

## Guest Editorial Preface

# Special Issue of Behavioral Analytics and its Application in Management Decision Making

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It is our great pleasure to introduce this special issue entitled “Behavioral Analytics and its Application in Management Decision Making” of International Journal of Business Analytics. The International Journal of Business Analytics is an indispensable resource for practitioners and academicians those who work in business analytics and related fields. Business analytics provides the framework to exploit the synergies among traditionally-diverse topics, such as the fields of data mining, quantitative methods, operations research, decision support system and so forth, in a more practical, application-driven format. The journal bridges the gap between different disciplines such as data mining, business process optimization, applied business statistics, business intelligence, bio-inspired computing, and information systems. This special issue is aimed at to discuss the concepts and techniques of behavioral analytics, descriptive analytics, predictive analytics, and use of intelligent techniques such as fuzzy and rough computing for making an efficient management decision. This issue will help academicians, researchers and experts to keep track of the recent advances in the field of behavioral analytics, web-based business data acquisition, useful computing and opinion mining from the perspectives of various computing and management techniques. The areas of application are vast ranging from banking and financial services, retails and public services. The security issue is another important aspect of business analytics can be applied for authentication and recognition purposes.

This issue is devoted to scientist and academician who are working in the area of behavioral analytics for decision making. In this spirit, this particular issue comprises of five articles, connected by a unifying theme on core areas of business decision making using behavioral analytics. These articles exemplify the analysis and exploration of concepts and techniques of behavioral analytics. This special issue mainly focuses on applications of interpretive structural modeling, self-organizing map, fuzzy-rough feature selection, sentiment classification, factor analysis, and regression.

To begin with, an application of interpretive structural modeling and quality function deployment is presented. The methodology is used for improving Indian retail service quality. It translates customer’s requirements and needs into specific service design factors. Further, customer segmentation using clustering through a self-organizing map is presented. It introduces an innovative approach through which a marketer can achieve success rate despite targeting a minimal number of customers.

To move on, how an intelligent technique comprising fuzzy-rough feature selection and rough set data analysis is used for investor’s behavior towards the Gold Exchange Traded Fund is discussed.

This analysis identifies the behavior of investors under various circumstances to arrive at behavioral intention. Again, knowledge generation using sentiment classification involving machine learning is discussed. This methodology is applied to e-commerce and describes how machine learning algorithms are used for unstructured data. As the amount of unstructured data is increasing day by day, the proposed methodology can be applied in the context of unstructured data helping both the consumer as well as the producer in decision making. Finally, using factor analysis and regression, exploring and ranking factors affecting currency counterfeiting in Indian banknotes is discussed.

Many academicians, scientists, and institutions have contributed to the creation and success of the special issue. We are very thankful to everybody within that community who had supported us directly or indirectly to frame this issue. A sincere thanks to Editor-in-Chief, Dr. John Wang, the editorial board members, and IGI Global team for their great support in completing this particular issue. We would also like to express our gratitude to Kayla Bishard, who supported us at every stage of the project.

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