
Information Technology and the U.S. Workforce Fundamentals of 3D Food Printing and Applications provides an update on this emerging technology that can not only create complex edible shapes, but also enable the alteration of food texture and nutritional content required by specific diets. This book discusses 3D food printing technologies and their working mechanisms within a broad spectrum of application areas, including, but not limited to, the development of soft foods and confectionary designs. It provides a unique and contemporary guide to help correlate supply materials (edible inks) and the technologies (e.g., extrusion and laser based) used during the construction of computer-aided 3D shapes. Users
will find a great reference that will help food engineers and research leaders in food science understand the characteristics of 3D food printing technologies and edible inks. Details existing 3D food printing techniques, with an in-depth discussion on the mechanisms of formation of self-supporting layers. Includes the effects of flow behaviour and viscoelastic properties of printing materials. Presents strategies to enhance printability, such as the incorporation of hydrocolloids and lubricant enhancers. 3D printing features of a range of food materials, including cereal based, insect enriched, fruits and vegetables, chocolate and dairy ingredients. Business development for chocolate printing and the prospects of 3D food printing at home for domestic applications. Prosumer-driven 3D food printing. Safety and labelling of 3D printed food.

Handbook of Research on Management and Strategies for Digital Enterprise Transformation. "Moby-Dick" is considered to be one of the Great American Novels and a treasure of world literature, one of the great epics in all of literature. The story tells the adventures of wandering sailor Ishmael, and his voyage on the whaleship Pequod, commanded by Captain Ahab. Ishmael soon learns that Ahab has one purpose on this voyage: to seek out Moby Dick, a ferocious, enigmatic white sperm whale. In a previous encounter, the whale destroyed Ahab's boat and bit off his leg, which now drives Ahab to take revenge. Herman Melville (1819–1891) was an American novelist, short story writer, and poet of the American Renaissance period. His best known works include Typee (1846), a romantic account of his experiences in Polynesian life, and his whaling novel Moby-Dick (1851).

The Enterprise Big Data Lake Building a Practical Information Security Program provides users with a strategic view on how to build an information security program that aligns with business objectives. The information provided enables both executive management and IT managers not only to validate existing security programs, but also to build new business-driven security programs. In addition, the subject matter supports aspiring security engineers to forge a career path to successfully manage a security program, thereby adding value and reducing risk to the business. Readers learn how to translate technical challenges into business requirements, understand when to "go big or go home," explore in-depth defense strategies, and review tactics on when to absorb risks. This book explains how to properly plan and implement an infosec program based on business strategy and results. Provides a roadmap on how to build a security program that will protect companies from intrusion. Shows how to focus the security program on its essential mission and move past FUD (fear, uncertainty, and doubt) to provide business value. Teaches how to build consensus with an effective business-focused program.

Site Reliability Engineering BDT takes a business-first approach, improving students' perception of the value of IS within the business discipline. This perspective allows instructors to more easily demonstrate how technology and
systems support business performance and growth. The adaptive chapter/plug-in organization enables the instructor to adjust content according to their business or technical preferences.

The Art of Network Architecture

Business Driven Information Systems The process of user-centered innovation: how it can benefit both users and manufacturers and how its emergence will bring changes in business models and in public policy. Innovation is rapidly becoming democratized. Users, aided by improvements in computer and communications technology, increasingly can develop their own new products and services. These innovating users—both individuals and firms—often freely share their innovations with others, creating user-innovation communities and a rich intellectual commons. In Democratizing Innovation, Eric von Hippel looks closely at this emerging system of user-centered innovation. He explains why and when users find it profitable to develop new products and services for themselves, and why it often pays users to reveal their innovations freely for the use of all. The trend toward democratized innovation can be seen in software and information products—most notably in the free and open-source software movement—but also in physical products. Von Hippel's many examples of user innovation in action range from surgical equipment to surfboards to software security features. He shows that product and service development is concentrated among "lead users," who are ahead on marketplace trends and whose innovations are often commercially attractive. Von Hippel argues that manufacturers should redesign their innovation processes and that they should systematically seek out innovations developed by users. He points to businesses—the custom semiconductor industry is one example—that have learned to assist user-innovators by providing them with toolkits for developing new products. User innovation has a positive impact on social welfare, and von Hippel proposes that government policies, including R&D subsidies and tax credits, should be realigned to eliminate biases against it. The goal of a democratized user-centered innovation system, says von Hippel, is well worth striving for. An electronic version of this book is available under a Creative Commons license.

