

artificial intelligence implications for business strategy

Artificial Intelligence Implications for Business Strategy: A Comprehensive Guide

Introduction:

Understanding the transformative power of AI in modern business

Artificial intelligence (AI) is no longer a futuristic concept; it's a rapidly evolving technology reshaping business strategies across diverse sectors. From streamlining operations to enhancing customer experiences and driving innovation, AI offers unprecedented opportunities for growth and competitive advantage. This comprehensive guide explores the key implications of AI for businesses, examining its impact on various aspects of strategic planning and execution. Ignoring AI's potential is no longer an option; understanding and integrating it effectively is crucial for future success.

Article Outline:

- I. AI's Impact on Business Processes:
 - a. Automation of repetitive tasks
 - b. Enhanced efficiency and productivity
 - c. Improved decision-making through data analysis
- II. AI-Driven Customer Relationship Management (CRM):
 - a. Personalized customer experiences
 - b. Predictive analytics for targeted marketing
 - c. Improved customer service through AI chatbots
- III. AI and Innovation:
 - a. Development of new products and services
 - b. Accelerated research and development
 - c. Enhanced competitive advantage through AI-driven innovation
- IV. Ethical Considerations and Challenges of AI Implementation:
 - a. Data privacy and security concerns
 - b. Bias in algorithms and mitigation strategies
 - c. Job displacement and workforce retraining
- V. Strategic Planning for AI Integration:
 - a. Defining clear AI goals and objectives
 - b. Assessing current infrastructure and resources
 - c. Selecting appropriate AI technologies and tools

d. Implementing a robust data management strategy

Article Body:

I. AI's Impact on Business Processes:

Automating repetitive tasks leads to increased efficiency and reduced operational costs.

AI excels at automating routine, repetitive tasks, freeing up human employees to focus on more strategic and creative endeavors. This automation leads to significant cost savings and increased operational efficiency.

Enhanced efficiency and productivity through AI-powered automation streamlines workflows.

By streamlining workflows and eliminating bottlenecks, AI significantly boosts overall productivity. This allows businesses to achieve more with fewer resources and respond more quickly to market demands.

AI-driven data analysis provides actionable insights for improved business decision-making.

AI algorithms can analyze vast datasets to identify trends, patterns, and anomalies that would be impossible for humans to detect. This data-driven insight forms the basis for more informed and effective business decisions.

II. AI-Driven Customer Relationship Management (CRM):

Personalized customer experiences enhance customer loyalty and satisfaction.

AI enables businesses to deliver highly personalized experiences tailored to individual customer preferences and behaviors. This personalization fosters stronger customer relationships and enhances loyalty.

Predictive analytics empowers targeted marketing campaigns for optimal ROI.

AI-powered predictive analytics helps businesses anticipate customer needs and behaviors, enabling the creation of more effective targeted marketing campaigns with higher ROI.

AI-powered chatbots provide 24/7 customer service, enhancing accessibility and responsiveness.

AI-driven chatbots offer immediate customer support, improving response times and enhancing customer satisfaction, even outside of regular business hours.

III. AI and Innovation:

AI accelerates the development of innovative products and services, fueling business growth.

AI facilitates the creation of new products and services by automating design processes, optimizing manufacturing, and identifying new market opportunities.

AI accelerates research and development, leading to faster breakthroughs and innovations.

AI accelerates research and development cycles by analyzing large datasets, identifying promising research avenues, and automating experimental processes.

AI-driven innovation provides a significant competitive advantage in the marketplace.

Businesses that effectively leverage AI for innovation gain a competitive edge by offering superior products, services, and experiences to their customers.

IV. Ethical Considerations and Challenges of AI Implementation:

Data privacy and security concerns are paramount in the age of AI.

Implementing AI responsibly necessitates robust data privacy and security measures to protect sensitive customer information.

Addressing algorithmic bias is crucial for fair and equitable AI applications.

AI algorithms can inherit biases present in the data they are trained on. Mitigating these biases is essential to ensure fair and equitable outcomes.

