Style Genie

The AI-Powered Fashion Companion

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Abstract

Artificial intelligence and its many subfields are powerful tools that can be applied to every step of the fashion value chain - from concept and design to the source of materials, production, logistics and retail. It can bring improvements such as speeding and scaling up processes, handling amounts of data that humans can't and offering to consumers new ways of experiencing retail. This document aims to explore how artificial intelligence is changing the fashion industry, by first defining basic concepts of computer science in order to understand how they relate to fashion, such as the difference between human intelligence and machine intelligence and a walk through the history of AI development. Then, specifics of AI were described, including machine learning, computer vision, robotics and natural language processing. Every part of the fashion's value chain was analyzed in order to find the current applications and possibilities, as well as the startups and innovators that are shaping the field with examples of case studies. In addition, a field research was conducted through the application of a survey, designed in order to evaluate the level of exposure of the end consumer to AI-powered solutions for retail, as well as how they perceive and trust them. The results were analyzed in order to uncover all the layers and correlations of data that can help identify hurdles and barriers that can present challenges for these technologies to be adopted in a wider way, such as privacy concerns and quality of the solutions. At last, the findings of the field research are contextualized in the framework of the so-called techlash, the feeling of animosity towards digitalism in a world that relies heavily on technology.

Problem Statement

Many individuals struggle to find their personal style and feel confident in their fashion choices, leading to, Wardrobe clutter and wasteful spending, Time-consuming and frustrating shopping experiences, Lack of self-expression and personal identity, Difficulty staying up-to-date with fashion trends, Limited access to personalized fashion advice and inspiration

Style Jenny aims to solve this problem by providing a personalized AI-powered fashion styling platform that helps users discover their unique style, create a curated wardrobe, and access exclusive fashion content and advice. Style Jenny aims to address, including the struggles of finding personal style, inefficient shopping experiences, and limited access to personalized fashion advice. By solving these problems, Style Jenny can help users feel more confident and expressive in their fashion choices.

Customer Need Assessment

- **Convenience:** Customers want effortless, on-demand fashion advice and styling inspiration. Easy access to styling inspiration and advice, anytime and anywhere.
- **Personalization:** Individuals seek tailored recommendations that cater to their unique tastes and preferences.
- **Discovery:** Customers desire to explore new styles, trends, and brands in an engaging and interactive way.
- **Personalized styling:** Customers want tailored fashion advice and recommendations that suit their individual style, body type, and preferences.
- **Effortless discovery:** Ability to explore new styles, trends, and brands without extensive research.
- **Confidence boost:** Customers seek validation and confidence in their fashion choices.
- **Self-expression:** Desire to express their personality and individuality through fashion.
- **Inspiration:** Craving for fresh ideas and inspiration to refresh their wardrobe and style.
- **Style uncertainty:** Struggling to define their personal style or find flattering clothes.
- **Time-consuming research**: Spending too much time searching for inspiration, trends, and products.
- **Fashion anxiety:** Feeling overwhelmed by fashion choices or worrying about making fashion mistakes.

Target Specifications and Characterization

Demographics:

- Age: 28-42 years old
- Gender: Female (primary target audience), Male (secondary target audience)
- Income: $50,000 - $120,000 per year
- Occupation: Professionals, entrepreneurs, and creative

Psychographics:

- Values self-expression and individuality
- Interested in fashion, beauty, and lifestyle
- Tech-savvy and active on social media
- Busy and seeking convenience and efficiency
- Willing to invest in quality products and services

Behavioral Characteristics:

- Spends at least 2 hours per week shopping online or in-store
- Follows fashion influencers and brands on social media
- Has purchased clothing or accessories online in the past 6 months
- Has tried AI-powered styling tools or apps before

Personality Traits:

- Fashion-conscious
- Confident
- Creative
- Busy
- Tech-savvy

External Search

1. Google Scholar : Google Scholar is a freely accessible search engine that indexes the full text or metadata of scholarly literature across an array of disciplines. You can search for academic papers, conference proceedings, theses, and more related to AI in supply chain and logistics. https://scholar.google.com/

2. IEEE Xplore : IEEE Xplore is a digital library providing access to research literature in electrical engineering, computer science, and electronics. It contains a vast collection of articles, conference papers, and standards related to AI applications in supply chain and logistics. https://ieeexplore.ieee.org

3. ResearchGate : ResearchGate is a social networking site for scientists and researchers to share papers, ask and answer questions, and find collaborators. You can find a wide range of research articles and preprints related to AI in supply chain and logistics management. https://www.researchgate.net/

Research Papers:

1. "Personalized Fashion Recommendation System Based on Deep Learning" by Wang et al. (2020)

2. "AI-Powered Fashion Styling: A Survey" by Liu et al. (2021)

