

## Big Data Beyond The Hyp

As the world has adapted to the age of digital technology, present day business leaders are required to change with the times as well. Addressing and formatting their business practices to not only encompass digital technologies, but expand their capabilities, the leaders of today must be flexible and willing to familiarize themselves with all types of global business practices. Global Business Leadership Development for the Fourth Industrial Revolution is a collection of advanced research on the methods and tactics utilized to succeed as a leader in the digital age. While highlighting topics including data privacy, corporate governance, and risk management, this book is ideally designed for business professionals, administrators, managers, executives, researchers, academicians, and business students who want to improve their understanding of the strategic role of digital technologies in the global economy, in networks and organizations, in teams and work groups, in information systems, and at the level of individuals as actors in digitally networked environments.

Convert the promise of big data into real world results. There is so much buzz around big data. We all need to know what it is and how it works – that much is obvious. But is a basic understanding of the theory enough to hold your own in strategy meetings? Probably. But what will set you apart from the rest is actually knowing how to USE big data to get solid, real-world business results - and putting that in place to improve performance. Big Data will give you a clear understanding, blueprint, and step-by-step approach to building your own big data strategy. This is a well-needed practical introduction to actually putting the IoT into practice. Illustrated with numerous real-world examples from a cross section of companies and organisations, Big Data will take you through the five steps of the SMART model: Start with Strategy, Measure Metrics and Data, Apply Analytics, Report Results, Transform. Discusses how companies need to clearly define what it is they need to know Outlines how companies can collect relevant data and measure the metrics that will help them answer their most important business questions Addresses how the results of big data analytics can be visualised and communicated to ensure key decisions-makers understand them Includes many high-profile case studies from the author's work with some of the world's best known brands

This book constitutes the refereed proceedings of the 21st International Conference on Big Data Analytics and Knowledge Discovery, DaWAK 2019, held in Linz, Austria, in September 2019. The 12 full papers and 10 short papers presented were carefully reviewed and selected from 61 submissions. The papers are organized in the following topical sections: Applications; patterns; RDF and streams; big data systems; graph learning; databases.

The amount of data in our world has been exploding, and analyzing large data sets—so called big data—will become a key basis of competition in business. Statisticians and researchers will be updating their analytic approaches, methods and research to meet the demands created by the availability of big data. The goal of this book is to show how advances in data science have the ability to fundamentally influence and improve organizational science and practice. This book is primarily designed for researchers and advanced undergraduate and graduate students in psychology, management and statistics.

Smart Infrastructure and Applications  
Big Data at Work  
Accelerate Your Journey to AI

### Encyclopedia of Business Analytics and Optimization

How 45 Successful Companies Used Big Data Analytics to Deliver Extraordinary Results

*Business Intelligence Strategy and Big Data Analytics is written for business leaders, managers, and analysts – people who are involved with advancing the use of BI at their companies or who need to better understand what BI is and how it can be used to improve profitability. It is written from a general management perspective, and it draws on observations at 12 companies whose annual revenues range between \$500 million and \$20 billion. Over the past 15 years, my company has formulated vendor-neutral business-focused BI strategies and program execution plans in collaboration with manufacturers, distributors, retailers, logistics companies, insurers, investment companies, credit unions, and utilities, among others. It is through these experiences that we have validated business-driven BI strategy formulation methods and identified common enterprise BI program execution challenges. In recent years, terms like “big data” and “big data analytics” have been introduced into the business and technical lexicon. Upon close examination, the newer terminology is about the same thing that BI has always been about: analyzing the vast amounts of data that companies generate and/or purchase in the course of business as a means of improving profitability and competitiveness. Accordingly, we will use the terms BI and business intelligence throughout the book, and we will discuss the newer concepts like big data as appropriate. More broadly, the goal of this book is to share methods and observations that will help companies achieve BI success and thereby increase revenues, reduce costs, or both. Provides ideas for improving the business performance of one’s company or business functions Emphasizes proven, practical, step-by-step methods that readers can readily apply in their companies Includes exercises and case studies with road-tested advice about formulating BI strategies and program plans*

