Blockchain In Government 2017 Q3 Learning Machine

The growth of Blockchain technology presents a number of legal questions for lawyers, regulators and industry participants alike. Primarily, regulators must allow Blockchain technology to develop whilst also ensuring it is not being abused. This book addresses the challenges posed by various applications of Blockchain technology, such as cryptocurrencies, smart contracts and initial coin offerings, across different fields of law. Contributors explore whether the problems posed by Blockchain and its applications can be addressed within the present legal system or whether significant rethinking is required.

Trade has always been shaped by technological innovation. In recent times, a new technology, Blockchain, has been greeted by many as the next big game-changer. Can Blockchain revolutionize international trade? This publication seeks to demystify the Blockchain phenomenon by providing a basic explanation of the technology. It analyses the relevance of this technology for international trade by reviewing how it is currently used or can be used in the various areas covered by WTO rules. In doing so, it provides an insight into the extent to which this technology could affect cross-border trade in goods and services, and intellectual property rights. It discusses the potential of Blockchain for reducing trade costs and enhancing supply chain transparency as well as the opportunities it provides for small-scale producers and companies. Finally, it reviews various challenges that must be addressed before the technology can be used on a wide scale and have a significant impact on international trade.

While creating new forms (Shari'ah-compliant standards) to operationalize Islamic values and ethics into the current conventional economic system and banking products is crucial to sustain the Islamic economy as it is today, we also need to develop new strategies to cope with the next economic evolution. The digital revolution in financial services is under way, and digital disruption has the potential to shrink the role and relevance of today’s banks, while simultaneously creating better, faster, cheaper services that will be an essential part of everyday life. This forward-looking book discusses the crucial innovation, structural and institutional development for financial technologies (fintech) in Islamic finance. The authors explain concepts in fintech and blockchain technology and follow through with their applications, challenges and evolving nature. The book provides insights into technology which will enable and enhance actual prescribed Islamic behaviors in modern economic transactions. Case studies highlight how to cope with modern transactional behavior with the advent of global online/mobile markets, shorter attention spans, and impersonal trade exchange.

This report provides an overview of the financial impact of cyber incidents, the coverage of cyber risk available in the insurance market, the challenges to market development and initiatives to address those challenges.

Assisted by globalization and the rapid application of advanced technologies, the transformative power of urbanization is being felt around the world. The scale and the speed of existing and projected urbanization poses several challenges to researchers in multiple disciplines, such as computer science, engineering, and the social sciences. Optimizing Regional Development Through Transformative Urbanization provides emerging research exploring the theoretical and practical aspects of applications within urban growth interventions. It also explores the strategies for new urban development tools such as the rise of new platforms for digital activities, concepts of sharing economy, collaborative economy, crowdsourcing, and crowdfunding. Featuring coverage on a broad range of topics such as cryptocurrencies, public-private partnership, and urban governance, this book is a vital reference for city development planners, decision makers, policymakers, academicians, researchers, and professionals seeking current research on the delivery of transformative urbanization changes.

This book is an authoritative handbook of current topics, technologies and methodological approaches that may be used for the study of scholarly impact. The included methods cover a range of fields such as statistical sciences, scientific visualization, network analysis, text mining, and information retrieval. The techniques and tools enable researchers to investigate metric phenomena and to assess scholarly impact in new ways. Each chapter offers an introduction to the selected topic and outlines how the topic, technology or methodological approach may be applied to metrics-related research. Comprehensive and up-to-date, Measuring Scholarly Impact: Methods and Practice is designed for researchers and scholars interested in informetrics, scientometrics, and text mining. The hands-on perspective is also beneficial to advanced-level students in fields from computer science and statistics to information science.