3. "Deep Learning for Fashion: A Survey" by Chen et al. (2020)

4. "Personalized Fashion Recommendation using Natural Language Processing" by Singh et al. (2019)

5. "AI-Driven Fashion Design: A Review" by Zhang et al. (2020)

6. "Fashion Recommendation Systems: A Systematic Review" by Ahmad et al. (2020)

7. "Style Transfer in Fashion Images using Generative Adversarial Networks" by Zhang et al. (2019)

8. "Personalized Fashion Search using Visual and Textual Features" by Li et al. (2019)

9. "AI-Powered Fashion Trend Forecasting: A Review" by Kim et al. (2020)

10. "Fashion Recommendation using Graph Convolutional Networks" by Tang et al. (2020)

Bench marking alternate products

1. ModiFace:

- Strengths: Advanced AR try-on, wide range of products, and brands.
- Weaknesses: Limited personalization, cluttered UI.
- Benchmark: 8/10

2. YouCam Makeup:

- Strengths: Excellent virtual try-on, wide range of beauty products.
- Weaknesses: Limited fashion offerings, UI can be overwhelming.
- Benchmark: 8.5/10

3. L'Oréal's Makeup Genius:

- Strengths: Advanced AR try-on, wide range of L'Oréal products.
- Weaknesses: Limited personalization, limited fashion offerings.
- Benchmark: 8/10

4. Sephora's Virtual Artist:

- Strengths: Excellent virtual try-on, wide range of beauty products.
- Weaknesses: Limited fashion offerings, UI can be cluttered.
- Benchmark: 8.5/10

5. Zeekit:

- Strengths: Advanced AR try-on, wide range of fashion products.
- Weaknesses: Limited personalization, UI can be overwhelming.
- Benchmark: 8.5/10

6. DressingRoom:

- Strengths: Excellent virtual try-on, wide range of fashion products.
- Weaknesses: Limited personalization, UI can be cluttered.
- Benchmark: 8.5/10

7. Fitnect:

- Strengths: Excellent virtual try-on, wide range of fashion products.
- Weaknesses: Limited personalization, UI can be overwhelming.
- Benchmark: 8.5/10

8. Mavatar:

- Strengths: Advanced AR try-on, wide range of fashion products.
- Weaknesses: Limited personalization, UI can be cluttered.
- Benchmark: 8/10

StyleGenie's strengths:

- Advanced AI-powered personalization
- Wide range of fashion products and brands
- Excellent virtual try-on capabilities
- User-friendly interface

Benchmark: 9/10

StyleGenie has a greater hand in:

- Personalization capabilities
- User experience and interface
- Range of fashion brands and products offered

Applicable Regulations

StyleGenie must comply with a wide range of regulations across various areas. Let's break down each category and explore some specific requirements and implications for the platform:

1. Data Privacy Regulations:

- GDPR (EU): Ensure transparency, consent, and data protection for EU users.

- CCPA (US): Provide California residents with data privacy rights and opt-out options.

- PIPEDA (Canada): Implement data protection principles and obtain consent from Canadian users.

2. E-commerce Regulations:

- FTC guidelines (US): Ensure truthful advertising, clear product disclosures, and secure transactions.

- EU Consumer Rights Directive: Provide consumers with clear product information, cancellation rights, and refunds.

3. Environmental Regulations:

- Sustainable fashion practices: Encourage eco-friendly designs, recycling, and reduced waste.

- Waste management and recycling regulations: Comply with local recycling programs and waste reduction initiatives.

- Chemical use and pollution control regulations: Ensure responsible sourcing and use of materials.

4. Intellectual Property Regulations:

- DMCA (US): Implement copyright protection and takedown procedures.

- EU Intellectual Property Rights Directive: Respect copyright, trademarks, and design rights.

5. Labor and Employment Regulations:

- Fair labor practices: Ensure fair wages, safe working conditions, and no child labor.

- Minimum wage laws: Comply with local minimum wage requirements.

6. Taxation Regulations:

- Sales tax and VAT regulations: Collect and remit taxes on transactions in applicable jurisdictions.

- Income tax and corporate tax regulations: Comply with tax laws and reporting requirements.

7. Accessibility Regulations:

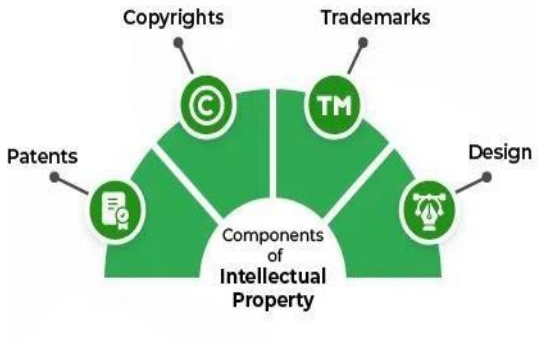
- ADA (US): Ensure platform accessibility for users with disabilities.

