Big Data Driven Supply Chain Management A Framework For Implementing Analytics And Turning Information Into Intelligence Ft Press Analytics

Supply chain management, rapidly-advancing and growing ever more important in the global business climate, requires an intense understanding of both underlying principles and practical techniques. Including both a broad overview of supply chain management and real-world examples of SCM in companies ranging from small to large, this book provides students with both the foundational material required to understand the subject matter and practical tips that demonstrate how the latest techniques are being applied. Spanning functional boundaries, this well-regarded book is now in its second edition and has quickly become a standard course text at many universities. This newest edition continues to provide a balanced, integrative, and business-oriented viewpoint of the material, and deeply explores how SCM is intertwined with other organizational functions. New material has been added to address the importance of big data analytics in SCM, as well as other technological advances such as 3-D printing, cloud computing, machine learning, driverless vehicles, the Internet of Things, RFID, and others.

Industry 4.0 is based on the cyber-physical transformation of processes, systems and methods applied in the manufacturing sector, and on its autonomous and decentralized operation. Industry 4.0 reflects that the industrial world is at the beginning of the so-called Fourth

Industrial Revolution, characterized by a massive interconnection of assets and the integration of human operators with the manufacturing environment. In this regard, data analytics and, specifically, the artificial intelligence is the vehicular technology towards the next generation of smart factories.Chapters in this book cover a diversity of current and new developments in the use of artificial intelligence on the industrial sector seen from the fourth industrial revolution point of view, namely, cyber-physical applications, artificial intelligence technologies and tools, Industrial Internet of Things and data analytics. This book contains high-quality chapters containing original research results and literature review of exceptional merit. Thus, it is in the aim of the book to contribute to the literature of the topic in this regard and let the readers know current and new trends in the use of artificial intelligence for the Industry 4.0.

The ability to uncover, share, and utilize knowledge is one of the most vital components to the success of any organization. While new technologies and techniques of knowledge dissemination are promising, there is still a struggle to derive and circulate meaningful information from large data sets. Strategic Data-Based Wisdom in the Big Data Era combines the latest empirical research findings, best practices, and applicable theoretical frameworks surrounding data analytics and knowledge acquisition. Providing a multi-disciplinary perspective of the subject area, this book is an essential reference source for professionals and researchers working in the field of knowledge management who would like to improve their understanding of the strategic role of data-based wisdom in different types of work communities and environments.

An expert offers a set of rules that will help managers achieve dramatic improvements in operations performance. In recent years, management gurus have urged businesses to adopt

such strategies as just-in-time, lean manufacturing, offshoring, and frequent deliveries to retail outlets. But today, these much-touted strategies may be risky. Global financial turmoil, rising labor costs in developing countries, and huge volatility in the price of oil and other commodities can disrupt a company's entire supply chain and threaten its ability to compete. In Operations Rules, David Simchi-Levi identifies the crucial element in a company's success: the link between the value it provides its customers and its operations strategies. And he offers a set of scientifically and empirically based rules that management can follow to achieve a quantum leap in operations performance. Flexibility, says Simchi-Levi, is the single most important capability that allows firms to innovate in their operations and supply chain strategies. A small investment in flexibility can achieve almost all the benefits of full flexibility. And successful companies do not all pursue the same strategies. Amazon and Wal-Mart, for example, are direct competitors but each focuses on a different market channel and provides a unique customer value proposition—Amazon, large selection and reliable fulfillment; Wal-Mart, low prices—that directly aligns with its operations strategy. Simchi-Levi's rules—regarding such issues as channels, price, product characteristics, value-added service, procurement strategy, and information technolog—-transform operations and supply chain management from an undertaking based on gut feeling and anecdotes to a science.

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.