This handbook provides the first comprehensive overview of the fast-evolving alternative finance space and makes a timely and in-depth contribution to the literature in this area. Bringing together expert contributions in the field from both practitioners and academics, in one of the most dynamic parts of the financial sector, it provides a solid reference for this exciting discipline. Divided into six parts, Section 1 presents a high-level overview of the technologically-enabled finance space. It also offers a historical perspective on technological finance models and outlines different business models. Section 2 analyses digital currencies including guides to bitcoins, other cryptocurrencies, and blockchains. Section 3 addresses alternative payment systems such as digital money and asset tokenization. Section 4 deals with crowdfunding models from both a theoretical perspective and from a regulatory perspective. Section 5 discusses data-driven business models and includes a discussion of neural networks and deep learning. Finally, Section 6 discusses welfare implications of the technological finance revolution. This collection highlights the most current developments to date and the state-of-the-art in alternative finance, while also indicating areas of further potential. Acting as a roadmap for future research in this innovative and promising area of finance, this handbook is a solid reference work for academics and students whilst also appealing to industry practitioners, businesses and policy-makers.

Since Bitcoin appeared in 2009, the digital currency has been hailed as an Internet marvel and decried as the preferred transaction vehicle for all manner of criminals. It has left nearly everyone without a computer science degree confused: Just how do you “mine” money from ones and zeros? The answer lies in a technology called blockchain, which can be used for much more than Bitcoin. A general-purpose tool for creating secure, decentralized, peer-to-peer applications, blockchain technology has been compared to the Internet itself in both form and impact. Some have said this tool may change society as we know it. Blockchains are being used to create autonomous computer programs known as “smart contracts,” to expedite payments, to create financial instruments, to organize the exchange of data and information, and to facilitate interactions between humans and machines. The technology could affect governance itself, by supporting new organizational structures that promote more democratic and participatory decision making. Primavera De Filippi and Aaron Wright acknowledge this potential and urge the law

to catch up. That is because disintermediation—a blockchain's greatest asset—subverts critical regulation. By cutting out middlemen, such as large online operators and multinational corporations, blockchains run the risk of undermining the capacity of governmental authorities to supervise activities in banking, commerce, law, and other vital areas. De Filippi and Wright welcome the new possibilities inherent in blockchains. But as Blockchain and the Law makes clear, the technology cannot be harnessed productively without new rules and new approaches to legal thinking.

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.

This volume brings together some of the world's leading scholars of market categorization. Together, their contributions depict categorization as both a cognitive and a social process, tightly connected to actors involved, their specific acts, the entity being categorized, and the context and timing which inform these activities.

This book responds to a gap in the literature in International Relations (IR) by integrating technology more systematically into analyses of global politics. Technology facilitates, accelerates, automates, and exercises capabilities that are greater than human abilities. And yet, within IR, the role of technology often remains under-studied. Building on insights from science and technology studies (STS), assemblage theory and new materialism, this volume asks how international politics are made possible, knowable, and durable by and through technology. The contributors provide empirically rich and pertinent accounts of a variety of technologies relevant to the discipline, including drones, algorithms, satellite imagery, border management databases, and blockchains. Problematizing various technologically mediated issues, such as secrecy, violence, and questions of how authority and evidence become constituted in international contexts, this book will be of interest to scholars in IR, in particular those who work in the subfields of (critical) security studies, International Political Economy, and Global Governance.

Research Anthology on Blockchain Technology in Business, Healthcare, Education, and GovernmentIGI Global

Can blockchain solve your biggest business problem? While the world is transfixed by bitcoin mania, your competitors are tuning out the noise and making strategic bets on blockchain. Your rivals are effortlessly tracking every last link in their supply chains. They're making bureaucratic paper trails obsolete while keeping their customers' data safer and discovering new ways to use this next foundational technology to sustain their competitive advantage. What should you be doing with blockchain now to ensure that your business is poised for success? "Blockchain: The Insights You Need from Harvard Business Review" brings you today's most essential thinking on blockchain, explains how to get the right initiatives started at your company, and prepares you to seize the opportunity of the coming blockchain wave. Business is changing. Will you adapt or be left behind? Get up to speed and deepen your understanding of the topics that are shaping your company's future with the Insights You Need from Harvard Business Review series. Featuring HBR's smartest thinking on fast-moving issues--blockchain, cybersecurity, AI, and more--each book provides the foundational introduction and practical case studies your organization needs to compete today and collects the best research, interviews, and analysis to get it ready for tomorrow. You can't afford to ignore how these issues will transform the landscape of business and society. The Insights You Need series will help you grasp these critical ideas--and prepare you and your company for the future.

