PROPOSED SOLUTION

SMART FASHION RECOMMENDER APPLICATION

PROBLEM STATEMENT:

Recommender systems provide users with product information and suggestions, which has gradually become an important research tool in e-commerce IT technology, which has attracted a lot of attention of researchers. Collaborative filtering recommendation technology has been the most successful recommendation technology so far, but there are two major problems—recommendation quality and scalability.

IDEA/SOLUTION DESCRIPTION:

The clustering analysis subsystem based on the genetic algorithm is innovatively introduced into the traditional collaborative filtering recommendation system, and its design and implementation are given. In addition, when obtaining the nearest neighbors, only the clustered users of the target user are searched, making it a collaborative filtering recommender system based on genetic clustering.

NOVELTY/UNIQUENESS:

It focuses on the creative part of the fashion industry, the fashion designing process. To this end, an intelligent and semi-autonomous decision support system for fashion designers is proposed. This system can act as a personal assistant, by retrieving, organizing and combining data from many sources, and, finally, suggesting clothing products taking into account the designer's preferences.

CUSTOMER SATISFACTION:

- ✓ Fashion item representation
- ✓ Fashion item compatibility
- ✓ Personalization and fit
- ✓ Interpretability and Explanation
- ✓ Discovering Trends

BUSINESS MODEL (FINANCIAL BENEFIT):

- ✓ Personalizing to a target customer
- ✓ Modeling outfits as a sequence
- ✓ Lack of consistency between brands
- ✓ Subjectivity
- ✓ Data sparsity

SCALABILITY:

The scalability problem is that as the size of the system increases, the response time of the system increases to a point where users cannot afford it. Existing solutions often result in a significant drop in recommendation quality while reducing recommendation response time.