### YOUR STYLE ADVISOR:

#### AN APP THAT MAKES ONLINE SHOPPING EASY AND EFFECTIVE

by

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## LIST OF ABBREVIATIONS

- **IT** Information technology
- **GDP** Gross domestic product
- EBITDA Earnings before interest, taxes, depreciation and amortization
- CAGR Compound annual growth rate
- AI Artificial intelligence

#### CHAPTER 1. INTRODUCTION

In 2022, more than 200 thousand people in the United States have done shopping online according to online shopping statistics (Taheer, 2023). As anybody might guessed already, this number is projected to increase rapidly in the next few years. What is more, around 50 per cent of those who buy online are open to use any kind of advisor to make purchases (ibid.).

Although, there are various problems that people face during the process of buying clothes online such as inability to pick the size of the garment, multitude of products which oversupply the market and lead to the impossibility to find what they are looking for, colors mismatch. Such issues force people to return or throw away the stuff they bought online which takes additional time, money and leaves a footprint on the environment.

The steady digitalization of our usual activities is caused by many factors including IT industry development, self-isolation during pandemics and closing of the offline stores due to hostilities. Nevertheless, this does not negate the fact that people still need an expert advice while buying clothes for their everyday life and special events as well.

What is more, the Artificial Intelligence technology only recently became widely spread and has already made a significant impact on many aspects in business, including fashion industry as well. The AI can personalize the consumers' experience by investigating their preferences indicated in individual customer profiles. Additionally, it can be used to customize virtual product trials and demonstrations for individual consumers, such as clothing fittings and personalized styling suggestions. Given all the information stated above, it can truly be stated that the fashion advisor app is a revolutionary decision for both retailers and consumers. This is usually a free or low-priced personal stylist app, which aims to help user reach sustainability by offering a digital wardrobe platform. It empowers the adoption "Buy less, buy better" approach and assists on how to make the most of one's wardrobe. Fashion advisor apps use technology to rationalize people's lifestyle and make fashion less harmful to the environment and more digital through allowing the users to upload their apparel and reconnect with their wardrobes.

Hence, the motivation of this work is set the stage for the future creation, development and efficient usage of Your Style Advisor Application. It will answer the following questions:

- What are people looking for in mobile advising applications? The psychology and expectations of online shoppers will be examined in order to identify and understand their preferences. This investigation will be instrumental in shaping the app's features to cater to consumer needs.

- Which app's features will make online shopping convenient for buyers? The features that hold the potential to elevate the online shopping experience, making it not only convenient but also delightful for buyers will be investigated to answer this question. By identifying these features, the author aims to reconcile consumer expectations and application capabilities.

- Which category of customers should online retailers to focus on while developing an advising app? By categorizing and targeting the right audience, retailers can optimize their outreach and engagement strategies.

The future Your Style Advisor Application is aimed to help customers by providing personalized recommendations, building confidence in product quality, and assisting customers in making more informed and sustainable purchasing decisions. To reach the goal of this work, the author did the analysis of online shoppers' characteristics and investigated the potential competitors, their features, prices and reviews.

Further research on this subject can be more application-oriented and estimate the prospective costs, profit and overall potential of the proposed app. The result of this study can be valuable for the fashion businesses and enthusiasts who are seeking the solutions to improve buyers' experience.

### CHAPTER 2. INDUSTRY OVERVIEW AND RELATED STUDIES

The fast-paced world of fashion retail, constantly experiencing solid growth, introduces various tools and apps for the conveniency of the shopping process for its customers. Plenty of style advising apps, which have become increasingly popular, offer diverse functionalities, such as creating digital wardrobe, personal outfit recommendations, color analysis etc. Hence, in this work the author decided to investigate the global fashion retail and mobile applications industries to better comprehend how they intersect one another.

1. Overview of global fashion industry.

As stated in McKinsey State of Fashion 2017 report, fashion belongs to one of the most significant industries, delivering considerable influence of the global economy. It stands as among the key value-generating industries for the world economy. Notably, if we were to compare the global fashion industry's economic impact to the GDP of individual countries, it would emerge as the seventh-largest economy worldwide.

