

Call for Papers

Data Analytics for Decision Making towards Business Excellence Through the lens of Retail and Financial Services

Volume Editors

- **Bhaskar Basu (corr)**
Xavier Institute of Management (XIM) University, Bhubaneswar, India
- **Jitendra Kumar Jha**
Dept. of Industrial & Systems Engineering, Indian Institute of Technology (IIT) Kharagpur,
Kharagpur, India
- **Indrajit Mukherjee**
Shailesh J. Mehta School of Management (SJMSOM), Indian Institute of Technology (IIT) Bombay,
India
- **Raghu Nandan Sengupta**
Dept. of Industrial & Management Engineering, Indian Institute of Technology (IIT) Kanpur, India

About the book

This edited volume collates state-of-the-art research on latest challenges, opportunities, trends and practices applicable to two major business sectors, retail and financial services, and chapters are segregated into two sections accordingly. It explores how these sectors are increasingly becoming data-intensive, and how ways of handling, manipulating, exploiting and evaluating data continues to change in this era of big data. This volume aims to compile contributions based on the below themes.

Part-A: Retail

- Inventory, assortment, and promotion effectiveness
- Pricing strategies
- Brand/category switching and customer loyalty
- Customer profitability
- Customer engagement
- Cross-buying and up-buying
- Synergistic effects of online and offline channels and retail innovations
- Effectiveness of different type of distribution channels
- Customer experience
- Service excellence/failure/recovery
- Digitalization in Retailing
- Consumer Behaviour and Marketing in omni-channel retail environments
- Case Studies: Data Analytics in Retail

Part-B: Financial Services

- Behavioral data finance
- Big data and credit Risk
- Data analytics and financial econometrics

...contd.

Part-B: Financial Services *contd...*

- Financial sentiment and news analysis
- Information and evidence in digital age
- Policy-making mechanisms and modelling approaches
- Stock Market manipulation detection
- Stock market trading strategies using data analytics
- High frequency/Algorithmic trading with AI
- Financial forecasting including interest rate/ oil price/ crude oil/ macroeconomic variables/ FOREX/ cryptocurrency price
- Deep learning for finance and insurance applications
- Case studies: Data Analytics in Financial Services

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- ▶ **Bhaskar Basu:** bhaskar@xim.edu.in

Call for Papers

Optimization and Data Science in Supply Chain and Logistics Towards Operational and Business Excellence

Volume Editors

- **Jitendra Kumar Jha (*corr*)**
Dept. of Industrial & Systems Engineering, Indian Institute of Technology (IIT) Kharagpur,
Kharagpur, India
- **Indrajit Mukherjee**
Shailesh J. Mehta School of Management (SJMSOM), Indian Institute of Technology (IIT) Bombay,
India
- **Raghu Nandan Sengupta**
Dept. of Industrial & Management Engineering, Indian Institute of Technology (IIT) Kanpur, India
- **Bhaskar Basu**
Xavier Institute of Management (XIM) University, Bhubaneswar, India

About the book

This edited volume explores how optimization and data science significantly impact the operations of supply chain and logistics and investigates them extensively for additional benefits. It demonstrates the concept and implementation of data science methods, advanced analytics, optimization, metaheuristics, and machine learning algorithms developed over the years for critical decision-making in warehousing, inventory, and transportation in supply chain management that facilitates the optimization of supply chain and logistics operations. It covers the following topics with an emphasis on their applications in areas like supply chain coordination, pricing and revenue management, warehousing, reverse logistics, facility location and supply chain network design, transportation and routing. The book is aiming to be a great resource for senior undergraduate students intending to get themselves acquainted with interesting future trends in the topic, postgraduate students curious to augment their knowledge in the detailed theory and applications of the topic, PhD and postdoctoral students who want to focus in-depth on the stimulating research areas on these issues, and practitioners from industry who wish to explore fruitful applications and their future trends in supply chain and logistics.

Coverage for the edited volume includes, but is not limited to, the following research topics and areas:

- Supply chain analytics
- Data-driven decision-making
- Data intelligence in supply chain optimization
- AI and IoT in supply chain
- Data-driven inventory planning
- Demand forecasting and operation scheduling using data analytics

...contd.

Themes continued...

