

### FIELD OF THE INVENTION

The present invention relates to the field of artificial intelligence, computer vision, and fashion technology, particularly to a silhouette-based digital twin system for personalized Indian ethnic wear styling and design visualization.

### BACKGROUND OF THE INVENTION

- ❖ Difficulty in visualizing ethnic outfit designs on individual body shapes before stitching.
- ❖ Dependence on verbal descriptions, reference images, or mannequins in traditional tailoring.
- ❖ Frequent mismatches in design expectations and repeated alterations.
- ❖ Existing platforms lack body-specific visualization and tailor-ready design support.

### OBJECTIVE

To develop an AI-based digital styling platform that helps Indian women visualize and finalize ethnic outfit designs before stitching.

### BRIEF DESCRIPTION OF THE PRODUCT

**DIGITAL STYLING SYSTEM:** A mobile-based AI assistant that creates a silhouette-based digital twin for personalized Indian blouse and outfit design.

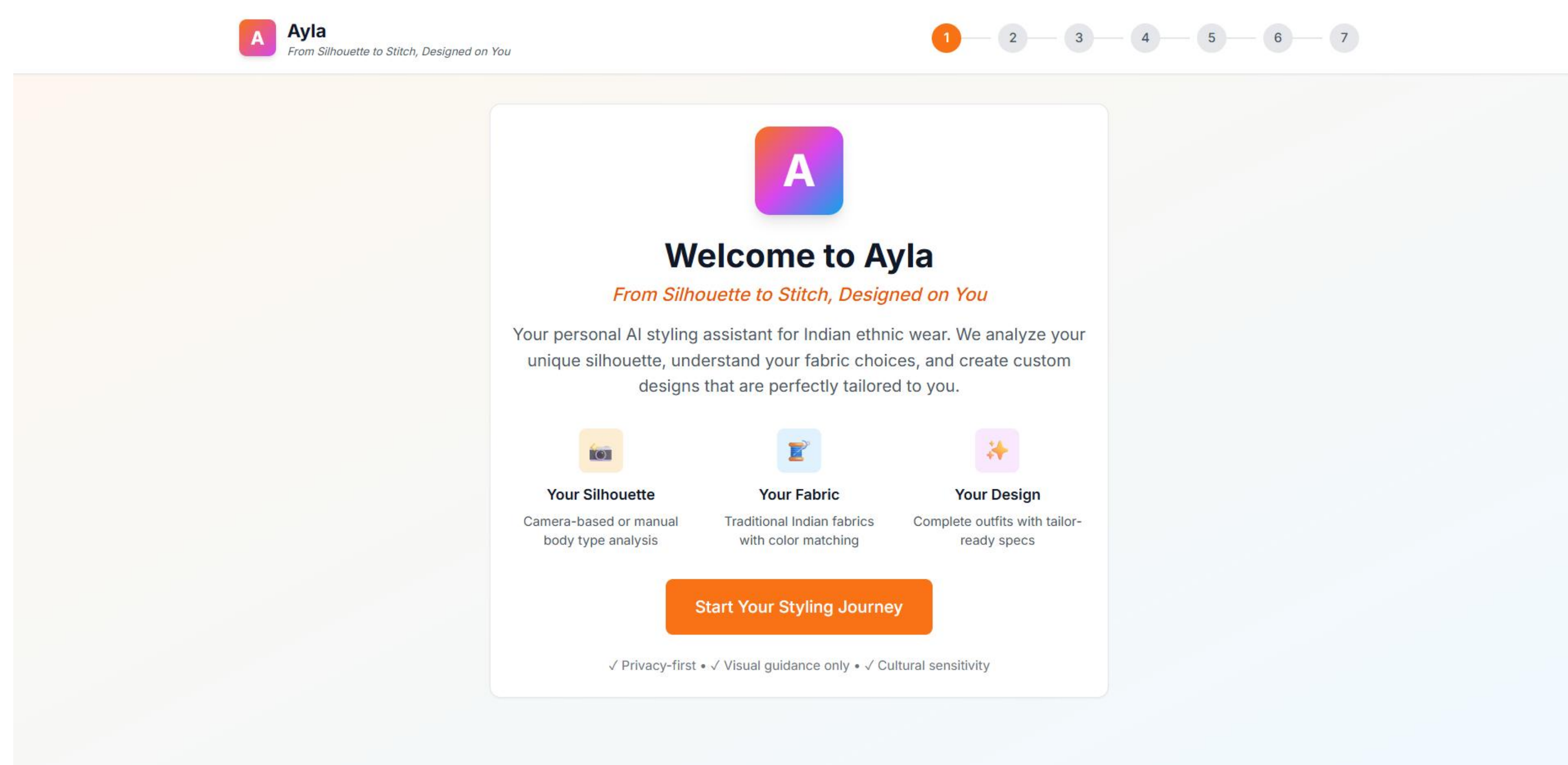
**MODE OF ACTION:** Generates body silhouette from image or manual input, applies rule-based styling with fabric awareness, and enables design customization and export.