The five-volume set IFIP AICT 630, 631, 632, 633, and 634 constitutes the refereed proceedings of the International IFIP WG 5.7 Conference on Advances in Production Management Systems, APMS 2021, held in Nantes, France, in September 2021.* The 378 papers presented were carefully reviewed and selected from 529 submissions. They discuss artificial intelligence techniques, decision aid and new and renewed paradigms for sustainable and resilient production systems at four-wall factory and value chain levels. *The conference was held online.

Get proven guidance to build a market-driven supply chain management system Supply chain management processes have gradually shifted from a supply-driven focus to a demand-driven one in order to better synchronize demand and supply signals. Bricks Matter shows you how you can identify market risks and opportunities and translate these into winning tactics. Business cases highlight how business leaders are winning through market-driven approaches. Helps you understand how to apply the emerging world of predictive analytics for the better management of value networks Includes business cases illustrating the market-driven approach Reveals how businesses can identify market risks and translate these into supply-side tactics As companies transition from demand-driven to market-driven approach, the focus in organizations shifts from one of vertical excellence to

building strong market-to-market horizontal processes. Improve revenue by increasing market share, improve profit margins, and maintain high levels of customer service with the indispensable guidance found in Bricks Matter.

Less than 0.5 per cent of all data is currently analysed and used. However, business leaders and managers cannot afford to be unconcerned or sceptical about data. Data is revolutionizing the way we work and it is the companies that view data as a strategic asset that will survive and thrive. Bernard Marr's Data Strategy is a must-have guide to creating a robust data strategy. Explaining how to identify your strategic data needs, what methods to use to collect the data and, most importantly, how to translate your data into organizational insights for improved business decision-making and performance, this is essential reading for anyone aiming to leverage the value of their business data and gain competitive advantage. Packed with case studies and real-world examples, advice on how to build data competencies in an organization and crucial coverage of how to ensure your data doesn't become a liability, Data Strategy will equip any organization with the tools and strategies it needs to profit from big data, analytics and the Internet of Things.

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.

In order to establish and maintain a successful company in the digital age, managers are digitally transforming their organizations to include such tools

as disruptive technologies and digital data to improve performance and efficiencies. As these companies continue to adopt digital technologies to improve their businesses and create new revenues and value-producing opportunities, they must also be aware of the challenges digitalization can present. Business Transformations in the Era of Digitalization is a collection of innovative research on the latest trends, business opportunities, and challenges in the digitalization of businesses. Highlighting a range of topics including business-IT alignment, cloud computing, Internet of Things (IoT), business sustainability, small and medium-sized enterprises, and digital entrepreneurship, this book is ideally designed for managers, professionals, consultants, entrepreneurs, and researchers.

Using data science in order to solve a problem requires a scientific mindset more than coding skills. Data Science for Supply Chain Forecasting, Second Edition contends that a true scientific method which includes experimentation, observation, and constant questioning must be applied to supply chains to achieve excellence in demand forecasting. This second edition adds more than 45 percent extra content with four new chapters including an introduction to neural networks and the forecast value added framework. Part I focuses on statistical "traditional" models, Part II, on machine learning, and the all-new Part III discusses demand

forecasting process management. The various chapters focus on both forecast models and new concepts such as metrics, underfitting, overfitting, outliers, feature optimization, and external demand drivers. The book is replete with do-it-yourself sections with implementations provided in Python (and Excel for the statistical models) to show the readers how to apply these models themselves. This hands-on book, covering the entire range of forecasting—from the basics all the way to leading-edge models—will benefit supply chain practitioners, forecasters, and analysts looking to go the extra mile with demand forecasting.

