# APPENDIX May 1, 2023 Matthew Louis

# PerfectFitAI

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Website:

https://perfectfitai.com/

## **EXECUTIVE SUMMARY**

#### **OUR MISSION**

Our Mission is to help e-commerce apparel companies reduce their overall return rates, improve conversion, top-line sales, and bottom-line profits, while also helping them build a more sustainable, eco-friendly business.

## **OUR WHY**

Following the pandemic and prior trends which drove a boom in e-commerce sales, customer return rates for online apparel purchases grew accordingly. Typical return rates for online apparel purchases range from the mid to high teens on the low side to fifty percent plus on the high side. Without meaningful solutions, these high rates of return will continue, driving real profit erosion for e-commerce companies. Additionally, high return rates further contribute to the global problem of climate change by driving up the use of fossil fuels for shipping goods back and forth between retailers and their customers. Also, Customers are more likely to simply throw away clothing they don't like, and too often this clothing ends up in landfills.

## **OUR PRODUCT**

Our company is a virtual fitting room that is easily customizable to look and feel like our customer's own website and mirror their brand voice. The Consumer will be able to create a personalized Avatar to use in the virtual fitting room that matches their style and preferences. In addition to the virtual fitting room, we will offer a size and fit guide feature that allows customers to input their preferred products for personalized recommendations while shopping. These tools will enable the Consumer to make better product choices (style/color/size), and improve their success rate with finding products that fit them well, and appeal to their sense of style. In doing so, we will help our customers significantly reduce their rate of returns and reduce the need for Consumers to buy multiple products to get to one that they like and want to keep. These sorts of tools only exist today with the world's largest companies (ex. Walmart) and are also prohibitively expensive. For example, Walmart spent just over \$200M to acquire some of this capability through their purchase of Zeekit. We will provide and host an affordable virtual fitting room and digital size and fit guide solution that any retailer with an established website can use for their customers, without a massive IT spend and a team of developers.

# **HOW IT WORKS**

Businesses utilizing our service will pay a fee per hosted product rather than a pay-per-use fee. This will allow our customers to accurately determine the true cost of using our service. For the product itself, customers will populate a visual template for the virtual fitting room with images and visuals of their choosing that are important to their brand voice and personality. Essentially, this will create a virtual space where the consumer feels as if they are in that company's fitting room. The customer will also have to populate a product template in our system for each product to be included in the fit guide and usable in the fitting room. This will include all specs, specific measurements of products, and multiple images of each product. The consumer will fill out a profile to create their virtual fitting room avatar. This will include pictures, specific measurements, select body and shape profiles, etc. For an additional fee, customers can have our team populate templates for them provided they can provide a source to acquire data and images. To acquire customers, our company will have a sales and customer support team to prospect for and service our B2B customers.

#### KEY INNOVATIVE FEATURES

Our software and website will be affordable and accessible to small and medium-sized businesses, something that does not currently exist today. Our service is also easy for customers to integrate into their own websites and easy for their consumers to utilize. We will offer a range of basic to more immersive experiences customized to reflect each individual brand's values, voice, and style. Lastly, we provide a completely custom avatar and a direct reflection of each consumer's ideal look and style.

## **MARKET SIZE**

The estimated market size is up to 575,000 e-commerce apparel brands. We started by obtaining the total number of e-commerce businesses in the United States (roughly 2.5 million) and multiplied it by the estimated percentage of total fashion/apparel e-commerce companies (23%) to get 575,000. Large Fortune 500 corporations account for less than 1% of e-commerce apparel companies so our estimated target market is roughly the entire 575,000.

The growth potential in this industry is huge as e-commerce fashion/apparel sales have skyrocketed in recent years and are projected to continually increase. In 2020 e-commerce apparel sales spiked a 25% increase from the previous year and another 24.8% year-over-year increase in 2021. In 2022 we saw a much less drastic increase of 1.6% as supply chains were still drastically impacted by post-pandemic challenges. However, 2023 is projected to get back up to a 13.1% increase. Projections moving forward anticipate these percentages to increase quite significantly every year.

#### PROFIT POTENTIAL

Based on the models we have done the business has a strong profit potential in year 3. The key drivers of this potential are the high revenue growth rate we expect to have (model said: 3333%), the significant increase in the total customers to 20,000, and the gross margin of six million.

