Business Intelligence Concepts Components Techniques

The 9th European Conference on Information Management and Evaluation (ECIME) is being hosted this year by the University of the West of England, Bristol, UK on the 21-22 September 2015. The Conference Chair is Dr Elias Pimenidis, and the Programme Chair is Dr Mohammed Odeh both from the host University. ECIME provides an opportunity for individuals researching and working in the broad field of information systems management, including IT evaluation to come together to exchange ideas and discuss current research in the field. This has developed into a particularly important forum for the present era, where the modern challenges of managing information and evaluating the effectiveness of related technologies are constantly evolving in the world of Big Data and Cloud Computing. We hope that this year's conference will provide you with plenty of opportunities to share your expertise with colleagues from around the world. The keynote speakers for the Conference are Professor Haris Mouratidis, from the School of Computing, Engineering and Mathematics, University of Brighton, UK who will address the topic "Rethinking Information Systems Security", Dr Mohammed Odeh, from the University of the West of England, Bristol, UK and Dr. Mario Kossmann from Airbus, UK who will talk about "The Significance of Information Systems Management and Evaluation in the Aerospace Industry' ECIME 2015 received an initial submission of 55 abstracts. After the double-blind peer review process 28 academic Research papers, 5 PhD Research papers, 1 Masters Research paper and 3 Work in Progress papers have been accepted for these Conference Proceedings. These papers represent research from around the world, including Austria, Botswana, Cyprus, Czech Republic, Ireland, Japan, Kuwait, New Zealand, Norway, Poland, Portugal, Slovakia, Russia, South Africa, South Korea, Sweden, The Netherlands, UK and the USA.

Data Mining for Business Analytics: Concepts, Techniques, and Applications in R presents an applied approach to data mining concepts and methods, using R software for illustration Readers will learn how to implement a variety of popular data mining algorithms in R (a free and open-source software) to tackle business problems and opportunities. This is the fifth version of this successful text, and the first using R. It covers both statistical and machine learning algorithms for prediction, classification, visualization, dimension reduction, recommender systems, clustering, text mining and network analysis. It also includes: Two new co-authors, Inbal Yahav and Casey Lichtendahl, who bring both expertise teaching business analytics courses using R, and data mining consulting experience in business and government Updates and new material based on feedback from instructors teaching MBA, undergraduate, diploma and executive courses, and from their students More than a dozen case studies demonstrating applications for the data mining techniques described End-of-chapter exercises that help readers gauge and expand their comprehension and competency of the material presented A companion website with more than two dozen data sets, and instructor materials including exercise solutions, PowerPoint slides, and case solutions www.dataminingbook.com Data Mining for Business Analytics: Concepts, Techniques, and Applications in R is an ideal textbook for graduate and upper-undergraduate level courses in data mining, predictive analytics, and business analytics. This new edition is also an excellent reference for analysts, researchers, and practitioners working with quantitative methods in the fields of business, finance, marketing, computer science, and information technology.

Knowledge-based systems, fully integrated with software, have become essential enablers for both science and commerce. But current software methodologies, tools and techniques are not robust or reliable enough for the demands of a constantly changing and evolving market, and many promising approaches have proved to be no more than case-oriented methods that are not fully automated. This book presents the proceedings of the 17th international conference on New Trends in Intelligent Software Methodology, Tools and Techniques (SoMeT18) held in Granada, Spain, 26-28 September 2018. The SoMeT conferences provide a forum for the exchange of ideas and experience, foster new directions in software development methodologies and related tools and techniques, and focus on exploring innovations, controversies, and the current challenges facing the software engineering community. The 80 selected papers included here are divided into 13 chapters, and cover subjects as diverse as intelligent software systems; medical informatics and bioinformatics; artificial intelligence techniques; social learning software and sentiment analysis; cognitive systems and neural analytics; and security, among other things. Offering a state-of-the-art overview of methodologies, tools and techniques, this book will be of interest to all those whose work involves the development or application of software.

This book constitutes the refereed proceedings of the 14th IFIP WG 9.4 International Conference on Social Implications of Computers in Developing Countries, ICT4D 2017, held in Yogyakarta, Indonesia, in May 2017. The 60 revised full papers and 8 short papers presented together with 3 keynotes were carefully reviewed and selected from 118 submissions. The papers are organized in the following topical sections: large scale and complex information systems for development; women empowerment and gender justice; social mechanisms of ICT-enabled development; the data revolution and sustainable development goals; critical perspectives on ICT and open innovation for development; the contribution of practice theories to ICT for development; agile development; indigenous local community grounded ICT developments; global sourcing and development; sustainability in ICT4D; and information systems development and implementation in Southeast Asia. Also included are a graduate student track, current issues and notes. The chapter 'An Analysis of Accountability Concepts for Open Development' is open access under a CC BY 4.0 license via link.springer.com.

