Digital Transformation

Delve into industrial digital transformation and learn how to implement modern business strategies powered by digital technologies as well as organization and cultural optimization. Key Features Identify potential industry disruptors from various business domains and emerging technologies. Leverage existing resources to identify new avenues for generating digital revenue. Boost digital transformation with cloud computing, big data, artificial intelligence (AI), and the Internet of Things (IoT).

Book Description

Digital transformation requires the ability to identify opportunities across industries and apply the right technologies and tools to achieve results. This book is divided into two parts with the first covering what digital transformation is and why it is important. The second part focuses on how digital transformation works. After an introduction to digital transformation, you will explore the transformation journey in logical steps and understand how to build business cases and create productivity benefit statements. Next, you'll delve into advanced topics relating to overcoming various challenges. Later, the book will take you through case studies in both private and public sector organizations. You'll explore private sector organizations such as industrial and hi-tech manufacturing in detail and get to grips with public sector organizations by learning how transformation can be achieved on a global scale and how the resident experience can be improved. In addition to this, you will understand the role of artificial intelligence, machine learning and deep learning in digital transformation. Finally, you'll discover how to create a playbook that can ensure success in digital transformation. By the end of this book, you'll be well-versed with industrial digital transformation and be able to apply your skills in the real world. What you will learn

- Get up to speed with digital transformation and its important aspects
- Explore the skills that are needed to execute the transformation
- Focus on the concepts of Digital Thread and Digital Twin
- Understand how to leverage the ecosystem for successful transformation
- Get to grips with various case studies spanning industries in both private and public sectors
- Discover how to execute transformation at a global scale
- Find out how AI delivers value in the transformation journey

Who this book is for

This book is for IT leaders, digital strategy leaders, line-of-business leaders, solution architects, and IT business partners looking for digital transformation opportunities within their organizations. Professionals from service and management consulting firms will also find this book useful. Basic knowledge of enterprise IT and some intermediate knowledge of identifying digital revenue streams or internal transformation opportunities are required to get started with this book.

In a world dependent on digital technologies, business corporations continually try to stay ahead of their competitors by adopting the most updated technology into their business processes. Many companies are adopting digital transformation models, data analytics, big data, data empowerment, and data sharing as key strategies and as service disruptors for information delivery and record management. Higher education institutions have adopted digital service innovation as a core to driving their business processes. Such services are key to ensuring efficiency and improving organizational performance. Digital Transformation and Innovative Services for Business and Learning is a collection of innovative research on the latest digital services and their role in supporting the digital transformation of businesses and education. While highlighting topics including brand equality, digital banking, and generational workforce, this book is ideally designed for managers, executives, IT consultants, industry professionals, academicians, researchers, and students.

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.

Digital transformation is reshaping the business arena as new, successful digital business
models are increasing agility and presenting better ways to handle business than the traditional
alternatives. Industry 4.0 affects everything in our daily lives and is blurring the line between
the physical, the biological, and the digital. This created an environment where technology and
humans are so closely integrated that it is impacting every activity within the organizations.
Specifically, contracting processes and procedures are challenged to align with the new
business dynamics as traditional contracts are no longer fitting today’s agile and continuously
changing environments. Businesses are required to facilitate faster, more secure, soft, and real-
time transactions while protecting stakeholders’ rights and obligations. This includes agile
contracts which are dynamically handling scope changes, smart contracts that can automate
rule-based functions, friction-less contracts that can facilitate different activities, and
opportunity contracts that looks toward the future. Innovative and Agile Contracting for Digital
Transformation and Industry 4.0 analyzes the consequences, benefits, and possible scenarios
of contract transformation under the pressure of new technologies and business dynamics in
modern times. The chapters cover the problems, issues, complications, strategies,
governance, and risks related to the development and enforcement of digital transformation
contracting practices. While highlighting topics in the area of digital transformation and
contracting such as artificial intelligence, digital business, emerging technologies, and
blockchain, this book is ideally intended for business, engineering, and technology practitioners
and policy makers, along with practitioners, stakeholders, researchers, academicians, and
students interested in understanding the scope, complexity, and importance of innovative
contracts and agile contracting.

This book unravels the complexities of supply chain process transformation by explaining step-
by-step, in simple terms, the requirements for success from the basics to the implementation of
this complicated task. The book provides insights into how to lead the transformation project
and how to manage the change internally and externally. The authors’ hands-on experience in
the field via applied research is clearly illustrated in the case studies, which provide the reader
with practical examples of the challenges and benefits of implementing a digital supply chain
transformation project. This is a must-have book for all supply chain and operations
professionals.