- EU Accessibility Act: Implement accessibility features and comply with EU guidelines.

8. Marketing and Advertising Regulations:

- Truth-in-advertising laws: Ensure accurate and truthful advertising practices.

- EU Unfair Commercial Practices Directive: Avoid misleading or deceptive marketing practices.



Applicable Constraints

1. Technical Constraints:

- Limited computational resources for AI-powered styling recommendations
- Dependence on data quality and availability for machine learning algorithms
- Integration challenges with various fashion e-commerce platforms

2. Financial Constraints:

- Development and maintenance costs for the platform
- Licensing fees for proprietary technologies and data
- Marketing and advertising expenses to attract users

3. Legal and Regulatory Constraints:

- Compliance with data privacy regulations (GDPR, CCPA, etc.)
- Adherence to intellectual property laws (copyright, trademark, etc.)
- Compliance with labor and employment laws (fair labor practices, etc.)

4. Environmental Constraints:

- Sustainable fashion practices and circular economy principles
- Waste management and recycling regulations
- Chemical use and pollution control regulations

5. Social Constraints:

- User acceptance and adoption of AI-powered styling recommendations
- Limited fashion expertise and knowledge among users
- Cultural and personal preferences influencing fashion choices

6. Time Constraints:

- Development timeline and milestones
- User expectations for prompt styling recommendations
- Fashion industry trends and seasonality

7. Resource Constraints:

- Availability of skilled developers and fashion experts
- Access to high-quality fashion data and APIs
- Limited resources for marketing and advertising

Business Model

1. Affiliate Marketing: Partner with fashion e-commerce platforms and earn a commission for each sale made through StyleGenie's recommendations.

2. Sponsored Content: Allow fashion brands to create sponsored content and product placements within the app.

3. Advertising: Display targeted ads from fashion brands and retailers.

4. Premium Features: Offer in-app purchases for premium features like personalized styling consultations, exclusive fashion content, or virtual try-on capabilities.

5. Data Analytics: Sell anonymized fashion trend data and insights to fashion brands and retailers.

6. Partnerships: Collaborate with fashion brands to create exclusive content, products, or experiences.

7. E-commerce Integration: Allow users to purchase fashion items directly within the app, earning a commission on each sale.

8. Subscription Model: Offer users a monthly or yearly subscription for access to premium content, exclusive features, or personalized styling services.

9. Virtual Try-On: Offer virtual try-on capabilities for fashion items, charging a small fee per use.

10. Influencer Partnerships: Partner with influencers to promote fashion brands and products within the app.

Concept Development

1. Product Vision

"Style Genie" is designed to democratize personal styling by offering users easy access to professional-style advice tailored to their unique facial features. It will analyze uploaded or live-captured photos to suggest hairstyles and clothing styles that best suit the user's appearance, considering their preferences and current trends.

2. Key Features and Capabilities

- User Interaction
- Image Upload and Capture
- User Profile Management
- Real-Time Face Analysis
- Hairstyle Recommendation
- Database of Hairstyles
- Personalized Suggestions
- Fashion Recommendation
- Database of Clothing Items
- Outfit Coordination