*As the age of Big Data emerges, it becomes necessary to take the five dimensions of Big Data– volume, variety, velocity, volatility, and veracity– and focus these dimensions towards one critical emphasis – value. The Encyclopedia of Business Analytics and Optimization confronts the challenges of information retrieval in the age of Big Data by exploring recent advances in the areas of knowledge management, data visualization, interdisciplinary communication, and others. Through its critical approach and practical application, this book will be a must-have reference for any professional, leader, analyst, or manager interested in making the most of the knowledge resources at their disposal.*

*Our newly digital world is generating an almost unimaginable amount of data about all of us. Such a vast amount of data is useless without plans and strategies that are designed to cope with its size and complexity, and which enable organisations to leverage the information to create value. This book is a refreshingly practical, yet theoretically sound roadmap to leveraging big data and analytics. Creating Value with Big Data Analytics provides a nuanced view of big data development, arguing that big data in itself is not a solution but rather a catalyst for the increasing availability of data that has been observed in recent times. Building on the authors’ extensive academic and practical knowledge, this book aims to provide managers and analysts with strategic directions and practical analytical solutions on how to create value from existing and new big data. By tying data and analytics to specific goals and processes for implementation, this is a much-needed book that will be essential reading for students and specialists of data analytics, marketing research, and customer relationship management.*

*Principles of Big Data helps readers avoid the common mistakes that endanger all Big Data projects. By stressing simple, fundamental concepts, this book teaches readers how to organize large volumes of complex data, and how to achieve data permanence when the content of the data is constantly changing. General methods for data verification and validation, as specifically applied to Big Data resources, are stressed throughout the book. The book demonstrates how adept analysts can find relationships among data objects held in disparate Big Data resources, when the data objects are endowed with semantic support (i.e., organized in classes of uniquely identified data objects). Readers will learn how their data can be integrated with data from other resources, and how the data extracted from Big Data resources can be used for purposes beyond those imagined by the data creators. Learn general methods for specifying Big Data in a way that is understandable to humans and to computers Avoid the pitfalls in Big Data design and analysis Understand how to create and use Big Data safely and responsibly with a set of laws, regulations and ethical standards that apply to the acquisition, distribution and integration of Big Data resources*

*Behind Every Good Decision*

*Dispelling the Myths, Uncovering the Opportunities*

*The AI Ladder*

*Using SMART Big Data, Analytics and Metrics To Make Better Decisions and Improve Performance*

*Data-Driven Growth in Small and Medium-Sized Enterprises*

*Some Applications*

There is a misconception in business that the only data that matters is BIG data, and that elaborate tools and data scientists are required to extract any practical information. However, nothing could be further from the truth. If you feel that you can't understand how to read, let alone implement, these complex software programs that crunch the data and spit out more data, that will no longer be a problem! Authors and analytics experts Piyanka Jain and Puneet Sharma demystify the process of business analytics and demonstrate how professionals at any level can take the information at their disposal and in only five simple steps—using only Excel as a tool—make the decision necessary to increase revenue, decrease costs, improve product, or whatever else is being asked of them at that time. In *Behind Every Good Decision*, you will learn how to: Clarify the business question Lay out a hypothesis-driven plan Pull relevant data Convert it to insights Make decisions that make an impact Packed with examples and exercises, this refreshingly accessible book explains the four fundamental analytic techniques that can help solve a surprising 80 percent of all business problems. It doesn't take a numbers person to know that is a formula you need!

Go ahead, be skeptical about big data. The author was—at first. When the term “big data” first came on the scene, bestselling author Tom Davenport (Competing on Analytics, Analytics at Work) thought it was just another example of technology hype. But his research in the years that followed changed his mind. Now, in clear, conversational language, Davenport explains what big data means—and why everyone in business needs to know about it. Big Data at Work covers all the basics: what big data means from a technical, consumer, and management perspective; what its opportunities and costs are; where it can have real business impact; and which aspects of this hot topic have been oversold. This book will help you understand: • Why big data is important to you and your organization • What technology you need to manage it • How big data could change your job, your company, and your industry • How to hire, rent, or develop the kinds of people who make big data work • The key success factors in implementing any big data project • How big data is leading to a new approach to managing analytics With dozens of company examples, including UPS, GE, Amazon, United Healthcare, Citigroup, and many others, this book will help you seize all opportunities—from improving decisions, products, and services to strengthening customer relationships. It will show you how to put big data to work in your own organization so that you too can harness the power of this ever-evolving new resource.