With the widespread transformation of information into digital form throughout society – firms
and organizations are embracing this development to adopt multiple types of IT to increase
internal efficiency and to achieve external visibility and effectiveness – we have now reached a
position where there is data in abundance and the challenge is to manage and make use of it
fully. This book addresses this new managerial situation, the post-digitalization era, and offers
novel perspectives on managing the digital landscape. The topics span how the post-
digitalization era has the potential to renew organizations, markets, and society. The chapters
of the book are structured in three topical sections but can also be read individually. The
chapters are structured to offer insights into the developments that take place at the
intersection of the management, information systems and computer science disciplines. It
features more than 60 researchers and managers as collaborating authors in 23 thought-
provoking chapters. Written for scholars, researchers, students and managers from the
management, information systems and computer science disciplines, the book presents a
comprehensive and thought-provoking contribution on the challenges of managing
organizations and engaging in global markets when tools, systems and data are abundant.
Fuel your business’ transition into the digital age with this insightful and comprehensive
resource Digital Business Transformation: How Established Companies Sustain Competitive
Advantage offers readers a framework for digital business transformation. Written by Nigel
Vaz, the acclaimed CEO of Publicis Sapient, a global digital business transformation company,
Digital Business Transformation delivers practical advice and approachable strategies to help
businesses realize their digital potential. Digital Business Transformation provides readers with
eamples of the challenges faced by global organizations and the strategies they used to
overcome them. The book also includes discussions of: How to decide whether to defend,
differentiate, or disrupt your organization to meet digital challenges How to deconstruct
decision-making throughout all levels of your organization How to combine strategy, product,
experience, engineering, and data to produce digital results Perfect for anyone in a leadership
position in a modern organization, particularly those who find themselves responsible for
transformation-related decisions, Digital Business Transformation delivers a message that
begs to be heard by everyone who hopes to help their organization meet the challenges of a
changing world.
The Digital Age is having a broad and profound impact on companies and entire industries.
Rather than simply automate or embed digital technology into existing offerings, your business
needs to rethink everything. In this practical book, three ThoughtWorks professionals provide a
game plan to help your business through this transformation, along with technical concepts
that you need to know to be an effective leader in a modern digital business. Chock-full of
practical advice and case studies that show how businesses have transitioned, this book
reveals lessons learned in guiding companies through digital transformation. While there’s no
silver bullet available, you’ll discover effective ways to create lasting change at your
organization. With this book, you’ll discover how to: Realign the business and operating
architecture to focus on customer value Build a more responsive and agile organization to deal
with speed and ambiguity Build next generation technology capability as a core differentiator
The digital transformation is impacting various aspects of how we live and work. Due to the
pervasive effects of the digital revolution on firms and societies, both scholars and practitioners
are interested in better understanding the key mechanisms behind the related challenges. This
book presents a collection of research papers focusing on the relationships between
technologies (e.g. artificial intelligence, social media, and the Internet of Things) and
behaviours (e.g. social learning, knowledge sharing, and decision-making). Moreover, it
provides insights into how the digital transformation may improve quality of personal life and
work life within public and private organisations. The plurality of views offered makes this book
particularly relevant for practitioners, companies, scientists, and governments. It gathers a
selection of the best papers - original double-blind peer-reviewed contributions - presented at
the annual conference of the Italian chapter of the AIS which was held in Naples, Italy, in
September 2019.
Through a series of studies, the overarching aim of this book is to investigate if
and how the digitalization/digital transformation process affects various welfare
services provided by the public sector, and the ensuing implications thereof. Ultimately, this book seeks to understand if it is conceivable for digital advancement to result in the creation of private/non-governmental alternatives to welfare services, possibly in a manner that transcends national boundaries. This study also investigates the possible ramifications of technological development for the public sector and the Western welfare society at large. This book takes its point of departure from the 2016 Organization for Economic Co-operation and Development (OECD) report that targets specific public service areas in which government needs to adopt new strategies not to fall behind. Specifically, this report emphasizes the focus on digitalization of health care/social care, education, and protection services, including the use of assistive technologies referred to as "digital welfare." Hence, this book explores the factors potentially leading to whether state actors could be overrun by other non-governmental actors, disrupting the current status quo of welfare services. The book seeks to provide an innovative, enriching, and controversial take on society at large and how various aspects of the public sector can be, and are, affected by the ongoing digitalization process in a way that is not covered by extant literature on the market. This book takes its point of departure in Sweden given the fact that Sweden is one of the most digitalized countries in Europe, according to the Digital Economy and Society Index (DESI), making it a pertinent research case. However, as digitalization transcends national borders, large parts of the subject matter take on an international angle. This includes cases from several other countries around Europe as well as the United States.

Communication and Learning in an Age of Digital Transformation provides cross-disciplinary perspectives on digitization as social transformation and its impact on communication and learning. This work presents openness within its interpretation of the digital and its impact on learning and communication, acknowledging historical contexts and contemporary implications emerging from discourse on digitization. The book presents a triangulation of different research perspectives. These perspectives, which range from digital resistance parks and cyber-religious questions to cultural-scientific media-theoretical reflections, point to the performative openness of the analysis. The book represents an interdisciplinary approach and opens a space for understanding the social complexity of digital transformations in teaching and learning. This book will be of great interest to academics, post graduate students and researchers in the field of digital learning, communication and education research.