ISE Business Driven Technology Recent years have yielded significant advances in computing and communication technologies, with profound impacts on society. Technology is transforming the way we work, play, and interact with others. From these technological capabilities, new industries, organizational forms, and business models are emerging. Technological advances can create enormous economic and other benefits, but can also lead to significant changes for workers. IT and automation can change the way work is conducted, by augmenting or replacing workers in specific tasks. This can shift the demand for some types of human labor, eliminating some jobs and creating new ones. Information Technology and the U.S. Workforce explores the interactions between technological, economic, and societal trends and identifies possible near-term
developments for work. This report emphasizes the need to understand and track these trends and develop strategies to inform, prepare for, and respond to changes in the labor market. It offers evaluations of what is known, notes open questions to be addressed, and identifies promising research pathways moving forward.

Smart City Citizenship The data lake is a daring new approach for harnessing the power of big data technology and providing convenient self-service capabilities. But is it right for your company? This book is based on discussions with practitioners and executives from more than a hundred organizations, ranging from data-driven companies such as Google, LinkedIn, and Facebook, to governments and traditional corporate enterprises. You’ll learn what a data lake is, why enterprises need one, and how to build one successfully with the best practices in this book. Alex Gorelik, CTO and founder of Waterline Data, explains why old systems and processes can no longer support data needs in the enterprise. Then, in a collection of essays about data lake implementation, you’ll examine data lake initiatives, analytic projects, experiences, and best practices from data experts working in various industries. Get a succinct introduction to data warehousing, big data, and data science Learn various paths enterprises take to build a data lake Explore how to build a self-service model and best practices for providing analysts access to the data Use different methods for architecting your data lake Discover ways to implement a data lake from experts in different industries

Business Driven Technology Powerful Earthquake Triggers Tsunami in Pacific. Hurricane Isaac Makes Landfall in the Gulf Coast. Wildfires Burn Hundreds of Houses and Businesses in Colorado. Tornado Touches Down in Missouri. These headlines not only have caught the attention of people around the world, they have had a significant effect on IT professionals as well. The new 2nd Edition of Business Continuity and Disaster Recovery for IT Professionals gives you the most up-to-date planning and risk management techniques for business continuity and disaster recovery (BCDR). With distributed networks, increasing demands for confidentiality, integrity and availability of data, and the widespread risks to the security of personal, confidential and sensitive data, no organization can afford to ignore the need for disaster planning. Author Susan Snedaker shares her expertise with you, including the most current options for disaster recovery and communication, BCDR for mobile devices, and the latest infrastructure considerations including cloud, virtualization, clustering, and more. Snedaker also provides you with new case studies in several business areas, along with a review of high availability and information security in healthcare IT. Don’t be caught off guard—Business Continuity and Disaster Recovery for IT Professionals, 2nd Edition , is required reading for anyone in the IT field charged with keeping information secure and systems up and running. Complete coverage of the 3 categories of disaster: natural hazards, human-caused hazards, and accidental / technical hazards Extensive disaster planning and readiness checklists for IT
infrastructure, enterprise applications, servers and desktops Clear guidance on developing alternate work and computing sites and emergency facilities Actionable advice on emergency readiness and response Up-to-date information on the legal implications of data loss following a security breach or disaster

Data-Driven Solutions to Transportation Problems Describes how organizations must change to compete in the information age

Decision Support Systems "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.