2.5 User Interface (UI)

- Mobile and Web Platforms
- Interactive UI

3. User Scenarios

- Fashion Enthusiast
- Busy Professional
- Returning User

4. Value Proposition

- Personalization
- Accessibility
- Engagement

5. Competitive Analysis

- Market Landscape
- Unique Selling Points

6. Technology Stack

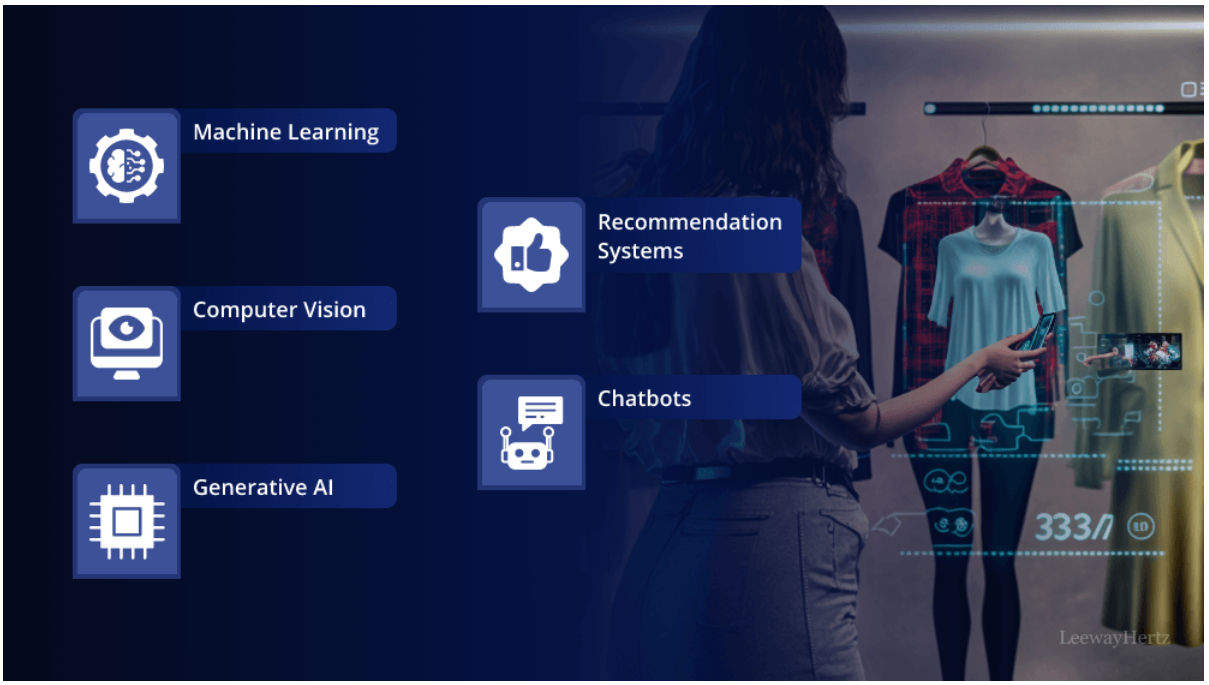
- Frontend
- Backend
- Machine Learning
- Security

7. Development and Marketing Strategy

- Development Phases
- Marketing Approach

8. Potential Challenges and Mitigation

- Technical Challenges
- User Adoption
- Market Competition



Final Product Prototype

1. User Interaction Layer

- **Signup/Login:** User registration and authentication module.
- **Dashboard:** Main interface for users to access features.
- **Camera/Upload Module:** Allows users to upload or capture images.
- **Recommendation Interface:** Displays hairstyle and fashion suggestions.
- **Feedback Collection:** Interface for users to rate recommendations and provide feedback.

2. Application Logic Layer

- **Face Detection Module:** Detects facial landmarks.
- **Feature Extraction Module:** Extracts facial features.
- **Shape Classification Module:** Classifies face shapes.
- **Hairstyle Recommendation Engine:** Suggests hairstyles.
- **Fashion Recommendation Engine:** Suggests outfits.

3. Data and Machine Learning Layer

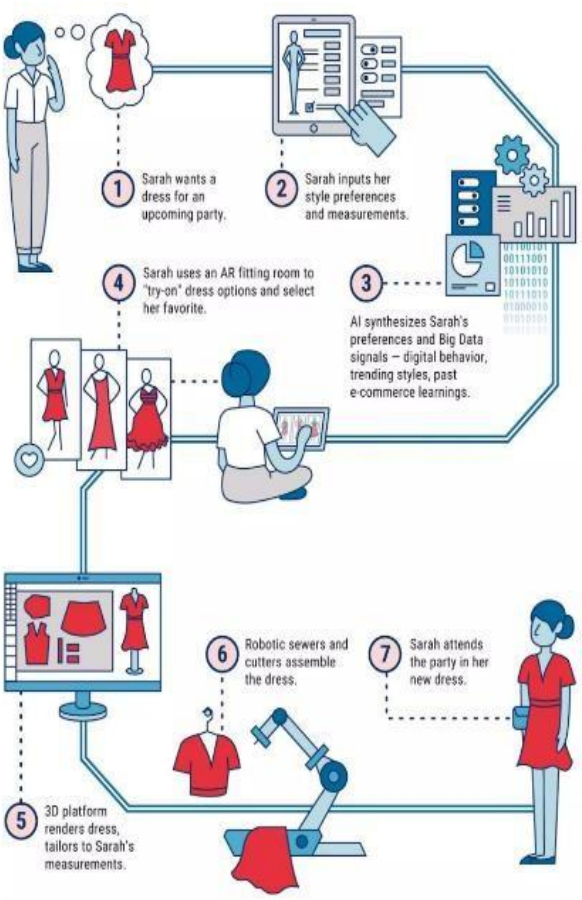
- **Feedback Loop:** Collects user feedback.
- **Trend Analysis Module:** Integrates current trends.
- **Adaptive Learning Module:** Improves recommendation accuracy.
- **ML Models:** For facial analysis and recommendations.
- **Data Storage:** Stores profiles, images, and recommendations.