EDGE: The Agile Operating Model That Will Help You Successfully Execute Your Digital Transformation “[The authors’] passion for technology allows them to recognize that for most enterprises in the 21st century, technology is THE business. This is what really separates the EDGE approach. It is a comprehensive operating model with technology at its core.” —From the Foreword by Heidi Musser, Executive Vice President and Principal Consultant, Leading Agile; retired, Vice President and CIO, USAA Maximum innovation
happens at the edge of chaos: the messy, risky, and uncertain threshold between randomness and structure. Operating there is uncomfortable but it’s where organizations “invent the future.” EDGE is a set of fast, iterative, adaptive, lightweight, and value-driven tools to achieve digital transformation, and EDGE: Value-Driven Digital Transformation is your guide to using this operating model for innovation. Jim Highsmith is one of the world’s leading agile pioneers and a coauthor of the Agile Manifesto. He, Linda Luu, and David Robinson know from their vast in-the-trenches experience that sustainable digital transformation requires far more than adopting isolated agile practices or conventional portfolio management. This hard, indispensable work involves changing culture and mindset, and going beyond transforming the IT department. EDGE embraces an adaptive mindset in the face of market uncertainty, a visible, value-centered portfolio approach that encourages continual value linkages from vision to detailed initiatives, incremental funding that shifts as strategies evolve, collaborative decision-making, and better risk mitigation. This guide shows leaders how to use the breakthrough EDGE approach to go beyond incremental improvement in a world of exponential opportunities. Build an organization that adapts fast enough to thrive Clear away unnecessary governance processes, obsolete “command and control” leadership approaches, and slow budgeting/planning cycles Improve collaboration when major, fast-paced responses are necessary Continually optimize investment allocation and monitoring based on your vision and goals Register your product for convenient access to downloads, updates, and/or corrections as they become available. See inside book for details.

Emerging technologies are having a profound impact upon business as individuals and organisations increasingly embrace the benefits of the ‘always on’ attitude that digital technologies produce. The use of the web, apps, cloud storage, GPS and Internet-connected devices has transformed the way we live, learn, play and interact – yet how a business can fully benefit from this transformation is not always clear. In response, this book enables students and business leaders to take a strategic and sustainable approach to realising the value of digital technologies. It offers results-driven solutions that successfully transform organisations into data-driven, people-focused businesses capable of sustainably competing at a global level. Split across four key parts, the material moves through understanding digital business to planning, implementing and assessing digital transformation. The current challenges facing all small organisations, including limited resources, financial pressures and the lack of dedicated IT departments, are explored. The authors consider the ways in which innovation can increase competitive advantage, how innovative business models can create new opportunities and how a data-driven perspective can release embedded value within the organisation. Contemporary international case studies and examples throughout each chapter bridge theory with practical application and systematically document the patterns of activities that enable
success. This textbook is a vital resource for postgraduate and undergraduate students of digital business, innovation and transformation. By showing how to initiate digital transformation across an organisation, it will prepare business owners, directors and management of small- and medium-sized businesses to take strategic advantage of new and emerging technologies to stay ahead of their competition.

Why an organization's response to digital disruption should focus on people and processes and not necessarily on technology. Digital technologies are disrupting organizations of every size and shape, leaving managers scrambling to find a technology fix that will help their organizations compete. This book offers managers and business leaders a guide for surviving digital disruptions—but it is not a book about technology. It is about the organizational changes required to harness the power of technology. The authors argue that digital disruption is primarily about people and that effective digital transformation involves changes to organizational dynamics and how work gets done. A focus only on selecting and implementing the right digital technologies is not likely to lead to success.

The best way to respond to digital disruption is by changing the company culture to be more agile, risk tolerant, and experimental. The authors draw on four years of research, conducted in partnership with MIT Sloan Management Review and Deloitte, surveying more than 16,000 people and conducting interviews with managers at such companies as Walmart, Google, and Salesforce. They introduce the concept of digital maturity—the ability to take advantage of opportunities offered by the new technology—and address the specifics of digital transformation, including cultivating a digital environment, enabling intentional collaboration, and fostering an experimental mindset. Every organization needs to understand its “digital DNA” in order to stop “doing digital” and start “being digital.” Digital disruption won't end anytime soon; the average worker will probably experience numerous waves of disruption during the course of a career. The insights offered by The Technology Fallacy will hold true through them all. A book in the Management on the Cutting Edge series, published in cooperation with MIT Sloan Management Review.

A Field Guide to Digital Transformation is the definitive reference and tutorial for all IT professionals and decision-makers who want to understand digital transformation and successfully achieve it in their own organizations. Best-selling IT author Thomas Erl and long-time practitioner Amin Naserour combine comprehensive coverage of digital transformation as a field of practice, and detailed guidance for adopting digital transformation and executing projects from start to finish. Erl and Naserour present a complete tutorial on digital transformation concepts, tools, technologies and practices, organized into a proven industry framework for adoption. Next, they offer end-to-end coverage of the full project lifecycle, walking readers through planning, defining, designing, building, and governing digital transformation solutions. The authors highlight common risks, pitfalls, and adoption considerations, sharing practical insights into
the organizational, cultural, technological, and operational impacts associated with digital transformation initiatives. Uniquely detailed and practical, this guide reflects the authors' deep experience driving value from digital transformation using technologies available right now.

