmet needs.

1. Availability of options: Other E-commerce apps have a lot of areas to focus on that's why they have a less variety of decor items. Our app is primarily focused on home decor and it's necessary parameters. We will make sure that the user is explored to a variety of furniture with various parameters such as Color Pallette, Texture etc.
2. Integration with Economical sellers: This is a key feature that makes our app stand out in the current market. All the existing apps have their tie-ups with leading retailers/sellers such as Amazon, IKEA, Walmart, Pottery Barn etc. It doesn't encourage small business owners and it's not an economical option for every buyer. We are focusing on integrating our app with Economical sellers to give them business as well as to provide cheaper options for the customers.
3. Quality: Many of the returns are requested because the customers are not satisfied with the quality of an item. We will make sure that all the Economical sellers are selling the best quality products to the users.

4. Other Parameters: We will provide a feature where the users will be able to resize the dimensions and see the results. This will help them to get the most accurate visualization. Also, we are planning to make the app more user interactive. In future, we will make a few updates according to user feedback to make it even more user friendly.

Existing solutions and Differentiation

The Internet is the medium for almost all resources. It's easily available and very useful thus it is no news that a virtual home decor app has already set foot in the ecommerce industry for quite a long time. Companies like Ikea, Magic, etc. are very well established in the industry by providing different perks but in the end serving a platform to help people to be their interior designer. Let's take a peek through the comparison of these existing solutions.

| Company Name	Compatibility	Features	Plans	Integration with companies
Magic Plan	IOS	Allows to save the plan	4 Types of Pricing model	No
Room Planner by Ikea	Desktop only	Ikea catalogue can be visualized in 3D	Paid expert advice	Yes
Artfully Walls	IOS & Android	3D view of art specific to walls	Free consultation	No
Roomy	IOS	Integration with top retailers like Amazon	No plans	Yes
Art.com	IOS	Walmart catalogue can be visualized in 3D	Expert advice	No

The above table shows the comparison of 5 existing competitions in market over 4 parameters:
● Every company covers only one strength like saving a plan or just viewing arts for walls.
● These solutions are pretty much compatible only IOS
Our goal for Virtual Home Decor is to include as many features like color options, furniture option and integration with economical companies (a feature very different from existing solutions in market) and to make sure is accessible over all platforms.

Why now?

Even though almost every furniture industry has a good online sales amount, if we consider the returns rate it is high too.We believe that the Furniture Industry in terms of returns is still at its peak waiting to make its breakthrough. Why is it that most Americans (80%) shop online but when asked about satisfaction there is only 25%-30% who actually don't have any issues after buying online. But when our team interviewed a few people and asked if they would consider shopping online keeping its strengths in mind almost more than 65% responded as yes. Here are a few numbers to depict our analysis. The first pie chart shows (in blue): Number of people who would prefer/consider online shopping. And the second pie chart on the right shows a few reasons why!
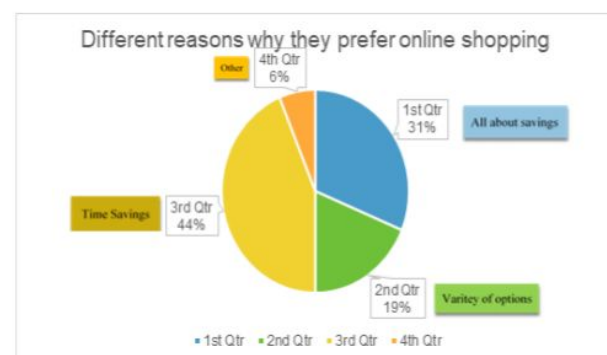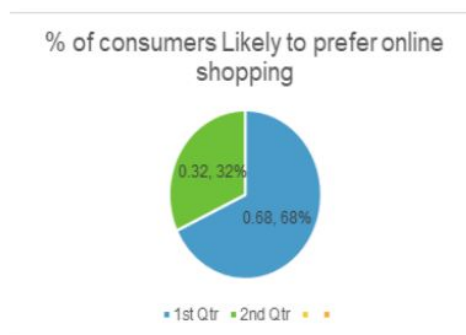
Use Cases

Use Case 1: #Convenience&Ease

Dane stays in Seattle for 3 weeks every month and loves waking up to cloudy weather in Seattle. He works for a company in Boston and has to come and stay in his Boston's house for a week every month. He has decorated his Seattle house but finds it very inconvenient to decorate his Boston house since he comes only for a week. But when he got to know about Virtual Home Decorator , he could decorate his Boston house within a week with ease and convenience.