Recognizing the importance of selecting and pursuing programs, projects, and operational work that add sustainable business value that benefits end users, the Project Management Institute (PMI®) issued its first Standard on Portfolio Management in 2006. In 2014, it launched the Portfolio Management Professional (PfMP®) credential—which

several of the experts who contributed to this book earned—to recognize the advanced expertise required of practitioners in the field. Presenting information that is current with The Standard for Portfolio Management, Third Edition (2013); Portfolio Management: A Strategic Approach supplies in-depth treatment of the five domains and identifies best practices to ensure the organization has a balanced portfolio management that is critical to success. Following PMI's standard, the book is organized according to its five domains: strategic alignment, governance, portfolio performance management, portfolio risk management, and portfolio communications management. Each chapter presents the insight of different thought leaders in academia and business. Contributors from around the world, including the Americas, Europe, the Middle East, Africa, and Australia, supply a global perspective as to why portfolio management is essential for all types of organizations. They provide guidelines, examples, and models to consider, along with discussion and analysis of relevant literature in the field. Most chapters reference PMI standards, complement their concepts, and expand on the concepts and issues that the standards mention in passing or not at all. Overall, this is a must-have resource for anyone pursuing the PfMP® credential from PMI. For executives and practitioners in the field, it provides the concepts you will need to address the ever-changing complexities that impact your work. This book is also suitable as a textbook for universities offering courses on portfolio management.

Business intelligence (BI) software is the code and tools that allow you to view different components of a business using a single visual platform, making comprehending mountains of data easier. Applications that include reports, analytics, statistics, and historical and predictive modeling are all examples of BI applications. Currently, we are in the second generation of BI software, called BI 2.0. This generation is focused on writing BI software that is predictive, adaptive, simple, and interactive. As computers and software have evolved, more data can be presented to end users with increasingly visually rich techniques. Rich Internet application (RIA) technologies such as Microsoft Silverlight can be used to transform traditional user interfaces filled with boring data into fully interactive analytical applications to deliver insight from large data sets quickly. Furthermore, RIAs include 3D spatial design capabilities that allow for interesting layouts of aggregated data beyond a simple list or grid. BI 2.0 implemented via RIA technology can truly bring out the power of BI and deliver it to an average user via the Web. Next-Generation Business Intelligence Software with Rich Internet Applications provides developers, designers, and architects a solid foundation of BI design and architecture concepts with Microsoft Silverlight. This book covers key BI design concepts and how they can be applied without requiring an existing BI infrastructure. The author, Bart Czernicki, will show you how to build small BI applications by example that are interactive, highly visual, statistical, predictive, and most importantly, intuitive to the user. BI isn't just for the executive branch of a Fortune 500 company; it is for the masses. Let Next-Generation Business Intelligence Software with Rich Internet Applications show you how to unlock the rich intelligence you already have.

With the dawn of electronic databases, information technologies, and the Internet, organizations, now more than ever, have easy access to all the knowledge they need to conduct their business. However, utilizing and detecting the beneficial information can pose as a challenge. Enhancing Knowledge Discovery and Innovation in the Digital Era is a vibrant reference source on the latest research on student education, open information, technology enhanced learning (TEL), and student outcomes. Featuring widespread coverage across a range of applicable perspectives and topics, such as engineering education, data mining, and 3D printing, this book is ideally designed for professionals, upper-level students, and academics seeking current research on knowledge management and innovation networks.

Succeeding in the modern business world is a multi-faceted endeavor that involves numerous parts. By implementing effective strategies, companies can strive toward achieving a competitive advantage. Digital Entrepreneurship and Global Innovation is a pivotal reference source for the latest academic material on strategic entrepreneurship initiatives to facilitate organizational growth and success, focusing on the role of digital technologies in business environments. Highlighting theoretical frameworks, industry perspectives, and emerging methodologies, this book is ideally designed for professionals, practitioners, upper-level students, and researchers involved in the field of entrepreneurship.

Following the footsteps of the first edition, the second edition of Business Intelligence is a full overview of what comprises business intelligence. It is intended to provide an introduction to the concepts to uncomplicate the learning process when implementing a business intelligence program. Over a relatively long lifetime (7 years), the current edition of book has received numerous accolades from across the industry for its straightforward introduction to both business and technical aspects of business intelligence. As an author, David Loshin has a distinct ability to translate challenging topics into a framework that is easily digestible by managers, business analysts, and technologists alike. In addition, his material has developed a following (such as the recent Master Data Management book) among practitioners and key figures in the industry (both analysts and vendors) and that magnifies our ability to convey the value of this book. Guides managers through developing, administering, or simply understanding business intelligence technology Keeps pace with the changes in best practices, tools, methods and processes used to transform an organization's data into actionable knowledge Contains a handy, quick-reference to technologies and terminology.