As the field of FinTech continues its progress, financial institutions must not only enhance their digitization, but also make serious efforts to understand the resulting new opportunities it creates. In line with these developments, TABF has published the book Basic knowledge on FinTech, which was designed by us as a reference for the FinTech Knowledge Test. Co-authored by TABF staff and other experts, it features balanced and credible analysis, avoiding trivia and overly complex concepts while emphasizing readability. The content structure is based on the World Economic Forum (WEF)'s roadmap for FinTech development, adding in TABF's research findings plus other domestic and international trends and practices. Not only is Basic knowledge on FinTech suitable for financial proficiency testing, but it can also be used as a textbook in university courses, supplementing theoretical knowledge with up-to-date practical knowledge in this rapidly changing field.

This book constitutes the refereed proceedings of the 3rd International Congress on Blockchain and Applications 2021, held in Salamanca, Spain, in October 2021. Among the scientific community, blockchain and artificial intelligence are a promising combination that will transform the production and manufacturing industry, media, finance, insurance, e-

government, etc. Nevertheless, there is no consensus with schemes or best practices that would specify how blockchain and artificial intelligence should be used together. The 38 full papers presented were carefully reviewed and selected from over 44 submissions. They contain the latest advances on blockchain and artificial intelligence and on their application domains, exploring innovative ideas, guidelines, theories, models, technologies, and tools and identifying critical issues and challenges that researchers and practitioners must deal with in future research.

The Economic Outlook for Southeast Asia, China and India is a bi-annual publication on regional economic growth, development and regional integration in Emerging Asia.

This book presents practical as well as conceptual insights into the latest trends, tools, techniques and methodologies of blockchains for the Internet of Things. The decentralised Internet of Things (IoT) not only reduces infrastructure costs, but also provides a standardised peer-to-peer communication model for billions of transactions. However, there are significant security challenges associated with peer-to-peer communication. The decentralised concept of blockchain technology ensures transparent interactions between different parties, which are more secure and reliable thanks to distributed ledger and proof-of-work consensus algorithms. Blockchains allow trustless, peer-to-peer communication and have already proven their worth in the world of financial services. The blockchain can be implanted in IoT systems to deal with the issues of scale, trustworthiness and decentralisation, allowing billions of devices to share the same network without the need for additional resources. This book discusses the latest tools and methodology and concepts in the decentralised Internet of Things. Each chapter presents an in-depth investigation of the potential of blockchains in the Internet of Things, addressing the state-of-the-art in and future perspectives of the decentralised Internet of Things. Further, industry experts, researchers and academicians share their ideas and experiences relating to frontier technologies, breakthrough and innovative solutions and applications.

Blockchain is widely considered a new key technology. The Foundation for Technology Assessment (TA-SWISS) has proposed a comprehensive assessment of blockchain technologies. With this publication, TA-SWISS provides the much-needed social contextualisation of blockchain. The first, more technical part of the study takes an in-depth look at how blockchain functions and examines the economic potential of this technology. By analysing multiple real-world applications, the study sheds light on where the blockchain has advantages over traditional applications and where existing technologies continue to be the better solution. The second part of the study examines how blockchain became mainstream. It explores the origins of blockchain in the early history of information technology and computer networks. The study also reveals the impact blockchain has on industrial and public spaces. Finally, it discusses the social implications and challenges of blockchain against the background of a new socio-technical environment.

Less than a decade after the Financial Crisis, we are witnessing the fast emergence of a new financial order driven by three different, yet interconnected, dynamics: first, the rapid application of technology - such as big data, machine learning, and distributed computing - to banking, lending, and investing, in particular with the emergence of virtual currencies and digital finance; second, a disintermediation fuelled by the rise of peer-to-peer lending platforms and crowd investment which challenge the traditional banking model and may, over time, lead to a transformation of the way both retail and corporate customers bank; and, third, a tendency of de-bureaucratisation under which new platforms and technologies challenge established organisational patterns that regulate finance and manage the money supply. These changes are to a significant degree driven by the development of blockchain technology. The aim of this book is to understand the technological and business potential of the blockchain technology and to reflect on its legal challenges. The book mainly focuses on the challenges blockchain technology has so far faced in its first application in the areas of virtual money and finance, as well as those that it will inevitably face (and is partially already facing, as the SEC Investigative Report of June 2017 and an ongoing SEC securities fraud investigation show) as its domain of application expands in other fields of economic activity such as smart contracts and initial coin offerings. The book provides an unparalleled critical analysis of the disruptive potential of this technology for the economy and the legal system and contributes to current thinking on the role of law in harvesting and shaping innovation.