The fashion industry as a whole includes a wide list of directions, which are the design, manufacturing, marketing, advertising, distribution, promotion and retailing of all types of men's, women's and children's apparel from the most expensive high fashion to the usual everyday fast-fashion clothing.

In 2021, the global fashion industry witnessed a remarkable 10,7 percent year-overyear growth in revenues, which is illustrated on Figure 1, reaching \$1.55 trillion, and the average EBITDA margin nearly doubled, increasing by 6 percentage points to 12.3 percent. This impressive trend persisted into early 2022, with the industry recording a substantial revenue growth in the first half of the year. However, the prices in Europe and the US reached its peak in the late 2022 due to geopolitical instability caused by russian full-scale invasion of Ukraine, which led to volatility increase, supply chain malfunctions and energy prices growth. Inflation and interest rates raise did also affect brands' costs as the industry deals with the competitive labor market. As a result, consumer demand experienced a downturn in 2022 and is expected to have a slow and steady growth in the future.



Figure 1. Revenue of the apparel market worldwide, year-over-year (%)

Source: statista.com

The fashion retail market can be segmented by three main types. Those are Hautecouture, Ready-to-wear designer and Mass-market fashion. As illustrated on Figure 2, ready-to-wear designer segment is projected to have the largest market share among the mentioned categories – \$363.39 billon with a CAGR of 4 percent by 2028. The reason to this is that Ready-to-wear offers high-quality, stylish, and well-constructed clothing that is produced in larger quantities than haute-couture but is still relatively exclusive and expensive, making it accessible to a more affluent clientele. What is more, these garments are often designed by renowned fashion designers.



Figure 2. Global fashion industry segmentation, by type

Source: linkedin.com, maximizemarketresearch.com

The advantage of the apparel industry lies in the innovative designs, preferable fashion selections, and efficient marketing strategies. Growing internet and e-commerce accessibility among consumers has increased fashion awareness and the accessibility of high-end brands and limited-edition products. As it can be seen on Figure 3, only 15 percent of the US population under the observation make online purchases less than once a month, while the remarkable 41 percent are buying something online once or twice a week.

The leading e-tailing countries are China with astonishing 50 percent of total sales accounting to internet sales; UK - 36 percent, South Korea - 32 percent and Denmark - 20 percent. In the United States, e-commerce sales reached the point of 16.5 percent of total sales in June 2020, when the COVID-19 had spread the world and people were unable to visit the offline store to buy the necessary goods. In comparison, this indicator was 10.3 percent a year before, consequently, it can be assumed that the lockdown caused by COVID-19 pandemic was one of the indicators which played role in the development of the e-commerce market.



Figure 3. Frequency of online purchases in the US in 2021 (%)

Source: mordorintelligence.com

The use of mobile devices and internet services becomes more and more widespread making the internet retailing the most convenient and least time-consuming tool to purchase goods. The simplicity of shopping experience on smartphones was facilitated by such innovative tools as mobile-first websites, special applications, evolving payment methods, etc (statista.com, mordorintelligence.com).

The retail industry creates the substantial part of working places among different countries. Approximately 430 million people, which is 12.6 percent of the labor force around the world are employed in clothing and textile production industry. This includes not only garment factories employees, but also farming, processing, finishing and logistics workers among others.

2. Overview of mobile applications industry.

In 2021, the size of world's mobile applications development market was accounted for 197.2 billion dollars. The market is substantially growing and it is projected that it will reach approximately 583.03 billion dollars market share with a CAGR at 12.8 percent by the end of 2030 (straitsresearch.com).

In the present times, mobile applications have beaten all the geographical limitations, giving its users an ability to enjoy unimpeded shopping journey. Fashion retail market is highly competitive and spatial, so the majority of the businesses acknowledges that the best way to engage with customers is developing a mobile application.