AI-driven job displacement necessitates workforce retraining and upskilling initiatives.

The automation potential of AI raises concerns about job displacement. Proactive workforce retraining and upskilling initiatives are vital to address this challenge.

V. Strategic Planning for AI Integration:

Defining clear AI goals and objectives is the cornerstone of successful implementation.

Before implementing AI, businesses need to define specific, measurable, achievable, relevant, and time-bound (SMART) goals.

Assessing current infrastructure and resources ensures effective AI integration.

Businesses need to evaluate their existing infrastructure and resources to determine their readiness for AI integration.

Selecting appropriate AI technologies and tools aligns with specific business needs.

Choosing the right AI technologies and tools is critical for successful implementation. This involves careful consideration of various factors, including cost, scalability, and ease of integration.

Implementing a robust data management strategy is vital for successful AI deployment.

A robust data management strategy, encompassing data collection, storage, processing, and security, is essential for successful AI implementation.

Conclusion:

The implications of AI for business strategy are profound and far-reaching. Successfully integrating AI requires a strategic, holistic approach that considers both the opportunities and the challenges. By proactively addressing ethical considerations, investing in infrastructure and talent, and focusing on clear objectives, businesses can leverage AI to achieve significant competitive advantages, drive innovation, and unlock new levels of growth.

Frequently Asked Questions (FAQs):

Q: Is AI affordable for small businesses? A: The cost of AI implementation varies greatly depending on the specific technologies and needs. Cloud-based AI solutions and open-source tools are making AI more accessible to small businesses.

Q: How long does it take to see a return on investment (ROI) from AI? A: The time to ROI varies widely depending on the application and implementation. Some applications may deliver quick returns, while others require longer-term investment.

Q: What are the biggest risks of AI implementation? A: Key risks include data security breaches, algorithmic bias, and job displacement. Careful planning and risk mitigation strategies are essential.

Q: What skills are needed for AI implementation? A: A range of skills are needed, including data science, AI engineering, and business strategy expertise. Many businesses rely on partnerships with AI specialists.

Related Keywords:

Artificial intelligence, AI in business, business strategy, AI implementation, AI strategy, digital transformation, AI applications, machine learning, deep learning, AI analytics, data analytics, AI ethics, AI risks, AI benefits, competitive advantage, customer relationship management (CRM), automation, productivity, innovation.

artificial intelligence implications for business strategy: [Artificial Intelligence](#) Harvard Business Review, 2019 Companies that don't use AI to their advantage will soon be left behind. Artificial intelligence and machine learning will drive a massive reshaping of the economy and society. What should you and your company be doing right now to ensure that your business is poised for success? These articles by AI experts and consultants will help you understand today's essential thinking on what AI is capable of now, how to adopt it in your organization, and how the technology is likely to evolve in the near future. Artificial Intelligence: The Insights You Need from Harvard Business Review will help you spearhead important conversations, get going on the right AI initiatives for your company, and capitalize on the opportunity of the machine intelligence revolution. Catch up on current topics and deepen your understanding of them with the Insights You Need series from Harvard Business Review. Featuring some of HBR's best and most recent thinking, Insights You Need titles are both a primer on today's most pressing issues and an extension of the conversation, with interesting research, interviews, case studies, and practical ideas to help you explore how a particular issue will impact your company and what it will mean for you and your business.

artificial intelligence implications for business strategy: Artificial Intelligence and Machine Learning for Business Steven Finlay, 2018-07 Artificial Intelligence (AI) and Machine Learning are now mainstream business tools. They are being applied across many industries to increase profits, reduce costs, save lives and improve customer experiences. Organizations which understand these tools and know how to use them are benefiting at the expense of their rivals. Artificial Intelligence and Machine Learning for Business cuts through the hype and technical jargon

that is often associated with these subjects. It delivers a simple and concise introduction for managers and business people. The focus is very much on practical application and how to work with technical specialists (data scientists) to maximize the benefits of these technologies. This third edition has been substantially revised and updated. It contains several new chapters and covers a broader set of topics than before, but retains the no-nonsense style of the original.

