

Big Data Analytics E Data Mining Innovative Management

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 Unique insights to implement big data analytics and reap big returns to your bottom line Focusing on the business and financial value of big data analytics, respected technology journalist Frank J. Ohlhorst shares his insights on the newly emerging field of big data analytics in Big Data Analytics. This breakthrough book demonstrates the importance of analytics, defines the processes,

highlights the tangible and intangible values and discusses how you can turn a business liability into actionable material that can be used to redefine markets, improve profits and identify new business opportunities. Reveals big data analytics as the next wave for businesses looking for competitive advantage Takes an in-depth look at the financial value of big data analytics Offers tools and best practices for working with big data Once the domain of large on-line retailers such as eBay and Amazon, big data is now accessible by businesses of all sizes and across industries. From how to mine the data your company collects, to the data that is available on the outside, Big Data Analytics shows how you can leverage big data into a key component in your business's growth strategy.

Data Science and Big Data Analytics Discovering, Analyzing, Visualizing and Presenting Data John Wiley & Sons

Integrate big data into business to drive competitive advantage and sustainable success Big Data MBA brings insight and expertise to leveraging big data in business so you can harness the power of analytics and gain a true business advantage. Based on a practical framework with supporting methodology and hands-on exercises,

this book helps identify where and how big data can help you transform your business. You'll learn how to exploit new sources of customer, product, and operational data, coupled with advanced analytics and data science, to optimize key processes, uncover monetization opportunities, and create new sources of competitive differentiation. The discussion includes guidelines for operationalizing analytics, optimal organizational structure, and using analytic insights throughout your organization's user experience to customers and front-end employees alike. You'll learn to "think like a data scientist" as you build upon the decisions your business is trying to make, the hypotheses you need to test, and the predictions you need to produce. Business stakeholders no longer need to relinquish control of data and analytics to IT. In fact, they must champion the organization's data collection and analysis efforts. This book is a primer on the business approach to analytics, providing the practical understanding you need to convert data into opportunity. Understand where and how to leverage big data Integrate analytics into everyday operations Structure your organization to drive analytic insights Optimize processes, uncover opportunities, and stand out from the rest Help business

stakeholders to “think like a data scientist” Understand appropriate business application of different analytic techniques If you want data to transform your business, you need to know how to put it to use. Big Data MBA shows you how to implement big data and analytics to make better decisions.

Big Data Imperatives

Big Data Analytics and Knowledge Discovery

Tools and Technology for Effective Planning

The Internet of Things and Big Data Analytics

Computational Intelligence and Big Data Analytics

Big-Data Analytics for Cloud, IoT and Cognitive Computing

Data Science and Big Data Analytics is about harnessing the power of data for new insights. The book covers the breadth of activities and methods and tools that Data Scientists use. The content focuses on concepts, principles and practical applications that are applicable to any industry and technology environment, and the learning is supported and explained with examples that you can replicate using open-source software. This book will help you: Become a contributor on a data science team Deploy a structured lifecycle approach to data

analytics problems Apply appropriate analytic techniques and tools to analyzing big data Learn how to tell a compelling story with data to drive business action Prepare for EMC Proven Professional Data Science Certification Corresponding data sets are available from the book's page at Wiley which you can find on the Wiley site by searching for the ISBN 9781118876138. Get started discovering, analyzing, visualizing, and presenting data in a meaningful way today!