Fundamentals of 3D Food Printing and Applications Building software is harder than ever. As a developer, you not only have to chase ever-changing technological trends but also need to understand the business domains behind the software. This practical book provides you with a set of core patterns, principles, and practices for analyzing business domains, understanding business strategy, and, most importantly, aligning software design with its business needs. Author Vlad Khononov shows you how these practices lead to robust implementation of business logic and help to future-proof software design and architecture. You'll examine the relationship between domain-driven design (DDD) and other methodologies to ensure you make architectural decisions that meet business requirements. You'll also explore the real-life story of implementing DDD in a startup company. With this book, you'll learn how to: Analyze a company's business domain to learn how the system you're building fits its competitive strategy Use DDD's strategic and tactical tools to architect effective software solutions that address business needs Build a shared understanding of the business domains you encounter Decompose a system into bounded contexts Coordinate the work of multiple teams Gradually introduce DDD to brownfield projects

Being Fluent with Information Technology The integration of technological innovations, such as In-Memory Analytics, Cloud Computing, Mobile Connectivity, and Social Media, with business practice can enable significant competitive advantage. In order to embrace recent challenges and changes in the governance of IT strategies, SAP and its think tank - the Business Transformation Academy (BTA) - have jointly developed the Digital Capability Framework (DCF). Digital Enterprise Transformation: A Business-Driven Approach to Leveraging Innovative IT by Axel Uhl and Lars Alexander Gollenia outlines the DCF which comprises six specific capabilities: Innovation Management, Transformation Management, IT
Excellence, Customer Centricity, Effective Knowledge Worker, and Operational Excellence. In cooperation with the University of Applied Sciences and Arts Northwestern Switzerland, University of St. Gallen (Switzerland), Queensland University of Technology (Australia), University of Liechtenstein (Principality of Liechtenstein), and Karlsruhe Institute of Technology (Germany), SAP and the BTA have been validating each capability and the corresponding maturity models based on analyzing several ‘lighthouse’ case studies comprising: SAMSUNG, IBM, Finanz Informatik, The Walt Disney Company, Google Inc., HILTI AG. Digital Enterprise Transformation presents how these companies take advantage of innovative IT and how they develop their digital capabilities. On top the authors also develop and present a range of novel yet hands-on Digital Use Cases for a number of different industries which have emerged from innovative technological trends such as: Big Data, Cloud Computing, 3D Printing and Internet of Things.

Value-driven IT Management Featuring contributions from more than 20 distinguished executives and subject matter experts, this unique reference challenges various traditional approaches and strategies for the PMO and explains how to set up a business-driven PMO using an extensively proven roadmap adaptable to any type or size organization.

The Marketing of Technology Intensive Products and Services In Team Topologies DevOps consultants Matthew Skelton and Manuel Pais share secrets of successful team patterns and interactions to help readers choose and evolve the right team patterns for their organization, making sure to keep the software healthy and optimize value streams. Team Topologies will help readers discover: • Team patterns used by successful organizations. • Common team patterns to avoid with modern software systems. • When and why to use different team patterns • How to evolve teams effectively. • How to split software and align to teams.

Digital Enterprise Transformation Value-Driven IT Management explains how huge sums are wasted by companies (and governments) on poorly aligned, poorly justified and poorly managed IT projects based on ‘wishful thinking’ cost and benefit assumptions and that even ‘successful’ projects rarely seem to realise the benefits promised. The author contends that the root cause of the disappointment and disillusion often found in senior management with the value extracted from its IT investments is a complacent corporate culture that can actually foster uncommercial behaviours in both users and internal suppliers of IT solutions. The author sets out a detailed, pragmatic framework for commercialising the internal IT Function and measuring its value to the business. This is not to be achieved by deploying conventional IT best practices or by making the IT Function look like an external service provider. Instead the author proposes that the IT Function should transform its value to the business by embracing a small set of best value practices that will engender more commercial behaviours in both IT staff and users and will focus the IT Function’s energies on delivering successful business
outcomes that will win the respect of senior management. * Sets out a detailed approach to transforming the value that an IT department can and should add to the business it serves * Firmly rooted in the real world * Practical and based on 27 years of experience of what actually works in delivering IT services

Business-Driven Technology Economics-driven Software Architecture presents a guide for engineers and architects who need to understand the economic impact of architecture design decisions: the long term and strategic viability, cost-effectiveness, and sustainability of applications and systems. Economics-driven software development can increase quality, productivity, and profitability, but comprehensive knowledge is needed to understand the architectural challenges involved in dealing with the development of large, architecturally challenging systems in an economic way. This book covers how to apply economic considerations during the software architecting activities of a project. Architecture-centric approaches to development and systematic evolution, where managing complexity, cost reduction, risk mitigation, evolvability, strategic planning and long-term value creation are among the major drivers for adopting such approaches. It assists the objective assessment of the lifetime costs and benefits of evolving systems, and the identification of legacy situations, where architecture or a component is indispensable but can no longer be evolved to meet changing needs at economic cost. Such consideration will form the scientific foundation for reasoning about the economics of nonfunctional requirements in the context of architectures and architecting. Familiarizes readers with essential considerations in economic-informed and value-driven software design and analysis. Introduces techniques for making value-based software architecting decisions. Provides readers a better understanding of the methods of economics-driven architecting.