#### APPLICATIONS:

1. Custom ethnic wear users
2. Working women
3. Bridal and festive styling
4. Tailors and boutiques

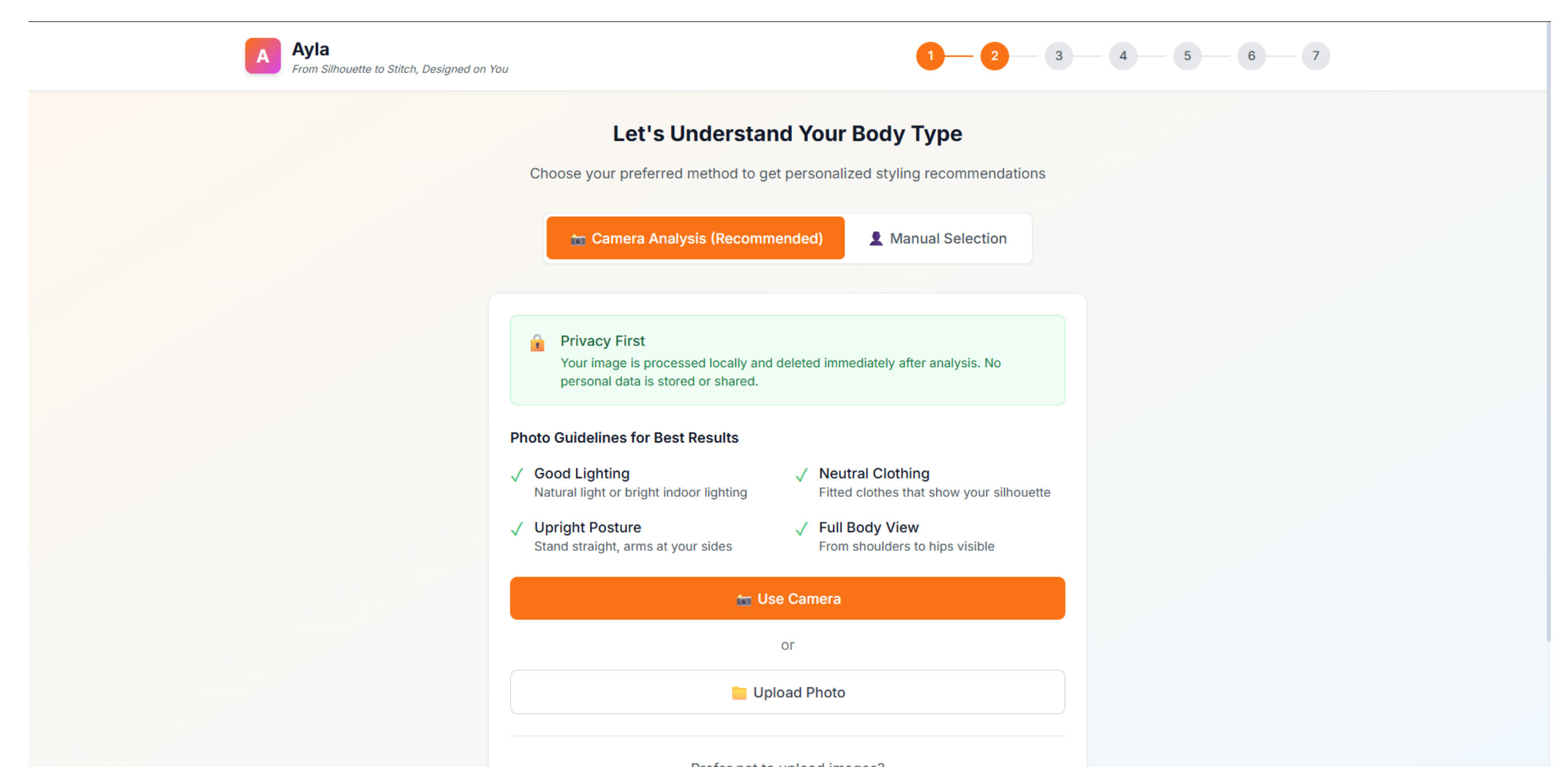
**UNIQUENESS :** No measurements required, Smartphone-only solution, Tailor-ready design output, Indian-centric styling intelligence