Work with blockchain and understand its potential application beyond cryptocurrencies in the domains of healthcare, Internet of Things, finance, decentralized organizations, and open science. Featuring case studies and practical insights generated from a start-up spun off from the author’s own lab, this book covers a unique mix of topics not found in others and offers insight into how to overcome real hurdles that arise as the market and consumers grow accustomed to blockchain based start-ups. You'll start with a review of the historical origins of blockchain and explore the basic cryptography needed to make the blockchain work for Bitcoin. You will then learn about the technical advancements made in the surrounded ecosystem: the Ethereum virtual machine, Solidity, Colored Coins, the Hyperledger Project, Blockchain-as-a-service offered through IBM, Microsoft and more. This book looks at the consequences of machine-to-machine transactions using the blockchain socially, technologically, economically and politically. Blockchain Enabled Applications provides you with a clear perspective of the ecosystem that has developed around the blockchain and the various industries it has penetrated. What You’ll Learn Implement the code-base from Fabric and Sawtooth, two open source blockchain-efforts being developed under the Hyperledger Project Evaluate the benefits of integrating blockchain with emerging technologies, such as machine learning and artificial intelligence in the cloud Use the practical insights provided by the case studies to your own projects or start-up ideas Set up a development environment to compile and manage projects Who This Book Is For Developers who are interested in learning about the blockchain as a data-structure, the recent advancements being made and how to implement the code-base. Decision makers within large corporations (product managers, directors or CIO level executives) interested in implementing the blockchain who need more practical insights and not just theory.

In Self-Sovereign Identity: Decentralized digital identity and verifiable credentials, you’ll learn how SSI empowers us to receive digitally-signed credentials, store them in private

wallets, and securely prove our online identities. Summary In a world of changing privacy regulations, identity theft, and online anonymity, identity is a precious and complex concept. Self-Sovereign Identity (SSI) is a set of technologies that move control of digital identity from third party “identity providers” directly to individuals, and it promises to be one of the most important trends for the coming decades. Now in Self-Sovereign Identity, privacy and personal data experts Drummond Reed and Alex Preukschat lay out a roadmap for a future of personal sovereignty powered by the Blockchain and cryptography. Cutting through the technical jargon with dozens of practical use cases from experts across all major industries, it presents a clear and compelling argument for why SSI is a paradigm shift, and shows how you can be ready to be prepared for it. About the technology Trust on the internet is at an all-time low. Large corporations and institutions control our personal data because we’ve never had a simple, safe, strong way to prove who we are online. Self-sovereign identity (SSI) changes all that. About the book In Self-Sovereign Identity: Decentralized digital identity and verifiable credentials, you’ll learn how SSI empowers us to receive digitally-signed credentials, store them in private wallets, and securely prove our online identities. It combines a clear, jargon-free introduction to this blockchain-inspired paradigm shift with interesting essays written by its leading practitioners. Whether for property transfer, ebanking, frictionless travel, or personalized services, the SSI model for digital trust will reshape our collective future. What's inside The architecture of SSI software and services The technical, legal, and governance concepts behind SSI How SSI affects global business industry-by-industry Emerging standards for SSI About the reader For technology and business readers. No prior SSI, cryptography, or blockchain experience required. About the authors Drummond Reed is the Chief Trust Officer at Evernym, a technology leader in SSI. Alex Preukschat is the co-founder of SSIMeetup.org and AlianzaBlockchain.org. Table of Contents PART 1: AN INTRODUCTION TO SSI 1 Why the internet is missing an identity layer—and why SSI can finally provide one 2 The basic building blocks of SSI 3 Example scenarios showing how SSI works 4 SSI Scorecard: Major features and benefits of SSI PART 2: SSI TECHNOLOGY 5 SSI architecture: The big picture 6 Basic cryptography techniques for SSI 7 Verifiable credentials 8 Decentralized identifiers 9 Digital wallets and digital agents 10 Decentralized key management 11 SSI governance frameworks PART 3: DECENTRALIZATION AS A MODEL FOR LIFE 12 How open source software helps you control your self-sovereign identity 13 Cypherpunks: The origin of decentralization 14 Decentralized identity for a peaceful society 15 Belief systems as drivers for technology choices in decentralization 16 The origins of the SSI community 17 Identity is money PART 4: HOW SSI WILL CHANGE YOUR BUSINESS 18 Explaining the value of SSI to business 19 The Internet of Things opportunity 20 Animal care and guardianship just became crystal clear 21 Open democracy, voting, and SSI 22 Healthcare supply chain powered by SSI 23 Canada: Enabling self-sovereign identity 24 From eIDAS to SSI in the European Union