Democratizing Innovation Smart City Citizenship provides rigorous analysis for academics and policymakers on the experimental, data-driven, and participatory processes of smart cities to help integrate ICT-related social innovation into urban life. Unlike other smart city books that are often edited collections, this book focuses on the business domain, grassroots social innovation, and AI-driven algorithmic and techno-political disruptions, also examining the role of citizens and the democratic governance issues raised from an interdisciplinary perspective. As smart city research is a fast-growing topic of scientific inquiry and evolving rapidly, this book is an ideal reference for a much-needed discussion. The book drives the reader to a better conceptual and applied comprehension of smart city citizenship for democratised hyper-connected-viralised post-COVID-19 societies. In addition, it provides a whole practical roadmap to build smart city citizenship inclusive and multistakeholder interventions through intertwined chapters of the book. Users will find a book that fills the knowledge gap between the purely critical studies on smart cities and those further constructive and highly promising socially innovative interventions using case study fieldwork action research empirical evidence drawn from several cities that are advancing and innovating smart city practices from the citizenship perspective. Utilises ongoing, action research fieldwork, comparative
case studies for examining current governance issues, and the role of citizens in smart cities. Provides definitions of new key citizenship concepts, along with a techno-political framework and toolkit drawn from a community-oriented perspective. Shows how to design smart city governance initiatives, projects and policies based on applied research from the social innovation perspective. Highlights citizen’s perspective and social empowerment in the AI-driven and algorithmic disruptive post-COVID-19 context in both transitional and experimental frameworks.

**Knowledge Driven Service Innovation and Management: IT Strategies for Business Alignment and Value Creation** For MIS specialists and nonspecialists alike, a comprehensive, readable, understandable guide to the concepts and applications of decision support systems.

**Analytics Best Practices: A Business-driven Playbook for Creating Value through Data Analytics**

**Team Topologies Business Driven Information Systems** 2nd edition takes a contemporary approach by discussing how business initiatives should ultimately drive technology choices. This edition offers an impressive variety of new case studies - real world examples of MIS in action - including coverage of Wikileaks, Myki and Apple innovations. Integrated coverage of mobile technologies, cloud computing and social networking reflects the emerging business environments that await today's business graduate. Business Driven Information Systems provides the foundation that will enable students to achieve excellence in business, whether they major in operations management, manufacturing, sales, marketing, finance, human resources, accounting, or virtually any other business discipline.

**Good to Great Computers, communications, digital information, software are everywhere.** Being computer literate, that is technically competent in two or three of today’s software applications, is not enough anymore. Individuals who want to realize the potential value of information technology (IT) in their everyday lives need to be computer fluent “able to use IT effectively today and to adapt to changes tomorrow. Being Fluent with Information Technology sets the standard for what everyone should know about IT in order to use it effectively now and in the future. It explores three kinds of knowledge - intellectual capabilities, foundational concepts, and skills - that are essential for fluency with IT. The book presents detailed descriptions and examples of current skills and timeless concepts and capabilities, which will be useful to individuals who use IT and to the instructors who teach them.