The legendary Silicon Valley entrepreneur examines how both business and government organizations can harness the power of disruptive technologies. Tom Siebel, the billionaire technologist and founder of Siebel Systems, discusses how four technologies—elastic cloud computing, big data, artificial intelligence, and the internet of things—are fundamentally changing how business and government will operate in the 21st century. While this profound and fast-moving transformation can appear daunting to some, Siebel shows how organizations can not only survive, but thrive in the new digital landscape. In this authoritative yet accessible book, Siebel guides readers through the technologies driving digital transformation, and demonstrates how they can strategically exploit their powerful capabilities. He shows how leading enterprises such as Enel, 3M, Royal Dutch Shell, the U.S. Department of Defense, and others are applying AI and IoT with stunning results.

Digital Transformation in Accounting is a critical guidebook for accountancy and digital business students and practitioners to navigate the effects of digital technology advancements, digital disruption, and digital transformation on the accounting profession. Drawing on the latest research, this book: Unpacks dozens of digital technology advancements, explaining what they are and how they could be used to improve accounting practice. Discusses the impact of digital disruption and digital transformation on different accounting functions, roles, and activities. Integrates traditional accounting information systems concepts and contemporary digital business and digital transformation concepts. Includes a rich array of real-world case studies, simulated problems, quizzes, group and individual exercises, as well as supplementary electronic resources. Provides a framework and a set of tools to prepare the future accounting workforce for the era of digital disruption. This book is an invaluable resource for students on accounting, accounting information systems, and digital business courses, as well as for accountants, accounting educators, and accreditation / advocacy bodies.

How companies can adapt in an era of continuous disruption: a guide to responding to such acute crises as COVID-19. When COVID-19 hit, businesses had to respond almost instantaneously—shifting employees to remote work, repairing broken supply chains, keeping pace with dramatically fluctuating customer demand. They were forced to adapt to a confluence of multiple disruptions inextricably linked to a longer-term, ongoing digital disruption. This book shows that companies that use disruption as an opportunity for innovation emerge from it stronger. Companies that merely attempt to "weather the storm" until things go back to normal (or the next normal), on the other hand, miss an opportunity to thrive. The authors, all experts on business and technology
strategy, show that transformation is not a one-and-done event, but a continuous process of adapting to a volatile and uncertain environment. Drawing on five years of research into digital disruption—including a series of interviews with business leaders conducted during the COVID-19 crisis—they offer a framework for understanding disruption and tools for navigating it. They outline the leadership traits, business principles, technological infrastructure, and organizational building blocks essential for adapting to disruption, with examples from real-world organizations. Technology, they remind readers, is not an end in itself, but enables the capabilities essential for surviving an uncertain future: nimbleness, scalability, stability, and optionality.

Digital Technologies are impacting society in the 21st century the same way the industrial technologies impacted society in the 20th century. They are dramatically changing consumer behavior and expectations which is resulting in traditional industries being disrupted, traditional businesses being displaced and new industries being created. Executives of traditional companies must transform their business models to survive in the digital economy. In this book author Lynda J Roth - describes how technology has been transforming society over the past 200 years and why the current digital technologies are so disruptive - explains the digital technologies that are fueling the digital economy with stories of successful business applications - describes the 7 key mistakes business executives are making in their digital transformation - details the 5 key steps to a successful transformation from a traditional 20th century business to a thriving 21st century digital business.

Former Procter & Gamble Vice President for IT and Shared Services, Tony Saldanha gives you the keys to a successful digital transformation: a proven five-stage model and a disciplined process for executing it. Digital transformation is more important than ever now that we're in the Fourth Industrial Revolution, where the lines between the physical, digital, and biological worlds are becoming ever more blurred. But fully 70 percent of digital transformations fail. Why? Tony Saldanha, a globally awarded industry thought-leader who led operations around the world and major digital changes at Procter & Gamble, discovered it's not due to innovation or technological problems. Rather, the devil is in the details: a lack of clear goals and a disciplined process for achieving them. In this book, Saldanha lays out a five-stage process for moving from digitally automating processes here and there to making digital technology the very backbone of your company. For each of these five stages, Saldanha describes two associated disciplines vital to the success of that stage and a checklist of questions to keep you on track. You want to disrupt before you are disrupted—be the next Netflix, not the next Blockbuster. Using dozens of case studies and his own considerable experience, Saldanha shows how digital transformation can be made routinely successful, and instead of representing an existential threat, it will become the opportunity of a lifetime.

Rethink your business for the digital age. Every business begun before the
Internet now faces the same challenge: How to transform to compete in a digital economy? Globally recognized digital expert David L. Rogers argues that digital transformation is not about updating your technology but about upgrading your strategic thinking. Based on Rogers’s decade of research and teaching at Columbia Business School, and his consulting for businesses around the world, The Digital Transformation Playbook shows how pre-digital-era companies can reinvigorate their game plans and capture the new opportunities of the digital world. Rogers shows why traditional businesses need to rethink their underlying assumptions in five domains of strategy—customers, competition, data, innovation, and value. He reveals how to harness customer networks, platforms, big data, rapid experimentation, and disruptive business models—and how to integrate these into your existing business and organization. Rogers illustrates every strategy in this playbook with real-world case studies, from Google to GE, from Airbnb to the New York Times. With practical frameworks and nine step-by-step planning tools, he distills the lessons of today’s greatest digital innovators and makes them usable for businesses at any stage. Many books offer advice for digital start-ups, but The Digital Transformation Playbook is the first complete treatment of how legacy businesses can transform to thrive in the digital age. It is an indispensable guide for executives looking to take their firms to the next stage of profitable growth.