How to Transform Your Organization with Analytics: Insider Lessons from IBM's Pioneering Experience Analytics is not just a technology: It is a better way to do business. Using analytics, you can systematically inform human judgment with data-driven insight. This doesn't just improve decision-making: It also enables greater innovation and creativity in support of strategy. Your transformation won't happen overnight; however, it is absolutely achievable, and the rewards are immense. This book demystifies your analytics journey by showing you how IBM has successfully leveraged analytics across the enterprise, worldwide. Three of IBM's pioneering analytics practitioners share invaluable real-world perspectives on what does and doesn't work and how you can start or accelerate your own

transformation. This book provides an essential framework for becoming a smarter enterprise and shows through 31 case studies how IBM has derived value from analytics throughout its business. Coverage Includes Creating a smarter workforce through big data and analytics More effectively optimizing supply chain processes Systematically improving financial forecasting Managing financial risk, increasing operational efficiency, and creating business value Reaching more B2B or B2C customers and deepening their engagement Optimizing manufacturing and product management processes Deploying your sales organization to increase revenue and effectiveness Achieving new levels of excellence in services delivery and reducing risk Transforming IT to enable wider use of analytics "Measuring the immeasurable" and filling gaps in imperfect data Whatever your industry or role, whether a current or future leader, analytics can make you smarter and more competitive. Analytics Across the Enterprise shows how IBM did it--and how you can, too. Learn more about IBM Analytics Leverage big data to add value to your business Social media analytics, web-tracking, and other technologies help companies acquire and handle massive amounts of data to better understand their customers, products, competition, and markets. Armed with the insights from big data, companies can improve customer experience and products, add

value, and increase return on investment. The tricky part for busy IT professionals and executives is how to get this done, and that's where this practical book comes in. Big Data: Understanding How Data Powers Big Business is a complete how-to guide to leveraging big data to drive business value. Full of practical techniques, real-world examples, and hands-on exercises, this book explores the technologies involved, as well as how to find areas of the organization that can take full advantage of big data. Shows how to decompose current business strategies in order to link big data initiatives to the organization’s value creation processes Explores different value creation processes and models Explains issues surrounding operationalizing big data, including organizational structures, education challenges, and new big data-related roles Provides methodology worksheets and exercises so readers can apply techniques Includes real-world examples from a variety of organizations leveraging big data Big Data: Understanding How Data Powers Big Business is written by one of Big Data's preeminent experts, William Schmarzo. Don't miss his invaluable insights and advice.

Harness data within the supply chain using this accessible guide on how to examine, evaluate and apply business analytics models.

This book is a collection of selected papers presented at the First International Conference on

Industrial IoT, Big Data and Supply Chain (IIoTBDSC), held as an online conference due to COVID-19 (initially to be held in Macao, Special Administration Region (SAR) of China), during September 15–17, 2020. It includes novel and innovative work from experts, practitioners, scientists and decision-makers from academia and industry. It brings multi-disciplines together on IIoT, data science, cloud computing, software engineering approaches to design, development, testing and quality of products and services.

This book shows digital economy has become one of the most sought out solutions to sustainable development and economic growth of nations. This book discusses the implications of both artificial intelligence and computational intelligence in the digital economy providing a holistic view on AI education, economics, finance, sustainability, ethics, governance, cybersecurity, blockchain, and knowledge management. Unlike other books, this book brings together two important areas, intelligence systems and big data in the digital economy, with special attention given to the opportunities, challenges, for education, business growth, and economic progression of nations. The chapters hereby focus on how societies can take advantage and manage data, as well as the limitations they face due to the complexity of resources in the form of digital data and the

intelligence which will support economists, financial managers, engineers, ICT specialists, digital managers, data managers, policymakers, regulators, researchers, academics, students, economic development strategies, and the efforts made by the UN towards achieving their sustainability goals. Supply Chain Analytics introduces the reader to data analytics and demonstrates the value of their effective use in supply chain management. By describing the key supply chain processes through worked examples, and the descriptive, predictive and prescriptive analytic methods that can be applied to bring about improvements to those processes, the book presents a more comprehensive learning experience for the reader than has been offered previously. Key topics are addressed, including optimisation, big data, data mining and cloud computing. The author identifies four core supply chain processes – strategy, design, execution and people – to which the analytic techniques explained can be applied to ensure continuous improvement. Pedagogy to aid learning is incorporated throughout, including an opening section for each chapter explaining the learnings designed for the chapter; worked examples illustrating how each analytic technique works, how it is applied and what to be careful of; tables, diagrams and equations to help 'visualise' the concepts and methods covered; chapter case studies; and end-of-