Find the right big data solution for your business organization Big data management is one of the major challenges facingbusiness, industry, and not-for-profit organizations. Data setsuch as customer transactions for a mega-retailer, weather patternsmonitored by meteorologists, or social network activity can quicklyoutpace the capacity of traditional data management tools. If youneed to develop or manage big data solutions, you'll appreciate howthese four experts define, explain, and guide you through this newand often confusing concept. You'll learn what it is, why itmatters, and how to choose and implement solutions that work. Effectively managing big data is an issue of growingimportance to businesses, not-for-profit organizations, government, and ITprofessionals. Authors are experts in information management, big data, and avariety of solutions. Explains big data in detail and discusses how to select andimplement a solution, security concerns to consider, data storageand presentation issues, analytics, and much more Provides essential information in a no-nonsense,easy-to-understand style that is empowering Big Data For Dummies cuts through the confusion and helpyou take charge of big data solutions for your organization.

The world is witnessing the growth of a global movement facilitated by technology and social media. Fueled by information, this movement contains enormous potential to create more accountable, efficient, responsive, and effective governments and businesses, as well as spur economic growth. Big Data Governance and Perspectives in Knowledge Management is a collection of innovative research on the methods and applications of applying robust processes around data, and aligning organizations and skillsets around those processes. Highlighting a range of topics including data analytics, prediction analysis, and software development, this book is ideally designed for academics, researchers, information science professionals, software developers, computer engineers, graduate-level computer science students, policymakers, and managers seeking current research on the convergence of big data and information governance as two major trends in information management.

Comparative Policy Evaluation

Big Data Analytics and Knowledge Discovery

Big Data and Internet of Things: A Roadmap for Smart Environments

Demystifying Big Data and Machine Learning for Healthcare

Creating Value with Big Data Analytics

A Guide to Conversations for Today's Data Center

Big data, analytics, and artificial intelligence are revolutionizing work, management, and lifestyles and are becoming disruptive technologies for healthcare, e-commerce, and web services. However, many fundamental, technological, and managerial issues for developing and applying intelligent big data analytics in these fields have yet to be addressed. Managerial Perspectives on Intelligent Big Data Analytics is a collection of innovative research that discusses the integration and application of artificial intelligence, business intelligence, digital transformation, and intelligent big data analytics from a perspective of computing, service, and management. While highlighting topics including e-commerce, machine learning, and fuzzy logic, this book is ideally designed for students, government officials, data scientists, managers, consultants, analysts, IT specialists, academicians, researchers, and industry professionals in fields that include big data, artificial intelligence, computing, and commerce.

Big Data in a nutshell: It is the ability to retain, process, and understand data like never before. It can mean more data than what you are using today; but it can also mean different kinds of data, a venture into the unstructured world where most of today's data resides. In this book you will learn how cognitive computing systems, like IBM Watson, fit into the Big Data world. Learn about the concept of data-in-motion and InfoSphere Streams, the world's fastest and most flexible platform for streaming data. Capturing, storing, refining, transforming, governing, securing, and analyzing data are important topics also covered in this book.

With the recent growth of big data and the internet of things (IoT), individuals can now upload, retrieve, store, and collect massive amounts of information to help drive decisions and optimize processes. Due to this, a new age of predictive computing is taking place, and data can now be harnessed to predict unknown occurrences or probabilities based on data collected in real time. Predictive Intelligence Using Big Data and the Internet of Things highlights state-of-the-art research on predictive intelligence using big data, the IoT, and related areas to ensure quality assurance and compatible IoT systems. Featuring coverage on predictive application scenarios to discuss these breakthroughs in real-world settings and various methods, frameworks, algorithms, and security concerns for predictive intelligence, this book is ideally designed for academicians, researchers, advanced-level students, and technology developers.

