An intelligent fast sales forecasting model for fashion products

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Resumen: Abstract: Sales forecasting is crucial in fashion business because of all the uncertainty associated with demand and supply. Many models for forecasting fashion products are proposed in the literature over the past few decades. With the emergence of artificial intelligence models, artificial neural networks (ANN) are widely used in forecasting. ANN models have been revealed to be more efficient and effective than many traditional statistical forecasting models. Despite the reported advantages, it is relatively more time-consuming for ANN to perform forecasting. In the fashion industry, sales forecasting is challenging because there are so many product varieties (i.e., SKUs) and prompt forecasting result is needed. As a result, the existing ANN models would become inadequate. In this paper, a new model which employs both the extreme learning machine (ELM) and the traditional statistical methods is proposed. Experiments with real data sets are conducted. A comparison with other traditional methods has shown that this ELM fast forecasting (ELM-FF) model is quick and effective. [Copyright &y& Elsevier]

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