chapter review questions and assignment tasks. Providing both management expertise and technical skills, which are essential to decision-makers in the supply chain, this textbook should be essential reading for advanced undergraduate and postgraduate students of supply chain analytics, supply chain leadership, and supply chain and operations management. Its practice-based and applied approach also makes it valuable for operating supply chain practitioners and those studying for professional qualifications. Online resources include chapter-by-chapter PowerPoint slides, tutorial exercises, written assignments and a test bank of exam questions.

Deliver unprecedented customer value and seize your competitive edge with a transformative digital supply network Digital tech has disrupted life and business as we know it, and supply chain management is no exception. But how exactly does digital transformation affect your business? What are the breakthrough technologies and their capabilities you need to know about? How will digital transformation impact skills requirements and work in general? Do you need to completely revamp your understanding of supply chain management? And most importantly: How do you get started? Digital Supply Networks provides clear answers to these and many other questions. Written by an experienced team comprised of Deloitte consultants

and leading problem-driven scholars from a premier research university, this expert guide leads you through the process of improving operations building supply networks, increasing revenue, reimagining business models, and providing added value to customers, stakeholders, and society. You'll learn everything you need to know about: Stages of development, roles, capabilities, and the benefits of DSN Big data analytics including its attributes, security, and authority Machine learning, Artificial Intelligence, Blockchain, robotics, and the Internet of Things Synchronized planning, intelligent supply, and digital product development Vision, attributes, technology, and benefits of smart manufacturing, dynamic logistics, and fulfillment A playbook to guide the digital transformation journey Drawing from real world-experience and problem-driven academic research, the authors provide an in-depth account of the transformation to digitally connected supply networks. They discuss the limitations of traditional supply chains and the underlying capabilities and potential of digitally-enabled supply flows. The chapters burst with expert insights and real-life use cases grounded in tomorrow's industry needs. Success in today's hyper-competitive, fast-paced business landscape, characterized by the risk of black swan events, such as the 2020 COVID-19 global pandemic, requires the reimagination and the digitalization of complex demand-supply systems,

more collaborative and connected processes, and smarter, more dynamic data-driven decision making?which can only be achieved through a fully integrated Digital Supply Network.

Big Data Driven Supply Chain ManagementA Framework for Implementing Analytics and Turning Information Into IntelligencePearson Education

The growth of Internet use and technologies has increased exponentially within the business sector. When utilized properly, these applications can enhance business functions and make them easier to perform. Exploring the Convergence of Big Data and the Internet of Things is a pivotal reference source featuring the latest empirical research on the business use of computing devices to send and receive data in conjunction with analytic applications to reduce maintenance costs, avoid equipment failures, and improve business operations. Including research on a broad range of topics such as supply chain, aquaculture, and speech recognition systems, this book is ideally designed for researchers, academicians, and practitioners seeking current research on various technology uses in business.

This edited book presents scientific results of the International Semi-Virtual Workshop on Software Engineering in IoT, Big data, Cloud and Mobile Computing (SE-ICBM 2020) which was held on October 15, 2020, at Soongsil University, Seoul, Korea. The aim of this workshop was to bring

together researchers and scientists, businessmen and entrepreneurs, teachers, engineers, computer users, and students to discuss the numerous fields of computer science and to share their experiences and exchange new ideas and information in a meaningful way. Research results about all aspects (theory, applications and tools) of computer and information science, and to discuss the practical challenges encountered along the way and the solutions adopted to solve them. The workshop organizers selected the best papers from those papers accepted for presentation at the workshop. The papers were chosen based on review scores submitted by members of the program committee and underwent further rigorous rounds of review. From this second round of review, 17 of the conference's most promising papers are then published in this Springer (SCI) book and not the conference proceedings. We impatiently await the important contributions that we know these authors will bring to the field of computer and information science.