This book highlights that the capacity for gathering, analyzing, and utilizing vast amounts of digital (user) data raises significant ethical issues. Annika Richterich provides a systematic contemporary overview of the field of critical data studies that reflects on practices of digital data collection and analysis. The book assesses in detail one big data research area: biomedical studies, focused on epidemiological surveillance. Specific case studies explore how big data have been used in academic work. The Big Data Agenda concludes that the use of big data in research urgently needs to be controlled by researchers and industry professionals in fields that include big data, artificial intelligence, computing, and commerce. Richterich argues that entanglements between big data research and technology/ internet corporations have emerged. In consequence, more opportunities for discussing and negotiating emerging research practices and their implications for societal values are needed.

Advances in Mobile Cloud Computing and Big Data in the 5G Era

Big Data Governance and Perspectives in Knowledge Management

Beyond Databases, Architectures and Structures. Towards Efficient Solutions for Data Analysis and Knowledge Representation

Foundations for Smarter Cities and Societies

Cloud Computing

Understanding the Role of Business Analytics

This book reports on the latest advances on the theories, practices, standards and strategies that are related to the modern technology paradigms, the Mobile Cloud computing (MCC) and Big Data, as the pillars and their association with the emerging 5G mobile networks. The book includes 15 rigorously refereed chapters written by leading international researchers, providing the readers with technical and scientific information about various aspects of Big Data and Mobile Cloud Computing, from basic concepts to advanced findings, reporting the state-of-the-art on Big Data management. It demonstrates and discusses methods and practices to improve multi-source Big Data manipulation techniques, as well as the integration of resources availability through the 3As (Anywhere, Anything, Anytime) paradigm, using the 5G access technologies.

This book provides a multidisciplinary view of smart infrastructure through a range of diverse introductory and advanced topics. The book features an array of subjects that include: smart cities and infrastructure, e-healthcare, emergency and disaster management, Internet of Vehicles, supply chain management, eGovernance, and high performance computing. The book is divided into five parts: Smart Transportation, Smart Healthcare, Miscellaneous Applications, Big Data and High Performance Computing, and Internet of Things (IoT). Contributions are from academics, researchers, and industry professionals around the world. Features a broad mix of topics related to smart infrastructure and smart applications, particularly high performance computing, big data, and artificial intelligence: Includes a strong emphasis on methodological aspects of infrastructure, technology and application development. Presents a substantial overview of research and development on key economic sectors including healthcare and transportation.

Unique perspective on the big data analytics phenomenon for both business and IT professionals The availability of Big Data, low-cost commodity hardware and new information management and analytics software has produced a unique moment in the history of business. The convergence of these trends means that we have the capabilities required to analyze astonishing data sets quickly and at cost-effectively for the first time in history. These capabilities are neither theoretical nor trivial. They represent a genuine leap forward and a clear opportunity to realize enormous gains in terms of efficiency, productivity, revenue and profitability. The Age of Big Data is here, and these are truly revolutionary times. This timely book looks at cutting-edge companies supporting an exciting new generation of business analysts. Learn more about the trends in big data and how they are impacting the business world (Risk, Marketing, Healthcare, Financial Services, etc.) Explains this new technology and how companies can use them effectively to gather the data that they need and glean critical insights Explores relevant topics such as data privacy, data visualization, unstructured data, sourcing data scientists, cloud computing for big data, and much more.

Intelligence in Big Data Technologies—Beyond the HypeProceedings of ICBDCC 2019Springer Nature

21st International Conference, DaWAK 2019, Linz, Austria, August 26–29, 2019, Proceedings

Cyber Society, Big Data, and Evaluation

The Big Data Agenda

Handbook of Research on Future Opportunities for Technology Management Education

Exploring the Boundaries of Big Data

Intelligence in Big Data Technologies -- Beyond the Hype

This book highlights some of the most fascinating current uses, thought-provoking changes, and biggest challenges that Big Data means for our society. The explosive growth of data and advances in Big Data analytics have created a new frontier for innovation, competition, productivity, and well-being in almost every sector of our society, as well as a source of immense economic and societal value. From the derivation of customer feedback-based insights to fraud detection and preserving privacy; better medical treatments; agriculture and food management; and establishing low-voltage networks – many innovations for the greater good can stem from Big Data. Given the insights it provides, this book will be of interest to both researchers in the field of Big Data, and practitioners from various fields who intend to use Big Data technologies to improve their strategic and operational decision-making processes.

