DESCRIPTION

Inspired by the *Encyclopedia of Statistical Sciences, Second Edition*, this volume presents the tools and techniques that are essential for carrying out best practices in the modern business world.

The collection and analysis of quantitative data drives some of the most important conclusions that are drawn in today's business world, such as the preferences of a customer base, the quality of manufactured products, the marketing of products, and the availability of financial resources. As a result, it is essential for individuals working in this environment to have the knowledge and skills to interpret and use statistical techniques in various scenarios. Addressing this need, *Methods and Applications of Statistics in Business, Finance, and Management Science* serves as a single, one-of-a-kind resource that guides readers through the use of common statistical practices by presenting real-world applications from the fields of business, economics, finance, operations research, and management science.

Uniting established literature with the latest research, this volume features classic articles from the acclaimed Encyclopedia of Statistical Sciences, Second Edition along with brand-new contributions written by today's leading academics and practitioners. The result is a compilation that explores classic methodology and new topics, including:

- Analytical methods for risk management
Statistical modeling for online auctions

- Ranking and selection in mutual funds

- Uses of Black-Scholes formula in finance

- Data mining in prediction markets

From auditing and marketing to stock market price indices and banking, the presented literature sheds light on the use of quantitative methods in research relating to common financial applications. In addition, the book supplies insight on common uses of statistical techniques such as Bayesian methods, optimization, simulation, forecasting, mathematical modeling, financial time series, and data mining in modern research.

Providing a blend of traditional methodology and the latest research, *Methods and Applications of Statistics in Business, Finance, and Management Science* is an excellent reference for researchers, managers, consultants, and students in the fields of business, management science, operations research, supply chain management, mathematical finance, and economics who must understand statistical literature and carry out quantitative practices to make smart business decisions in their everyday work.

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**ABOUT THE AUTHOR**

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