**Moby Dick (Complete Unabridged Edition)** 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.

Business-Driven IT-Wide Agile (Scrum) and Kanban (Lean) Implementation

Deliver enterprise data analytics success by following Prashanth’s prescriptive and practical techniques. Today, organizations across the globe are looking at ways to glean insights from data analytics and make good business decisions. However, not many business enterprises are successful in data analytics. According to Gartner, 80% of analytics programs do not deliver business outcomes. McKinsey consulting says, less than 20% of the companies have achieved analytics at scale. So, how can a business enterprise avoid analytics failure and deliver business results? This book provides ten key analytics best practices that will improve the odds of delivering enterprise data analytics solutions successfully. It is intended for anyone who has a stake and interest in deriving insights from data analytics. The three key differentiating aspects of this book are: · Practicality. This book offers prescriptive, superior, and practical guidance. · Completeness. This book looks at data analytics holistically across the four key data analytics domains - data management, data engineering, data science, and data visualization. · Neutrality. This book is technologically agnostic and looks at analytics concepts without any reference to commercial analytics products and technologies. Dr. Southekal proves why he is one of the leading thinkers on data and analytics today. ‘Analytics Best Practices’ is an indispensable guide for business leaders and those looking to get into the analytics field on the nuances, challenges, and immense opportunities with data.

Douglas B. Laney Principal, Data & Analytics Strategy, Caserta, and author of "Infonomics" Dr. Southekal’s book is a treasure trove of best practices and practical examples from the field of Data Analytics. Upen Varanasi CEO & Co-Founder, Riversand Technologies What I like about this book is its focus on real-world best practices with an extensive set of practical tips and tricks. It provides an important bridge between the data management and business operations sides of a business. Michael Wade Professor of Innovation & Strategy, IMD Business...
School Prashanth’s book is accessible and practical – an excellent guide for corporate leaders who want to produce meaningful business results from the use of data and analytics to create true business value. Irina Pelphrey Senior Director, Walmart Corporation This book is a must on the desks of business executives and decision makers at all levels in an organization who want to truly understand what it takes to become a successful data driven organization. Ram Kumar Senior Vice President, Quantum Dr. Prashanth Southekal has created a practical guidebook for realizing business value from data and analytics investments. Highly recommended. Randy Bean Founder & CEO, NewVantage Partners Prashanth’s second book starts with the right title – it is always about BUSINESS VALUE. The practices explored here will help anyone interested to achieve these goals. Mario Faria Gartner Research Board The Analytics Best Practices book is one of the most comprehensive and well-researched books I have come across on data analytics. Ameet Shetty Former Chief Data and Analytics Officer, McDonald’s Corporation I would encourage all professionals to read this easy to navigate, thoughtful and pragmatic book as it is relevant to all of us seeking to maximize the ROI for our organizations. Lisa M. Wardlaw Former EVP, Global Chief Digital Strategy Officer, MunichRe Deriving actionable insights from data requires that linkage to be clear between art and science and this book does just that. Chris Leonard, Director, Digital Strategy & Transformation, Plains Midstream Prashanth’s book simplifies the complex world of data analytics, and one to understand the drivers of bringing valued results to an organization. Matthew Joyce Senior Solution Architect, SAS-Institute

Enterprise Security Architecture

Formula 4.0 for Digital Transformation Business-Driven IT-Wide Agile (Scrum) and Kanban (Lean) Implementation: An Action Guide for Business and IT Leaders explains how to increase IT delivery capabilities through the use of Agile and Kanban. Factoring in constant change, communication, a sense of urgency, clear and measurable goals, political realities, and infrastructure needs, it covers...

Competing in the Age of AI Security is a major consideration in the way that business and information technology systems are designed, built, operated, and managed. The need to be able to integrate security into those systems and the discussions with business functions and operations exists more than ever. This IBM® Redbooks® publication explores concerns that characterize security requirements of, and threats to, business and information technology (IT) systems. This book identifies many business drivers that illustrate these concerns, including managing risk and cost, and compliance to business policies and external regulations. This book shows how these drivers can be translated into capabilities and security needs that can be represented in frameworks, such as the IBM Security Blueprint, to better enable enterprise security. To help organizations with their security challenges, IBM created a bridge to address the communication gap between the business and technical perspectives of security to enable...
simplification of thought and process. The IBM Security Framework can help you translate the business view, and the IBM Security Blueprint describes the technology landscape view. Together, they can help bring together the experiences that we gained from working with many clients to build a comprehensive view of security capabilities and needs. This book is intended to be a valuable resource for business leaders, security officers, and consultants who want to understand and implement enterprise security by considering a set of core security capabilities and services.