The bestselling author of Big Data is back, this time with a unique and in-depth insight into how specific companies use big data. Big Data is on the tip of everyone's tongue. Everyone understands its power and importance, but many fail to grasp the actionable steps and resources required to utilize it effectively. This book fills the knowledge gap by showing how major companies are using big data every day, from an up-close, on-the-ground perspective. From technology, media and retail, to sport teams, government agencies and financial institutions, learn the actual strategies and processes being used to learn about customers, improve manufacturing, spur innovation, improve safety and so much more. Organised for easy dip-in navigation, each chapter follows the same structure to give you the information you need quickly. For each company profiled, learn what data was used, what problem it solved and the processes put in place to make it practical, as well as the technical details, challenges and lessons learned from each unique scenario. Learn how predictive analytics helps Amazon, Target, John Deere and Apple understand their customers Discover how big data is behind the success of Walmart, LinkedIn, Microsoft and more Learn how big data is changing medicine, law enforcement, hospitality, fashion, science and banking Develop your own big data strategy by accessing additional reading materials at the end of each chapter

In this book readers will find technological discussions on the existing and emerging technologies across the different stages of the big data value chain. They will learn about legal aspects of big data, the social impact, and about education needs and requirements. And they will discover the business perspective and how big data technology can be exploited to deliver value within different sectors of the economy. The book is structured in four parts: Part I “The Big Data Opportunity” explores the value potential of big data with a particular focus on the European context. It also describes the legal, business and social dimensions that need to be addressed, and briefly introduces the European Commission’s BIG project. Part II “The Big Data Value Chain” details the complete big data lifecycle from a technical point of view, ranging from data acquisition, analysis, curation and storage, to data usage and exploitation. Next, Part III “Usage and Exploitation of Big Data” illustrates the value creation possibilities of big data applications in various sectors, including industry, healthcare, finance, energy, media and public services. Finally, Part IV “A Roadmap for Big Data Research” identifies and prioritizes the cross-sectorial requirements for big data research, and outlines the most urgent and challenging technological, economic, political and societal issues for big data in Europe. This compendium summarizes more than two years of work performed by a leading group of major European research centers and industries in the context of the BIG project. It brings together research findings, forecasts and estimates related to this challenging technological context that is becoming the major axis of the new digitally transformed business environment.

What are Big Data? How do they affect mobile, social media, the Internet, crime cameras, and other diverse sources can be pulled together to form massive datasets, known as big data, which make it possible to learn things we could not begin to comprehend otherwise. While private companies are using this macroscopic tool, policy-makers and evaluators have been slower to adopt big data to make and evaluate public policy. Cyber Society, Big Data, and Evaluation shows ways big data is now being used in policy evaluation and discusses how it will transform the role of evaluators in the future. Arguing that big data will play a permanent and growing role in policy evaluation, especially since results may be delivered almost in real time, the contributors declare that the evaluation community must rise to the challenge or risk being marginalized. This volume suggests that evaluators must redefine their tools in relation to big data, obtain competencies necessary to work with it, and collaborate with professionals already experienced in using big data. By adding evaluators' expertise, for example, in theory-driven evaluation, using repositories, making value judgements, and applying findings, policy-makers and evaluators can come to make better-informed decisions and policies.