Assuming that the average estimate per customer type is \$1,300 and the cost of providing the service per customer type of \$1,00 remain the same, the business can generate total revenue of twenty-six million(20,000 customers x\$1,3000). There is potential to reduce the cost of providing the service through the Financial plans listed below. We hope to make the cost of providing the service for a low cost and keeping the businesses ongoing costs low to create a strong potential.

#### PRODUCT DESCRIPTION

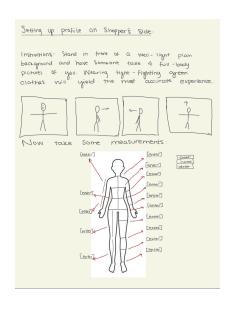
Our software will use deep fake technology to accurately portray the clothing on the shoppers. It will use the shopper's exact measurements and the exact measurements and material stretch information to show a realistic image of how the clothes will look on the person. This way shoppers can not only try on different colors and styles but see exact sizing information as well. For women buying jeans is extremely difficult. Jeans may fit a person's waist but not hips or may not be long enough. This virtual fitting room technology will allow shoppers to see all aspects of fit to determine the perfect size and style to suit their measurements. On the shopper's side, it asks the shopper to have a friend take 4 full-body pictures of them. The website will walk them through this process. Next, the scan will be uploaded and shoppers will be asked to take measurements again with the website guiding them exactly where on their bodies they should take these measurements. On the company side, the website will ask for specific measurements of each size of clothing with specific instructions to make the process simple. By having exact measurements and material stretch information shoppers will be able to see what this specific size 4 will look like on them since any woman knows a size 4 is not universal from brand to brand. Sometimes it isn't even universal within one brand. Another specific feature of our software is that once the information is stored, the same profile can be used with each brand that buys our product. This means that unless a shopper's measurements change, they will only have to set up their profile once. We will require a monthly payment for the companies that buy our software. Each update we put on the software will result in an increase in the monthly price of our software.

With our feature of trying clothes on virtually and accurately showing customers how clothes fit, businesses will benefit from having fewer return rates from orders online which will ensure that customers are happy with their orders and have an easier time shopping online. Many clothing brands are attempting to create their own virtual software. By outsourcing to our company, they will ensure the virtual fitting room aspect of their website is flawless and headed by a company that dedicated all its resources to ensuring the top quality virtual fitting room technology rather than a brand spreading its resources thin and can instead focus all their attention on doing what they do best.

Means of production involve the development of the software and patents.

In order to create the software we plan to recruit a University of Iowa computer science major to join our company. One of our team members has already spoken to a computer science student, Ethan, who estimates this project would take him 3-6 months. I estimate an additional 3 months to ensure we have the level of quality needed. We plan to recruit a software developer to become part of the company. We also have close connections with 2 patent lawyers with 25+ years of experience who we plan to recruit to acquire patents on our software. As our company grows and our software improves we will make a patent lawyer a permanent member of our team and company to ensure we stay ahead of the competition. Because we will have personal information and pictures of shoppers it is imperative that we protect this information to avoid any liability. We can also include a clause in the agreement that shoppers will sign when creating their profiles to acknowledge that they cannot sue if this information is ever breached.





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## INDUSTRY AND MARKET

## **INDUSTRY PROFILE**

The estimated market size for our company is 575,000. To obtain this number we took the number of e-commerce businesses in The United States (approx. 2.5 million) and multiplied it by the number of e-commerce fashion/apparel companies (23%). This number is representative of the approximate total number of small to medium-sized e-commerce fashion/apparel businesses because the number of Fortune 500 corporations in this industry accounts for less than 1% of total businesses. As we said earlier the e-commerce business for fashion/apparel has rapidly expanded following the pandemic and continues to show trends of further expansion. According to a graph on statistica, over the next five years, the percentage of e-commerce fashion/apparel sales will increase by over 10% every year. The continued growth of this industry directly positively impacts our growth potential as a company because our market size will continue to expand. It is also significant to note that as the e-commerce fashion/apparel industry continues to grow so does the need for our services.