"The chapters in this volume offer useful case studies, technical roadmaps, lessons learned, and a few prescriptions todo this, avoid that."-From the Foreword by Joe LaCugna, Ph.D., Enterprise Analytics and Business Intelligence, Starbucks Coffee CompanyWith the growing barrage of "big data," it becomes vitally important for organizations to mak

Unique prospective 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 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 analytics. 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, crowd sourcing data scientists, cloud computing for big data, and much more. The best-selling 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 utilise 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 it 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

Big Data Analytics: Systems, Algorithms, Applications

Big Data Analytics and Intelligence

Discovering, Analyzing, Visualizing and Presenting Data

Big Data and Business Analytics

Applications of Big Data and Business Analytics in Management

Business Intelligence Strategy and Big Data Analytics

This book comprehensively conveys the theoretical and practical aspects of IoT and big data analytics with the solid contributions from practitioners as well as academicians. This book examines and expounds the unique capabilities of the big data analytics platforms in capturing, cleansing and crunching IoT device/sensor data in order to extricate actionable insights. A number of experimental case studies and real-world scenarios are incorporated in this book in order to instigate our book readers. This book Analyzes current research and development in the domains of IoT and big data analytics Gives an overview of latest trends and transitions happening in the IoT data analytics space Illustrates the various platforms, processes, patterns, and practices for simplifying and streamlining IoT data analytics The Internet of Things and Big Data Analytics: Integrated Platforms and Industry Use Cases examines and accentuates how the multiple challenges at the cusp of IoT and big data can be fully met. The device ecosystem is growing steadily. It is forecast that there will be billions of connected devices in the years to come. When these IoT devices, resource-constrained as well as resource-intensive, interact with one another locally and remotely, the amount of multi-structured data generated, collected, and stored is bound to grow exponentially. Another prominent trend is the integration of IoT devices with cloud-based applications, services, infrastructures, middleware solutions, and databases. This book examines the pioneering technologies and tools emerging and evolving in order to collect, pre-process, store, process

and analyze data heaps in order to disentangle actionable insights.

Big Data Analytics - 2 BOOK BUNDLE!! Data Analytics With Python Data is the foundation of this digital age that we live in. With this book, you are going to learn how to organize and analyze data and how to interpret vast sources of information. This book covers various topics on data analytics such as data analytics applications, data analytics process, using Python for data analytics, Python libraries for data analytics and many other that will help you kick-start your data analytics journey from the very beginning. In this book you are going to learn how to use Python its tools in order to interpret data and examine those interesting data trends and information, which are important in predicting the future. Whether you are dealing with some medical data, sales data, web page data, you can use Python in order to interpret data, analyze it and obtain this valuable information. You can also use this data for creating data analytics models and predictions. Here Is A Brief Preview of What You'll Learn In This Book... Data analytics applications Data analytics process How to install and run Python Python data structures and Python libraries Python conditional construct and iteration Data exploration using Pandas Pandas series and dataframes Data munging and distribution analysis Carrying out binary operations Data manipulation and categorical variable analysis How to build a predictive model And of course much, much more! Natural Language Processing With Python This book is a perfect beginner's guide to natural language processing. It is offering an easy to understand guide to implementing NLP techniques using Python. Natural language processing has been around for more than fifty years, but just recently with greater amounts of data present and better computational powers, it has gained a greater popularity. Given the importance of data, there is no wonder why natural language processing is on the rise. If you

are interested in learning more, this book will serve as your best companion on this journey introducing you to this challenging, yet extremely engaging world of automatic manipulation of our human language. It covers all the basics you need to know before you dive deeper into NLP and solving more complex NLP tasks in Python. Here Is a Preview of What You'll Learn Here... The main challenges of natural language processing The history of natural language processing How natural language processing actually works The main natural language processing applications Text preprocessing and noise removal Feature engineering and syntactic parsing Part of speech tagging and named entity extraction Topic modeling and word embedding Text classification problems Working with text data using NLTK Text summarization and sentiment analysis And much, much more... Get this book bundle NOW and SAVE money!