AppStore and Google Play are full with thousands of various applications, with around 17 percent of them is related to fashion. These apps offer a wide range of functionality, including shopping, advising, resale, communication features.

Fashion apps are getting more and more popular. According to the report by apptopia.com, the top-100 shopping applications in the world had over 788 million downloads by the end of 2021 with the yearly growth of 12.2 percent (Tara Kirkpatrick).

It is also important to mention the bonds of mobile applications industry and the artificial intelligence. The area of artificial intelligence is auspicious in the field of mobile application development. Users across the globe are intrigued by the idea of having a personal assistant to helps them with their daily tasks. However, the potential of intelligent apps extends far beyond just digital assistants. Nowadays, artificial intelligence is employed in mobile applications to substantially enhance user satisfaction.

Due to the impact of recent technological improvements and changing customer preferences, the development of AI-powered mobile applications has appeared as a new frontier in the digital landscape for businesses. Fashion advising applications offer a wide range of functionality such as personalized recommendations, shopping assistance, wardrobe organization, outfit creation, fashion trends analysis. Moreover, these apps increase the level of sustainability in the retail market by helping people reduce buying garments they would never wear as well.

Two related studies which investigate mobile style advising applications industry were taken into account in this research.

Taiwan scientists Cheng and Liu (2008) introduced in their study an intelligent system which is named "Mobile Fashion Advisor". The purpose of this system is to assist people through the process of buying and using their garments. Researchers had several main objectives to accomplish – "building a personal digital wardrobe, and developing Attire Scheme Harmony Evaluator". Digital wardrobe building task aimed to create a database of one's clothes and was done through several techniques: color histogram to define the most frequent color of the clothes, the transformation of the color space and shape detection. The Harmony Evaluation is the tool for matching the garments by materials, colors and shapes. The research resulted in satisfactory functioning of the proposed application and approval of the mobile fashion consultants as helpful tools.

Deldjoo et al. (2022) in their research investigated recommender systems that operate in fashion retail market. The study resulted in introduction of a categorization of style advising tools by task "(e.g., item, outfit, size recommendation, explainability among others)" and identification of the key targets and opportunities for the development of convenient advising system.

### CHAPTER 3. METHODOLOGY

How often do people have to return or exchange the garments they bought online? According to retail statistics (shiftprocessing.com), almost every second purchase made online has to be returned. In comparison, only 5 to 10 percent of purchases made in store are returned, which in fact is around 8 times less than online shopping return rates. The global retail sector had received \$4 trillion in 2020 in sales, though 10.6 percent of this was lost due to returns.

The main reasons for online shoppers to return clothes are the following:

- Items don't fit well (38% of respondents);
- Items don't suit me (15%);
- Quality wasn't good enough (14%);
- Buying multiple sizes without an intention to keep everything (6%).

Several additional, but not significant for the research factors that make shoppers to return their purchases are: faulty items, changed mind (statista.com).

Considering the problems stated above, this research aims to find out the way how can the mobile advising app improve both customers and retailers shopping and selling experience. The investigation will be conducted in two logical ways - customers analysis and competitor overview. The result is going to indicate which apps features are good to implement and what is not that necessary.

The creation of the Your Style Advisor app is considered to be done for the use of Inditex Group customers. Inditex Group consists of seven brands: Zara, Zara Home, Pull&Bear, Massimo Dutti (integrated with Uterqüe in the late 2021), Bershka, Stradivarius and Oysho. The above brands operate in fast fashion segment, categories of products are apparel, footwear, accessories. Hence, the first step of the research is Inditex customers analysis. It is planned to evaluate the following main indicators upon this part of the analysis:

 Hierarchical clustering of the Inditex Group brands. Grouping brands with similar customers' behavior will enable to identify which brand we should focus on for implementing the app;

- Top countries where the customers live. This will provide insights into the popularity and performance of each brand's online presence. Knowing which countries house the majority of customers will provide an understanding which market to focus on;

- Customers' age and gender distribution. Demographic data will be used to tailor the app's features and content to better suit the diverse preferences of Inditex customers;

 Average amount of money spent per store visit. Analysis of the average spending per visit to physical stores and online outlets will be implemented to gauge the economic significance of Inditex customers;

The data for this part of the analysis are collected from the company's official website, statista.com and similarweb.com. This raw data is to be validated and organized to create a foundation for the analysis.