Our target customer is typically not capable of developing or hosting this kind of technology on their own website. They are in need of a seamless yet attainable way to provide this service to their customers in order to compete. Because we are selling directly to other businesses and the e-commerce apparel industry continues to expand, our growth potential should expand similarly. Our company is B2B or Business to Business. Our products are highly technical and customized solutions that are modified and implemented uniquely for each user. They will require significant levels of service and technical support to implement. As such, our primary channels for marketing and distribution of our products and services would include the following: B2B e-commerce, trade shows, referrals, and prospecting for direct B2B sales via skilled and a well-trained sales force

## **COMPETITIVE ANALYSIS**

Currently on the market, our closest and direct competitor is Zeekit, a virtual fitting room tech startup owned by Walmart. Through this technology, customers can upload an image of themselves and virtually try on a limited selection of brands and clothing items on Walmart's website. After making this acquisition, Walmart also launched the program "Choose My Model" which provides the customer with a wide range of models varying in height, size, body shape, and skin tone to better identify how a garment will look on them. Another direct competitor of our company is Princess Polly and their virtual try-on experience. They are able to place garments on consumers' images for them to ideally see how the clothes would look on them. A final notable but more indirect competitor of our company is True Fit, a digital fit guide based on a consumer questionnaire including things such as height, weight, and a selection between 3 body types. Their service is time-consuming and tedious for the user and is highly dependent on the quality of fit data from brands that are included in their offering. Our future competition is

difficult to anticipate, but will likely rely on the advancement of AI technology and access to lots of highly personal data. Regardless of the state of current and future competition, our business strives to provide six distinct sustainable competitive advantages: affordability of our services, pay-by-product inclusion, relative ease of connectivity for the business, ease of use for the consumer, a customizable aspirational avatar, support for a more sustainable and profitable approach to business, and a commitment to providing best of class customer service.

## CUSTOMER DISCOVERY FINDINGS

As a part of our customer discovery research, we interviewed three executives, one at Walmart, one at Dicks Sporting Goods, and one at Moosejaw Mountaineering. Through talking with companies in our market we learned a lot of valuable information and advice. To begin, the quality of content for the customer is vital to them making a purchase decision. Following this we learned about the customer purchase journey or customer purchase funnel: awareness, consideration, conversion, and customer satisfaction. Our innovative technology is extremely important to conversion and customer satisfaction because they drive repeat business and lower return rates. Additionally, we were able to learn about how retailers think about the customer experience online, the keys to supporting and optimizing this experience, and how all that then transfers to greater customer satisfaction and therefore lowers return rates.

One of the most important things that we took away from these interviews is the immense level of resources required to integrate the sorts of tools that we intend to provide onto a retailer's website. To put it simply, this kind of technology is out of reach for most small to medium-sized digital retailers. This realization gave us insight into how we are going to have to provide our services. However, we also discovered our value resides in helping these small to medium-sized businesses compete more effectively with large companies.

We also talked to shoppers to determine what they are looking for. Through speaking to shoppers we discovered that they would want the software to provide additional written information regarding fit of the garment after the AI analyzes the measurements of the shopper and the measurements of the clothes. Shoppers also wanted the software to suggest specific styles the AI calculates would fit their specific measurements best. We have added both of these features to our software.

## **CUSTOMER ANALYSIS**

Our target market is small to medium-sized online retailers because our technology allows them to remain in competition with large retailers. Our specific customer segments include men's and women's retailers, fashion and lifestyle apparel, and activewear brands including swimwear. The primary demographic of online shoppers is millennials and Gen Xers. More often women compared to men. Geographically, these consumers are located in dense metropolitan areas. To better understand our customer segments we also have to understand the customer segments of the businesses who buy our services. With this information, we are better equipped to have

relevant and accurate information allowing us to ideally do business with our entire projected market size.

# **FINANCIALS**

# Software Development Financial Plan A

After speaking to a University of Iowa computer science major, Ethan, we have determined that our vision is fully viable. The ideal plan would be to recruit Ethan, or someone like Ethan to join our company and grant him 1/5th ownership. Ethan would design the software in 6-9 months and would head the projects to implement the software into our client's company's websites.

# Software Development Financial Plan B

If we are unable to acquire a partner with the necessary software building skills then we would pay a computer science student to build it. Ethan quoted this project taking 3 months to build, another 3 months to acquire the level of quality we expect of our product, and I factor another 3 months to ensure pristine quality. Ethan quoted 40 hours a week, \$100 an hour. That means 9 months of development and a total cost of \$144,000.

# Patent Lawyer Financial Plan A

A member of our team has a good relationship with two family friends who are patent lawyers with 25+ years of experience who may be willing to help us pro bono or for a small compensation.

# Patent Lawyer Financial Plan B

If Plan A doesn't work, then we will pay for a patent lawyer which would cost \$20,000. By doing this we will have intellectual property rights and a wall from competitors, though expensive we would maintain our competitive advantage.

Expected costs of doing business include an initial investment of \$1,000,000, including the initial development and other startup expenses. We plan on earning this investment back in 2 years. We plan on spending this money towards website development, inventory modeling, client acquisition, and marketing expenses.