- Blockchain for supply chain optimization
- Real time order management systems
- Supply chain logistics
- Benefits of data science in logistics
- Smart trucks and vehicle route optimization
- Problems associated with data utilization in logistics

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- ▶ **Jitendra Kumar Jha:** jkjha@iem.iitkgp.ac.in

Call for Papers

Decision Sciences for Quality and Productivity Improvement Towards Operational and Business Excellence

Volume Editors

- **Indrajit Mukherjee (*corr*)**
Shailesh J. Mehta School of Management (SJMSOM), Indian Institute of Technology (IIT) Bombay, India
- **Raghu Nandan Sengupta**
Dept. of Industrial & Management Engineering, Indian Institute of Technology (IIT) Kanpur, India
- **Bhaskar Basu**
Xavier Institute of Management (XIM) University, Bhubaneswar, India
- **Jitendra Kumar Jha**
Dept. of Industrial & Systems Engineering, Indian Institute of Technology (IIT) Kharagpur, Kharagpur, India

About the book

This book engages with decision science theory-based approaches for quality and productivity improvement of products and processes, especially in the field of manufacturing, services, healthcare, and IT. The decision science theories are drawn from various areas of management science, economics, operations research, statistical methods, machine learning, data mining, artificial intelligence, behavioural decision making and cognitive psychology. The book provides a unique platform to address various real-life problems and scenarios related to quality and productivity improvement. New concepts, varied solution methods, diverse research implications, industry case studies, comparative analysis of relevant approaches, in-depth review of literature, and future research scopes discussed in the articles will certainly provide food for thought to researchers, decision-makers, and practitioners working in the domain of quality and productivity improvement. These theme-based book chapters demonstrate the immense potential of decision science theories to develop novel ideas that can support scientific decision-making to improve the quality and productivity of any organisation.

Coverage for the edited volume includes, but is not limited to, the following research topics and areas:

- | | |
|---|--|
| • Quality Control & Improvement | • Predictive Quality Control |
| • Univariate & Multivariate Control chart | • Univariate & Multivariate Process capability |
| • Quality Engineering and Robust Design | • Service Quality Modelling and Optimisation |
| • Design and analysis of experiments | • Cost of poor quality |
| • Quality Management | • Big data and Quality Improvement |
| • Multiple Response Optimisation | • Reliability Analysis and Quality Improvement |
| • Inspection and Quality | • Quality and Sustainability |
| • Pattern Recognition in Quality Control | • Quality and Process Performance, |
| • Sustainable Quality and Productivity | • Quality and Operations strategy |

...contd.

Themes continued...

- Data mining and quality
- Process Quality Optimisation
- Six Sigma
- Lean Manufacturing
- Maintenance and Productivity
- Statistical Process Control
- Green Productivity
- Total productivity management
- Quality needs, issues, barriers, drivers, enablers
- Quality and Technology Innovation
- Artificial Intelligence and Quality
- Industry 4.0 and Quality
- Software Quality & Reliability
- Healthcare Quality Improvement
- Data analytics and Quality Improvement
- Image processing and Quality Inspection
- Case studies on Quality & Productivity Improvement
- Reviews on recent advances and trends in Quality/Productivity

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Call for Papers

Data Science and Statistical Modeling in Business Towards Operational and Business Excellence

Volume Editors

- **Raghu Nandan Sengupta (corr)**
Dept. of Industrial & Management Engineering, Indian Institute of Technology (IIT) Kanpur, India
- **Bhaskar Basu**
Xavier Institute of Management (XIM) University, Bhubaneswar, India
- **Jitendra Kumar Jha**
Dept. of Industrial & Systems Engineering, Indian Institute of Technology (IIT) Kharagpur,
Kharagpur, India
- **Indrajit Mukherjee**
Shailesh J. Mehta School of Management (SJMSOM), Indian Institute of Technology (IIT) Bombay,
India

About the book

This edited volume focuses on the applications of different statistical and computation techniques in business where data related to fields like sales and marketing, production, supply chain management & logistics, accounting, corporate finance, vendor selection, quality control and inspection, and human resource management needs to be processed and analyzed for better and effective business decisions. Established rigorous statistical methodologies, along with the aid of computational power to process data from different domain of business help in coming up with rationale business decisions, minimize cost, maximize throughput, generate employment, ensure sustainability, and guarantee green environment. This book, a compilation of applied work by researchers and industry experts on business applications, demonstrates interesting applications of computational and statistical techniques in the domain of business analytics. The chapters of the volume are planned in a way such that each deal with unique applications, of statistics and computation, with in-depth theoretical background, complete analysis of business problem, clear practical implications, exhaustive pictorial presentation, general pseudo-codes and well thought future developmental scenarios. The intended audience is not limited to industry but also aimed at post graduate researchers who desire to have a broader look at a variety of business-related issues where data analysis, statistics and computation is applied very uniquely.

Chapters will revolve around business applications of the following statistical models.:

- Quality Control & Improvement
- Bayesian Analysis and Learning
- Predictive Analytics
- Response models
- Regression Analysis
- Logit model
- Probit model

Themes continued...

- Non-linear Regression
- Multivariate Time Series
- Forecasting
- Simulation
- Markov Chain Monte Carlo Methods
- Resampling
- Bootstrapping
- Reliability
- Survival Analysis
- Decision Sciences
- Risk Analysis
- Multivariate Data Analysis
- Clustering Methods
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- Non-parametric Models

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