This Palgrave Pivot identifies the key legal, economic, and policy issues surrounding the allowance to use and interpret electronic data consistently and in a scientifically valid manner in U.S. courts. Evidence based on the analysis of large amounts of electronic data ("Big Data") plays an increasing role in civil court disputes, providing information that could not have been obtained from a witness stand. While Big Data evidence presents opportunities, it also presents legal and public policy challenges and concerns. How can one be sure that deviations found in Big Data fall outside the norm? If statistical analyses can be conducted and presented different ways, how can judges and juries make sense of conflicting interpretations? When does Big Data extraction stop being investigative and instead become an invasion of privacy? This book traces the history of Big Data use in U.S. courts, couples current case studies with legal challenges to explore key controversies, and suggests how courts can change the way

they handle Big Data to ensure that findings are statistically significant and scientifically sound. Applications of Big Data and Business Analytics in Management uses advanced analytic tools to explore the solutions to problems in society, environment and industry. The chapters within bring together researchers, engineers and practitioners, encompassing a wide and diverse set of topics in almost every field.

Data Analytics and Decision Making in Higher Education

*How 45 Successful Companies Used Big Data Analytics to Deliver Extraordinary Results
17th International Conference, DaWaK 2015, Valencia, Spain, September 1-4, 2015,
Proceedings*

Big Data

Big Data and Analytics Applications in Government

Creating Value with Big Data Analytics

This book highlights major issues related to big data analysis using computational intelligence techniques, mostly interdisciplinary in nature. It comprises chapters on computational intelligence technologies, such as neural networks and learning algorithms, evolutionary computation, fuzzy systems and other emerging techniques in data science and big data, ranging from methodologies, theory and algorithms for handling big data, to their applications in bioinformatics and related disciplines. The book describes the latest solutions, scientific results and methods in solving intriguing problems in the fields of big data analytics, intelligent agents and

computational intelligence. It reflects the state of the art research in the field and novel applications of new processing techniques in computer science. This book is useful to both doctoral students and researchers from computer science and engineering fields and bioinformatics related domains.

Takes an in-depth look at the financial value of big data analytics and offers tools and best practices for working with big data. Once the domain of large on-line retailers such as eBay and Amazon, big data is now accessible by businesses of all sizes and across industries.

Big Data Imperatives, focuses on resolving the key questions on everyone's mind: Which data matters? Do you have enough data volume to justify the usage? How you want to process this amount of data? How long do you really need to keep it active for your analysis, marketing, and BI applications? Big data is emerging from the realm of one-off projects to mainstream business adoption; however, the real value of big data is not in the overwhelming size of it, but more in its effective use. Big Data Imperatives describes the complementary nature of traditional data warehouses and big-data analytics platforms and how they feed each other. This book aims to bring the big data and analytics realms together with a greater focus on architectures that leverage the scale and power of big data

and the ability to integrate and apply analytics principles to data which earlier was not accessible. This book can also be used as a handbook for practitioners; helping them on methodology, technical architecture, analytics techniques and best practices. At the same time, this book intends to hold the interest of those new to big data and analytics by giving them a deep insight into the realm of big data.

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 topic 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 decision-makers understand them Includes many high-profile case studies from the author's work with some of the world's best known brands

2 Manuscripts - Data Analytics With Python And Natural Language Processing With Python

Enterprise 'Big Data' Warehouse, 'BI' Implementations and Analytics A General Management Perspective

From Strategic Planning to Enterprise Integration with Tools, Techniques, NoSQL, and Graph

Big Data MBA

Data Analytics and Big Data

The definitive guide to successfully integrating social, mobile, Big-Data analytics, cloud and IoT principles and technologies The main goal of this book is to spur the development of effective big-data computing operations on smart clouds that are fully supported by IoT sensing, machine learning and analytics systems. To that end, the authors draw upon their original research and proven track record in the field to describe a practical approach integrating big-data theories, cloud design principles, Internet of Things (IoT) sensing, machine learning, data analytics and Hadoop and