artificial intelligence implications for business strategy: Competing in the Age of AI

Marco Iansiti, Karim R. Lakhani, 2020-01-07 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. Now with a new preface that explores how the coronavirus crisis compelled organizations such as Massachusetts General Hospital, Verizon, and IKEA to transform themselves with remarkable speed, 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.

artificial intelligence implications for business strategy: Artificial Intelligence and its

Impact on Business Wolfgang Amann, Agata Stachowicz-Stanusch, 2020-06-01 Artificial intelligence (AI) technologies are one of top investment priorities in these days. They are aimed at finding applications in fields of special value for humans, including education. The fourth industrial revolution will replace not only human hands but also human brains, the time of machines requires new forms of work and new ways of business education, however we must be aware that if there is no control of human-chatbot interaction, there is a risk of losing sight of this interaction's goal. First, it is important to get people to truly understand AI systems, to intentionally participate in their use, as well as to build their trust, because "the measure of success for AI applications is the value they create for human lives" (Stanford University 2016, 33). Consequently, society needs to adapt to AI applications if it is to extend its benefits and mitigate the inevitable errors and failures. This is why it is highly recommended to create new AI-powered tools for education that are the result of cooperation between AI researchers and humanities' and social sciences' researchers, who can identify cognitive processes and human behaviors. This book is authored by a range of international experts with a diversity of backgrounds and perspectives hopefully bringing us closer to the responses for the questions what we should teach (what the 'right' set of future skills is), how we should teach (the way in which schools should teach and assess them) and where we should teach (what implications does AI have for today's education infrastructure). We must remember as we have already noticed before "...education institutions would need to ensure that that they have an appropriate infrastructure, as well as the safety and credibility of AI-based systems. Ultimately, the law and policies need to adjust to the rapid pace of AI development, because the formal responsibility for appropriate learning outcomes will in future be divided between a teacher and a machine. Above all, we should ensure that AI respect human and civil rights (Stachowicz-Stanusch, Amann, 2018)".

artificial intelligence implications for business strategy: The AI Marketing Canvas Raj

Venkatesan, Jim Lecinski, 2021-05-18 This book offers a direct, actionable plan CMOs can use to map out initiatives that are properly sequenced and designed for success—regardless of where their marketing organization is in the process. The authors pose the following critical questions to marketers: (1) How should modern marketers be thinking about artificial intelligence and machine learning? and (2) How should marketers be developing a strategy and plan to implement AI into their marketing toolkit? The opening chapters provide marketing leaders with an overview of what exactly AI is and how is it different than traditional computer science approaches. Venkatesan and Lecinski, then, propose a best-practice, five-stage framework for implementing what they term the AI Marketing Canvas. Their approach is based on research and interviews they conducted with leading marketers, and offers many tangible examples of what brands are doing at each stage of the AI Marketing Canvas. By way of guidance, Venkatesan and Lecinski provide examples of brands—including Google, Lyft, Ancestry.com, and Coca-Cola—that have successfully woven AI into their marketing strategies. The book concludes with a discussion of important implications for marketing leaders—for your team and culture.

artificial intelligence implications for business strategy: Using Artificial Intelligence in Marketing Katie King, 2019-02-03 Artificial intelligence (AI) is paving the way for the future of marketing and business transformation, yet many organizations struggle to know exactly how and where to integrate it. This book is the ultimate guide to embracing the opportunity that AI can bring for your marketing. With AI forecasted to boost global GDP by 14% by 2030, an efficient and sustainable AI marketing strategy is now essential to avoid losing the competitive edge. Using Artificial Intelligence in Marketing provides the definitive, practical framework needed for marketers to identify, apply and embrace the opportunity to maximize the results and business advancement that AI can bring. Streamlining efficiencies into every business practice, AI automates simpler, repetitive tasks with unrivalled accuracy, allowing sales and marketing teams to return their attention to where human interaction is most valuable: strategy, creativity and personal connection. Using Artificial Intelligence in Marketing outlines key marketing benefits such as accurate market research samples, immediate big data insights and brand-safe content creation, right through to the on-demand customer service that is now expected 24/7. It also explores the inevitable myths, concerns and ethical questions that can arise from the large-scale adoption of AI. This book is an essential read for every 21st century marketer.