The customer analysis phase is a fundamental pillar of the Your Style Advisor app's development. By deepening into the above stated indicators, the author aims to develop a profound understanding of Inditex customers. This knowledge is going to be used to guide the app's features, content, and overall strategy, ensuring that it resonates with the diverse and dynamic customer base served by the Inditex Group.

Secondly, the competitor overview is conducted. This part of the research provides valuable insights into the existing landscape of style and wardrobe-related applications. To move towards this analysis, the author has searched relevant applications in the AppStore

and Google Play, using keywords such as "style", "wardrobe", "closet", "advisor", "dress". The searched apps relate to the following categories: Lifestyle, Shopping and Beauty. Competitor overview is performed in the following manner: identification of the most popular and high-rated apps and investigation of their essential features.

To proceed with this part, the author decided to create a comprehensive comparison table to highlight the essential features of the selected competitors. This table includes a side-by-side evaluation of functionalities, pricing models, and overall user experience. Structuring the data in this manner enables to identify areas where the Your Style Advisor app can excel and stand out.

Hereinafter, several word clouds are generated from user reviews. This visualization tool highlights the most frequently mentioned issues and user preferences in a visually engaging manner. The word cloud assists in identifying key aspects that resonate with users and those that may need improvement in the Your Style Advisor app.

Firstly, user reviews are tokenized into words, i. e. each single word is treated as a separate unit (token). Secondly, some cleansing is done: each word is made lower case, spaces and punctuation are removed. Thirdly all stop words (words that are used often in the language and useless for the purpose of this research, such as it, be, etc.) are removed. Next, the stemming of the tokens is performed: each word is reduced to its root. This allows to count words with similar meaning as one word, like words "walk" and "walking" are counted as two occurrences of word "walk". Finally, the number of occurrences is counted for each word and word cloud is constructed to depict it: the size of each word is proportional to its frequency.

### CHAPTER 4. DATA

The data for the research was collected by author from different sources and consists of two datasets. To conduct the analysis of Inditex Group customers, the dataset of 19 variables and 173 observations was manually compounded. The variables are the following: Number of social media followers, Number of female and male website visitors, Monthly website visits, Average visit duration, Pages viewed per visit, Fashion and apparel category rank, Top countries, Average amount of money spent per visit, Net Sales in 2021, Audience age distribution. It is used to identify the key customers' habits and characteristics.

The distribution of countries where the majority traffic come from is represented in Table 1. As we can see, almost all of the Group's concepts are prevalent in Spain, except for Zara.

Concept	Top-5 countries							
Zara	USA	Spain	GB	Poland	Turkey			
	17.28%	7.73%	7.41%	4.79%	4.64%			
Pull&Bear	Spain	Turkey	Portugal	Poland	GB			
	19.21%	10.11%	8%	7.44%	6.44%			
Massimo Dutti	Spain	USA	Poland	GB	Turkey			
	11.2%	10.31%	10.18%	8.46%	6.05%			
Bershka	Spain	Poland	Turkey	France	Italy			
	12.86%	11.08%	9.41%	6.78%	5.86%			
Stradivarius	Spain	Poland	France	Turkey	Portugal			
	16.18%	14.07%	11.53%	7.33%	6.64%			

Table 1. Representation of the countries where the majority traffic come from<br/>(continued on the next page)

Concept	Top-5 countries							
Oysho	Spain Turkey		Poland	Portugal	France			
	24.57%	13.59%	10.88%	6.54%	5.13%			

Source: similarweb.com

Usually, as shown on Figure 4, the customers spend on average from three to seven minutes while browsing the brands' websites. Throughout this time, they manage to review from four to ten webpages.