Spark programming. Part 1 focuses on data science, the roles of clouds and IoT devices and frameworks for big-data computing. Big data analytics and cognitive machine learning, as well as cloud architecture, IoT and cognitive systems are explored, and mobile cloud-IoT-interaction frameworks are illustrated with concrete system design examples. Part 2 is devoted to the principles of and algorithms for machine learning, data analytics and deep learning in big data applications. Part 3 concentrates on cloud programming software libraries from MapReduce to Hadoop, Spark and TensorFlow and describes business, educational, healthcare and social media applications for those tools. The first book describing a practical approach to integrating social, mobile, analytics, cloud and IoT (SMACT) principles and technologies Covers theory and computing techniques and technologies, making it suitable for use in both computer science and electrical engineering programs Offers an extremely well-informed vision of future intelligent and cognitive computing environments integrating SMACT technologies Fully illustrated throughout with examples, figures and approximately 150 problems to support and reinforce learning Features a companion website with an instructor manual and PowerPoint slides www.wiley.com/go/hwangIoT Big-Data Analytics for Cloud, IoT and Cognitive Computing satisfies the demand among university faculty and students for cutting-edge information on emerging intelligent and cognitive computing systems and technologies. Professionals working in data science, cloud computing and IoT applications will also

find this book to be an extremely useful working resource.

The main purpose of this book is to investigate, explore and describe approaches and methods to facilitate data understanding through analytics solutions based on its principles, concepts and applications. But analyzing data is also about involving the use of software. For this, and in order to cover some aspect of data analytics, this book uses software (Excel, SPSS, Python, etc) which can help readers to better understand the analytics process in simple terms and supporting useful methods in its application. This volume explores the diverse applications of advanced tools and technologies of the emerging field of big data and their evidential value in business. It examines the role of analytics tools and methods of using big data in strengthening businesses to meet today ' s information challenges and shows how businesses can adapt big data for effective businesses practices. This volume shows how big data and the use of data analytics is being effectively adopted more frequently, especially in companies that are looking for new methods to develop smarter capabilities and tackle challenges in dynamic processes. Many illustrative case studies are presented that highlight how companies in every sector are now focusing on harnessing data to create a new way of doing business.

This book presents and discusses the main strategic and organizational challenges posed by Big Data and analytics in a manner relevant to both practitioners and scholars. The first part of the book analyzes strategic issues relating to the growing

relevance of Big Data and analytics for competitive advantage, which is also attributable to empowerment of activities such as consumer profiling, market segmentation, and development of new products or services. Detailed consideration is also given to the strategic impact of Big Data and analytics on innovation in domains such as government and education and to Big Data-driven business models. The second part of the book addresses the impact of Big Data and analytics on management and organizations, focusing on challenges for governance, evaluation, and change management, while the concluding part reviews real examples of Big Data and analytics innovation at the global level. The text is supported by informative illustrations and case studies, so that practitioners can use the book as a toolbox to improve understanding and exploit business opportunities related to Big Data and analytics.

Emerging Business Intelligence and Analytic Trends for Today's Businesses

The Essential Guide to Data Science and its Applications

Big Data Analytics in U.S. Courts

Concepts, Technology, and Architecture

Big Data Analytics for Improved Accuracy, Efficiency, and Decision Making in Digital Marketing

This book is intended to present the state of the art in research on machine learning and big data analytics. The accepted chapters covered many themes including artificial intelligence and data

mining applications, machine learning and applications, deep learning technology for big data analytics, and modeling, simulation, and security with big data. It is a valuable resource for researchers in the area of big data analytics and its applications.

The guide to targeting and leveraging business opportunities using big data & analytics By leveraging big data & analytics, businesses create the potential to better understand, manage, and strategically exploiting the complex dynamics of customer behavior. Analytics in a Big Data World reveals how to tap into the powerful tool of data analytics to create a strategic advantage and identify new business opportunities. Designed to be an accessible resource, this essential book does not include exhaustive coverage of all analytical techniques, instead focusing on analytics techniques that really provide added value in business environments. The book draws on author Bart Baesens' expertise on the topics of big data, analytics and its applications in e.g. credit risk, marketing, and fraud to provide a clear roadmap for organizations that want to use data analytics to their advantage, but need a good starting point. Baesens has conducted extensive research on big data, analytics, customer relationship management, web analytics, fraud detection, and credit risk management, and uses this experience to bring clarity to a complex topic. Includes numerous case studies on risk management, fraud detection, customer relationship management, and web analytics Offers the results of research and the author's personal experience in banking, retail, and government Contains an overview of the visionary ideas and current developments on the strategic use of analytics for business Covers the topic of data analytics in easy-to-understand terms without an undo emphasis on mathematics and the minutiae of statistical analysis For organizations looking to enhance their capabilities via data analytics, this resource is the go-to reference for leveraging data to enhance business capabilities.