The delivery of quality education to students relies heavily on the actions of an institution's administrative staff. Effective leadership strategies allow for the continued progress of modern educational initiatives. It is crucial to investigate how effective administrators lead their organizations in challenging and difficult times and promote the accomplishments of their organization. Research Anthology on Preparing School Administrators to Lead Quality Education Programs is a vital reference source that offers theoretical and pedagogical research concerning the management of educational systems on both the national and international scale. It also explores academic administration as well as administrative effectiveness in achieving organizational goals. Highlighting a range of topics such as strategic planning, human resources, and school culture, this multi-volume

book is ideally designed for educators, administrators, principals, superintendents, board members, researchers, academicians, policymakers, and students.
This two-volume set (CCIS 1045 and CCIS 1046) constitutes the refereed proceedings of the Third International Conference on Advances in Computing and Data Sciences, ICACDS 2019, held in Ghaziabad, India, in April 2019. The 112 full papers were carefully reviewed and selected from 621 submissions. The papers are centered around topics like advanced computing, data sciences, distributed systems organizing principles, development frameworks and environments, software verification and validation, computational complexity and cryptography, machine learning theory, database theory, probabilistic representations.
As the Internet becomes increasingly interconnected with modern society, the transition to online business has developed into a prevalent form of commerce. While there exist various advantages and disadvantages to online business, it plays a major role in contemporary business methods. Improving E-Commerce Web Applications Through Business Intelligence Techniques provides emerging research on the core areas of e-commerce web applications. While highlighting the use of data mining, search engine optimization, and online marketing to advance online business, readers will learn how the role of online commerce is becoming more prevalent in modern business. This book is an important resource for vendors, website developers, online customers, and scholars seeking current research on the development and use of e-commerce.
This book devises an alternative conceptual framework to understand digital transformation in the cultural heritage sector. It achieves this by placing a high importance on the role of technology in the strategic process of modeling and developing cultural services in the digital era. The focus is on how marketing activities and customer processes are being transformed by digital technologies to create better value, which can also be communicated to customers through an engaged and personalized approach. Much of the digital debate in cultural heritage is still in infancy. Some existing studies are anecdotal and often developed within the domain of established research streams, including studies with some technological aspects addressed partially and from an episodic or periodic perspective. Moreover, the critical changes that have emerged in the cultural management landscape are yet to be highlighted. This book fills that gap and provides a perspective on the cultural heritage sector, which uses the new social and technology landscape to describe the digital transformation in cultural heritage sectors. The authors highlight an inclusive perspective that addresses marketing strategy in the digital era as a proactive, technology-enabled process by which firms collaborate with customers to jointly create, communicate, deliver, and sustain experience and value co-creation.
In recent years, our world has experienced a profound shift and progression in available computing and knowledge sharing innovations. These emerging advancements have developed at a rapid pace, disseminating into and affecting numerous aspects of contemporary society. This has created a pivotal need for an innovative compendium encompassing the latest trends, concepts, and issues surrounding this relevant discipline area. During the past 15 years, the Encyclopedia of Information Science and Technology has become recognized as one of the landmark sources of the latest knowledge and discoveries in this discipline. The Encyclopedia of Information Science and Technology, Fourth Edition is a 10-volume set which includes 705 original and previously unpublished research articles covering a full range of perspectives, applications, and techniques contributed by thousands of experts and researchers from around the globe. This authoritative encyclopedia is an all-encompassing, well-established reference source that is ideally designed to disseminate the most forward-thinking and diverse research findings. With critical perspectives on the impact of information science management and new technologies in modern settings, including but not limited to computer science, education, healthcare, government, engineering, business, and natural and physical sciences, it is a pivotal and relevant source of knowledge that will benefit every professional within the field of information science and technology and is an invaluable addition to every academic and corporate library.
Business intelligence (BI) software allows you to view different components of a business using a single visual platform, which makes comprehending mountains of data easier. BI is everywhere. Applications that include reports, analytics, statistics, and historical and predictive modeling are all examples of business intelligence. Currently, we are in the second generation of business intelligence software—called BI 2.0—which is focused on writing business intelligence software that is predictive, adaptive, simple, and interactive. As computers and software have evolved, more data can be presented to end users with increasingly visually rich techniques. Rich Internet application (RIA) technologies such as Microsoft Silverlight can be used to transform traditional user-interfaces filled with boring data into fully interactive analytical applications that quickly deliver insight from large data sets. Furthermore, RIAs now include 3D spatial-design capabilities that move beyond a simple list or grid and allow for interesting layouts of aggregated data. BI 2.0 implemented via an RIA technology can truly bring out the power of business intelligence and deliver it to an average user on the Web. Silverlight 4 Business Intelligence Software provides developers, designers, and architects with a solid foundation in business intelligence design and architecture concepts for Microsoft Silverlight. This book covers key business intelligence design concepts and how they can be applied without an existing BI infrastructure. Author Bart Czernicki provides you with examples of how to build small BI applications that are interactive, highly visual, statistical, predictive—and most importantly—intuitive to the end-user. Business intelligence isn't just for the executive branch of a Fortune 500 company—it is for the masses. Let Silverlight 4 Business Intelligence Software show you how to unlock the rich intelligence you already have.
Business practices are constantly evolving in order to meet growing customer demands. Evaluating the role of logistics and supply chain management skills or applications is necessary for the success of any organization or business. As market competition becomes more aggressive, it is crucial to evaluate ways in which a business can maintain a strategic edge over competitors. Supply Chain and Logistics Management: Concepts, Methodologies, Tools, and Applications is a vital reference source that centers on the effective management of risk factors and the implementation of the latest supply management strategies. It also explores the field of digital supply chain optimization and