Business Driven PMO Setup A staggering 70% of digital transformations have failed as per McKinsey. The key reason why enterprises are failing in their digital transformation journey is because there is no standard framework existing in the industry that enterprises can use to transform themselves to digital. There are several books that speak about technologies such as Cloud, Artificial Intelligence and Data Analytics in silos, but none of these provides a holistic view on how enterprises can embark on a digital transformation journey and be successful using a combination of these technologies. FORMULA 4.0 is a methodology that provides clear guidance for enterprises aspiring to transform their traditional operating model to digital. Enterprises can use this framework as a readymade guide and plan their digital transformation journey. This book is intended for all chief executives, software managers, and leaders who intend to successfully lead this digital transformation journey. An enterprise can achieve success in digital transformation only if it can create an IT Platform that will enable them to adopt any new technology seamlessly into existing IT estate; deliver new products and services to the market in shorter durations; make business decisions with IT as an enabler and utilize automation in all its major business and IT processes. Achieving these goals is what defines a digital enterprise -- Formula 4.0 is a methodology for enterprises to achieve these goals and become digital. Essentially, there is no existing framework in the market that provides a step-by-step guide to enterprises on how to embark on their successful digital transformation journey. This book enables such transformations. Overall, the Formula 4.0 is an enterprise digital transformation framework that enables organizations to become truly digital.

Business Driven Technology From traditional brick and mortar to new start-ups, businesses are harnessing the power of digital enterprise as a cost-effective model to deliver goods and services online. Digital enterprise strategy is adopted for transforming business, streamlining processes, and making the best use of online technologies to enhance interaction with customers and employees and deliver excellent customer experience in real time. Digital enterprises increasingly need digital workers to establish greater digital skills to bear on every activity and to drive management, strategy, and innovation, which are key for digital enterprise transformation. The Handbook of Research on Management and Strategies for Digital Enterprise Transformation is a crucial reference source that discusses leveraging technology for the customers', employees', and suppliers' benefit, as
well as integrating complex processes to management, marketing, production, manufacturing, and financial systems. Combining management, strategy, technology, and digital enterprise topics into one book provides the reader with a holistic understanding of the new developments in these emerging fields. This study will also include key topics of interest on how to address structural changes underway in the local and global business environment for digital enterprise transformation. Featuring research on topics such as e-commerce, organizational learning, and agile management, this book is ideally designed for business professionals, policymakers, researchers, students, and managers.

Building a Practical Information Security Program The Challenge Built to Last, the defining management study of the nineties, showed how great companies triumph over time and how long-term sustained performance can be engineered into the DNA of an enterprise from the very beginning. But what about the company that is not born with great DNA? How can good companies, mediocre companies, even bad companies achieve enduring greatness? The Study For years, this question preyed on the mind of Jim Collins. Are there companies that defy gravity and convert long-term mediocrity or worse into long-term superiority? And if so, what are the universal distinguishing characteristics that cause a company to go from good to great? The Standards Using tough benchmarks, Collins and his research team identified a set of elite companies that made the leap to great results and sustained those results for at least fifteen years. How great? After the leap, the good-to-great companies generated cumulative stock returns that beat the general stock market by an average of seven times in fifteen years, better than twice the results delivered by a composite index of the world's greatest companies, including Coca-Cola, Intel, General Electric, and Merck. The Comparisons The research team contrasted the good-to-great companies with a carefully selected set of comparison companies that failed to make the leap from good to great. What was different? Why did one set of companies become truly great performers while the other set remained only good? Over five years, the team analyzed the histories of all twenty-eight companies in the study. After sifting through mountains of data and thousands of pages of interviews, Collins and his crew discovered the key determinants of greatness -- why some companies make the leap and others don't. The Findings The findings of the Good to Great study will surprise many readers and shed light on virtually every area of management strategy and practice. The findings include: Level 5 Leaders: The research team was shocked to discover the type of leadership required to achieve greatness. The Hedgehog Concept (Simplicity within the Three Circles): To go from good to great requires transcending the curse of competence. A Culture of Discipline: When you combine a culture of discipline with an ethic of entrepreneurship, you get the magical alchemy of great results. Technology Accelerators: Good-to-great companies think differently about the role of technology. The Flywheel and the Doom Loop: Those who launch radical change programs and wrenching restructurings will almost certainly fail to make the leap. “Some of the key concepts discerned in the study,” comments Jim Collins, “fly in the face of our modern business culture and will,
quite frankly, upset some people." Perhaps, but who can afford to ignore these findings?