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 revolution but an evolution of 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.

A hands-on book showing how to process and derive business value from big data in real time. Examples in the book draw from social media sources such as Twitter (tweets) and Foursquare (check-ins). You also learn to draw from machine data, enabling you to analyze web server log files and patterns of user access in real time, as the access is occurring.

Uses, Challenges, and Implications

Big Data Analytics with Spark

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

**A Practitioner's Guide to Using Spark for Large Scale Data Analysis
Applications in Bioinformatics**

Integrated Platforms and Industry Use Cases

This book constitutes the refereed proceedings of the 17th International Conference on Data Warehousing and Knowledge Discovery, DaWaK 2015, held in Valencia, Spain, September 2015. The 31 revised full papers presented were carefully reviewed and selected from 90 submissions. The papers are organized in topical sections similarity measure and clustering; data mining; social computing; heterogeneous networks and data; data warehouses; stream processing; applications of big data analysis; and big data.

Get command of your organizational Big Data using the power of data science and analytics Key Features A perfect companion to boost your Big Data storing, processing, analyzing skills to help you take informed business decisions Work with the best tools such as Apache Hadoop, R, Python, and Spark for NoSQL platforms to perform massive online analyses Get expert tips on statistical inference, machine learning, mathematical modeling, and data visualization for Big Data Book Description Big Data

analytics relates to the strategies used by organizations to collect, organize and analyze large amounts of data to uncover valuable business insights that otherwise cannot be analyzed through traditional systems. Crafting an enterprise-scale cost-efficient Big Data and machine learning solution to uncover insights and value from your organization's data is a challenge. Today, with hundreds of new Big Data systems, machine learning packages and BI Tools, selecting the right combination of technologies is an even greater challenge. This book will help you do that. With the help of this guide, you will be able to bridge the gap between the theoretical world of technology with the practical ground reality of building corporate Big Data and data science platforms. You will get hands-on exposure to Hadoop and Spark, build machine learning dashboards using R and R Shiny, create web-based apps using NoSQL databases such as MongoDB and even learn how to write R code for neural networks. By the end of the book, you will have a very clear and concrete understanding of what Big Data analytics means,

how it drives revenues for organizations, and how you can develop your own Big Data analytics solution using different tools and methods articulated in this book. What you will learn - Get a 360-degree view into the world of Big Data, data science and machine learning - Broad range of technical and business Big Data analytics topics that caters to the interests of the technical experts as well as corporate IT executives - Get hands-on experience with industry-standard Big Data and machine learning tools such as Hadoop, Spark, MongoDB, KDB+ and R - Create production-grade machine learning BI Dashboards using R and R Shiny with step-by-step instructions - Learn how to combine open-source Big Data, machine learning and BI Tools to create low-cost business analytics applications - Understand corporate strategies for successful Big Data and data science projects - Go beyond general-purpose analytics to develop cutting-edge Big Data applications using emerging technologies Who this book is for The book is intended for existing and aspiring Big Data professionals who wish to become the go-to person in their

organization when it comes to Big Data architecture, analytics, and governance. While no prior knowledge of Big Data or related technologies is assumed, it will be helpful to have some programming experience.