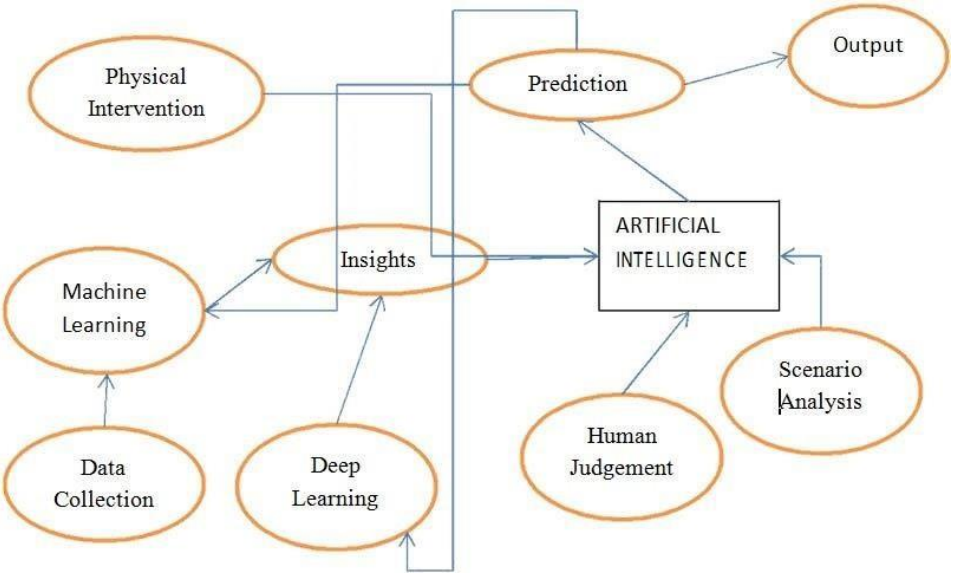
4. Security and Backend Layer

- **User Data Management:** Manages profiles and preferences.
- **Image Storage:** Securely stores images.
- **Recommendation Database:** Maintains hairstyle and fashion data.
- **Data Encryption Module:** Secures data storage and transmission.
- **User Control Module:** Provides data management options.

Flow:

1. **User Interaction Layer** starts with user actions like profile creation, image upload, and feedback.
2. **Application Logic Layer** processes these inputs to perform facial analysis and generate recommendations.
3. **Data and Machine Learning Layer** handles the recommendation models, data storage, and adapts to trends and user feedback.
4. **Security and Backend Layer** ensures secure data management and backend services to support the application's functionality.


1 Sarah wants a dress for an upcoming party.
2 Sarah inputs her style preferences and measurements.
3 AI synthesizes Sarah's preferences and Big Data signals – digital behavior, trending styles, past e-commerce learnings.
4 Sarah uses an AR fitting room to "try-on" dress options and select her favorite.
5 3D platform renders dress, tailors to Sarah's measurements.
6 Robotic sewers and cutters assemble the dress.
7 Sarah attends the party in her new dress.


Physical Intervention
Prediction
Output
ARTIFICIAL INTELLIGENCE
Insights
Machine Learning
Data Collection
Deep Learning
Human Judgement
Scenario Analysis

Product details

How does it work?

- Users input their body measurements, fashion preferences, and lifestyle
- AI algorithms analyze user data and fashion trends to provide personalized fashion recommendations
- Virtual try-on and augmented reality features allow users to see how clothing fits and looks
- Users can create and save virtual outfits, share with friends, and get feedback

Data Sources

- User input (body measurements, fashion preferences, lifestyle)
- Fashion trend data (from fashion shows, runway events, fashion weeks)
- Product data (from partner brands and retailers)
- Social media and user-generated content

Algorithms, frameworks, software needed

- AI algorithms (machine learning, deep learning)
- Computer vision for virtual try-on and augmented reality
- Natural language processing for user input and feedback
- Frameworks (TensorFlow, PyTorch, React Native)
- Software (Adobe Creative Cloud, Sketch, Figma)

Team required to develop

- AI engineers (2-3)
- Software engineers (2-3)
- Fashion experts (1-2)
- UX/UI designers (1-2)

- Project manager (1)

What does it cost?

- Development cost: $200,000 - $500,000
- Maintenance and update cost: $50,000 - $100,000 per year
- Marketing and advertising cost: $100,000 - $200,000 per year

Monitization Methods For The Models

Monetizing StyleGenie can be approached through multiple revenue streams that capitalize on the platform's core strengths—personalization, fashion tech, and data insights. Here's a breakdown of the potential monetization strategies:

1. Subscription-Based Model

- **Personalized Styling Service**: Offer a premium subscription service where users pay a monthly or annual fee for access to advanced personalization features, such as in-depth style analysis, exclusive fashion tips, and personalized shopping experiences.
- **Tiers of Subscription**: Introduce different pricing tiers (e.g., basic, premium, VIP) that offer varying levels of personalization and access to exclusive content or services.