artificial intelligence implications for business strategy: The AI Advantage Thomas H. Davenport, 2019-08-06 Cutting through the hype, a practical guide to using artificial intelligence for business benefits and competitive advantage. In The AI Advantage, Thomas Davenport offers a guide to using artificial intelligence in business. He describes what technologies are available and how companies can use them for business benefits and competitive advantage. He cuts through the hype of the AI craze—remember when it seemed plausible that IBM's Watson could cure cancer?—to explain how businesses can put artificial intelligence to work now, in the real world. His key recommendation: don't go for the “moonshot” (curing cancer, or synthesizing all investment knowledge); look for the “low-hanging fruit” to make your company more efficient. Davenport explains that the business value AI offers is solid rather than sexy or splashy. AI will improve products and processes and make decisions better informed—important but largely invisible tasks. AI technologies won't replace human workers but augment their capabilities, with smart machines to work alongside smart people. AI can automate structured and repetitive work; provide extensive analysis of data through machine learning (“analytics on steroids”), and engage with customers and employees via chatbots and intelligent agents. Companies should experiment with these technologies and develop their own expertise. Davenport describes the major AI technologies and explains how they are being used, reports on the AI work done by large commercial enterprises like Amazon and Google, and outlines strategies and steps to becoming a cognitive corporation. This book provides an invaluable guide to the real-world future of business AI. A book in the Management on the Cutting Edge series, published in cooperation with MIT Sloan Management Review.

artificial intelligence implications for business strategy: *Artificial Intelligence in Society*

OECD, 2019-06-11 The artificial intelligence (AI) landscape has evolved significantly from 1950 when Alan Turing first posed the question of whether machines can think. Today, AI is transforming societies and economies. It promises to generate productivity gains, improve well-being and help address global challenges, such as climate change, resource scarcity and health crises.

artificial intelligence implications for business strategy: Elements of Robotics

Mordechai Ben-Ari, Francesco Mondada, 2017-10-25 This open access book bridges the gap between playing with robots in school and studying robotics at the upper undergraduate and graduate levels to prepare for careers in industry and research. Robotic algorithms are presented formally, but using only mathematics known by high-school and first-year college students, such as calculus, matrices and probability. Concepts and algorithms are explained through detailed diagrams and calculations. Elements of Robotics presents an overview of different types of robots and the components used to build robots, but focuses on robotic algorithms: simple algorithms like odometry and feedback control, as well as algorithms for advanced topics like localization, mapping, image processing, machine learning and swarm robotics. These algorithms are demonstrated in simplified contexts that enable detailed computations to be performed and feasible activities to be posed. Students who study these simplified demonstrations will be well prepared for advanced study of robotics. The algorithms are presented at a relatively abstract level, not tied to any specific robot. Instead a generic robot is defined that uses elements common to most educational robots: differential drive with two motors, proximity sensors and some method of displaying output to the user. The theory is supplemented with over 100 activities, most of which can be successfully implemented using inexpensive educational robots. Activities that require more computation can be programmed on a computer. Archives are available with suggested implementations for the Thymio robot and standalone programs in Python.