Using the IBM Security Framework and IBM Security Blueprint to Realize Business-Driven Security The Art of Network Architecture Business-Driven Design The business-centered, business-driven guide to architecting and evolving networks The Art of Network Architecture is the first book that places business needs and capabilities at the center of the process of architecting and evolving networks. Two leading enterprise network architects help you craft solutions that are fully aligned with business strategy, smoothly accommodate change, and maximize future flexibility. Russ White and Denise Donohue guide network designers in asking and answering the crucial questions that lead to elegant, high-value solutions. Carefully blending business and technical concerns, they show how to optimize all network interactions involving flow, time, and people. The authors review important links between business requirements and network design, helping you capture the information you need to design effectively. They introduce today’s most useful models and frameworks, fully addressing modularity, resilience, security, and management. Next, they drill down into network structure and topology, covering virtualization, overlays, modern routing choices, and highly complex network environments. In the final section, the authors integrate all these ideas to consider four realistic design challenges: user mobility, cloud services, Software Defined Networking (SDN), and today’s radically new data center environments. • Understand how your choices of technologies and design paradigms will impact your business • Customize designs to improve workflows, support BYOD, and ensure business continuity • Use modularity, simplicity, and network management to prepare for rapid change • Build resilience by addressing human factors and redundancy • Design for security, hardening networks without making them brittle • Minimize network management pain, and maximize gain • Compare topologies and their tradeoffs • Consider the implications of network virtualization, and walk through an MPLS-based L3VPN example • Choose routing protocols in the context of business and IT requirements • Maximize mobility via ILNP, LISP, Mobile IP, host routing, MANET, and/or DDNS • Learn about the challenges of removing and changing services hosted in cloud environments • Understand the opportunities and risks presented by SDNs • Effectively design data center control planes and topologies

Data Science for Business Unlike any other MIS textbook franchise, our Baltzan texts (Business Driven Technology, Business Driven Information Systems and M: Information Systems) discuss various business initiatives first and how technology supports those initiatives second. The premise for this unique approach is that business initiatives should drive technology choices. Every discussion in these texts first addresses the business needs and then addresses the technology that supports those needs. Business Driven Technology5e offers you the flexibility to customize your course according to your needs and the needs of your students by covering only essential concepts and topics in the five core units, while providing
additional in-depth coverage in the business and technology plug-ins. This text contains 20 chapters, 20 business plug-ins, and 12 technology plug-ins offering you the ultimate flexibility in tailoring content to the exact needs of your MIS or IT course. The unique construction of this text allows you to cover essential concepts and topics in the five core units while providing you with the ability to customize a course and explore certain topics in greater detail with the business and technology plug-ins. Plug-ins are fully developed modules of text that include student learning outcomes, case studies, business vignettes, and end-of-chapter material such as key terms, individual and group questions and projects, and case study exercises. We realize that instructors today require the ability to cover a blended mix of topics in their courses. While some instructors like to focus on networks and infrastructure throughout their course, others choose to focus on ethics and security. Business Driven Technology was developed to easily adapt to your needs. Each chapter and plug-in is independent so you can: *Cover any or all of the chapters as they suit your purpose. *Cover any or all of the business plug-ins as they suit your purpose. *Cover any or all of the technology plug-ins as they suit your purpose. *Cover the plug-ins in any order you wish. Baltzan, Business Driven Technology 5e: Engaging * Flexible * 100% Supported

Economics-Driven Software Architecture This book provides the basic models and methods for the profitable use and marketing of advanced technology. It provides a guide to developing and administering marketing plans, conducting market research, searching for and managing partners, tapping capital for innovation, scoping adequate pricing methods, managing intellectual property rights, and selling and distributing products and services. It also shows how to develop formatted business plans for investors. This title is uniquely focused on the critical technology/market interface, and provides an executive introduction to marketing these products and services.