business transformation. Highlighting a range of topics such as inventory management, competitive advantage, and transport management, this multi-volume book is ideally designed for business managers, supply chain managers, business professionals, academicians, researchers, and upper-level students in the field of supply chain management, operations management, logistics, and operations research.

With a constant stream of developments in the IT research field, it seems only practical that there be methods and systems in place to consistently oversee this growing area. Managing Information Resources and Technology: Emerging Applications and Theories highlights the rising trends and studies in the information technology field. Each chapter offers interesting perspectives on common problems as well as suggestions for future improvement. Professionals, researchers, scholars, and students will gain deeper insight into this area of study with this comprehensive collection.

The five-volume set LNCS 9786-9790 constitutes the refereed proceedings of the 16th International Conference on Computational Science and Its Applications, ICCSA 2016, held in Beijing, China, in July 2016. The 239 revised full papers and 14 short papers presented at 33 workshops were carefully reviewed and selected from 849 submissions. They are organized in five thematical tracks: computational methods, algorithms and scientific applications; high performance computing and networks; geometric modeling, graphics and visualization; advanced and emerging applications; and information systems and technologies.

This symposium was born as a research forum to present and discuss original, rigorous and significant contributions on Artificial Intelligence-based (AI) solutions—with a strong, practical logic and, preferably, with empirical applications—developed to aid the management of organizations in multiple areas, activities, processes and problem-solving; what we call Management Intelligent Systems (MiS). This volume presents the proceedings of these activities in a collection of contributions with many original approaches. They address diverse Management and Business areas of application such as decision support, segmentation of markets, CRM, product design, service personalization, organizational design, e-commerce, credit scoring, workplace integration, innovation management, business database analysis, workflow management, location of stores, etc. A wide variety of AI techniques have been applied to these areas such as multi-objective optimization and evolutionary algorithms, classification algorithms, ant algorithms, fuzzy rule-based systems, intelligent agents, Web mining, neural networks, Bayesian models, data warehousing, rough sets, etc. This volume also includes a track focused on the latest research on Intelligent Systems and Technology Enhanced Learning (iTEL), as well as its impacts for learners and institutions. It aims at bringing together researchers and developers from both the professional and the academic realms to present, discuss and debate the latest advances on intelligent systems and technology-enhanced learning The symposium was organized by the Soft Computing and Intelligent Information Systems Research Group (http://sci2s.ugr.es) of the University of Granada (Spain) and the Bioinformatics, Intelligent System and Educational Technology Research Group (http:// bisite.usal.es/) of the University of Salamanca (Spain). The present edition was held in Salamanca (Spain) on May 22–24, 2013.

?Limited potential of financial, organizational, human and technology resources doesn't provide SMEs sufficient opportunities to access information and knowledge necessary in competition. Observing the methods and tools used by large companies, this book studies the conditions under which it would be possible to provide support to SMEs at a lower cost and with greater methodological and organizational backing. The author presents the proposed solution, Benchmarking Collaborative Network, which would provide SMEs access to information about their level of competitiveness, the key areas for the creation of competitive advantage and the activities required to achieve this advantage.

Data analysis is an important part of modern business administration, as efficient compilation of information allows managers and business leaders to make the best decisions for the financial solvency of their organizations. Understanding the use of analytics, reporting, and data mining in everyday business environments is imperative to the success of modern businesses. Business Intelligence: Concepts, Methodologies, Tools, and Applications presents a comprehensive examination of business data analytics along with case studies and practical applications for businesses in a variety of fields and corporate arenas. Focusing on topics and issues such as critical success factors, technology adaptation, agile development approaches, fuzzy logic tools, and best practices in business process management, this multivolume reference is of particular use to business analysts, investors, corporate managers, and entrepreneurs in a variety of prominent industries.