Describes ways to incorporate domain modeling into software development.

Data has cemented itself as a building block of daily life. However, surrounding oneself with great quantities of information heightens risks to one’s personal privacy. Additionally, the presence of massive amounts of information prompts

researchers into how best to handle and disseminate it. Research is necessary to understand how to cope with the current technological requirements. Large-Scale Data Streaming, Processing, and Blockchain Security is a collection of innovative research that explores the latest methodologies, modeling, and simulations for coping with the generation and management of large-scale data in both scientific and individual applications. Featuring coverage on a wide range of topics including security models, internet of things, and collaborative filtering, this book is ideally designed for entrepreneurs, security analysts, IT consultants, security professionals, programmers, computer technicians, data scientists, technology developers, engineers, researchers, academicians, and students.

"What do you need to become a data-driven organization? Far more than having big data or a crack team of unicorn data scientists, it requires establishing an effective, deeply-ingrained data culture. This practical book shows you how true data-drivenness involves processes that require genuine buy-in across your company ... Through interviews and examples from data scientists and analytics leaders in a variety of industries ... Anderson explains the analytics value chain you need to adopt when building predictive business models"--Publisher's description.

Written by renowned data science experts Foster

Provost and Tom Fawcett, Data Science for Business introduces the fundamental principles of data science, and walks you through the "data-analytic thinking" necessary for extracting useful knowledge and business value from the data you collect. This guide also helps you understand the many data-mining techniques in use today. Based on an MBA course Provost has taught at New York University over the past ten years, Data Science for Business provides examples of real-world business problems to illustrate these principles. You'll not only learn how to improve communication between business stakeholders and data scientists, but also how participate intelligently in your company's data science projects. You'll also discover how to think data-analytically, and fully appreciate how data science methods can support business decision-making. Understand how data science fits in your organization—and how you can use it for competitive advantage Treat data as a business asset that requires careful investment if you're to gain real value Approach business problems data-analytically, using the data-mining process to gather good data in the most appropriate way Learn general concepts for actually extracting knowledge from data Apply data science principles when interviewing data science job candidates Master a complete, five-step roadmap for leveraging Big Data and analytics to gain unprecedented competitive advantage from your supply chain. Using Big Data, pioneers such as Amazon, UPS, and Wal-Mart are gaining unprecedented mastery over their supply chains. They are achieving greater visibility into inventory levels,

order fulfillment rates, material and product delivery... using predictive data analytics to match supply with demand; leveraging new planning strengths to optimize their sales channel strategies; optimizing supply chain strategy and competitive priorities; even launching powerful new ventures. Despite these opportunities, many supply chain operations are gaining limited or no value from Big Data. In Big Data Driven Supply Chain Management, Nada Sanders presents a systematic five-step framework for using Big Data in supply chains. You'll learn best practices for segmenting and analyzing customers, defining competitive priorities for each segment, aligning functions behind strategy, dissolving organizational boundaries to sense demand and make better decisions, and choose the right metrics to support all of this. Using these techniques, you can overcome the widespread obstacles to making the most of Big Data in your supply chain -- and earn big profits from the data you're already generating. For all executives, managers, and analysts interested in using Big Data technologies to improve supply chain performance.

Operations Management and Data Analytics Modelling: Economic Crises Perspective addresses real operation management problems in thrust areas like the healthcare and energy management sectors and Industry 4.0. It discusses recent advances and trends in developing data-driven operation management-based methodologies, big data analysis, application of computers in industrial engineering, optimization techniques, development of decision support systems for industrial operation, the role of a multiple-criteria decision-

making (MCDM) approach in operation management, fuzzy set theory-based operation management modelling and Lean Six Sigma. Features Discusses the importance of data analytics in industrial operations to improve economy Provides step-by-step implementation of operation management models to identify best practices Covers in-depth analysis using data-based operation management tools and techniques Discusses mathematical modelling for novel operation management models to solve industrial problems This book is aimed at graduate students and professionals in the field of industrial and production engineering, mechanical engineering and materials science.