Let's assume we need around 10 employees that are dedicated to this project and have control over their work and schedule from an array of knowledge. In year 3 we would need a startup cost

of \$200,000 for office space, a full-time team, and the development of our projects/products. At first, however, Freelancing and self-knowledge are the most cost-effective. Ongoing development costs of \$100,000 per year are also needed for the AI system.

## RECOMMENDATION/ NEXT STEPS/ GO OR NO GO

#### IF NOT FEASIBLE

Our biggest obstacle in creating this business is going to be the extreme costs of developing this intricate software. Realistically, it is going to take millions and millions of dollars which is why this solution doesn't already exist. It is also problematic that our target market, small and medium-sized businesses, are not able to afford this kind of technology development and have the ability to integrate it into their own website because it is too expensive. As a result of this, our solution would be a seamless experience, however, it will have to take the consumer off of the brands website. To try and pivot and pursue a modified opportunity we could work with software-engineering students that are looking for experience to find the cheapest possible labor to create our software. Another possible option is to open-source our software development to exponentially cut down on our start-up costs and make this business feasible. By doing this anyone is able to contribute to our ideas and the development of our software at no cost to us.

## IF FEASIBLE

In the next 30 days, we start our market research to identify customers and competitors in this market. We would also need to get our software fully developed and tested so we can ensure no technical difficulties. Additionally, we would develop marketing strategies to reach out to businesses. In the next 60 days, we create a customer support team and hire employees that will help the performance of our business. Finally, in the next 90 days, we want to start launching our software and start really reaching out to as many clothing businesses as possible. It will also help us to create partnerships with businesses and industry influencers so that we can get our business out there and spread our name to other businesses.

## **BIBLIOGRAPHY**

- Apparel Resources, and Apparel Resources. "5 Apparel Companies Feature in Fortune 500: Events News USA." *Apparel Resources*, 28 July 2017, https://apparelresources.com/events-news/5-apparel-companies-feature-in-fortune-5 00/.
- "Ecommerce Statistics for 2023 Chatbots, Voice, Omni-Channel Marketing." *Kinsta*®, 9 Feb. 2023, https://kinsta.com/blog/ecommerce-statistics/#:~:text=Millennials%20and%20Gen%20Xers%20are,spend%20more%20time%20shopping%20online.
- Etailinsights. "How Many Online Retailers Are in the US?" *How Many Online Retailers Are in the US?*, https://www.etailinsights.com/online-retailer-market-size#:~:text=It's%20essential%20to%20know%20the,are%20in%20the%20United%20States.
- Murray, Christopher. "Small Business Statistics in 2022." *Bankrate*, https://www.bankrate.com/finance/credit-cards/small-business-statistics/#general.
- Published by Statista Research Department, and Mar 21. "U.S. e-Retail Fashion Market Growth 2018-2027." *Statista*, 21 Mar. 2023, https://www.statista.com/statistics/368328/apparel-and-accessories-eretail-share-us/
- "Study Shows 74% of US Small Business Don't Have E-Commerce Web Marketing Pros." *Web Marketing Pros* -, 15 June 2016, https://www.webmarketingpros.com/study-shows-74-of-us-small-business-dont-hav e-e-commerce/#:~:text=According%20to%20SurePayroll's%20latest%20Small,t%2 0have%20an%20ecommerce%20site.
- This text provides general information. Statista assumes no liability for the information given being complete or correct. Due to varying update cycles, statistics can display more up-to-date data than referenced in the text. "Topic: Fashion E-Commerce in the United States." *Statista*,

https://www.statista.com/topics/3481/fashion-e-commerce-in-the-united-states/#:~:t ext=Recent%20geolocated%20mobile%20user%20data,the%20Chinese%20retail%20brand%20Shein.

This text provides general information. Statista assumes no liability for the information given being complete or correct. Due to varying update cycles, statistics can display more up-to-date data than referenced in the text. "Topic: Fashion E-Commerce in the United States." *Statista*,

https://www.statista.com/topics/3481/fashion-e-commerce-in-the-united-states/#topicOverview.

Yang, James. "What Is the Average Patent Cost?" *Top-Rated Orange County Patent Lawyer* | *Helping Inventors in Orange County, Los Angeles County & Beyond* | *OC Patent Lawyer, Irvine CA*, 24 July 2022,

https://ocpatentlawyer.com/how-much-does-the-average-patent-cost/.