During the 21st century business environments have become more complex and dynamic than ever before. Companies operate in a world of change influenced by globalisation, volatile markets, legal changes and technical progress. As a result, they have to handle growing volumes of data and therefore require fast storage, reliable data access, intelligent retrieval of information and automated decision-making mechanisms, all provided at the highest level of service quality. Successful enterprises are aware of these challenges and efficiently respond to the dynamic environment in which their business operates. Business Intelligence (BI) and Performance Management (PM) offer solutions to these challenges and provide techniques to enable effective business change. The important aspects of both topics are discussed within this state-of-the-art volume. It covers the strategic support, business applications, methodologies and technologies from the field, and explores the benefits, issues and challenges of each. Issues are analysed from many different perspectives, ranging from strategic management to data technologies, and the different subjects are complimented and illustrated by numerous examples of industrial applications. Contributions are authored by leading academics and practitioners representing various universities, research centres and companies worldwide. Their experience covers multiple disciplines and industries, including finance, construction, logistics, and public services, amongst others. Business Intelligence and Performance Management is a valuable source of reference for graduates approaching MSc or PhD programs and for professionals in industry researching in the fields of BI and PM for industrial application.

Businesses consistently work on new projects, products, and workflows to remain competitive and successful in the modern business environment. To remain zealous, businesses must employ the most effective methods and tools in human resources, project management, and overall business plan execution as competitors work to succeed as well. Advanced Methodologies and Technologies in Business Operations and Management provides emerging research on business tools such as employee engagement, payout policies, and financial investing to promote operational success. While highlighting the challenges facing modern organizations, readers will learn how corporate social responsibility and utilizing artificial intelligence improve a company's culture and management. This book is an ideal resource for executives and managers, researchers, accountants, and financial investors seeking current research on business operations and management.

Cognition-driven decision support system (DSS) has been recognized as a paradigm in the research and development of business intelligence (BI). Cognitive decision support aims to help managers in their decision making from human cognitive aspects, such as thinking, sensing, understanding and predicting, and fully reuse their experience. Among these cognitive aspects, decision makers' situation awareness (SA) and mental models are considered to be two important prerequisites for decision making, particularly in ill-structured and dynamic decision situations with uncertainties, time pressure and high personal stake. In today's business domain, decision making is becoming increasingly complex. To make a successful decision, managers' SA about their business environments becomes a critical factor. This book presents theoretical models as well practical techniques of cognitiondriven DSS. It first introduces some important concepts of cognition orientation in decision making process and some techniques in related research areas including DSS, data warehouse and BI, offering readers a preliminary for moving forward in this book. It then proposes a cognition-driven decision process (CDDP) model which incorporates SA and experience (mental models) as its central components. The goal of the CDDP model is to facilitate cognitive decision support to managers on the basis of BI systems. It also presents relevant techniques developed to support the implementation of the CDDP model in a BI environment. Key issues addressed of a typical business decision cycle in the CDDP model include: natural language interface for a manager's SA input, extraction of SA semantics, construction of data warehouse queries based on the manger's SA and experience, situation information retrieval from data warehouse, how the manager perceives situation information and update SA, how the manager's SA leads to a final decision. Finally, a cognition-driven DSS, FACETS, and two illustrative applications of this system are discussed.

This is an important text for all students and practitioners of Business Intelligence (BI) and Customer Relationship Management (CRM). It provides a comprehensive resource for understanding and implementing Enterprise Resource Planning (ERP) and BI solutions within the organisational context. It provides an in-depth coverage of all key areas relating to the implementation of ERP and BI systems. It provides unique practical guidance on implementing ERP and BI strategies as formulated by the author and a range of academic practitioners and industry experts. Importantly, it demonstrates how these systems can be implemented in a real-world environment and in a way that provides strategic alignment that is compatible with the strategic vision of the organisation. The author presents a "BI Psychology Adoption Model" which represents new and innovative thinking in relation to how employees within organisations react to the introduction of new technology within the workplace.

Provides developments and research, as well as current innovative activities in data warehousing and mining, focusing on the intersection of data warehousing and business intelligence.

Decision makers, such as government officials, need to better understand human activity in order to make informed decisions. With the ability to measure and explore geographic space through the use of geospatial intelligence data sources including imagery and mapping data, they are better able to measure factors affecting the human population. As a broad field of study, geospatial research has applications in a variety of fields including military science, environmental science, civil engineering, and space exploration. Geospatial Intelligence: Concepts, Methodologies, Tools, and Applications explores multidisciplinary applications of geographic information systems to describe, assess, and visually depict physical features and to gather data, information, and knowledge regarding human activity. Highlighting a range of topics such as geovisualization, spatial analysis, and landscape mapping, this multi-volume book is ideally designed for data scientists, engineers, government agencies, researchers, and graduate-level students in GIS programs.