Is digitalization a value-added approach? Global leaders believe so, and this book reveals how to digitally transform your business model and compete in today’s economy. It presents a roadmap consisting of five phases; Digital Reality, Digital Ambition, Digital Potential, Digital Fit, and Digital Implementation, each with step-by-step instructions as well as innovative activities and tools. This is a timely book offering professionals a concise, tried-and-trusted guide to the digital transformation of business models.

With the exception of written letters and personal conversations, digital technology forms the basis of nearly every means of communication and information that we use today. It is also used to control the essential elements of economic, scientific, and public and private life: security, production, mobility, media, and healthcare. Without exaggerating it is possible to say that digital technology has become one of the foundations of our technologically oriented civilization. The benefits of modern data technology are so impressive and the potential for future applications so enormous that we cannot fail to promote its development if we are to retain our leading role in the competitive international marketplace. In this process, security plays a vital role in each of the areas of application of digital technology — the more technological sectors are entrusted to data systems technology, the more important their reliability becomes to us. Developing digital systems further while simultaneously ensuring that they always act and respond in the best interests of people is a central goal of the technological research and development propagated and conducted by Fraunhofer.
"This book is for people worrying about their sinking ship. Based on experience, it is a guide for navigating the blockers, buzzwords and bloody-mindedness that doom any analogue organisation trapped into thinking that while the internet has changed the world, it won't change their world. Companies that grew up on the web have changed our expectations of the services we rely on. We demand simplicity, speed and low cost. Organizations founded before the Internet aren't keeping up - despite spending millions on IT, marketing and 'innovation'. This book is a guide to building a digital institution. It explains how a growing band of reformers in businesses and governments around the world have helped their organizations pivot to this new way of working, and what lessons others can learn from their experience. It is based on the authors' experience designing and helping to deliver the UK's Government Digital Service (GDS). The GDS was a new institution made responsible for the digital transformation of government, designing public services for the Internet era. It snipped £4 billion off the government's technology bill, opened up public sector contracts to thousands of new suppliers, and delivered online services so good that citizens chose to use them over the offline alternatives, without a big marketing campaign. Other countries and companies noticed, with the GDS model now being copied around the world."

A comprehensive guide for seasoned business leaders who struggle with where and how to exploit the economics of data and analytics to gain true value from data, accelerate company operations through AI, and guide their digital transformation.

Digital TransformationSurvive and Thrive in an Era of Mass ExtinctionRosettaBooks

This book is a reference guide for healthcare executives and technology providers involved in the ongoing digital transformation of the healthcare sector. The book focuses specifically on the challenges and opportunities for health systems in their journey toward a digital future. It draws from proprietary research and public information, along with interviews with over one hundred and fifty executives in leading health systems such as Cleveland Clinic, Partners, Mayo, Kaiser, and Intermountain as well as numerous technology and retail providers. The authors explore the important role of technology and that of EHR systems, digital health innovators, and big tech firms in the ongoing digital transformation of healthcare. Importantly, the book draws on the accelerated learnings of the healthcare sector during the COVID-19 pandemic in their digital transformation efforts to adopt telehealth and virtual care models. Features of this book:

Provides an understanding of the current state of digital transformation and the factors influencing the ongoing transformation of the healthcare sector. Includes interviews with executives from leading health systems. Describes the important role of emerging technologies; EHR systems, digital health innovators, and more. Includes case studies from innovative health organizations. Provides a set of templates and frameworks for developing and implementing a digital roadmap.
Based on best practices from real-life examples, the book is a guidebook that provides a set of templates and frameworks for digital transformation practitioners in healthcare.

Imagine if your process manufacturing plants were running so well that your production, safety, environmental, and profitability targets were being met so that your subject matter experts could focus on data-driven business improvements. Through proper use and analysis of your existing operations data, your company can become an industry leader and reward your stakeholders. Written in an engaging and easily understandable manner, this book demonstrates a step-by-step process of how an organization can effectively utilize technology and make the necessary culture changes to achieve operational excellence. You will see how several industry-leading companies have used an effective real-time data infrastructure for mission-critical business use cases. The book also addresses challenges involved, such as effectively integrating operational (OT) data with business (IT) systems to enable a more proactive, predictive management model for a fleet of process plants. Some of the things you will take away: Learn how a real-time data infrastructure enables transformation of raw sensor data into contextualized information for operational insights and business process improvement. Understand how reusing the same operational data for multiple use cases significantly impacts fleet management, profitability, and asset stewardship. See how a simple digital unit template representing production flows can be repeatedly used to identify critical inefficiencies in plant operations. Discover best practices of deploying real-time situational awareness alerts and predictive analytics. Realize how to transform your organization into a data-driven culture for continuous sustainable improvement. Find out how leading companies integrate operations data with business intelligence and predictive analytics tools in a corporate on-premises or cloud-enabled environment. Learn how industry-leading companies have imaginatively used a real-time data infrastructure to improve yields, reduce cycle times, and slash operating costs. This book is targeted for process industries production and operations leadership, senior engineers, IT management, CIOs, and service providers to those industries. Academics will benefit from latest data analysis strategies. This book guides readers to use the best, results-proven approaches to ensure operational excellence.