artificial intelligence implications for business strategy: Artificial Intelligence for Marketing Jim Sterne, 2017-08-14 A straightforward, non-technical guide to the next major marketing tool Artificial Intelligence for Marketing presents a tightly-focused introduction to machine learning, written specifically for marketing professionals. This book will not teach you to be a data scientist—but it does explain how Artificial Intelligence and Machine Learning will revolutionize your company's marketing strategy, and teach you how to use it most effectively. Data and analytics have become table stakes in modern marketing, but the field is ever-evolving with data scientists continually developing new algorithms—where does that leave you? How can marketers use the latest data science developments to their advantage? This book walks you through the need-to-know aspects of Artificial Intelligence, including natural language processing, speech recognition, and the power of Machine Learning to show you how to make the most of this technology in a practical, tactical way. Simple illustrations clarify complex concepts, and case studies show how real-world companies are taking the next leap forward. Straightforward, pragmatic, and with no math required, this book will help you: Speak intelligently about Artificial Intelligence and its advantages in marketing Understand how marketers without a Data Science degree can make use of machine learning technology Collaborate with data scientists as a subject matter expert to help develop focused-use applications Help your company gain a competitive advantage by leveraging leading-edge technology in marketing Marketing and data science are two fast-moving, turbulent spheres that often intersect; that intersection is where marketing professionals pick up the tools and methods to move their company forward. Artificial Intelligence and Machine Learning provide a data-driven basis for more robust and intensely-targeted marketing strategies—and companies that effectively utilize these latest tools will reap the benefit in the marketplace. Artificial Intelligence for Marketing provides a nontechnical crash course to help you stay ahead of the curve.

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insights from your analytics efforts. Discover how to move beyond clickstream analysis, why qualitative data should be your focus, and more insights and techniques that will help you develop a customer-centric mindset without sacrificing your company's bottom line. Note: CD-ROM/DVD and other supplementary materials are not included as part of eBook file.

artificial intelligence implications for business strategy: Artificial Intelligence for Business Ana Landeta Echeberria, 2022-01-22 This book seeks to build a shared understanding of Artificial Intelligence (AI) within the global business scenario today and in the near future. Drawing on academic theory and real-world case studies, it examines AI's development and application across a number of business contexts. Taking current scholarship forward in its engagement with AI theory and practice for enterprises and applied research and innovation, it outlines international practices for the promotion of reliable AI systems, trends, research and development, fostering a digital ecosystem for AI and preparing companies for job transformation and building skills. This book will be of great interest to academics studying Digital Business, Digital Strategy, Innovation Management, and Information Technology.

artificial intelligence implications for business strategy: A Human's Guide to Machine Intelligence Kartik Hosanagar, 2020-03-10 A Wharton professor and tech entrepreneur examines how algorithms and artificial intelligence are starting to run every aspect of our lives, and how we can shape the way they impact us Through the technology embedded in almost every major tech platform and every web-enabled device, algorithms and the artificial intelligence that underlies them make a staggering number of everyday decisions for us, from what products we buy, to where we decide to eat, to how we consume our news, to whom we date, and how we find a job. We've even delegated life-and-death decisions to algorithms--decisions once made by doctors, pilots, and judges. In his new book, Kartik Hosanagar surveys the brave new world of algorithmic decision-making and reveals the potentially dangerous biases they can give rise to as they increasingly run our lives. He makes the compelling case that we need to arm ourselves with a better, deeper, more nuanced understanding of the phenomenon of algorithmic thinking. And he gives us a route in, pointing out that algorithms often think a lot like their creators--that is, like you and me. Hosanagar draws on his experiences designing algorithms professionally--as well as on history, computer science, and psychology--to explore how algorithms work and why they occasionally go rogue, what drives our trust in them, and the many ramifications of algorithmic decision-making. He examines episodes like Microsoft's chatbot Tay, which was designed to converse on social media like a teenage girl, but instead turned sexist and racist; the fatal accidents of self-driving cars; and even our own common, and often frustrating, experiences on services like Netflix and Amazon. A Human's Guide to Machine Intelligence is an entertaining and provocative look at one of the most important developments of our time and a practical user's guide to this first wave of practical artificial intelligence.