This volume explores from a legal perspective, how blockchain works. Perhaps more than ever before, this new technology requires us to take a multidisciplinary approach. The contributing authors, which include distinguished academics, public officials from important national authorities, and market operators, discuss and demonstrate how this technology can be a driver of innovation and yield positive effects in our societies, legal systems and economic/financial system. In particular, they present critical analyses of the potential benefits and legal risks of distributed ledger technology, while also assessing the opportunities offered by blockchain, and possible modes of regulating it. Accordingly, the discussions chiefly focus on the law and governance of blockchain, and thus on the paradigm shift that this technology can bring about.

This series contains the decisions of the Court in both the English and French texts.

This timely book addresses the effects and implications of rapid technological changes within the financial services industry on Islamic finance and Islamic banks. Exploring current challenges, opportunities and threats, the authors provide an overview of how FinTech can operate within an Islamic context, under the Shari’ah principles or the Halal framework, for example. Examining the potential opportunities of Islamic FinTech from a socio-economic perspective, this edited collection will be of use to anyone researching FinTech or Islamic Finance as well as practitioners and policy-makers involved in banking and financial services.

Even though blockchain technology was originally created as a ledger system for bitcoin to operate on, using it for areas other than cryptocurrency has become increasingly popular as of late. The transparency and security provided by blockchain technology is challenging innovation in a variety of businesses and is being applied in fields that include accounting and finance, supply chain management, and education. With the ability to perform such tasks as tracking fraud and securing the distribution of medical records, this technology is key to the advancement of many industries.

The **Research Anthology on Blockchain Technology in Business, Healthcare, Education, and Government** is a vital reference source that examines the latest scholarly material on trends, techniques, and uses of blockchain technology applications in a variety of industries, and how this technology can further transparency and security. Highlighting a range of topics such as cryptography, smart contracts, and decentralized blockchain, this multi-volume book is ideally designed for academics, researchers, industry leaders, managers, healthcare professionals, IT consultants, engineers, programmers, practitioners, government officials, policymakers, and students.

The definitive guide to enterprise blockchain - how we got here, how it's gaining momentum and what's next in the digital world.Enterprise blockchain experts Jorden Woods (Silicon Valley serial entrepreneur and Caltech-trained astrophysicist) and Radhika Iyengar (TEDx speaker and Silicon Valley Woman of Influence) present this comprehensive guide enabling executives,

visionaries and entrepreneurs to benefit from blockchain's transformative power. Throughout the book, there are recurring themes of decentralized digital trust, value and identity that are fully explored and developed. These overarching themes comprise a new era, Web 3.0, and blockchain marks the first step in harnessing its power. Drawing on their experiences as experts, serial entrepreneurs and ecosystem builders, the authors provide real-world insights bolstered by incisive interviews that put you in the front row of conversations with key enterprise business and thought leaders shaping this new era.Today, widespread counterfeiting and identity fraud, grave cyber threats, and ineffective data sharing are escalating multitrillion-dollar challenges. What enterprises need right now is a better technology stack that provides a secure layer of trust, transparency, and accountability to mitigate the inherent risks and inefficiencies of Web 2.0 and the Internet. Enterprise blockchain is generating real value from real deployments across sectors like fintech, supply chain/logistics, healthcare/life sciences, power/energy, and the public sector. Get ahead of the curve on enterprise blockchain as it transforms business and the digital world.