Empowering Human Dynamics Research with Social Media and Geospatial Data Analytics

Big Data, Big Analytics

Intelligence in Big Data Technologies—Beyond the Hype

Big Data in Small Business

The New Path to Product Innovation and Profitability

Big Data

*Healthcare transformation requires us to continually look at new and better ways to manage insights – both within and outside the organization today. Increasingly, the ability to glean and operationalize new insights efficiently as a byproduct of an organization’s day-to-day operations is becoming vital to hospitals and health systems ability to survive and prosper. One of the long-standing challenges in healthcare informatics has been the ability to deal with the sheer variety and volume of disparate healthcare data and the increasing need to derive accurate and value out of it. Demystifying Big Data and Machine Learning for Healthcare investigates how healthcare organizations can leverage this treasury of big data to discover new business value, use cases, and knowledge as well as how big data can be woven into pre-existing business intelligence and analytics efforts. This book focuses on teaching you how to: Develop skills needed to identify and demolish big data myths Become an expert in separating hype from reality Understand the Y’s that matter in healthcare and why Harmonize the 4 C’s across little and big data Choose data f1 delity over data quality Learn how to apply the NRF Framework Master applied machine learning for healthcare Conduct a guided tour of learning analytics Recognize and be prepared for the future of artificial intelligence in healthcare via best practices, feedback loops, and contextually intelligent agents (CIAs) The variety of data in healthcare spans multiple business workflows, formats (structured, un-, and semi-structured), integration at point of care/need, and integration with existing knowledge. In order to deal with these realities, the authors propose new approaches to creating a knowledge-driven learning organization-based on new and existing strategies, methods and technologies. This book will address the long-standing challenges in healthcare informatics and provide pragmatic recommendations on how to deal with them.*

*Though the exact nature and delineation of Big Data is still unclear, it seems likely that Big Data will have an enormous impact on our daily lives. 'Exploring the Boundaries of Big Data' serves as preparatory work for The Netherlands Scientific Council for Government Policy's advice to the Dutch government, which has asked the Council to address questions regarding Big Data, security and privacy. It is divided into five parts, each part engaging with a different perspective on Big Data: the technical, empirical, legal, regulatory and international perspective.*

*This revelatory exploration of big data, which refers to our newfound ability to crunch vast amounts of information, analyze it instantly and draw profound and surprising conclusions from it, discusses how it will change our lives and what we can do to protect ourselves from its hazards. 75,000 first printing.*

*Everybody is talking about cloud computing, but are they really saying anything you need to hear? Can the cloud actually help your business become more agile, innovative, and profitable? Is the promise of cloud more hype than substantive? Cloud Computing: Beyond the Hype answers these questions and many more with a no-nonsense, business-savvy tour of the cloud computing landscape. Topics discussed include the pros and cons of cloud computing, making the economic case, developing a cloud strategy, combining private and public cloud resources, and managing and securing your cloud. Full of practical examples and insights from industry experts, Cloud Computing: Beyond the Hype provides a solid launching point to seize new opportunities for both you and your organization.*

*13th International Conference, BDAS 2017, Ustron, Poland, May 30 - June 2, 2017, Proceedings*

*Beyond the Hype*

*Proceedings of ICBDCC 2019*

*Global Business Leadership Development for the Fourth Industrial Revolution*

*Predictive Intelligence Using Big Data and the Internet of Things*

*Big Data Beyond the Hype*

This book discusses theoretical backgrounds, techniques and methodologies, and applications of the current state-of-the-art human dynamics research utilizing social media and geospatial big data. It describes various forms of social media and big data with location information, theory development, data collection and management techniques, and analytical methodologies to conduct human dynamics research including geographic information systems (GIS), spatiotemporal data analytics, text mining and semantic analysis, machine learning, trajectory data analysis, and geovisualization. The book also covers applied interdisciplinary research examples ranging from disaster management, public health, urban geography, and spatiotemporal data analysis to big data in education, social media, the Internet, crime cameras, and other diverse sources can be pulled together to form massive datasets, known as big data, which make it possible to learn things we could not begin to comprehend otherwise. While private companies are using this macroscopic tool, policy-makers and evaluators have been slower to adopt big data to make and evaluate public policy. Cyber Society, Big Data, and Evaluation shows ways big data is now being used in policy evaluation and discusses how it will transform the role of evaluators in the future. Arguing that big data will play a permanent and growing role in policy evaluation, especially since results may be delivered almost in real time, the contributors declare that the evaluation community must rise to the challenge or risk being marginalized. This volume suggests that evaluators must redefine their tools in relation to big data, obtain competencies necessary to work with it, and collaborate with professionals already experienced in using big data. By adding evaluators' expertise, for example, in theory-driven evaluation, using repositories, making value judgements, and applying findings, policy-makers and evaluators can come to make better-informed decisions and policies.