### PRODUCT DEVELOPED



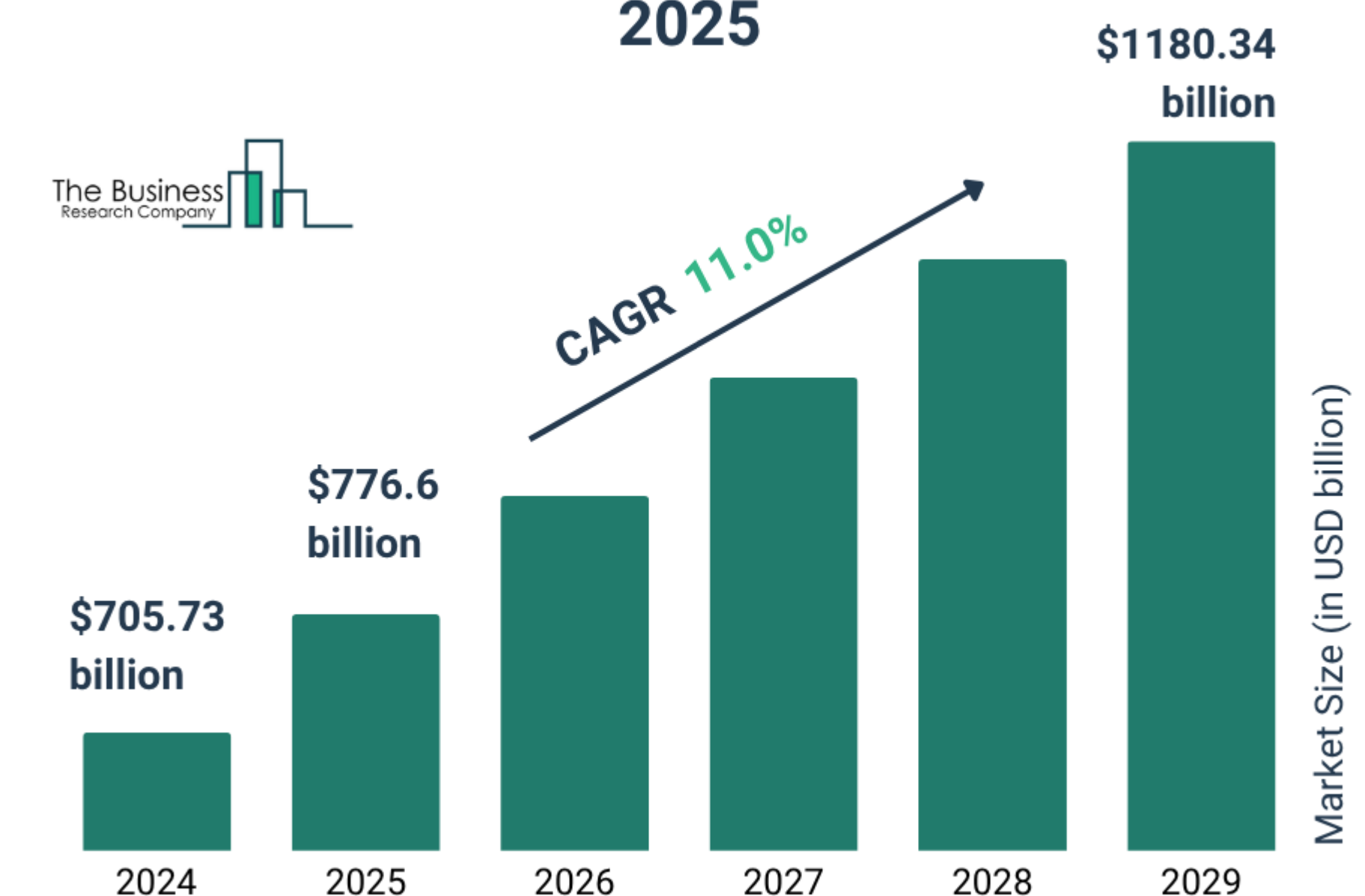
MENTOR :  
**Dr Anitha J**

### SCIENTIFIC VALIDATION



### COMMERCIAL VIABILITY

#### Online Fashion Retail Global Market Report 2025



### INDUSTRIES IDENTIFIED

- ❖ Fashion Technology
- ❖ Industry, Apparel and Garment Industry,
- ❖ Tailoring and Boutique Services,
- ❖ AI-based Personalization Platforms.

### COMPARISON WITH NATIONAL & INTERNATIONAL PRODUCTS

- **NATIONAL :** STYLZ , zazzdrobe
- **INTERNATIONAL:** DNA styles

### COST OF THE PRODUCT

Market Price = Free / Premium: ₹99–₹299/month

#### STUDENT INNOVATOR

Trina Joan Lynus (URK23CS1308)  
D Jerlin Seraphina (URK23CS1004)  
Jershlin Paul J (URK23CS1059)