Figure 4. Inditex Group's websites visits

Source: similarweb.com

The Group's concepts are popular within all ages groups because it sells fast-fashion affordable garments. However, more than 60 percent of the customers are aged between 18 and 34 years old. The representation of the customers' age is shown on the Table 2.

The data shows that the least popular concept among the youngest group of customers (18-24) and, simultaneously, the most popular among the middle-aged group (35-44) is Massimo Dutti.

Consent	Audience age distribution, %							
Concept	18-24	25-34	35-44	45-54	55-64	65+		
Zara	28.32	33.11	17.8	10.77	6.44	3.57		
Pull&Bear	32.6	32.82	16.84	9.42	5.35	2.97		
Massimo Dutti	21.64	35.18	20.34	11.75	7.26	3.84		
Bershka	31.53	30.71	16.86	10.37	6.6	3.93		
Stradivarius	29.82	31.36	17.37	10.57	6.96	3.92		
Oysho	24.84	35.32	19.87	10.54	6.17	3.25		

Table 2. Representation of the customers age distribution

Source: similarweb.com

It can be observed from the correlation matrix on Figure 5 that Group's Net Sales in 2021 suggest a strong positive relationship with Monthly website visits (0.83) and Average Visit duration (0.89).

Notably, Number of male website visitors exhibits a moderate positive correlation with the Average amount of money spent per visit (0.49), while Number of female website visitors has a negative correlation with the above metric (-0.49).

This correlation matrix provides valuable insights about the relationships among the analyzed metrics, enabling a deeper understanding of the dataset and the factors that influence various aspects of the business.



Figure 5. Customers data correlation matrix

Source: own calculations based on data from similarweb.com, Inditex Group Annual Report

For the competitive analysis, the data was manually collected as well. It consists of 198 observations of twelve variables such as Main features, Rating from 1 to 5, Number of reviews (in thousands), Price to download, Offers In-App purchases (yes/no), In-App subscription prices and Link. This dataset provides information about 17 major styling applications on the market. Four of them are only available on AppStore and one was designed exclusively for Google play. Those applications were considered as main competitors for the future Your Style Advisor app.

According to the methodological approach, the author collected ten of most relevant reviews for each app. For the convenience of further text analysis, the reviews for each separate app were stacked into the corresponding cell, separated by slash. Table 3 represents the sample of competitors data.

Name	Main features	Appstore reviews	Google play	Price to download,	Offers In-App	In-App prices,
Stylebook	Add images	So many	-	4.99	No	
	of your own clothes	benefits!				
Style	Styling for	Addicting	This app	Free	Yes	39.99
DNA	any type of	and	has a lot of			
	figure	informative	potential			
Pureple	Suggests you	Really	I like how	Free	Yes	69.99
	outfits from	good but	you can			
	your own	needs	categorize			
	wardrobe	some help	your			
			wardrobe			

Table 3. Sample of the data used in the research

Source: AppStore, Google Play

According to the amount of the ratings in AppStore and Google Play, number of people using fashion advising applications in general is relatively similar for both iPhone and Android users, with the difference accounting for around 3 percent. However, the relative difference between user count for each separate app varies from 23 to 114 percent. The most popular app among iPhone users is Stylebook with remarkable 7400 of ratings, while Android users prefer Acloset. Sample of the data used to analyze the ratings is demonstrated in Table 4.

Name	Appstore number	Google Play number	Absolute	Relative
	of ratings,	of ratings, thousands	difference,	difference
	thousands		thousands	
Smart Closet	4.3	5.55	1.25	-23%
Style DNA	2.8	1.31	1.49	114%
Acloset	1.1	8.68	-7.58	-87%

Table 4. Representation of the ratings	quantity

Source: AppStore, Google Play

### CHAPTER 5. RESULTS

#### 5.1. Inditex Group customers

Dendrogram on the Figure 6 show the key indicators of the Inditex Group brands' websites visiting behavior. The clustering is performed based on the Euclidian distance of brands' statistics after all of them were ranked.