Digital transformation is a revolutionary technology that will play a vital role in major industries, including global governments. These administrations are taking the initiative to incorporate digital programs with their objective being to provide digital infrastructure as a basic utility for every citizen, provide on demand services with superior governance, and empower their citizens digitally. However, security and privacy are major barriers in adopting these mechanisms, as organizations and individuals are concerned about their private and financial data. Impact of Digital Transformation on Security Policies and Standards is an essential research book that examines the policies, standards, and mechanisms
for security in all types of digital applications and focuses on blockchain and its imminent impact on financial services in supporting smart government, along with bitcoin and the future of digital payments. Highlighting topics such as cryptography, privacy management, and e-government, this book is ideal for security analysts, data scientists, academicians, policymakers, security professionals, IT professionals, government officials, finance professionals, researchers, and students.

This book provides practising executives and academics with the theories and best practices to plan and implement the digital transformation successfully. Key benefits: an overview on how leading companies plan and implement digital transformation interviews with chief executive officers and chief digital officers of leading companies – Bulgari, Deutsche Bahn, Henkel, Lanxess, L’Oréal, Unilever, Thales and others – explore lessons learnt and roadmaps to successful implementation research and case studies on the digitalization of small and medium-sized companies cutting-edge academic research on business models, organizational capabilities and performance implications of the digital transformation tools and insights into how to overcome internal resistance, build digital capabilities, align the organization, develop the ecosystem and create customer value to implement digital strategies that increase profits Managing Digital Transformation is unique in its approach, combining rigorous academic theory with practical insights and contributions from companies that are, according to leading academic thinkers, at the forefront of global best practice in the digital transformation. It is a recommended reading both for practitioners looking to implement digital strategies within their own organisations, as well as for academics and postgraduate students studying digital transformation, strategy and marketing.

Building Intelligent Enterprises by leveraging the emerging and next-generation technologies to accelerate the adoption of digital transformation The speed of innovation and emerging IT technologies are changing at a very fast pace and enterprises are eager to join the digital revolution so they can stand above the competition and succeed as the enterprise of tomorrow. This book is an attempt to make the enterprise intelligent by providing the path to digital transformation and the adoption of new IT methods, tools and technologies. This book has been organized to cover the following topics: Digital Transformation, Design Thinking, Agile, DevOps, Robotic Process Automation, Internet of Things, Artificial Intelligence, Machine Learning, Blockchain, Drones, Augmented and Virtual Reality, 3D Printing, Big Data, Analytics, Cloud Computing, APIs, and SAP Leonardo. No prior knowledge of any technical coding or language is necessary to understand the content of this book. End-to-end storyline to accelerate the enterprise's digital transformation journey How an enterprise can stay relevant, compete, and perform in the digital economy How to leverage these technologies to build intelligent enterprises Understand and apply the emerging technologies across key business processes Industry-specific Use Cases for all technologies
as a reference point to build the business case for implementation. The book is very well suited towards the C-Suite executives, both IT and business leaders, directors and managers, project managers, solution architects, and all professionals who have an interest and desire to keep up-to-date with the latest technological trends, looking for a career change, want to help enterprise adapt and onboard the digital roadmap, or have an agenda to digitize key processes within the enterprise to make it intelligent.

Deliver on your digital transformation by learning from the insights and experiences from organizations adapting their approaches to life in the digital world. Business leaders, industry strategists, academics, and policy makers are all scrambling to make sense of digital transformation, and to define strategies for success in our increasingly digital economy. This book provides today’s leaders, managers, and practitioners with the tools for understanding, leading, and delivering in the digital age. »What I see here is an excellent survey of the best thinking on Digital Transformation. It's a book I wish I had written.« Brad Power, Process Innovator »A clear and crisply written guide for any manager considering delivering digital transformation who would like a digestible introduction to key technology trends, organisational and social impact as well as a glimpse of the future.« Petrina Steele, Equinix »A thoroughly enjoyable read. A great synthesis of many different sources that I'm sure will be an invaluable guide for managers.« Richard Sargeant, faculty.ai

I see it all the time: Businesses implement the latest Agile and DevOps practices from the software industry, hoping that simply doing so will provide the required improvements. But months and even years later, they’re still struggling. Similarly, I watch the software industry trying to learn and implement wholesale what the manufacturing industry did years ago. As it turns out, we can't just copy what others have done. Businesses need to understand the unique challenges of their company. And digital assets like software are very different from physical assets that are manufactured. Every business is different, and software development is different from manufacturing. Engineering the Digital Transformation provides systematic approaches to improving how software is developed for a broad range of applications. This book focuses on high-level principles for engineering improvements, leveraging as much as possible from manufacturing, and modifies them to address the unique characteristics and capabilities of software.