artificial intelligence implications for business strategy: Powering the Digital Economy: Opportunities and Risks of Artificial Intelligence in Finance El Bachir Boukherouaa, Mr. Ghiath Shabsigh, Khaled AlAjmi, Jose Deodoro, Aquiles Farias, Ebru S Iskender, Mr. Alin T Mirestean, Rangachary Ravikumar, 2021-10-22 This paper discusses the impact of the rapid adoption of artificial intelligence (AI) and machine learning (ML) in the financial sector. It highlights the benefits these technologies bring in terms of financial deepening and efficiency, while raising concerns about its potential in widening the digital divide between advanced and developing economies. The paper advances the discussion on the impact of this technology by distilling and categorizing the unique risks that it could pose to the integrity and stability of the financial system, policy challenges, and potential regulatory approaches. The evolving nature of this technology and its application in finance means that the full extent of its strengths and weaknesses is yet to be fully understood. Given the risk of unexpected pitfalls, countries will need to strengthen prudential oversight.

artificial intelligence implications for business strategy: Contemporary Perspectives in Corporate Social Performance and Policy Agata Stachowicz-Stanusch, Wolfgang Amann, 2018-01-01 The book Contemporary Perspectives in Corporate Social Performance and Policy - The Middle Eastern Perspective is our endeavor to deepen the current discussion about business and

institutional activity in Middle Eastern countries and disseminate the new perspective of the scientific inquiry in the responsibility of various organization operating in this part of the world. The book is divided into four parts: "Introduction", "Reality and Challenges of Corporate Social Performance - The Middle Eastern Perspective", "Corporate Social Responsibility in Middle Eastern countries", "Corporate Social Performance -specific problems". There were included some theoretical and practical contributions into the topic of corporate social responsibility and corporate social performance based on experiences from different countries (such as Israel, Turkey, United Arab Emirates). We hope that this volume will help to understand better this specific region and its business activities.

artificial intelligence implications for business strategy: *Web Analytics 2.0* Avinash Kaushik, 2009-12-30 Adeptly address today's business challenges with this powerful new book from web analytics thought leader Avinash Kaushik. Web Analytics 2.0 presents a new framework that will permanently change how you think about analytics. It provides specific recommendations for creating an actionable strategy, applying analytical techniques correctly, solving challenges such as measuring social media and multichannel campaigns, achieving optimal success by leveraging experimentation, and employing tactics for truly listening to your customers. The book will help your organization become more data driven while you become a super analysis ninja!

artificial intelligence implications for business strategy: Artificial Intelligence and Machine Learning in Business Management Sandeep Kumar Panda, Vaibhav Mishra, R. Balamurali, Ahmed A. Elngar, 2021-11-04 Artificial Intelligence and Machine Learning in Business Management The focus of this book is to introduce artificial intelligence (AI) and machine learning (ML) technologies into the context of business management. The book gives insights into the implementation and impact of AI and ML to business leaders, managers, technology developers, and implementers. With the maturing use of AI or ML in the field of business intelligence, this book examines several projects with innovative uses of AI beyond data organization and access. It follows the Predictive Modeling Toolkit for providing new insight on how to use improved AI tools in the field of business. It explores cultural heritage values and risk assessments for mitigation and conservation and discusses on-shore and off-shore technological capabilities with spatial tools for addressing marketing and retail strategies, and insurance and healthcare systems. Taking a multidisciplinary approach for using AI, this book provides a single comprehensive reference resource for undergraduate, graduate, business professionals, and related disciplines.