It can be observed on this figure that Pull&Bear and Bershka are the most similar brands in the dataset. The next two most similar brands are Stradivarius and Oysho. The most distinct brand is Zara as it is joined with others at the biggest height.



Figure 6. Inditex Group brands similarity dendrogram

Source: own calculations based on data from similarweb.com

Hence, it is evident that Zara is the most popular concept within the others with the 92.8 million website visits per month, 6.34 minutes average visit duration and 10.48 pages viewed per visit. The website with the least number of pages viewed per visit (4.22) belongs to Stradivarius, which can indicate that its products are not as interesting and eye-catching as others'.

In total, the customers spend around 4.36 minutes and view 6.7 pages while browsing the observed websites. Furthermore, the total visits of Group's websites per month stands at 140.7 million.

From the Figure 7 it can be observed that, obviously, Massimo Dutti is the most expensive concept among the others, while in Oysho consumers tend to spend the least amount of money. On average within the entire Inditex group, customers spend from 45 to 90 dollars per one visit.



Figure 7. Average amount of money spent per visit, by brand [USD]

Later on, the analysis of traffic distribution on Inditex Group websites was conducted. As shown on Figure 8, the country which hosts 15,29 percent of all customers around the globe is Spain, which is quite obvious because the brand itself comes from this country. Secondly, almost 10 percent of the traffic comes from Poland and the impressive 9 percent from Turkey.

As per Zara separately, it can be stated that, unlike other Group's brands, which are the most common among Spain, Zara is the most popular with the US consumers, showing the remarkable 17 percent of the total traffic to the website from this country.



Figure 8. Top countries where the customers live

Source: own calculations based on data from similarweb.com

The investigation of the Inditex Group products consumers' age is illustrated on Figure 9. Upon visual consideration of the chart, it can be seen that the vast majority (79.39%) of customers is between 18 and 44 years. The major age group which consists of 33.08 percent of customers is 25 - 34 years. The second biggest group is 18-24 years.

Taking into account each brand separately, it can be stated that the most popular one among the youngest audience (18-24 years) is Pull&Bear, while the most aged category of customers (65+ years) prefers Bershka. 35.32 percent of customers between the ages from 25 to 34 choose Oysho for their apparel shopping.





The pie chart on Figure 9 represents the gender distribution among the Inditex Group audience. It indicates a clear dominance (68.48% on average within the Group's brands) of female consumers. The concept which has the biggest difference between male and female customers is Oysho – the proportion of women to men is 71.37% to 28.63%.



Figure 10. Inditex Group customers gender distribution, %

### 5.2. Competitor overview

For the first part of the potential competitor overview section, it was decided to select 5 most significant apps with the best set of features. Table 5 shows the comprehensive comparison of the mentioned apps.

Арр		Is it free				
	Wardrobe	Style	Outfit	Shopping	Wearing	of
	digitalization	ideas	planning	history	statistics	charge?
		and tips				
Style DNA	+	+		+		No
My Wardrobe	+		+			No
- Outfit						
Finder						

Table 5. Comparison of the potential competitors (continued on the next page)

Арр	Available features							
	Wardrobe	Style	Outfit	Shopping	Wearing	of		
	digitalization	ideas	planning	history	statistics	charge?		
		and tips						
Whering	+		+			Yes		
Indyx:	+	+	+			No		
Wardrobe &								
Outfit App								
GetWardrobe	+		+		+	No		
Outfit								
Planner								

Source: AppStore, Google Play

As seen on the Table, the most popular function among the apps is wardrobe digitalization. It means that users can employ digital tools and technology to organize, catalog, and manage your clothing and fashion items.

Another powerful tool is outfit planning. GetWardrobe app, for example, offers its users a built-in calendar and weather forecast so that people can plan what to wear on a particular date and get outfit suggestions based on today's weather. This app is free to download, but requires an in-app yearly subscription payment of USD 34.99. Furthermore, outfit planning feature suggests a user can make a packing list for his/her trip to avoid overpacking and prevent impulse buying ahead of travel.