One book for the entire journey: How to digitally transform your organization. Innovation in the face of major external change is critical for any organization’s success, but attempting to do so often leads to more questions than actions. Where do you start? How do you get the right resources? How should work be implemented? What data should you measure? For the first time, these questions are answered in a single book that covers the end-to-end execution of digital transformation – from leadership-level strategy, to on-the-ground team implementation. With the biggest revelation of all, Herbert argues, being that true digital transformation only needs to happen once because, at its core, it means
becoming more adaptive to change itself. Featuring the 'how to' of digital transformation devised from successes across every sector, Herbert distils it into five actionable stages. These stages act as a repeatable framework for continual innovation, allowing you to produce results immediately and grow change incrementally across your organization. In Digital Transformation, Herbert draws on her own experiences in leading change and innovation programmes globally, as well as featuring insights from experts and leaders from organizations as diverse as the World Wildlife Fund, Morgan Stanley, Royal Caribbean Cruises, the United Nations High Commission for Refugees, the Rijksmuseum, the American Cancer Society, The Guardian, Harvard University, and many others. This practical book in instrumental analytics conveys an overview of important methods of analysis and enables the reader to realistically learn the (principally technology-independent) working techniques the analytical chemist uses to develop methods and conduct validation. What is to be conveyed to the student is the fact that analysts in their capacity as problem-solvers perform services for certain groups of customers, i.e., the solution to the problem should in any case be processed in such a way as to be "fit for purpose". The book presents sixteen experiments in analytical chemistry laboratory courses. They consist of the classical curriculum used at universities and universities of applied sciences with chromatographic procedures, atom spectrometric methods, sensors and special methods (e.g. field flow fractionation, flow injection analysis and N-determination according to Kjeldahl). The carefully chosen combination of theoretical description of the methods of analysis and the detailed instructions given are what characterizes this book. The instructions to the experiments are so detailed that the measurements can, for the most part, be taken without the help of additional literature. The book is complemented with tips for effective literature and database research on the topics of organization and the practical workflow of experiments in analytical laboratory, on the topic of the use of laboratory logs as well as on writing technical reports and grading them (Evaluation Guidelines for Laboratory Experiments). A small introduction to Quality Management, a brief glance at the history of analytical chemistry as well as a detailed appendix on the topic of safety in analytical laboratories and a short introduction to the new system of grading and marking chemicals using the "Globally Harmonized System of Classification and Labelling of Chemicals (GHS)", round off this book. This book is therefore an indispensable workbook for students, internship assistants and lecturers (in the area of chemistry, biotechnology, food technology and environmental technology) in the basic training program of analytics at universities and universities of applied sciences.

What do companies like Uber and Amazon, Apple and Tesla have in common? They are all Experience Brands. Businesses that have embraced digital and technology as a competitive differentiator are creating exponentially more value than their counterparts and for their customers. This progressive digital transformation has completely shifted the way businesses capture, create, and
retain customers throughout the entirety of the relationship. From simple awareness creation, to streamlining shopping, to building personalized products and services, to offering new business models, digital-enabled businesses are changing the way they view their role in their customers’ lives. They are transforming their mindset from acquisition to membership and from marketing to relationship management. Businesses are entering the Journey Economy - where customer value goes beyond a single transaction and into a holistic experience with the brands they do business with. Understanding the entire customer journey gives brands the insight of the pain points and moments of joy customers expect and experience throughout their individual path to a brand. This intelligence gives brands the power to not only capitalize on these moments of pain and joy, but also the ability to see trends and shifts in the marketplace. Experience Brands are built around the notion and idea of speed. They believe the faster they can identify consumer problems and pain points, then create solutions to fix them, the faster they can create new value, access new revenue opportunities, and establish a deeper relationship with their consumers. Being consumer focused gives Experience Brands the ability to track the end-to-end journey of consumers and keep an open dialog with them, while identifying the bottlenecks and challenges to solve. This continuous loop gives Experience Brands the ability to access the fast-to-market advantage, while maintaining strong relationships with their consumers. Author Paul Miser takes the conversation about digital disruption to a higher level. He explains that Experience Brands are never focused on the next sale, rather they rely on learning and building relationships that will lead to a third sale and many more after that.