artificial intelligence implications for business strategy: Superminds Thomas W. Malone, 2018-05-15 From the founding director of the MIT Center for Collective Intelligence comes a fascinating look at the remarkable capacity for intelligence exhibited by groups of people and computers working together. If you're like most people, you probably believe that humans are the most intelligent animals on our planet. But there's another kind of entity that can be far smarter: groups of people. In this groundbreaking book, Thomas Malone, the founding director of the MIT Center for Collective Intelligence, shows how groups of people working together in superminds -- like hierarchies, markets, democracies, and communities -- have been responsible for almost all human achievements in business, government, science, and beyond. And these collectively intelligent human groups are about to get much smarter. Using dozens of striking examples and case studies, Malone shows how computers can help create more intelligent superminds simply by connecting humans to one another in a variety of rich, new ways. And although it will probably happen more gradually than many people expect, artificially intelligent computers will amplify the power of these superminds by doing increasingly complex kinds of thinking. Together, these changes will have far-reaching implications for everything from the way we buy groceries and plan business strategies to how we respond to climate change, and even for democracy itself. By understanding how these collectively intelligent groups work, we can learn how to harness their genius to achieve our human goals. Drawing on cutting-edge science and insights from a remarkable range of disciplines, Superminds articulates a bold -- and utterly fascinating -- picture of the future that will change the ways you work and live, both with other people and with computers.

artificial intelligence implications for business strategy: Digital Entrepreneurship

Mariusz Soltanifar, Mathew Hughes, Lutz Göcke, 2020-11-13 This open access book explores the global challenges and experiences related to digital entrepreneurial activities, using carefully selected examples from leading companies and economies that shape world business today and tomorrow. Digital entrepreneurship and the companies steering it have an enormous global impact; they promise to transform the business world and change the way we communicate with each other. These companies use digitalization and artificial intelligence to enhance the quality of decisions and augment their business and customer operations. This book demonstrates how cloud services are continuing to evolve; how cryptocurrencies are traded in the banking industry; how platforms are created to commercialize business, and how, taken together, these developments provide new opportunities in the digitalized era. Further, it discusses a wide range of digital factors changing the way businesses operate, including artificial intelligence, chatbots, voice search, augmented and virtual reality, as well as cyber threats and data privacy management. "Digitalization mirrors the Industrial Revolution's impact. This book provides a complement of perspectives on the opportunities emanating from such a deep seated change in our economy. It is a comprehensive collection of thought leadership mapped into a very useful framework. Scholars, digital entrepreneurs and practitioners will benefit from this timely work." Gina O'Connor, Professor of Innovation Management at Babson College, USA "This book defines and delineates the requirements for companies to enable their businesses to succeed in a post-COVID19 world. This book deftly examines how to accomplish and achieve digital entrepreneurship by leveraging cloud computing, AI, IoT and other critical technologies. This is truly a unique "must-read" book because it goes beyond theory and provides practical examples." Charlie Isaacs, CTO of Customer Connection at Salesforce.com, USA This book provides digital entrepreneurs useful guidance identifying, validating and building their venture. The international authors developed new perspectives on digital entrepreneurship that can support to create impact ventures." Felix Staeritz, CEO FoundersLane, Member of the World Economic Forum Digital Leaders Board and bestselling author of FightBack, Germany

artificial intelligence implications for business strategy: Working with AI Thomas H.

Davenport, Steven M. Miller, 2022-09-27 Two management and technology experts show that AI is not a job destroyer, exploring worker-AI collaboration in real-world work settings. This book breaks through both the hype and the doom-and-gloom surrounding automation and the deployment of artificial intelligence-enabled—"smart"—systems at work. Management and technology experts Thomas Davenport and Steven Miller show that, contrary to widespread predictions, prescriptions, and denunciations, AI is not primarily a job destroyer. Rather, AI changes the way we work—by taking over some tasks but not entire jobs, freeing people to do other, more important and more challenging work. By offering detailed, real-world case studies of AI-augmented jobs in settings that range from finance to the factory floor, Davenport and Miller also show that AI in the workplace is not the stuff of futuristic speculation. It is happening now to many companies and workers. These cases include a digital system for life insurance underwriting that analyzes applications and third-party data in real time, allowing human underwriters to focus on more complex cases; an intelligent telemedicine platform with a chat-based interface; a machine learning-system that identifies impending train maintenance issues by analyzing diesel fuel samples; and Flippy, a robotic assistant for fast food preparation. For each one, Davenport and Miller describe in detail the work context for the system, interviewing job incumbents, managers, and technology vendors. Short "insight" chapters draw out common themes and consider the implications of human collaboration with smart systems.