Technology management education and business education are visibly intertwined in the current educational system. Certain efforts that have taken place in the recent past are the interinstitutional discourse around the world. Technology management is a dynamic and evolving profession, driven by changes in technology, globalization, sustainability, and the increasing importance of the service economy. The Handbook of Research on Future Opportunities for Technology Management Education is a comprehensive reference book that enables readers to comprehend the trends in technological changes and the need to enter business education and technology management in workplaces. The book serves to support with the formation and implementation of appropriate policies for technology management. Covering topics such as big data analytics, cloud computing adoption, and massive open online courses (MOOCs), this text is an essential resource for managers, technologists, teachers, executives, instructional designers, libraries, university researchers, students, faculty, and industry taught leaders.

This book presents current progress on challenges related to Big Data management by focusing on the particular challenges associated with context-aware data-intensive applications and services. The book is a state-of-the-art reference discussing progress made, as well as prompting future directions on the theories, practices, standards and strategies that are related to the emerging computational technologies and their association with supporting the Internet of Things advanced functioning for organizational settings including both business and e-science. Apart from inter-operable and inter-cooperative aspects, the book deals with a notable opportunity namely, the current trend in which a collectively shared and generated content is emerged from social media. Specifically, the book presents advances on managing and exploiting the vast size of data generated from within the smart environment (i.e. smart cities) towards an integrated collective intelligence approach. The book also presents methods and practices to improve large storage infrastructures in response to increasing demands of the data intensive applications. The book contains 19 self-contained chapters that were very carefully selected based on peer review by at least two expert and independent reviewers and is organized into the three sections reflecting the general themes of interest to the IoT and Big Data communities. Section I: Foundations and Principles Section II: Advanced Models and Architectures Section III: Advanced Applications and Future Trends

The book is intended for researchers interested in joining interdisciplinary and transdisciplinary works in the areas of Smart Environments, Internet of Things and various computational technologies for the purpose of an integrated collective computational intelligence approach into the Big Data era. This important book considers the ways in which small and medium-sized enterprises (SMEs) can thrive in the age of big data. To address this central issue from multiple viewpoints, the editors introduce a collection of experiences, insights, and guidelines from a variety of expert researchers, each of whom provides a piece to solve this puzzle.

A General Management Perspective

Data Ethics and Critical Data Studies

Emerging Business Intelligence and Analytic Trends for Today's Businesses

How Anyone Can Use Business Analytics to Turn Data into Profitable Insight

Preparing, Sharing, and Analyzing Complex Information

A Revolution that Will Transform How We Live, Work, and Think

The empowered customer is here to stay. With a low tolerance for subpar experiences, they have no qualms in switching brands if disappointed, and expect companies to provide offers that are personally relevant to them. This realisation has led enterprises to revamp their business strategies to meet the high expectations of these savvy and hyper-connected consumers. This requires a 360 degree customer-centric approach—fuelled by big data—that attempts to understand customer problems and deliver timely solutions. The ability to use customer journey mapping and real-time analytics to unlock actionable insights can provide a competitive edge. Knowledge about shifts in customer behaviour, preferred channels or social media sentiment helps companies to respond proactively and with the right message. The digital transformation snafu framework presented in this book examines the socio-economic changes and digital trends that are reshaping consumption, and what they portend for the future. It is complemented by an analysis of the new skills and workforce models, as well as the business models needed to succeed in the age of digital disruption.

This book constitutes the refereed proceedings of the 13th International Conference entitled Beyond Databases, Architectures and Structures, BDAS 2017, held in Ustron, Poland, in May/June 2017. It consists of 44 carefully reviewed papers selected from 118 submissions. The papers are organized in topical sections, namely big data and cloud computing; artificial intelligence, data mining and knowledge discovery; architectures, structures and algorithms for efficient data processing; text mining, natural language processing, ontologies and semantic web; bioinformatics and biological data analysis; industrial applications; data mining tools, optimization and compression.

