

## **PROBLEM DEFINITION:**

The textile and fashion industries have witnessed an enormous amount of growth in fast fashion. On e-commerce platforms, where numerous choices are available, an efficient recommendation system is required to sort, order, and efficiently convey relevant product content or information to users. Smart fashion have attracted a huge amount of attention from fast fashion retailers as they provide personalized shopping experience to consumers. With the technological advancements, this branch of artificial intelligence exhibits a tremendous amount of potential in image processing, parsing, classification, and segmentation. . Customers no longer have to visit many stores, stand in long queues, or try on garments in dressing rooms as millions of products are now available in online catalogs. Effective fashion RS can have a noticeable impact on billions of customers' shopping experiences and increase sales and revenues on the provider-side. The goal of this survey is to provide a review of recommender systems that operate in the specific vertical domain of garment and fashion products. We have identified the most pressing challenges in fashion RS research and created a taxonomy that categorizes the literature according to the objective they are trying to accomplish (e.g., item or outfit recommendation, size recommendation, explainability, among others) and type of side-information (users, items, context). We have also identified the most important evaluation goals and perspectives (outfit generation, outfit recommendation, pairing recommendation, and fill-in-the-blank outfit compatibility prediction) and the most commonly used datasets and evaluation metrics. Recommender systems help users navigate large collections of products to find items relevant to their interests leveraging large amounts of product information and user signals like product views, followed or ignored items, purchases or web-page visits to determine how, when and what to recommend to their customers. Due to market dynamics and customer preferences, there is a large vocabulary of distinct fashion products, as well as high turnover. This leads to sparse purchase data, which challenges the usage of traditional recommender systems . In shopping apps navigating to the desired product is very difficult and no proper assistance will be provided. Which you can directly do your online shopping based on your choice without any search. Instead of navigating to several screens for booking products online the user can directly talk to Chatbot regarding the products. To deal with the aforementioned problems, and given the visual and aesthetic nature of fashion products, there is a growing body of computer vision research addressing tasks like localizing fashion items , determining their category and attribute or establishing the degree of similarity to other products .