A blueprint for reinventing the core of your business Value in the next phase of the digital era will go to those companies that don't just try digital but also scale it. Digital@Scale examines what it takes for companies to break through the gravitational pull of their legacy organizations and capture the full value of digital. Digging into more than fifty detailed case studies and years of McKinsey experience and data, the authors, along with a group of expert contributors, show how companies can move beyond incremental change to transform the business where the greatest value is generated—at its core. The authors provide practical insights into the three pillars of digital transformations that successfully scale: reinventing the business model, building out a business architecture from the customer back into the organization, and establishing an 'amoeba' IT and organizational foundation that learns and evolves. This is the ideal guide for all leaders who recognize the power and promise of a digital transformation. Through a series of studies, the overarching aim of this book is to investigate if and how the digitalization/digital transformation process causes (or may cause) the autonomy of various labor functions, and its impact in creating (or stymieing) various job opportunities on the labor market. This book also seeks to illuminate what actors/groups are mostly benefited by the digitalization/digital
transformation and which actors/groups that are put at risk by it. This book takes its point of departure from a 2016 OECD report that contends that the impact digitalization has on the future of labor is ambiguous, as on the one hand it is suggested that technological change is labor-saving, but on the other hand, it is suggested that digital technologies have not created new jobs on a scale that it replaces old jobs. Another 2018 OECD report indicated that digitalization and automation as such does not pose a real risk of destroying any significant number of jobs for the foreseeable future, although tasks would by and large change significantly. This would affects welfare, as most of its revenue stems from taxation, and particularly so from the taxation on labor (directly or indirectly). For this reason, this book will set out to explore how the future technological and societal advancements impact labor conditions. The book seeks to provide an innovative, enriching and controversial take on how various aspects of the labor market can be (and are) affected the ongoing digitalization trend in a way that is not covered by extant literature. As such, this book intends to cater to a wider readership, from a general audience and students, to specialized professionals and academics wanting to gain a deeper understanding of the possible future developments of the labor market in light of an accelerating digitalization/digital transformation of society at large.

Become a Digital Master—No Matter What Business You’re In If you think the phrase “going digital” is only relevant for industries like tech, media, and entertainment—think again. In fact, mobile, analytics, social media, sensors, and cloud computing have already fundamentally changed the entire business landscape as we know it—including your industry. The problem is that most accounts of digital in business focus on Silicon Valley stars and tech start-ups. But what about the other 90-plus percent of the economy? In Leading Digital, authors George Westerman, Didier Bonnet, and Andrew McAfee highlight how large companies in traditional industries—from finance to manufacturing to pharmaceuticals—are using digital to gain strategic advantage. They illuminate the principles and practices that lead to successful digital transformation. Based on a study of more than four hundred global firms, including Asian Paints, Burberry, Caesars Entertainment, Codelco, Lloyds Banking Group, Nike, and Pernod Ricard, the book shows what it takes to become a Digital Master. It explains successful transformation in a clear, two-part framework: where to invest in digital capabilities, and how to lead the transformation. Within these parts, you’ll learn:

• How to engage better with your customers • How to digitally enhance operations • How to create a digital vision • How to govern your digital activities

The book also includes an extensive step-by-step transformation playbook for leaders to follow. Leading Digital is the must-have guide to help your organization survive and thrive in the new, digitally powered, global economy.

This book presents how Digital Transformation is a requirement to upgrade Latin American universities to a next level in management, lecturing and learning processes and strategies. The book starts with a thorough introduction of the
Latin American context addressing the three main topics in the book: Digital Transformation, Higher Education and Artificial Intelligence & Industry 4.0. They will be depicted by region, with a clear distribution between Central America & Mexico, Comunidad Andina (Perú, Colombia, Chile, Ecuador, Bolivia), Mercosur (Argentina, Brasil, Paraguay and Uruguay), and other countries. The book also shows how online learning is a key part of the transformation, with a clear focus on learning management systems, innovation and learning analytics. Further, personalised services for every single profile at the university (students, lecturers, academic managers) are presented to guarantee inclusive education service aggregation for networked campuses. Following, the book addresses strategy and overall services that concentrate on sustainability and revenue models integrated with a strategic planning. Finally a set of chapters will show specific experiences and case studies of direct application of Artificial Intelligence and Technology 4.0, where the readers can learn from and transfer directly into their educational contexts.

In 2018, '77 Building Blocks of Digital Transformation: The Digital Capability Model' was published to help 'digital practitioners' working in the digital space. Since then, quite a few readers have suggested writing a book about digital transformation for 'the general public' interested in learning more than basics of digital transformation. That is how the book '77 Building Blocks of Digital Transformation: Simply Explained' has been created. This book is intended to deliver the key messages of 'the 77 Building Blocks' to the general public. It aims to help the general public understand 'actual practices' in the digital space. This is not a theory book that discusses the academical ideas and concepts of digital transformation, but a 'practical' field book that describes the proven digital capabilities as the building blocks of digital transformation. This book does however not fully cover the technical detail of the Maturity Model described in '77 Building Blocks of Digital transformation: The Digital Capability Model' that aims to help digital practitioners with measuring digital maturity. Instead, this book provides examples of higher maturity indicators as an introduction to the Maturity Model. If you are looking for a deep dive into the Maturity Model, refer to '77 Building Blocks of Digital transformation: The Digital Capability Model'. This book covers:

4. Digital Commerce - Online Merchandising - Shopping Cart & Checkout - Payments & Reconciliation - Order Management & Fulfillment - Account
Management & Self-Service

5. Digital Channel Management - Channel Mix & Optimization - Cross-Business Integration - Cross-Channel Integration - Multi-Device Presentation


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