Bitcoin first appeared in January 2009, the creation of a computer programmer using the pseudonym Satoshi Nakamoto. His invention is an open-source (its controlling computer code is open to public view), peer-to-peer (transactions do not require a third-party intermediary such as PayPal or Visa) digital currency (being electronic with no physical manifestation). The Bitcoin system is private, with no traditional financial institutions involved in transactions. Unlike earlier digital currencies that had some central controlling person or entity, the Bitcoin network is completely decentralized, with all parts of transactions performed by the users of the system. With a Bitcoin transaction there is no third-party intermediary. The buyer and seller interact directly (peer to peer), but their identities are encrypted and no personal information is transferred from one to the other. However, unlike a fully anonymous transaction, there is a transaction record. A full transaction record of every Bitcoin and every Bitcoin user's encrypted identity is maintained on the public ledger. For this reason, Bitcoin transactions are thought to be pseudonymous, not anonymous. Although the scale of Bitcoin use has increased substantially, it still remains small in comparison to traditional electronic payments systems, such as credit cards, and the use of dollars as a circulating currency. Congress is interested in Bitcoin because of concerns about its use in illegal money transfers, concerns about its effect on the ability of the Federal Reserve to meet its objectives (of stable prices, maximum employment, and financial stability), and concerns about the protection of consumers and investors who might use Bitcoin. Bitcoin offers users the advantages of lower transaction costs, increased privacy, and long-term protection of loss of purchasing power from inflation. However, it also has a number of disadvantages that could hinder wider use. These include sizable volatility of the price of Bitcoins, uncertain security from theft and fraud, and a long-term deflationary bias that encourages the hoarding of Bitcoins. In addition, Bitcoin raises a number of legal and regulatory concerns, including its potential for facilitating money laundering, its treatment under federal securities law, and its status in the regulation of foreign exchange trading.

This book explores the main challenges and trends related to the use of blockchain technology for digital business innovation with the aim of providing practitioners with stimulating insights and ideas. Readers will find a unified survey of current scientific work on blockchain and related phenomena, such as bitcoin, from a range of perspectives, including information systems, technology management, innovation research, computer science, and engineering. In this way, the book links research and industry practices suitable for use by practitioners in their day-to-day activities and also provides an update on what academia may offer in terms of industry proposals. The contents are divided into three parts. After discussion of blockchain technology and management, including impacts on value chains and systems, governance, and security issues, the bitcoin phenomenon and main technological trends in the use of blockchain are addressed. The final part presents examples of business innovation using blockchain that are drawn from across the globe. Throughout, the author adopts a methodologically rigorous approach while ensuring that the text is readily understandable for readers, regardless of their degree of acquaintance with blockchain.

This book, written jointly by an engineer and artificial intelligence expert along with a lawyer and banker, is a glimpse on what the future of the financial services will look like and the impact it will have on society. The first half of the book provides a detailed yet easy to understand educational and technical overview of FinTech, artificial intelligence and cryptocurrencies including the existing industry pain points and the new technological enablers. The second half provides a practical, concise and engaging overview of their latest trends and their impact on the future of the financial services industry including numerous use cases and practical examples. The book is a must read for any professional currently working in finance, any student studying the topic or anyone curious on how the future of finance will look like.

Alternative assets such as fine art, wine, or diamonds have become popular investment vehicles in the aftermath of the global financial crisis. Correlation with classical financial markets is typically low, such that diversification benefits arise for portfolio allocation and risk management. Cryptocurrencies share many alternative asset features, but are hampered by high volatility, sluggish commercial acceptance, and regulatory uncertainties. This collection of papers addresses alternative assets and cryptocurrencies from economic, financial, statistical, and technical points of view. It gives an overview of their current state and explores their properties and prospects using innovative approaches and methodologies.