Data Mining for Business Analytics: Concepts, Techniques, and Applications in XLMiner®, Third Edition presents an applied approach to data mining and predictive analytics with clear exposition, hands-on exercises, and real-life case studies. Readers will work with all of the standard data mining methods using the Microsoft® Office Excel® add-in XLMiner® to develop predictive models and learn how to obtain business value from Big Data. Featuring updated topical coverage on text mining, social network analysis, collaborative filtering, ensemble methods, uplift modeling and more, the Third Edition also includes: Real-world examples to build a theoretical and practical understanding of key data mining methods End-of-chapter exercises that help readers better understand the presented material Data-rich case studies to illustrate various applications of data mining techniques Completely new chapters on social network analysis and text mining A companion site with additional data sets, instructors material that include solutions to exercises and case studies, and Microsoft PowerPoint® slides https://www.dataminingbook.com Free 140-day license to use XLMiner for Education software Data Mining for Business Analytics: Concepts, Techniques, and Applications in XLMiner®, Third Edition is an ideal textbook for upper-undergraduate and graduate-level courses as well as professional programs on data mining, predictive modeling, and Big Data analytics. The new edition is also a unique reference for analysts, researchers, and practitioners working with predictive analytics in the fields of business, finance, marketing, computer science, and information technology. Praise for the Second Edition "…full of vivid and thought-provoking anecdotes... needs to be read by anyone with a serious interest in research and marketing."– Research Magazine "Shmueli et al. have done a wonderful job in presenting the field of data mining - a welcome addition to the literature." – ComputingReviews.com "Excellent choice for business analysts...The book is a perfect fit for its intended audience." – Keith McCormick, Consultant and Author of SPSS Statistics For Dummies, Third Edition and SPSS Statistics for Data Analysis and Visualization Galit Shmueli, PhD, is Distinguished Professor at National Tsing Hua University's Institute of Service Science. She has designed and instructed data mining courses since 2004 at University of Maryland, Statistics.com, The Indian School of Business, and National Tsing Hua University, Taiwan. Professor Shmueli is known for her research and teaching in

business analytics, with a focus on statistical and data mining methods in information systems and healthcare. She has authored over 70 journal articles, books, textbooks and book chapters. Peter C. Bruce is President and Founder of the Institute for Statistics Education at www.statistics.com. He has written multiple journal articles and is the developer of Resampling Stats software. He is the author of Introductory Statistics and Analytics: A Resampling Perspective, also published by Wiley. Nitin R. Patel, PhD, is Chairman and cofounder of Cytel, Inc., based in Cambridge, Massachusetts. A Fellow of the American Statistical Association, Dr. Patel has also served as a Visiting Professor at the Massachusetts Institute of Technology and at Harvard University. He is a Fellow of the Computer Society of India and was a professor at the Indian Institute of Management, Ahmedabad for 15 years.

The book discusses real-world problems and exploratory research in computational intelligence and mathematical models. It brings new approaches and methods to real-world problems and exploratory research that describes novel approaches in the mathematical methods, computational intelligence methods and software engineering in the scope of the intelligent systems. This book constitutes the refereed proceedings of the Computational Methods in Systems and Software 2017, a conference that provided an international forum for the discussion of the latest high-quality research results in all areas related to computational methods, statistics, cybernetics and software engineering.

Praise for the First Edition " full of vivid and thought-provoking anecdotes needs to be read by anyone with a serious interest in research and marketing." —Research magazine "Shmueli et al. have done a wonderful job in presenting the field of data mining a welcome addition to the literature." —computingreviews.com Incorporating a new focus on data visualization and time series forecasting, Data Mining for Business Intelligence, Second Edition continues to supply insightful, detailed guidance on fundamental data mining techniques. This new edition guides readers through the use of the Microsoft Office Excel add-in XLMiner for developing predictive models and techniques for describing and finding patterns in data. From clustering customers into market segments and finding the characteristics of frequent flyers to learning what items are purchased with other items, the authors use interesting, real-world examples to build a theoretical and practical understanding of key data mining methods, including classification, prediction, and affinity analysis as well as data reduction, exploration, and visualization. The Second Edition now features: Three new chapters on time series forecasting, introducing popular business forecasting methods including moving average, exponential smoothing methods; regression-based models; and topics such as explanatory vs. predictive modeling, two-level models, and ensembles A revised chapter on data visualization that now features interactive visualization principles and added assignments that demonstrate interactive visualization in practice Separate chapters that each treat k-nearest neighbors and Naïve Bayes methods Summaries at the start of each chapter that supply an outline of key topics The book includes access to XLMiner, allowing readers to work hands-on with the provided data. Throughout the book, applications of the discussed topics focus on the business problem as motivation and avoid unnecessary statistical theory. Each chapter concludes with exercises that allow readers to assess their comprehension of the presented material. The final chapter includes a set of cases that require use of the different data mining techniques, and a related Web site features data sets, exercise solutions, PowerPoint slides, and case solutions. Data Mining for Business Intelligence, Second Edition is an excellent book for courses on data mining, forecasting, and decision support systems at the upper-undergraduate and graduate levels. It is also a one-of-a-kind resource for analysts, researchers, and practitioners working with quantitative methods in the fields of business, finance, marketing, computer science, and information technology.