Use Case 2: #SmartSavings

Katie usually decorates her house hiring an Interior Designer which would cost almost 10k USD but when she got to know about Virtual Home Decorator she could do it on her own with her own choice saving almost 10k USD.

Jessica stays with her husband. They both work 8 am to 5pm 5 days a week. Jessica loves to decorate her house but she doesn't have enough free time to look for ideas on the internet on weekends. While surfing on google, she got to know about Virtual Home Decorator which helped her visualise all the decor materials with ease , saving her all the time of the weekends she used to invest searching for ideas on google.

Market Size

In this tech-savvy world, everyone wants to do things with a few clicks on their devices. The participation of US citizens who purchased furniture online has increased exponentially in the last few years and it is expected to increase even more. According to new data from One Click Retail, furniture sales on Amazon grew 51% year over year in 2017. Mattresses and box springs were the No. 1 category, rising 82% with $1.1 billion in sales. Bedroom furniture (45%) and living room furniture (40%) were next on the list. The image below shows the numbers for various areas of furniture bought online.

US Furniture Sales on Amazon, by Category, 2017
billions and % change vs. prior year

	Furniture sales	% change vs. prior year
Mattresses & box springs	$1.1	82%
Bedroom furniture	$0.8	45%
Living room furniture	$0.6	40%
Home office furniture	$0.5	27%
Kitchen furniture	$0.4	27%
Total*	**$4.0**	**51%**

Note: *includes categories not listed
Source: One Click Retail, "Furniture: The Amazon Effect," June 14, 2018

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All the market data is clear to understand that the numbers for online sales of home decor items is increasing but it doesn't meet all the customer needs. With our product, we are trying to help the customers to make their house renovation experience better and convenient. We are certain that there is a huge market waiting for our product to help customers design the house of their dreams!

Risks/Key Dependencies

1. Alliance with Retail stores: This is a key dependency in our app. There should be good communication between the stores and application employees to maintain the updated records about the availability of items.
2. Decor items availability: In scenarios where items requested by customers are not present in the storage, the information should be available for customers. All the information including price fluctuation and availability of decor items should be updated from time to time in coordination with integrated sellers.
3. Application Latency: In the current situations, the application might take longer than expected to provide the appropriate visualization as we have many color, texture, size and furniture options. We aim to remove the lag and make the application faster by using advanced database strategy and augmented reality techniques.
4. Unverified Sellers: This is one of the risks currently present in the app. In future we aim to carry out a background check for all the sellers to make sure that they are genuine vendors.
5. Misleading Recommendations: It is a possibility that the application might provide some misleading recommendations to the user. We aim to add more parameters in the visualizations so that that customer gets the best quality of the house representation.

Strategic Consideration

The Virtual Home Decorator is an intelligent platform that connects users to a wide range of options at the cheapest possible rates inclusive of delivery. It is a seamless experience that users have without having to worry about other platforms or download multiple apps.

The key ingredient is collaboration. There are strongholds in different regions but usually, the market is highly localized. To build a service that enables users to have a single app on phone

yet order everything they want anywhere is a "never-like-before" experience. There are multiple region-wise players in this market, however, they do not scale outside their respective city of operation. The network effect thus is not scalable since the preferences vary across the geography. Virtual Home Decorator helps the Interior Designers to scale as well. By finding various Interior Designers and retailers across US we enable businesses to scale over US and that's our long term goal

The strategic partnerships with existing platforms would be pivotal for the app's success. In this competitive space, every player has identified a niche and there is a need to integrate the services and package it into one platform. The vision is not to white label the existing services; it is to enable businesses to reach more masses catering to the change of consumption patterns if based on intangible reasons.

Team members

Virtual Home Decor's development team is a good combination of people with technical, analytical and management background. The roles and contact information can be shown as follows:

Name	Role	Contact
Pranjali Doiphode	Team lead, Product Management	doiphode.p@husky.neu.edu
Apoorv Dudhe	Data analyst	dudhe.a@husky.neu.edu
Bhashmi Fatnani	Back-end developer	fatnani.b@husky.neu.edu

Go/No Go recommendations

Considering the current market for home decor items, number of active Interior Designers, current E-commerce dependent population and Interior Designers to Citizens ratio, we as a team believe that this app will ease a lot of trouble that people go through while renovating their houses. Not only the house owner but Small scale furniture business owners and a few designers as well can be benefitted by this app. There are certainly a few unmet needs that we can focus and fulfill. Our team considers this application as a GO!

References

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