In a world of soaring digitization, social media, financial transactions, and production and logistics processes constantly produce massive data. Employing analytical tools to extract insights and foresights from data improves the quality, speed, and reliability of solutions to highly intertwined issues faced in supply chain operations. From procurement in Industry 4.0 to sustainable consumption behavior to curriculum development for data scientists, this book offers a wide array of techniques and theories of Big Data Analytics applied to Supply Chain Management. It offers a comprehensive overview and forms a new synthesis by bringing together seemingly divergent fields of research. Intended for Engineering and Business students, scholars, and professionals, this book is a collection of state-of-the-art research and best practices to spur discussion about and extend the cumulant knowledge of emerging supply chain problems.

This book addresses a broad range of problems commonly encountered in the fields of financial analysis, logistics and supply chain management, such as the use of big data analytics in the banking sector. Divided into twenty chapters, some of the contemporary topics discussed in the book are co-operative/non-cooperative supply chain models for imperfect quality items with trade-credit financing; a non-dominated sorting water cycle algorithm for the cardinality constrained portfolio problem; and determining initial, basic and feasible solutions for transportation problems by means of the “supply demand reparation method” and “continuous allocation method.” In addition, the book delves into a comparison study on exponential smoothing and the Arima model for fuel prices; optimal policy for Weibull distributed deteriorating items varying with ramp type demand rate and shortages; an inventory model with shortages and deterioration for three different demand rates; outlier labeling methods for medical data; a garbage disposal plant as a validated model of a fault-tolerant system; and the design of a “least cost ration formulation application for cattle”; a preservation technology model for deteriorating items with advertisement dependent demand and trade credit; a time series model for stock price forecasting in India; and asset pricing using capital market curves. The book offers a valuable asset for all researchers and industry practitioners working in these areas, giving them a feel for the latest developments and encouraging them to pursue further research in this direction.

The proper understanding and managing of project risks

and uncertainties is crucial to any organization. It is paramount that all phases of project development and execution are monitored to avoid poor project results from meager economics, overspending, and reputation. Supply Chain Management Strategies and Risk Assessment in Retail Environments is a comprehensive reference source for the latest scholarly material on effectively managing risk factors and implementing the latest supply management strategies in retail environments. Featuring coverage on relevant topics such as omni-channel retail, green supply chain, and customer loyalty, this book is geared toward academicians, researchers, and students seeking current research on the challenges and opportunities available in the realm of retail and the flow of materials, information, and finances between companies and consumers.

Technological advancements in recent years have led to significant developments within a variety of business applications. In particular, data-driven research provides ample opportunity for enterprise growth, if utilized efficiently. Supply Chain Management in the Big Data Era is an authoritative reference source for the latest scholarly material on the implementation of big data analytics for improved operations and supply chain processes. Highlighting emerging strategies from different industry perspectives, this book is ideally designed for managers, professionals, practitioners, and students interested in the most recent research on supply chain innovations.

It’s time to get your head in the cloud! In today’s

business environment, more and more people are requesting cloud-based solutions to help solve their business challenges. So how can you not only anticipate your clients' needs but also keep ahead of the curve to ensure their goals stay on track? With the help of this accessible book, you'll get a clear sense of cloud computing and understand how to communicate the benefits, drawbacks, and options to your clients so they can make the best choices for their unique needs. Plus, case studies give you the opportunity to relate real-life examples of how the latest technologies are giving organizations worldwide the opportunity to thrive as supply chain solutions in the cloud. Demonstrates how improvements in forecasting, collaboration, and inventory optimization can lead to cost savings Explores why cloud computing is becoming increasingly important Takes a close look at the types of cloud computing Makes sense of demand-driven forecasting using Amazon's cloud Whether you work in management, business, or IT, this is the dog-eared reference you'll want to keep close by as you continue making sense of the cloud.