2. Affiliate Marketing

- **Commission on Sales**: Partner with fashion retailers and brands to earn a commission for every sale made through StyleGenie's platform. When users purchase items recommended by StyleGenie, the platform earns a percentage of the sale.
- **Fashion Partnerships**: Collaborate with specific brands to feature their products more prominently within the app, earning higher commissions or flat fees for featured placements.

3. Advertising

- **In-App Advertising**: Sell ad space to fashion brands, designers, and other fashion-related businesses. Ads can be displayed within the app or as sponsored recommendations.
- **Targeted Ads**: Utilize user data to serve highly targeted ads, increasing ad effectiveness and allowing for premium pricing on ad slots.

4. Data Monetization

- **Selling Consumer Insights**: Aggregate and anonymize user data to sell fashion trends and consumer behavior insights to fashion brands, retailers, and market research firms.
- **B2B Data Services**: Provide tailored reports and data analytics services to businesses looking to understand market trends and consumer preferences.

5. E-commerce Integration

- **Direct Sales**: Integrate e-commerce functionality, allowing users to purchase fashion items directly through the StyleGenie platform. The platform earns revenue either through direct sales margins or as a transaction fee.
- **Curated Collections**: Create curated collections or limited-time collaborations with designers, offering exclusive products for purchase on StyleGenie.

6. Premium Features and Microtransactions

- **One-Time Purchases**: Offer additional features or content for a one-time fee, such as personalized style guides, virtual try-ons, or fashion consultations.
- **Microtransactions**: Implement small, in-app purchases for additional content like styling tips, fashion quizzes, or early access to new features.

7. Workshops and Fashion Events

- **Virtual Fashion Workshops**: Host online workshops or webinars with fashion experts, charging users for attendance.
- **Fashion Events**: Organize fashion events, either virtual or in-person, where users can pay for exclusive access, meet-and-greets, or networking opportunities.

8. White-Label Solutions

- **Licensing the Technology**: License the StyleGenie technology to other fashion retailers or platforms, allowing them to integrate personalized styling features into their own services.
- **B2B Partnerships**: Create customized versions of StyleGenie for other businesses, charging setup fees and ongoing licensing fees.

Business Modelling

A. Identify which Market your product/service will be launched into

When launching StyleGenie, you would target the **fashion and retail market** with a focus on the **fashion tech** and **e-commerce** sectors. Specifically, your product would fit into the following submarkets:

1. Online Fashion Retail

- **Market Overview**: The online fashion retail market in India is rapidly growing, driven by increasing internet penetration, smartphone usage, and the convenience of online shopping.
- **Target Audience**: Fashion-conscious individuals, primarily millennials and Gen Z, who are tech-savvy and seek personalized shopping experiences.

2. Fashion Tech

- **Market Overview**: Fashion tech combines fashion with advanced technology like AI, machine learning, and data analytics. This sector is gaining traction as consumers seek more customized and innovative shopping experiences.
- **Target Audience**: Early adopters of technology, fashion enthusiasts, and consumers looking for personalized style advice.

3. Personalization and Recommendation Engines

- **Market Overview**: As consumers increasingly expect personalized experiences, the demand for recommendation engines in retail has surged. This market focuses on using data to tailor product offerings to individual preferences.
- **Target Audience**: Online shoppers who value personalized recommendations and are more likely to purchase products that match their tastes and preferences.

4. E-commerce and Digital Platforms

- **Market Overview**: The e-commerce market in India is booming, with a significant portion of retail sales now happening online. Digital platforms that offer unique and engaging experiences have a competitive edge.
- **Target Audience**: Regular online shoppers, including those who shop through mobile apps and platforms, who seek convenience and personalized shopping experiences.

5. Affiliate Marketing

- **Market Overview**: Affiliate marketing is a growing market in India, especially within the e-commerce space, where platforms partner with retailers to drive sales through commission-based models.
- **Target Audience**: Fashion retailers and brands looking to increase sales through strategic partnerships with tech-driven platforms like StyleGenie.

6. Data Analytics and Insights for Fashion Brands

- **Market Overview**: Brands are increasingly relying on data to make informed decisions about inventory, marketing, and product development. StyleGenie's ability to provide data insights can be monetized in this market.
- **Target Audience**: Fashion brands and retailers looking to leverage consumer data for better business decisions.