Big Data Analytics Using Splunk is a hands-on book showing how to process and derive business value from big data in real time. Examples in the book draw from social media sources such as Twitter (tweets) and Foursquare (check-ins). You also learn to draw from machine data, enabling you to analyze, say, web server log files and patterns of user access in real time, as the access is occurring. Gone are the days when you need be caught out by shifting public opinion or sudden changes in customer behavior. Splunk's easy to use engine helps you recognize and react in real time, as events are occurring. Splunk is a powerful, yet simple analytical tool fast gaining traction in the fields of big data and operational intelligence. Using Splunk, you can monitor data in real time, or mine your data after the fact. Splunk's stunning visualizations aid in locating the

needle of value in a haystack of a data. Geolocation support spreads your data across a map, allowing you to drill down to geographic areas of interest. Alerts can run in the background and trigger to warn you of shifts or events as they are taking place. With Splunk you can immediately recognize and react to changing trends and shifting public opinion as expressed through social media, and to new patterns of eCommerce and customer behavior. The ability to immediately recognize and react to changing trends provides a tremendous advantage in today's fast-paced world of Internet business. Big Data Analytics Using Splunk opens the door to an exciting world of real-time operational intelligence. Built around hands-on projects Shows how to mine social media Opens the door to real-time operational intelligence

Data availability is surpassing existing paradigms for governing, managing, analyzing, and interpreting health data. Big Data and Health Analytics provides frameworks, use cases, and examples that illustrate the role of big data and

analytics in modern health care, including how public health information can inform health delivery. Written for health

Practical Big Data Analytics

Understanding Big Data: Analytics for Enterprise Class

Hadoop and Streaming Data

Big Data, Big Analytics

Strategic and Organizational Impacts

Big Data in Practice

Turning Big Data into Big Money

Data availability is surpassing existing paradigms for governing, managing, analyzing, and interpreting health data. Big Data and Health Analytics provides frameworks, use cases, and examples that illustrate the role of big data and analytics in modern health care, including how public health information can inform health delivery. Written for health care professionals and executives, this is not a technical book on the use of statistics and machine-learning algorithms for extracting knowledge out of data, nor a book on the intricacies of database design. Instead, this book presents the current thinking of academic and industry researchers and leaders from around the world. Using non-technical language, this book is accessible to health care professionals who might not have an IT and analytics background. It includes case studies that illustrate the business

processes underlying the use of big data and health analytics to improve health care delivery. Highlighting lessons learned from the case studies, the book supplies readers with the foundation required for further specialized study in health analytics and data management. Coverage includes community health information, information visualization which offers interactive environments and analytic processes that support exploration of EHR data, the governance structure required to enable data analytics and use, federal regulations and the constraints they place on analytics, and information security. Links to websites, videos, articles, and other online content that expand and support the primary learning objectives for each major section of the book are also included to help you develop the skills you will need to achieve quality improvements in health care delivery through the effective use of data and analytics.

The availability of big data, low-cost commodity hardware, and new information management and analytic software have produced a unique moment in the history of data analysis. The convergence of these trends means that we have the capabilities required to analyze astonishing data sets quickly and cost-effectively for the first time in history. They represent a genuine leap forward and a clear opportunity to realize enormous gains in terms of efficiency, productivity, revenue, and profitability especially in digital marketing. Data plays a huge role in understanding valuable insights about target demographics and customer preferences. From every interaction with technology, regardless of whether it is active or passive, we are creating new data that can describe us. If analyzed

correctly, these data points can explain a lot about our behavior, personalities, and life events. Companies can leverage these insights for product improvements, business strategy, and marketing campaigns to cater to the target customers. Big Data Analytics for Improved Accuracy, Efficiency, and Decision Making in Digital Marketing aids understanding of big data in terms of digital marketing for meaningful analysis of information that can improve marketing efforts and strategies using the latest digital techniques. The chapters cover a wide array of essential marketing topics and techniques, including search engine marketing, consumer behavior, social media marketing, online advertising, and how they interact with big data. This book is essential for professionals and researchers working in the field of analytics, data, and digital marketing, along with marketers, advertisers, brand managers, social media specialists, managers, sales professionals, practitioners, researchers, academicians, and students looking for the latest information on how big data is being used in digital marketing strategies. Big Data Analytics with Spark is a step-by-step guide for learning Spark, which is an open-source fast and general-purpose cluster computing framework for large-scale data analysis. You will learn how to use Spark for different types of big data analytics projects, including batch, interactive, graph, and stream data analysis as well as machine learning. In addition, this book will help you become a much sought-after Spark expert. Spark is one of the hottest Big Data technologies. The amount of data generated today by devices, applications and users is exploding. Therefore, there is a critical need for tools that can analyze large-scale data and