Wearing statistics is not that common feature in the observed apps, however, this is a powerful tool. It is aimed to provide insights on how users wear their clothes and outfits, including what they wear the most, what they wear the least and which items are the most preferable and have the lowest cost-per-wear.

Lastly, the applications review investigation was conducted. Figure 11 visualize the word frequencies in AppStore and Google Play reviews.

The whole set of reviews for one entity (e. g. Apple) are taken to be text corpora, so that there are two corpora. The bigger the size of the word, the more frequent in the text corpus it is.





Source: own calculations based on data from AppStore, Google Play

The words "love" and "closet" are most common in both Apple reviews and Google reviews, which means that overall people have positive experience using such kind of app.

### CHAPTER 6. CONCLUSIONS AND RECOMMENDATIONS

Given all the information stated in this research, it can be concluded that the first beta version of the proposed app will have the following indicators:

- Primarily the app will be only available for the USA based Zara customers. However, it is planned to expand the app's service globally, with the intention of increasing the list of countries where the app will be accessible in the near future.

- The users will be proposed to install the app when entering Zara shopping app and website. Otherwise, it will be a built-in function in the already existing Zara app, which now is designed only for shopping process. This part will be discussed after developing and testing both options.

 The price for the app's services will be distributed among the Zara products, hence it will be free of charge for its users.

Registration procedure for the app will include the next steps:

-firstly, the user will be asked to set up an account by providing an email address and creating a secure password;

-after the account is created the users will be asked to complete a quick questionnaire to identify their preferences;

-next, the user will be proposed to create her digital wardrobe through uploading pictures of clothing items from the device's gallery or by taking photos. It will enable her to organize and catalog the clothing collection digitally, facilitating outfit planning, mix-and-match possibilities, and the convenient storage of style preferences.

After completing these three steps, the user will have access to the functionality of the app and can start her stylish journey.

The Your Style Advisor app is projected to have the following features:

-creation of the user's own virtual wardrobe based on the pictures of the garments. Customers will be able to upload pictures of their clothes to digitally organize and catalog their clothing collection. This feature enhances the shopping experience by facilitating outfit planning, mix-and-match possibilities, and convenient storage of personal style preferences.

-ability to digitally try on the outfits. Implementing an innovative augmented reality technology, an app will enable customers to virtually try on outfits before making a purchase. This immersive experience allows customers to visualize how garments would look on them, taking into account their body shape, size, and personal style. By reducing uncertainty and enhancing confidence in purchasing decisions, this feature will significantly improve the online shopping experience.

-personal AI recommendations based on the answers to the survey provided in the very beginning of registration. During the registration process, the app will prompt customers to complete a brief survey that captures their style preferences, body measurements, and fashion interests. Leveraging artificial intelligence algorithms, personalized recommendations will be generated based on the survey responses. These tailored suggestions help customers discover new fashion items that align with their unique tastes, increasing the likelihood of successful purchases and customer satisfaction.

-construction of the outfits by mixing own clothes and the ones from shopping list. This feature will allow customers to create and save outfits by combining their existing wardrobe items with potential purchases from the shopping list. This interactive tool encourages creativity, experimentation, and efficient planning. By providing customers with a holistic view of their wardrobe and suggesting complementary additions, the company can foster a sense of personal style and offer a comprehensive solution for outfit curation.

-articles and lectures with invited speakers about the business of fashion. To further engage and educate customers, the app management will curate a collection of informative articles and host online lectures featuring industry experts and fashion influencers. These resources would cover various topics related to the business of fashion, including trends, sustainability, styling tips, and brand stories.

