

# Preface

Forecasting is a crucial function for companies in the fashion apparel industry. Despite the fact that there is no “perfect” forecast, forecasting for highly structured data (e.g., the time series with high seasonality or trend) is known to be “easy” because there are many well-established models which provide the needed analytical formulations. However, for many real-life forecasting applications in the fashion industry, the data patterns are notorious for being highly volatile, and it is very difficult, if not impossible, to analytically learn about the underlying pattern. As a result, many traditional methods (such as statistical models) will fail to make a sound prediction. Over the past decade, advances in artificial intelligence technologies have provided an alternative way of generating precise and accurate forecasting results for fashion (e.g., sales forecasting, color trend forecasting).

Although being an important and timely topic, there is currently an absence of a comprehensive reference source that provides the state-of-the-art findings on both theoretical and applied research on the intelligent fashion forecasting systems. In view of the above, we have edited this Springer handbook which features several peer-refereed papers. To be specific, this handbook contains three parts that cover (i) introductory, review, and exploratory materials related to fashion forecasting; (ii) theoretical modeling research on fashion forecasting; and (iii) intelligent fashion forecasting applications and analysis. The specific topics covered include the following:

- Introduction to Intelligent Fashion Forecasting
- Sales Forecasting in Apparel and Fashion Industry: A Review
- Collaborative Planning Forecasting Replenishment Schemes in Apparel Supply Chain Systems: Cases and Research Opportunities
- Measuring Forecasting Accuracy: Problems and Recommendations
- Forecasting Demand for Fashion Goods: A Hierarchical Bayesian Approach
- Forecasting Fashion Store Reservations: Booking Horizon Forecasting with Dynamic Updating
- Fuzzy Forecast Combining for Apparel Demand Forecasting

- Intelligent Fashion Colour Trend Forecasting Schemes: A Comparative Study
- Neural Networks Based Forecasting for Romanian Clothing Sector

We are pleased to offer through this handbook new analytical and empirical results with valuable insights, which will contribute to the literature. To the best of our knowledge, this research handbook is the first one which specifically examines intelligent fashion forecasting.

Before ending, we would like to take this opportunity to thank Niels Peter Thomas, Emmie Yang, and Michelle Feng of Springer for their kindest support and advice along the course of carrying out this book project. We are grateful to all the authors who have contributed their research to this handbook and the anonymous reviewers who have helped review the papers. We also acknowledge the editorial assistance of Na Liu and Hau-Ling Chan.

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