unlock value from it. Spark is a powerful technology that meets that need. You can, for example, use Spark to perform low latency computations through the use of efficient caching and iterative algorithms; leverage the features of its shell for easy and interactive Data analysis; employ its fast batch processing and low latency features to process your real time data streams and so on. As a result, adoption of Spark is rapidly growing and is replacing Hadoop MapReduce as the technology of choice for big data analytics. This book provides an introduction to Spark and related big-data technologies. It covers Spark core and its add-on libraries, including Spark SQL, Spark Streaming, GraphX, and MLlib. Big Data Analytics with Spark is therefore written for busy professionals who prefer learning a new technology from a consolidated source instead of spending countless hours on the Internet trying to pick bits and pieces from different sources. The book also provides a chapter on Scala, the hottest functional programming language, and the program that underlies Spark. You'll learn the basics of functional programming in Scala, so that you can write Spark applications in it. What's more, Big Data Analytics with Spark provides an introduction to other big data technologies that are commonly used along with Spark, like Hive, Avro, Kafka and so on. So the book is self-sufficient; all the technologies that you need to know to use Spark are covered. The only thing that you are expected to know is programming in any language. There is a critical shortage of people with big data expertise, so companies are willing to pay top dollar for people with skills in areas like Spark and Scala. So reading this book and absorbing its principles will provide a

boost—possibly a big boost—to your career.

The proposed book will discuss various aspects of big data Analytics. It will deliberate upon the tools, technology, applications, use cases and research directions in the field. Chapters would be contributed by researchers, scientist and practitioners from various reputed universities and organizations for the benefit of readers.

Big Data Analytics Using Splunk

A Perspective for Health Care

Driving Business Strategies with Data Science

Big Data on Campus

Making Smarter Marketing Decisions

Harnessing Data for New Business Models

Big Data Analytics and Intelligence is essential reading for researchers and experts working in the fields of health care, data science, analytics, the internet of things and information retrieval.

Public Sector organizations represent an important aspect of the economy of many countries, ranging from 30-40% of GDP. The application of Big Data and Analytics (BDA) techniques can greatly enhance the efficiency of these organizations, but in the early days yet for public managers who might not really understand what BDA is and how to apply it. This book represents a global repository of case studies also

with academic and practitioner viewpoints on the application of BDA in public sector agencies. Learn about the most recent advances in the application of BDA, the challenges, the opportunities and the outcomes of applying new technologies and techniques to improve program delivery.

Webber, Henry Y. Zheng, Ying Zhou

Big Data Analytics: Applications in Business and Marketing explores the concept and applications related to marketing and business as well as future research directions. It also examines how this emerging field could be extended to performance management and decision-making. Investment in business and marketing analytics can create value through proper allocation of resources and resource orchestration process. The use of data analytics tools can be used to diagnose and improve performance. The book is divided into five parts. The first part introduces data science, big data, and data analytics. The second part focuses on applications of business analytics including: Big data analytics and algorithmic market basket analysis Anticipating consumer purchase behavior Variation in shopping patterns Big data analytics for market intelligence The third part looks at business intelligence and features an evaluation study of churn prediction models for business Intelligence. The fourth part of the book examines analytics for marketing decision-making and the roles of big data analytics for market

intelligence and of consumer behavior. The book concludes with digital marketing marketing by consumer analytics, web analytics for digital marketing, and smart retailing. This book covers the concepts, applications and research trends of marketing and business analytics with the aim of helping organizations increase profitability by improving decision-making through data analytics.