The current period of market and governmental turbulence is the most challenging—yet rewarding—time to be a treasurer. Now, as perhaps never before, the treasurer’s visions, skills, and worth will be tested and proven. A useful reference, The Strategic Treasurer: A Partnership for Corporate Growth systematically equips today’s corporate treasurers to move from merely being the liquidity manager to becoming a strategic driver and steward of corporate value as well as an equal partner with senior management.

This book is for strategists0?4leaders, managers, entrepreneurs0?4who are so caught up in the daily pressures of business that they're missing key signals of their future reality. It's like driving a car heads down, staring at the dashboard, rather than heads up, looking through the windshield. We need to do both. The book is devoted to the practice of sensing, or scanning the horizon for signs of emerging trends. The sooner we see them, the better our response.Each chapter starts with a set of signals0?4data we observed that, taken together, helped us to reveal a trend. The impact of new technology on strategy is a theme of the book, and each chapter looks at how organizations are using new technologies to their advantage.The goal is to spark meaningful conversations within organizations: How could we participate in the collaborative economy? What could our CIO and our CMO be doing to drive strategy, innovation, and revenue growth? What could we do to leverage the Internet of Things and intelligent automation as catalysts of invention? Could we use MOOCs as pivots for corporate training, recruiting, and marketing? How might technology transform the manufacturing process, our supply chain, and the knowledge work that we do? Could we take advantage of the renaissance in domestic energy (oil and gas)?

What could we be doing to counter cyber crime? What is our organization doing to tune into signals of emerging trends that may be relevant to us?In an environment where the pace of change is accelerating, sensing has become an essential discipline for all organizations. No matter your role in an organization, sensing emerging trends can make you more effective and more valuable in your work. If you've been working too heads-down lately and feel overwhelmed by data and deadlines, then this book is for you. It's a quick read designed to give you a heads up on your horizon.

Amid a growing global forced displacement crisis, refugees and the organizations that assist them have turned to technology as an important resource in solving problems in humanitarian settings. This report analyzes technology uses, needs, and gaps, as well as opportunities for better using technology to help displaced people and improving the operations of responding agencies.

This open access book constitutes the refereed proceedings of the 15th International Annual Conference on Cyber Security, CNCERT 2018, held in Beijing, China, in August 2018. The 14 full papers presented were carefully reviewed and selected from 53 submissions. The papers cover the following topics: emergency response, mobile internet security, IoT security, cloud security, threat intelligence analysis, vulnerability, artificial intelligence security, IPv6 risk research, cybersecurity policy and regulation research, big data analysis and industrial security.

Finance is the language of business and as technological disruption accelerates, a fundamental change is under way. This presents both opportunities and challenges for current-day organizations and finance professionals alike. Money makes the world go around, they say; but digital money not only makes the world go around, it does it in a decentralized fashion. Because the currencies are decentralized, with the right mix of technology the opportunities that emerge are noteworthy and emerge as a game changer for financial institutions. This book shows many different aspects, examples, and regulations of cryptocurrencies through its underpinning technology of blockchain in the present-day digital era. The diversity of the authors who sum up this book signify the importance of implementation in the digitized economy. It is divided into four main sections, with topics on Bitcoin, blockchain and digital returns, impact of cryptocurrencies in gaming, and cryptocurrency exchanges.

This is the United Nations definitive report on the state of the world economy, providing global and regional economic outlook for 2020 and 2021. Produced by the Department of Economic and Social Affairs, the five United Nations regional commissions, the United Nations Conference on Trade and Development, with contributions from the UN World Tourism Organization and other intergovernmental agencies.

The Global Innovation Index 2020 provides detailed metrics about the innovation performance of 131 countries and economies around the world. Its 80 indicators explore a broad vision of innovation, including political environment, education, infrastructure and business sophistication. The 2020 edition sheds light on the state of innovation financing by investigating the evolution of financing mechanisms for entrepreneurs and other innovators, and by pointing to progress and remaining challenges – including in the context of the economic slowdown induced by the coronavirus disease (COVID-19) crisis.