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# APPENDIX

# Data used in the research

		Number of	Number of		Average						Average amount	Average amount
	Number of	male	female	Monthly	visit	Pages	Fashion and	Top countries, %			of money spent	of money spent
	social media	website	website	website	duration,	viewed	apparel				per visit, from	per visit, to
	followers, mln	visitors, %	visitors, %	visits, mln	min	per visit	category rank				[USD]	[USD]
Zara	129,343	31,25	68,75	92,8	6,34	10,48	16 USA	16,4 Spain	7,56 GB	7,37	50	100
Pull&Bear	23,037	34,22	65,78	11,1	4,34	7,24	12 Spain	19,31 Turkey	8,09 Poland	8,01	40	80
Massimo Dutti	12,931	33,68	66,32	7,6	4,01	6,65	30 Spain	12,11 Poland	9,66 Turkey	8,53	80	150
Bershka	32,027	32,58	67,42	13,1	4,02	5,46	26 Spain	12,61 Poland	10,13 France	9,72	30	70
Stradivarius	18,623	28,74	71,26	13,2	4	4,22	34 Poland	25,18 France	13,62 Spain	13,43	40	80
Ovsho	10.691	28.63	71.37	2.9	3.46	6.17	37 Spain	23.51 Poland	10.61 Turkev	8.82	30	60

Name	Main features	Appstore Rating	Google play	Appstore	Google play	Appstore	Google play	Price to	Offers In-	In-App subscription	Link Appstore	Link
		from 1 to 5	Rating from 1 to	Number of	Number of ratings,	reviews	reviews	download,	App purchases	prices, USD/year		Google Play
			5	ratings, TH	TH			USD				
Stylebook	CLOSET: add	4,7		7,4	-	// So many be	e -	4,99	No		https://apps.app	appstore only
VOGACLOSET	Specific filtering	4,5	4,1	60,2	3,93	// Customer r	// The worst.	Free	No		https://apps.app	https://play.
Pureple	Provides the	3,9	3,3	5,8	3,38	// Really good	I // I like how	Free	Yes	69,99	https://apps.app	https://play.j
Smart Closet	Select clothing	4,4	3,1	4,3	5,55	// Great but a	// I used to lo	3,99	Yes	9,99	https://apps.app	https://play.j
Style DNA	Explore your p	4,3	4,3	2,8	1,31	// Addicting a	r// I want to le	Free	Yes	39,99	https://apps.app	https://play.j
Acloset	Acloset is a 'fr	4,5	4,3	1,1	8,68	// The best cl	c// Good: mul	t Free	No		https://apps.app	https://play.
Cladwell	Simply Tap Ite	4,3	4,2	0,72	0,363	// Life Chang	i // Fun and he	Free	Yes	59,99	https://apps.app	https://play.
Save Your Wardrobe: Organiser	Effortlessly up	4,5	4	0,165	0,261	// Great but o	// The app is	Free	No		https://apps.app	https://play.į
Whering	DIGITAL CL	4,4	4	1,3	4,11	// If Whering	// I absolutely	Free	No		https://apps.app	https://play.
Wishi	1. We match y	4		0,276	-	// Best Person	n -	Free	Yes	hal stylist recommendation	https://apps.app	appstore only
DRESSX	BUILD YOU	4,5	3,4	0,227	0,532	// Digital outf	i // Hey guys, I	Free	Yes	9,99	https://apps.app	https://play.į
My Wardrobe - Outfit Finder	MANAGE YO	3,9		0,304	-	// Great App	-	Free	Yes	13,99	https://apps.app	appstore only
Indyx: Wardrobe & Outfit App	DIGITIZE Y	4,9	2,4	0,02	0,014	// Amazing w	a // Very cool o	Free	Yes	hal stylist recommendation	https://apps.app	https://play.
GetWardrobe Outfit Planner	UNLIMITED	4,2	. 4	0,572	2,35	// Great, but	x// I haven't b	Free	Yes	34,99	https://apps.app	https://play.į
OpenWardrobe Outfit Planner	YOUR	4,3	4,1	0,107	0,336	// please add	t // I really lov	Free	No		https://apps.app	https://play.j
My Wardrobe - All your clothes	Add your cloth		3,8	-	0,959	-	// I LOVE th	i Free	Yes	9,99	google play only	https://play.j
My Digital Wardrobe Lookscope	SUMMARY C	4,2	-	0,356	-	// Great app!	1-	Free	Yes	49,99	https://apps.app	appstore only