Machine Learning and Big Data Analytics Paradigms: Analysis, Applications and Challenges

Big Data and Health Analytics

Current Practices and Future Opportunities

Hands-on techniques to implement enterprise analytics and machine learning us

Hadoop, Spark, NoSQL and R

Applications in Business and Marketing

Analytics in a Big Data World

Big Data Analytics will assist managers in providing an overview of the drivers for introducing big data technology into the organization and for understanding the types of business problems best suited to big data analytics solutions, understanding the value drivers and benefits, strategic planning, developing a pilot, and eventually planning to integrate back into production within the enterprise. Guides the reader in assessing the opportunities and value proposition Overview of big data hardware and software architectures Presents a variety of technologies and how they fit into the big data ecosystem

Learn Big Data from the ground up with this complete and up-to-date resource from leaders in the field

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Big Data: Concepts, Technology, and Architecture delivers a comprehensive treatment of Big Data tools, terminology, and technology perfectly suited to a wide range of business professionals, academic researchers, and students. Beginning with a fulsome overview of what we mean when we say, “ Big Data, ” the book moves on to discuss every stage of the lifecycle of Big Data. You ’ ll learn about the creation of structured, unstructured, and semi-structured data, data storage solutions, traditional database solutions like SQL, data processing, data analytics, machine learning, and data mining. You ’ ll also discover how specific technologies like Apache Hadoop, SQOOP, and Flume work. Big Data also covers the central topic of big data visualization with Tableau, and you ’ ll learn how to create scatter plots, histograms, bar, line, and pie charts with that software. Accessibly organized, Big Data includes illuminating case studies throughout the material, showing you how the included concepts have been applied in real-world settings. Some of those concepts include: The common challenges facing big data technology and technologists, like data heterogeneity and incompleteness, data volume and velocity, storage limitations, and privacy concerns Relational and non-relational databases, like RDBMS, NoSQL, and NewSQL databases Virtualizing Big Data through encapsulation, partitioning, and isolating, as well as big data server virtualization Apache software, including Hadoop, Cassandra, Avro, Pig, Mahout, Oozie, and Hive The Big Data analytics lifecycle, including business case evaluation, data preparation, extraction, transformation, analysis, and visualization Perfect for data scientists, data engineers, and database managers, Big Data also belongs on the bookshelves of business intelligence analysts who are required to make decisions based on large volumes of information. Executives and managers who lead teams responsible for keeping or understanding large datasets will also benefit from this book.

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 provides a comprehensive survey of techniques, technologies and applications of Big Data and its analysis. The Big Data phenomenon is increasingly impacting all sectors of business and industry, producing an emerging new information ecosystem. On the applications front, the book offers detailed descriptions of various application areas for Big Data Analytics in the important domains of Social Semantic Web Mining, Banking and Financial Services, Capital Markets, Insurance, Advertisement, Recommendation Systems, Bio-Informatics, the IoT and Fog Computing, before delving into issues of security and privacy. With regard to machine learning techniques, the book presents all the standard algorithms for learning – including supervised, semi-supervised and unsupervised techniques such as clustering and reinforcement learning techniques to perform collective Deep Learning. Multi-layered and nonlinear learning for Big Data are also covered. In turn, the book highlights real-life case studies on successful implementations of Big Data Analytics at large IT companies such as Google, Facebook, LinkedIn and Microsoft. Multi-sectorial case studies on domain-based companies such as Deutsche Bank, the power provider Opower, Delta Airlines and a Chinese City Transportation application

represent a valuable addition. Given its comprehensive coverage of Big Data Analytics, the book offers a unique resource for undergraduate and graduate students, researchers, educators and IT professionals alike.

Turning Big Data Into Big Money

Big Data and Analytics

Data Science and Big Data Analytics

Deriving Operational Intelligence from Social Media, Machine Data, Existing Data Warehouses, and Other Real-Time Streaming Sources

Big Data Analytics