

Implementation of The Decision Tree Method in The Textile Industry: A Systematic Literature Review

Haryadi Sarjono;

BINUS Business School Undergraduate, Bina Nusantara University,
Jl. K.H. Syahdan No.9, Palmerah, Jakarta Barat, Indonesian 11480.
haryadi_s@binus.ac.id

Windhi Setianingrum

Sekolah Tinggi Ilmu Ekonomi, Bisnis Indonesia, Management
Jl. Kebayoran Lama No. 46, South Sukabumi, West Jakarta, Indonesia 11560
windhisetia89@gmail.com

Abstract

The textile industry is one of the major industries and has a high level of integration for the country's economy. The use of the right method can increase good profits and make it easier for the company. The 4 countries with the largest textile industries include Bangladesh, China, India and Indonesia. Decision Tree is included in data mining that is used by many industries, one of which is the textile industry. The decision tree is in the form of classifying data in the form of classes and nodes, a method that is easy to understand and very capable of providing the effectiveness of a company's production process. This paper uses the C4.5, SVM and Multi-Layer Perceptron algorithms. The methodology used is Decisions Tree which has the right level of accuracy and classification for the textile industry, because it is very efficient, has a variety of models and a structured rule tree structure. This method is used to be implemented in the textile industry, including being able to predict fabric defects, and clustering information in the textile industry. The company wants quality fabric products. Classification is in the form of class and root so that it can determine the right level of accuracy and can determine the level of defects in the fabric whether later the fabric can be processed into finished products or not and inform the level of smoothness. A high level of accuracy is obtained from Perceptron Multi-Layer with a value of 83.6%.

Keywords

Decision Tree, Systematic Literature Review, Textile Industry

Biography

Haryadi Sarjono as a permanent lecturer majoring in management with specialization in operations management, Sekolah Tinggi Ilmu Ekonomi Bisnis Indonesia, West Jakarta, Indonesia, since 1996, has received the best paper at IEOM 2021 Surakarta, Indonesia.

Windhi Setianingrum, a student majoring in Management at the Indonesian College of Business Economics who took the Business Management Course. Whose future prospect is to continue a post-graduate diploma in Management