artificial intelligence implications for business strategy: Predictive Medicine Emmanuel

Fombu, 2020-01-10 Predictive Medicine makes artificial intelligence more accessible for healthcare practitioners without shying away from complex topics and controversial subject matter. Artificial intelligence, machine learning, natural language processing, robotics, big data and other new technologies are ready to revolutionize the way we look at healthcare. But if we want them to

achieve their full potential, we'll need leaders who understand these new tools and who have long-term strategies in place to take advantage of them. This book will help you to become one of those leaders. Predictive Medicine makes artificial intelligence more accessible for healthcare practitioners without shying away from complex topics and controversial subject matter. It's a call-to-action for a new generation of health leaders and a roadmap to help them usher in a brighter future.

artificial intelligence implications for business strategy: Leadership by Algorithm David De Cremer, 2020-05-26 With artificial intelligence on the rise, the way we run our organisations will change—and drastically. But what exactly will that future look like? And who will take the leading role: machines or people? In this compelling new book, leading management guru David De Cremer identifies the key areas where algorithms will collide with human skills, and assesses the likely outcomes. Will your next boss be a robot? Can an AI boss display the human qualities that define a good leader: compassion, empathy, imagination, ethics, and strategic awareness? Drawing on his own research findings, and those from thought leaders around the world, the author presents fascinating insights into the challenges that an automated work environment poses for organisations of the future. Leadership by Algorithm offers some startling conclusions that make clear the true nature of the power struggle between man and machine. It also identifies the leadership qualities needed to deal with this struggle most effectively.

artificial intelligence implications for business strategy: The Economics of Artificial Intelligence Ajay Agrawal, Joshua Gans, Avi Goldfarb, Catherine Tucker, 2024-03-05 A timely investigation of the potential economic effects, both realized and unrealized, of artificial intelligence within the United States healthcare system. In sweeping conversations about the impact of artificial intelligence on many sectors of the economy, healthcare has received relatively little attention. Yet it seems unlikely that an industry that represents nearly one-fifth of the economy could escape the efficiency and cost-driven disruptions of AI. The Economics of Artificial Intelligence: Health Care Challenges brings together contributions from health economists, physicians, philosophers, and scholars in law, public health, and machine learning to identify the primary barriers to entry of AI in the healthcare sector. Across original papers and in wide-ranging responses, the contributors analyze barriers of four types: incentives, management, data availability, and regulation. They also suggest that AI has the potential to improve outcomes and lower costs. Understanding both the benefits of and barriers to AI adoption is essential for designing policies that will affect the evolution of the healthcare system.

artificial intelligence implications for business strategy: Artificial Intelligence in Healthcare Adam Bohr, Kaveh Memarzadeh, 2020-06-21 Artificial Intelligence (AI) in Healthcare is more than a comprehensive introduction to artificial intelligence as a tool in the generation and analysis of healthcare data. The book is split into two sections where the first section describes the current healthcare challenges and the rise of AI in this arena. The ten following chapters are written by specialists in each area, covering the whole healthcare ecosystem. First, the AI applications in drug design and drug development are presented followed by its applications in the field of cancer diagnostics, treatment and medical imaging. Subsequently, the application of AI in medical devices and surgery are covered as well as remote patient monitoring. Finally, the book dives into the topics of security, privacy, information sharing, health insurances and legal aspects of AI in healthcare. - Highlights different data techniques in healthcare data analysis, including machine learning and data mining - Illustrates different applications and challenges across the design, implementation and management of intelligent systems and healthcare data networks - Includes applications and case studies across all areas of AI in healthcare data

artificial intelligence implications for business strategy: Artificial Intelligence for Business Transforming Strategies for Success Sam Morgan, 2024-11-12 Discover how to leverage technology with Artificial Intelligence for Business Transforming Strategies for Success. This comprehensive guide explores the impact of artificial intelligence in business environments, providing actionable insights on implementing AI strategies to enhance operational efficiency and

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