Learning Domain-Driven Design The overwhelming majority of a software system’s lifespan is spent in use, not in design or implementation. So, why does conventional wisdom insist that software engineers focus primarily on the design and development of large-scale computing systems? In this collection of essays and articles, key members of Google’s Site Reliability Team explain how and why their commitment to the entire lifecycle has enabled the company to successfully build, deploy, monitor, and maintain some of the largest software systems in the world. You’ll learn the principles and practices that enable Google engineers to make systems more scalable, reliable, and efficient—lessons directly applicable to your organization. This book is divided into four sections: Introduction—Learn what site reliability engineering is and why it differs from conventional IT industry practices Principles—Examine the patterns, behaviors, and areas of concern that influence the work of a site reliability engineer (SRE) Practices—Understand the theory and practice of an SRE’s day-to-day work: building and operating large distributed computing systems Management—Explore Google’s best practices for training, communication, and meetings that your organization can use
Business Continuity and Disaster Recovery Planning for IT Professionals Today the fastest growing companies have no physical assets. Instead, they create innovative digital products and new data-driven business models. They capture huge market share fast and their capitalizations skyrocket. The success of these digital giants is pushing all companies to rethink their business models and to start digitizing their products and services. Whether you are a new start-up building a digital product or service, or an employee of an established company that is transitioning to digital, you need to consider how digitization has transformed every aspect of management. Data-driven business models scale not through asset accumulation and product standardization, but through disaggregation of supply and demand. The winners in the new economy master the demand for one and the supply to millions. Throughout the book the author illustrates with examples and use cases how the market competition has changed and how companies adept to the new rules of the game. The economic levers of scale and scope are also different in the digital economy and companies have to learn new tactics how to achieve and sustain their competitive advantage. While data is at the core of all digital business models, the monetization strategies vary across products, services and business models. Our Monetization Matrix is a model that helps managers, marketers, sales professionals, and technical product designers to align the digital product design with the data-driven business model.

Data-Driven Business Models for the Digital Economy

Competing in the Information Age "a provocative new book" -- The New York Times AI-centric organizations exhibit a new operating architecture, redefining how they create, capture, share, and deliver value. Marco Iansiti and Karim R. Lakhani show how reinventing the firm around data, analytics, and AI removes traditional constraints on scale, scope, and learning that have restricted business growth for hundreds of years. From Airbnb to Ant Financial, Microsoft to Amazon, research shows how AI-driven processes are vastly more scalable than traditional processes, allow massive scope increase, enabling companies to straddle industry boundaries, and create powerful opportunities for learning--to drive ever more accurate, complex, and sophisticated predictions. When traditional operating constraints are removed, strategy becomes a whole new game, one whose rules and likely outcomes this book will make clear. Iansiti and Lakhani: Present a framework for rethinking business and operating models Explain how "collisions" between AI-driven/digital and traditional/analog firms are reshaping competition, altering the structure of our economy, and forcing traditional companies to rearchitect their operating models Explain the opportunities and risks created by digital firms Describe the new challenges and responsibilities for the leaders of both digital and traditional firms Packed with examples--including many from the most powerful and innovative global, AI-driven competitors--and based on research in hundreds of firms across many sectors, this is your essential guide for rethinking how your firm competes and operates in the era of AI.
Creating a Data-Driven Organization Data-Driven Solutions to Transportation Problems explores the fundamental principle of analyzing different types of transportation-related data using methodologies such as the data fusion model, the big data mining approach, computer vision-enabled traffic sensing data analysis, and machine learning. The book examines the state-of-the-art in data-enabled methodologies, technologies and applications in transportation. Readers will learn how to solve problems relating to energy efficiency under connected vehicle environments, urban travel behavior, trajectory data-based travel pattern identification, public transportation analysis, traffic signal control efficiency, optimizing traffic networks network, and much more. Synthesizes the newest developments in data-driven transportation science Includes case studies and examples in each chapter that illustrate the application of methodologies and technologies employed Useful for both theoretical and technically-oriented researchers

Global Business Driven HR Transformation: The Journey Continues (Print Edition) "This book provides a comprehensive collection of research and analysis on the principles of service, knowledge and organizational capabilities, clarifying IT strategy procedures and management practices and how they are used to shape a firm's knowledge resources"--Provided by publisher.

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