Data Mining for Business IntelligenceConcepts, Techniques, and Applications in Microsoft Office Excel with XLMinerJohn Wiley and Sons

This book examines the managerial dimensions of business intelligence (BI) systems. It develops a set of guidelines for value creation by implementing business intelligence systems and technologies. In particular the book looks at BI as a process - driven by a mix of human and technological capabilities - to serve complex information needs in building insights and providing aid in decision making. After an introduction to the key concepts of BI and neighboring areas of information processing, the book looks at the complexity and multidimensionality of BI. It tackles both data integration and information integration issues. Bodies of knowledge and other widely accepted collections of experience are presented and turned into lessons learned. Following a straightforward introduction to the processes and technologies of BI the book embarks on BI maturity and agility, the components, drivers and inhibitors of BI culture and soft BI factors like attention, sense and trust. Eventually the book attempts to provide a holistic view on business intelligence, possible structures and tradeoffs and embarks to provide an outlook on possible developments in BI and analytics. .

Technology is a key driver behind the effects of contemporary globalization on business and other organizations worldwide. Understanding this phenomena in connection with the impact of cultural variations can help improve business and product life cycles in an era in which corporate capital and liquidity buffers must be increased for unexpected developments in global markets. Cultural and Technological Influences on Global Business is a leading publication in its field emphasizing the importance of deeply exploring the effects of cultures and technologies on the global business sector. This reference source is beneficial for professionals, researchers, and practitioners who wish to broaden their understanding of the direct relationship between culture and technology in the international business realm.

In the next few years, it is expected that most businesses will have transitioned to the use of electronic commerce technologies, namely e-commerce. This acceleration in the acceptance of e-commerce not only changes the face of business and retail, but also has introduced new, adaptive business models. The experience of consumers in online shopping and the popularity of the digital marketplace have changed the way businesses must meet the needs of consumers. To stay relevant, businesses must develop new techniques and strategies to remain competitive in a changing commercial atmosphere. The way in which e-commerce is being implemented, the business models that have been developed, and the applications including the benefits and challenges to e-commerce must be discussed to understand modern business. The Research Anthology on E-Commerce Adoption, Models, and Applications for Modern Business discusses the best practices, latest strategies, and newest methods for implementing and using e-commerce in modern businesses. This includes not only a view of how business models have changed and what business models have emerged, but also provides a focus on how consumers have changed in terms of their needs, their online behavior, and their use of e-commerce services. Topics including e-business, e-services, mobile commerce, usability models, website development, brand management and marketing, and online shopping will be explored in detail. This book is ideally intended for business managers, e-commerce managers, marketers, advertisers, brand managers, executives, IT consultants, practitioners, researchers, academicians, and students

interested in how e-commerce is impacting modern business models.

Business organizations develop strategies and set targets which focus on maximizing profit, reduce cost, improving customer satisfaction & retention and operational performance. In order to achieve the set targets, organizations need to continuously monitor status of organizational performance. Organizations need to collect, store, organize, transform the data to know the current status of set targets. Business Intelligence tools help the organizations to draw meaningful and actionable insights from the raw data in achieving the set targets. Business Intelligence tools help the organizations to answer questions such as where the organization stands in terms of profitability, growth status, brand & market position and market segment. Business intelligence tools focuses mainly on the past or current data and try to explore the hidden insight from the data. Business intelligence tools include querying, reporting, online analytics and data visualization tools which help the business decision makers to arrive at informed decision about the impact and status of their strategies. This book starts with the introduction of business intelligence concepts, components of business intelligence system, business intelligence tools used for querying, reporting and visualization of data. It provides an overview of the data visualization and data mining methods like classification, clustering and regression methods using R open source software. Book also covers some of the basic descriptive and inferential statistical tools. It focuses on both managerial side and technological side of BI. Vinaitheerthan Renganathan www.vinatheerthan.com/book.php

This book showcases cutting-edge research papers from the 6th International Conference on Research into Design (ICoRD 2017) – the largest in India in this area – written by eminent researchers from across the world on design process, technologies, methods and tools, and their impact on innovation, for supporting design for communities. While design traditionally focused on the development of products for the individual, the emerging consensus on working towards a more sustainable world demands greater attention to designing for and with communities, so as to promote their sustenance and harmony - within each community and across communities. The special features of the book are the insights into the product and system innovation process, and the host of methods and tools from all major areas of design research for the enhancement of the innovation process. The main benefit of the book for researchers in various areas of design and innovation are access to the latest quality research in this area, with the largest collection of research from India. For practitioners and educators, it is exposure to an empirically validated suite of theories, models, methods and tools that can be taught and practiced for design-led innovation. The contents of this volume will be of use to researchers and professionals working in the areas on industrial design, manufacturing, consumer goods, and industrial management.