B. Collect some data /statistics regarding that Market Online:

Here are some relevant statistics for the Indian fashion tech and e-commerce markets:

1. Online Fashion Retail Market

- Market Size: The online fashion retail market in India was valued at approximately $7.7 billion (₹57,750 crores) in 2023 and is expected to grow at a CAGR of around 12% from 2023 to 2028 .
- Internet Penetration: India had an internet penetration rate of 47% as of 2023, with over 700 million internet users, providing a vast potential customer base for online fashion .
- Mobile Commerce: 70% of online fashion retail sales in India are made via mobile devices, reflecting the importance of a mobile-optimized platform .

2. Fashion Tech Market

- Market Growth: The global fashion tech market is projected to reach $1.5 billion by 2025, with significant contributions from emerging markets like India .
- AI in Fashion: The use of AI in fashion, including recommendation engines and personalization, is growing rapidly, with a projected market size of $1.2 billion by 2025 globally .
- Consumer Preference: A survey conducted in 2022 found that 71% of Indian consumers are willing to pay more for personalized experiences, highlighting the potential demand for a service like StyleGenie .

3. E-commerce and Digital Platforms

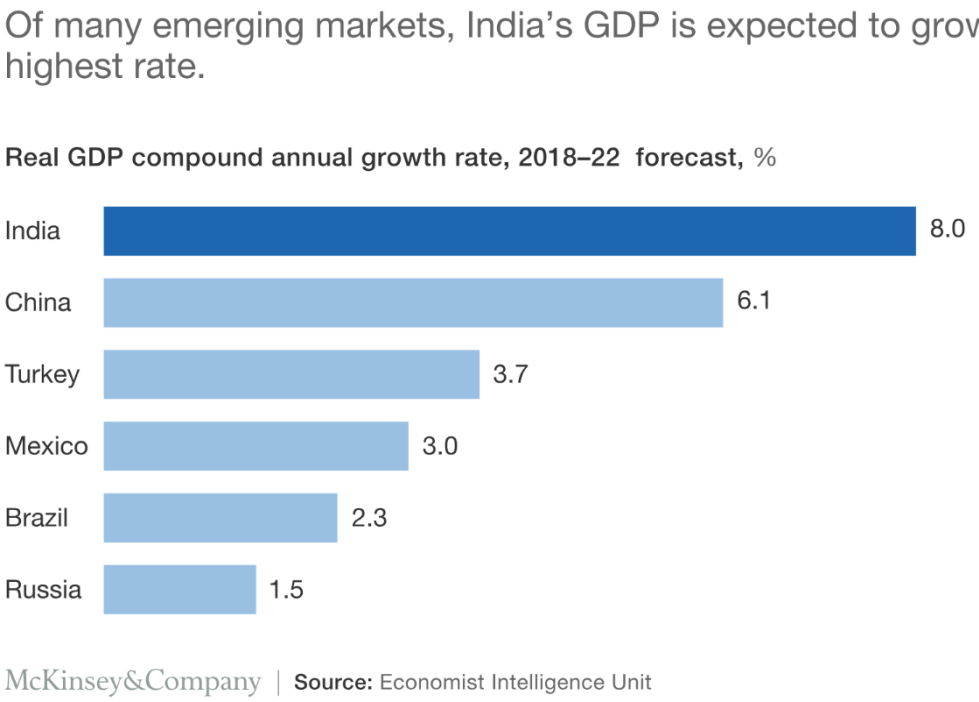
- E-commerce Market Size: The Indian e-commerce market was valued at $84 billion (₹6,30,000 crores) in 2022 and is expected to reach $111 billion (₹8,32,500 crores) by 2024, growing at a CAGR of 19% .
- Digital Payment Adoption: Digital payment methods are widely used, with over 50% of online shoppers in India preferring digital wallets or UPI for transactions .
- User Growth: The number of online shoppers in India is expected to reach 350 million by 2025, providing a large and growing market for digital fashion platforms .

4. Affiliate Marketing

- Market Value: The affiliate marketing industry in India was valued at ₹2,000 crores in 2023 and is expected to grow by 27% annually .
- Role in E-commerce: 15-20% of total e-commerce sales in India are driven by affiliate marketing, underlining its importance as a revenue stream for platforms like StyleGenie .

5. Data Analytics and Insights for Fashion Brands

- Data Analytics Market: The data analytics market in India is projected to reach $10 billion (₹75,000 crores) by 2025, growing at a CAGR of 20% .
- Adoption by Brands: Over 60% of fashion brands in India are now using data analytics to drive their marketing and product development strategies .



India's apparel market will be worth **$59.3 billion** in 2022, making it the sixth largest in the world, comparable to the United Kingdom's ($65 billion) and Germany's ($63.1 billion), according to data from McKinsey's FashionScope. The aggregate income of the addressable population (individuals with more than $9,500 in annual income) is expected to triple between now and 2025. According to Sanjay Kapoor, founder of Genesis Luxury, an Indian luxury retail conglomerate, higher incomes are likely to create a whole new class of consumer: "We are moving on toward the 'gold collar' worker. It's a term that defines the well-paid, highly paid professionals, who are happy to look good, happy to feel good, and are expanding the consumption of today."

