

## Guest Editorial Preface

# Special Issue on Marketing Analytics: Developing New Conceptual Frameworks, Theories, and Measures to Understand the Emerging Use of Data Analytics

Surabhi Singh, Department of Marketing, IMS Ghaziabad, Ghaziabad, India

The main objective of the International Journal of Business Analytics (IJBAN) is to advance the next frontier of decision sciences and provide an international forum for practitioners and researchers to present useful and innovative ideas and work. The special issue of IJBAN on Marketing Analytics-Developing New Conceptual Frameworks, Theories, and Measures to Understand the Emerging use of Data Analytics has attempted to bring forth the innovative work in marketing analytics.

The field of business analytics has improved radically over the last few years, providing business users with better insights, particularly from operational data stored in transactional systems (Kohavi et al., 2002). Quite simply, the Big Data era is in full force today because the world is changing. Through instrumentation we're able to sense more things, and if we sense it we tend to store it (or at least some of it). Through advances in technology, people and things are becoming increasingly interconnected – and not just some of the time, but all of the time. The interconnectivity rate is a runaway train (Zikopoulos et al., 2012). Social media have reduced the effectiveness of traditional market research techniques. Marketers can overcome that effect by employing some of the social media related techniques that have become available (Anthony et al., 2012). With the advent of powerful, enabling big data technology, the concept of measuring one media channels' "assist power" to another media channel (i.e. TV's assist in bolstering social media' effectiveness) is becoming more practical. As online becomes a critical brand vehicle integrated performance measurement intuitively becomes more important (Nichols, 2013).

The purpose of this special issue has been to develop new conceptual frameworks, theories, or measures that explore the emerging use of data analytics in business. This issue has discussed the current state of marketing analytics and its significance as a standard marketing research tool in the twenty-first century. Marketing analytics is the practice of managing and studying metrics data in order to determine the ROI of marketing efforts, as well as the act of identifying opportunities for improvement. Understanding marketing analytics allows marketers to be more efficient at their jobs and minimize wasted web marketing dollars. The three kinds of analytics: descriptive, prescriptive and predictive. The descriptive Analytics is about looking at historical information that Airbnb has on its website that looks into reports that say how often a property is rented, in which place, and why and what is happening in terms of change in rental rates over time. This is basically summarizing past information. In predictive models, we look at how we take all the review sentiments, star ratings and property attribute to predict its sales. And then in prescriptive, analytics, optimization becomes important. It guides the ways to optimize the prices in any city to improve the rental prospects of properties. Thus, the analytics allows us to improve the marketing planning process at different stages. The papers in this issue have presented the different data analytics tools used for marketing

by industry. The decision tree is a simple way to visualize decision, a kind of predictive analytics. Omnichannel retailing experience is not possible unless analytics is applied. The marketing analytics enable the online retailers to customize the changes in the channels usage engaged in delivery of products to end users. The data analytics in virtual reality leads to big data visualizations. The online retailers use the virtual reality to change the retail experience of customers. The airline industry also employs the data analytics to maximize the revenue, smart and safe flight, check the real time baggage status, personalized offers. The advanced data analytics is utilized by the Government for making the informed decisions. The descriptive analytics enable to get the insights from the historic data available in repository and the governance becomes effective. The journal brings forth the authors who have discussed their work on the role of marketing analytics for some of the industry and even in online governance. The Industry extracts the insights from the big data and lead to better decisions and growth. The technology has given multifold advantage to the analytics in showing results. The machine learning tools, virtual reality have facilitated the marketing analytics drastically. The business transformations have led to better services for the customers and the revenue has multiplied. The digitization has strengthened the territory of analytics. The big data is stored in the virtual warehouse and cloud computing has expanded the customer experience.

The first paper 'Conceptualizing the Role of Data Analytics and Technology in E-Governance: An Insight' by Parag Shukla and Mayank Mathur has discussed on the significance of data analytics for e governance. The motto of various e-governance plans is to empower citizens and promote the use of information and communication technology (ICT) infrastructure. The government has an agenda to make all major services accessible to all the citizens by opting for the digital route. The government also aims to provide customized services to all the citizens and even reaching to the bottom of the pyramid (BOP) by low cost technological interventions. The E-Governance initiatives would provide universal digital literacy to empower citizens to use digital platform/ devices.

The author Manu Sharma and Sudhanshu Joshi in their second paper 'Online Advertisement using Web Analytics Software: A Comparison using AHP Method' focuses on the online advertisement using data analytics software. An AHP-based approach was applied in all the disciplines and has proven its potential in helping decision makers for their selection decisions. This study is designed and implemented to help web advertisers, marketing firms, and decision makers to select web-analytics software. Although this study has taken four software only but the same evaluation method can be replicated for several web-analytics software. Advertisement analytics is a part of advanced marketing analytics where the impact of advertisements can be analyzed.

The third paper 'Airline Choice: A Comparison of Classifiers in Traditional Analysis vs Decision Trees' presented by Archana Shrivastava, James Daniel Paul, J K Sharma discuss on decision tree, a machine learning tool. Decision trees are the most powerful Machine Learning tools. A decision tree can clearly represent decisions and elucidate them in decision analysis. They are widely used for automated decision making. The research analyses the classification accuracy of the traditional Anova, regression and the decision trees like the MSP tree and the Rep tree.

The last paper of the special issue has explained about the strategic initiative of fashion retailer with the title 'From "e" Retail to "Omni" Channel Retail: A Strategic Initiative of a Fashion Etailer'. According to the estimates by Redseer Consultants, fashion industry contributes to major percentage of online retailers in India. No doubt, myntra has gone extra miles to achieve leadership by taking novel initiatives like 'try n buy', 'app only' and now the upcoming one- 'Omni-channel retailing'. A close survey revealed that myntra had kept on changing its strategies from time to time to remain upgraded and provide meaningful experience to the shoppers.

The special issue has thereby proposed new conceptual framework, theories and provided measures to understand the emerging use of data analytics.

The book review on 'Research Methodology and its Applications in Management' has been completed by Mukesh Chaturvedi and he has presented the abstract of the book. The book review discusses on the various chapters included by the book author and the applications of research added

to the area of management. This is an attempt to present the simple form of book on research for the management students, scholars and corporate. This book has referred various books on research available in market and tried to simplify the concepts. The book comprises of four chapters in which first chapter discusses on research, its nature and scope. The chapter has inclusion of types of research, steps in research process and scales of measurement. The learning objectives of the first chapter are to understand the role and relevance of research in management, the steps in research formulation process and different types of research. The second chapter has research design, classification of designs and data collection methods. The learning objectives of second chapter are to understand the framework intended to arrive at the answers to research questions and to comprehend the different research designs. The third chapter depicts the details on sampling design which includes types of sample and steps in sampling. The learning outcome of this chapter includes the understanding of the concepts of sampling, sample size measurement and sampling methods. The fourth chapter includes the data analysis part where preliminary investigation of data, processing and tabulation is elaborated. Hypotheses testing and Confidence intervals are mentioned in the chapter with examples. The chapter further includes Univariate analysis, bivariate analysis, parametric and non-parametric tests.

The journal expects the readers to extract the information related to marketing analytics and market measurement tools. The technology has expanded the wings of marketing analytics and the future of technology enabled marketing analytics is all set to begin with new models, frameworks and possibilities for better business prospects in the world.

*Surabhi Singh*  
*Guest Editor*  
*IJBAN*