This book presents a selection of papers from the 2017 World Conference on Information Systems and Technologies (WorldCIST'17), held between the 11st and 13th of April 2017 at Porto Santo Island, Madeira, Portugal. WorldCIST is a global forum for researchers and practitioners to present and discuss recent results and innovations, current trends, professional experiences and challenges involved in modern Information Systems and Technologies research, together with technological developments and applications. The main topics covered are: Information and Knowledge Management; Organizational Models and Information Systems; Software and Systems Modeling; Software Systems, Architectures, Applications and Tools; Multimedia Systems and Applications; Computer Networks, Mobility and Pervasive Systems; Intelligent and Decision Support Systems; Big Data Analytics and Applications; Human–Computer Interaction; Ethics, Computers & Security; Health Informatics; Information Technologies in Education; and Information Technologies in Radiocommunications.

Clear your doubts about Business Intelligence and start your new journey KEY FEATURES ? Includes successful methods and innovative ideas to achieve success with BI. ? Vendor-neutral, unbiased, and based on experience. ? Highlights practical challenges in BI journeys. ? Covers financial aspects along with technical aspects. ? Showcases multiple BI organization models and the structure of BI teams. DESCRIPTION The book demystifies misconceptions and misinformation about BI. It provides clarity to almost everything related to BI in a simplified and unbiased way. It covers topics right from the definition of BI, terms used in the BI definition, coinage of BI, details of the different main uses of BI, processes that support the main uses, side benefits, and the level of importance of BI, various types of BI based on various parameters, main phases in the BI journey and the challenges faced in each of the phases in the BI journey. It clarifies myths about self-service BI and real-time BI. The book covers the structure of a typical internal BI team, BI organizational models, and the main roles in BI. It also clarifies the doubts around roles in BI. It explores the different components that add to the cost of BI and explains how to calculate the total cost of the ownership of BI and ROI for BI. It covers several ideas, including unconventional ideas to achieve BI success and also learn about IBI. It explains the different types of BI architectures, commonly used technologies, tools, and concepts in BI and provides clarity about the boundary of BI w.r.t technologies, tools, and concepts. The book helps you lay a very strong foundation and provides the right perspective about BI. It enables you to start or restart your journey with BI. WHAT YOU WILL LEARN ? Builds a strong conceptual foundation in BI. ? Gives the right perspective and clarity on BI uses, challenges, and architectures. ? Enables you to make the right decisions on the BI structure, organization model, and budget. ? Explains which type of BI solution is required for your business. ? Applies successful BI ideas. WHO THIS BOOK IS FOR This book is a must-read for business managers, BI aspirants, CxOs, and all those who want to drive the business value with data-driven insights. TABLE OF CONTENTS 1. What is Business Intelligence? 2. Why do Businesses need BI? 3. Types of Business Intelligence 4. Challenges in Business Intelligence 5. Roles in Business Intelligence 6. Financials of Business Intelligence 7. Ideas for Success with BI 8. Introduction to IBI 9. BI Architectures 10. Demystify Tech, Tools, and Concepts in BI

These proceedings of the SAI Intelligent Systems Conference 2016 (IntelliSys 2016) offer a remarkable collection of chapters on a wide range of topics in intelligent systems, artificial intelligence and their applications to the real world. Authors hailing from 56 countries on 5 continents submitted 404 papers to the conference, attesting to the global importance of the conference’s themes. After being reviewed, 222 papers were accepted for presentation, and 168 were ultimately selected for these proceedings. Each has been reviewed on the basis of its originality, novelty and rigorousness. The papers not only present state-of-the-art methods and valuable experience from researchers in the related research areas; they also outline the field’s future development.

This book constitutes the proceedings of the 10th International IFIP WG 8.9 Working Conference on Research and Practical Issues of Enterprise Information Systems, CONFENIS 2016, held in Vienna, Austria, in December 2016. The conference provided an international forum for the broader IFIP community to discuss the latest research findings in the area of EIS and specifically aimed at facilitating the exchange of ideas and advances on all aspects and developments of EIS. The 25 papers presented in this volume were carefully reviewed and selected from 63

submissions. They were organized in topical sections on: semantic concepts and open data; customer relationship management; security and privacy issues; advanced manufacturing and management aspects; business intelligence and big data; decision support in EIS; and EIS-practices.