Book Review

Data Visualization: Storytelling Using Data

By Sharada Sringeswara, Purvi Tiwari, U Dinesh Kumar

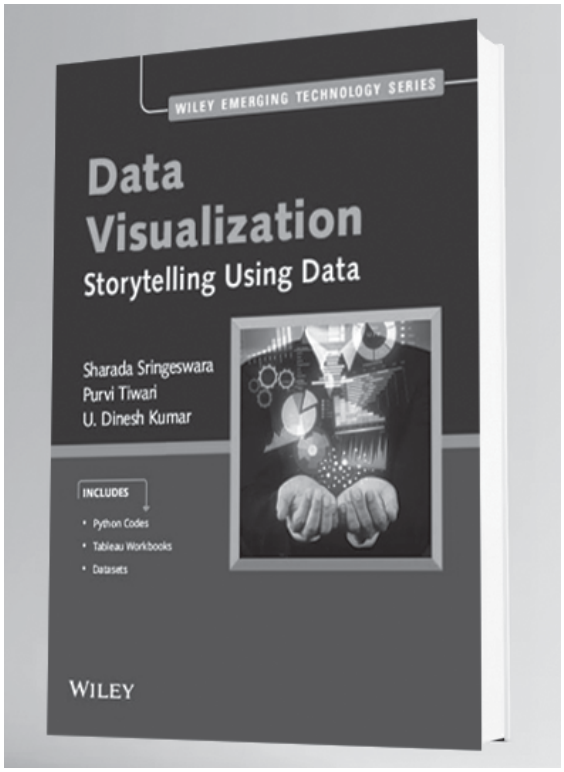
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About the Author

Sharada Sringeswara is an Associate partner at Acuver Consulting Private Limited and a consultant at the Indian Institute of Management Bangalore – Data Centre and Analytics Lab (IIMB-DCAL). Currently, she is pursuing Ph.D. in Information Systems and Analytics at the Indian Institute of Management, Tiruchirappalli. An alumnus of BITS Pilani and IIMB with over 20 years of experience in leading IT development organizations and delivering IT products. A seasoned analytics executive with hands-on and leadership experience in building business models with an understanding of the digital technology landscape. As a data enthusiast, she brings in product leadership by balancing knowledge and experience in data science and software engineering. She has worked with companies like Walmart, Tesco, Sterling Commerce, Wipro, and Future Group.

Purvi Tiwari, her areas of interest are Data Science, Machine Learning and Data Visualization and Story Telling. Experienced research associate with a demonstrated history of working in the higher education industry. Skilled in Mathematical Modeling, Machine Learning, Statistical Modeling and Data Visualization and Data Storytelling. Strong research professional with Master's Degree focused in Applied Mathematics from Indian Institute of Science Education and Research, Pune. She is Working as Research Associate in IIMB, and as Project Assistant in Tata Institute of Fundamental Research, Research Intern at IISER, IISC, IMS. Her certifications lie in the area of Sequence Models, Convolutional Neural Networks, Improving Deep NN: Hyper parameter tuning, Regularization and Optimization, Structuring Machine Learning Projects and Neural Networks and Deep Learning.

U Dinesh Kumar's research interest includes Business Analytics and Big Data, Artificial Intelligence, Machine Learning, Deep Learning Algorithms, Stochastic models (Reinforcement Learning Algorithms), Reliability, Optimization, Six Sigma and Performance Based Logistics. He has published several research articles in reputed academic journals such as European Journal of Operational Research, Annals of Operations Research, International Journal of Production Economics, The Journal of Operational Research Society, and so on. He has published more than thirty case studies on Business Analytics and Machine Learning Algorithms based on Indian and multinational organizations such as Aavin Milk Dairy, Akshaya Patra Foundation, Apollo Hospitals, Big basket, Bollywood, Flipkart.com, HP, iD Fresh Food, L&T, Manipal Hospitals, Mission Hospital, HAL, Indian Premier League, Shubham HDFC and VMWare at the Harvard Business Publishing's case portal. He has provided analytics consulting services to organizations such as Boston Consulting Group, GE Healthcare, General Motors, Hindustan Aeronautics Limited, Indian Army, TVS Motors, Wipro and so on.

Appreciation and Critique

"Data Visualization: Story Telling Using Data" authored by Sharada Sringeswara, Purvi Tiwari, and U. Dinesh Kumar is an exemplary work and comprehensive guide to mastering the art and science of data visualization. This comprehensive guide starts with an in-depth Introduction to Visualization, which establishes a strong basis by explaining the importance of visualizing data and providing a thoughtful examination of the seven phases of data visualization. This book stands out for

its holistic approach, which covers everything from comprehension and planning to modelling, assessment, and implementation. Each step is thoroughly explained, giving readers a full toolkit. The chapters devoted to best practices for visualization explore the subtleties of visual encodings, design concepts, and the effectiveness of charts, providing vital information for creating powerful visual representations. Moreover, the book doesn't merely stop at technique; it ventures into the realm of storytelling, illuminating the scientific underpinnings and offering compelling frameworks for narrative construction. With its breadth of knowledge, practicality, and commitment to educating readers on both effective and potentially deceptive practices, this book emerges as an indispensable resource for beginners and seasoned professionals alike, solidifying its place as a beacon of excellence in the field of data visualization literature. Chapter 1 talks about Introduction to Visualization, and meticulously covers the entire spectrum of data visualization processes, from understanding and preparation to modeling, evaluation, and deployment. It offers an extensive array of visualization best practices in Chapter 2, delving into the particulars of visual encodings, design principles, and the utility of 'chart junk.' Chapters 3 and 4 present an in-depth knowledge of visualizing structured and unstructured data, providing a rich toolkit of visualization techniques ranging from bar charts and histograms to text data visualization and content representations.

Moreover, the book doesn't stop at techniques but delves into the crucial aspect of storytelling in data visualization. Chapters 5 and 6, emphasizes the significance of storytelling, backed by scientific principles, while offering comprehensive frameworks for narrative creation and a multitude of data story types. What truly sets this book apart is its honesty in addressing potential pitfalls and misleading practices in Chapter 7, educating readers on recognizing and mitigating misleading visual representations, thereby empowering them to navigate through visual data with informed discernment.

Overall, "Data Visualization: Story Telling Using Data" stands as a beacon in the realm of data visualization and stands as an indispensable resource for both novices and seasoned professionals in the field of data analysis and visualization.

The book offers a comprehensive exploration of data visualization techniques and presents an extensive range of visualization techniques, methodologies and best practices. The extensive detail in each chapter might be challenging for beginners. Additionally, while the book adeptly covers the nuances of visualization, it could further enhance its value by exploring emerging trends or technologies in the field. Despite these minor points, the book remains a robust resource for those seeking an in-depth exploration of data visualization techniques and methodologies.

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