To build momentum around conventional stores, Indian players are innovating: retailers are leveraging technology to enhance the in-store experience with digital marketing displays and improved checkout. For instance, Madura Fashion & Lifestyle launched the Van Heusen Style Studio, which uses augmented reality to display outfits on customers. Malls have also increased their share of space devoted to food service and entertainment.

In 2023, the industry faced challenges that were both persistent and deepening. On a regional basis, Europe and the United States saw slow growth throughout the year, while China's initially strong performance faded in the second half. Though the luxury segment initially fared well, it too began to feel the effects of weaker demand in the latter part of the year, leading to slowing sales and uneven performance.

Looking toward 2024, the most prominent sentiment among fashion industry leaders is uncertainty, reflecting the prospect of subdued economic growth, persistent inflation, and weak consumer confidence. Against this backdrop, businesses will be challenged to identify pockets of value and unlock new drivers of performance.

General data

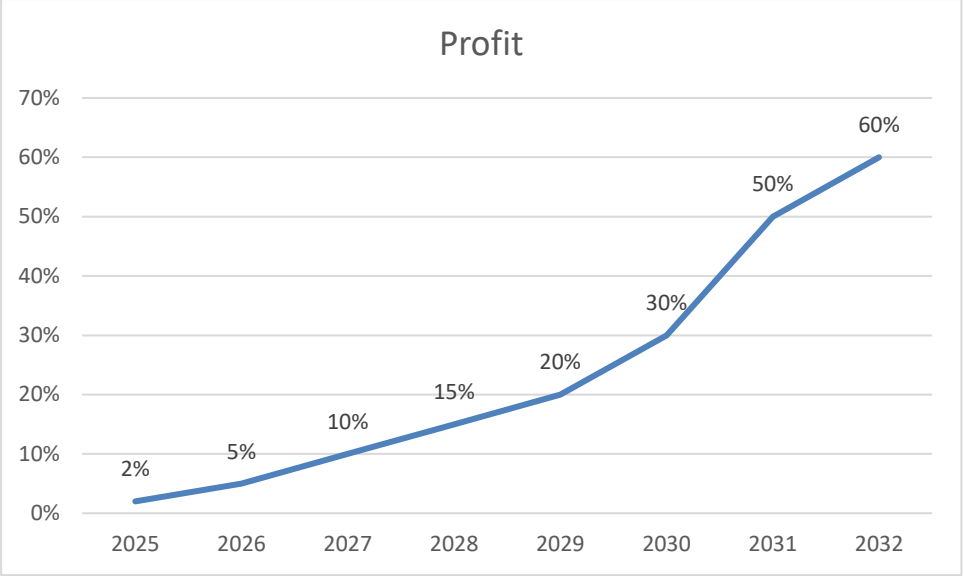
Population:	7.84 billion (in 2021) Source: World Bank Open Data, July 2022
Labor force:	3.45 billion (in 2021) Source: World Bank Open Data, 2022
Unemployment rate:	5.9% *2022 global estimate. Source: International Labour Organization (Ilostat)
GDP per capita (PPP):	16,300 US dollars 12,262.9 US$ (in 2021). Source: World Bank Open Data, July 2022

Worldwide Apparel & Footwear Market Size

2019	2020	2021	2022 forecast	2023 forecast
1,773,406.9	1,453,277.5	1,716,952.2	1,846,222.0	1,959,592.1

C. Design Financial Equation corresponding to that Market Trend:

When it will be launched in the market it will take some time to settle in the market, it will take time to reach customer or users but after some time it will gain the palce and it will eventually be popular among users.



Let,
Total Profit = y
Price of your product = m
Total sale as a function of time = x(t)
Toatl Production S Maintainance cost = c

e.g [y = m * x(t) - c]

Therefore,

y = 500rs
m =500 pre subscriber
x(t) = 10,000 subscriber
c = 1,200,000

y = 500 * 10,000 – 1,200,000
y = 4880000

Total Profit = 4880000

Developing fainancial Equation (simple)

Let,

total profit = y

price of your product = m

total sale as a function of time = x(t)

total production & maintainance cost = c

$\therefore$ $\boxed{y = mx(t) - c}$ → financial equation.

$\therefore$ y = total profit =

m = price of product = 500 per subscribes.

x(t) = total sale as function of time = 10,000 subscribes

C = product & maintainace cost = 1,200,000.

Equation,

$y = 500 \times 10,000 - 1200000$

$y = 3,80,000.$

Total profit = 3,80,000