OPTIMIZE YOUR BUSINESS DATA FOR FIRST-CLASS RESULTS Data Driven Business Transformation illustrates how to find the secrets to fast adaptation and disruptive origination hidden in your data and how to use them to capture market share. Digitalisation – or the Digital Revolution – was the first step in an evolving process of analysis and improvement in the operations and administration of commerce. The popular author team of Caroline

Carruthers and Peter Jackson, two global leaders in data transformation and education, pick up the conversation here at the next evolutionary step where data from these digital systems generates value, and really use data science to produce tangible results. Optimise the performance of your company through data-driven processes by: Following step-by-step guidance for transitioning your company in the real world to run on a data-enabled business model Mastering a versatile set of data principles powerful enough to produce transformative results at any stage of a business's development Winning over the hearts of your employees and influencing a cultural shift to a data-enabled business Reading first-hand stories from today's thought leaders who are shaping data transformation at their companies Enable your company's data to lift profits with Data Driven Business Transformation.

Master a complete, five-step roadmap for leveraging Big Data and analytics to gain unprecedented competitive advantage from your supply chain. Using Big Data, pioneers such as Amazon, UPS, and Wal-Mart are gaining unprecedented mastery over their supply chains. They are achieving greater visibility into inventory levels, order fulfillment rates, material and product delivery… using predictive data analytics to match supply with demand; leveraging new planning strengths to optimize their sales channel

strategies; optimizing supply chain strategy and competitive priorities; even launching powerful new ventures. Despite these opportunities, many supply chain operations are gaining limited or no value from Big Data. In Big Data Driven Supply Chain Management, Nada Sanders presents a systematic five-step framework for using Big Data in supply chains. You'll learn best practices for segmenting and analyzing customers, defining competitive priorities for each segment, aligning functions behind strategy, dissolving organizational boundaries to sense demand and make better decisions, and choose the right metrics to support all of this. Using these techniques, you can overcome the widespread obstacles to making the most of Big Data in your supply chain — and earn big profits from the data you're already generating. For all executives, managers, and analysts interested in using Big Data technologies to improve supply chain performance. This book constitutes the refereed post-conference proceedings of the First International Conference on Smart Cities, Infrastructures, Technologies and Applications, SCITA 2017, held in Jeddah, Saudi Arabia, in November 2017. The 35 revised full papers were carefully reviewed and selected from 62 submissions. The papers are grouped in topical sections: infrastructure track, e-governance and transportation track, healthcare track, applications track.

Organizations of all types are consistently working on new initiatives, product lines, and workflows as a way to remain competitive in the modern business environment. No matter the type of project at hand, employing the best methods for effective execution and timely completion of the task is essential to business success. Operations and Service Management: Concepts, Methodologies, Tools, and Applications is a comprehensive reference source for the latest research on business operations and production processes. It examines the need for a customer focus and highlights a range of pertinent topics such as financial performance measures, human resource development, and business analytics, this multi-volume book is ideally designed for managers, professionals, students, researchers, and academics interested in operations and service management.

Big data, big data analytics, and blockchain are game-changers capable of revolutionizing business transactions in many indus- tries. Big data analytics enables companies to plan and act ahead of market competitors and offers a competitive advantage to ?rms [3]. Various developments in big data infrastructure, analytics, and services help ?rms transform themselves into data-driven organi- zations [68,154]. According to market predictors, the big data as a service (BDaaS) market is expected grow at a compound annual growth rate of 30.5%

over the period 2010-2024, with annual rev- enues of US$40.7 billion by 2024 [87]. Similarly, the blockchain as a service (BaaS) market is predicted to grow from US$113.1 mil- lion in 2019 to US$3.021 billion by 2024 [88]. Big data emerges as the latest stage of evolution in this race of technological adop- tion. Big data combines three trends in technology: computing, data, and convergence (SAS [previously known as Statistical Anal- ysis System]) [122].