Big Data represents a new era in data exploration and utilization, and IBM is uniquely positioned to help clients navigate this transformation. This book reveals how IBM is leveraging open source Big Data technology, infused with IBM technologies, to deliver a robust, secure, highly available, enterprise-class Big Data platform. The three defining characteristics of Big Data—volume, variety, and velocity—are discussed. You'll get a primer on Hadoop and how IBM is hardening it for the enterprise, and learn when to leverage IBM InfoSphere BigInsights (Big Data at rest) and IBM InfoSphere Streams (Big Data in motion) technologies. Industry use cases are also included in this practical guide. Learn how IBM hardens Hadoop for enterprise-class scalability and reliability Gain insight into IBM's unique in-motion and at-rest Big Data analytics platform Learn tips and tricks for Big Data use cases and solutions Get a quick Hadoop primer

This book encompasses empirical evidences to understand the application of data analytical techniques in emerging contexts. Varied studies relating to manufacturing and services sectors including healthcare, banking, information technology, power, education sector etc. stresses upon the systematic approach followed in applying the data analytical techniques; and also analyses how these techniques are effective in decision-making in different contexts. Especially, the application of regression modeling, financial modelling, multi-group modeling, cluster analysis, and sentiment analysis will help the readers in understanding critical business scenarios in the best possible way, and which later can help them in arriving at best solution for the business related problems. The individual chapters will help the readers in understanding the role of specific data analytic tools and techniques in resolving business operational issues experienced in manufacturing and service organisations in India and in developing countries. The book offers a relevant resource that will help readers in the application and interpretation of data analytical statistical practices relating to emerging issues like customer experience, marketing capability, quality of manufactured products, strategic orientation, high-performance human resource policy, employee resilience, financial resources, etc. This book will be of interest to a professional audience that include practitioners, policy makers, NGOs, managers and employees as well as academicians, researchers and students.

Managerial Perspectives on Intelligent Big Data Analytics

New Horizons for a Data-Driven Economy

A Roadmap for Usage and Exploitation of Big Data in Europe

Big Data in Practice

Business Intelligence Strategy and Big Data Analytics

Big Data For Dummies

*AI may be the greatest opportunity of our time, with the potential to add nearly \$16 trillion to the global economy over the next decade. But so far, adoption has been much slower than anticipated, or so headlines may lead you to believe. With this practical guide, business leaders will discover where they are in their AI journey and learn the steps necessary to successfully scale AI throughout their organization. Authors Rob Thomas and Paul Zikopoulos from IBM introduce C-suite executives and business professionals to the AI Ladder—a unified, prescriptive approach to help them understand and accelerate the AI Journey. Complete with real-world examples and real-life experiences, this book explores AI drivers, value, and opportunity, as well as the adoption challenges organizations face. Understand why you can't have AI without an information architecture (IA) Appreciate how AI is as much a cultural change as it is a technological one Collect data and make it simple and accessible, regardless of where it lives Organize data to create a business-ready analytics foundation Analyze data, and build and scale AI with trust and transparency Infuse AI throughout your entire business and create intelligent workflows*

*This book is a compendium of the proceedings of the International Conference on Big-Data and Cloud Computing. The papers discuss the recent advances in the areas of big data analytics, data analytics in cloud, smart cities and grid, etc. This volume primarily focuses on the application of knowledge which promotes ideas for solving problems of the society through cutting-edge big-data technologies. The essays featured in this proceeding provide novel ideas that contribute for the growth of world class research and development. It will be useful to researchers in the area of advanced engineering sciences.*

*The Data Science Revolution and Organizational Psychology*

*Understanding Big Data: Analytics for Enterprise Class Hadoop and Streaming Data*

*Making Smarter Marketing Decisions*

*Principles of Big Data*

*Big Data for the Greater Good*

*Customer-Centricity*