1. Record Nr. UNINA9910830204503321

Titolo	Blockchain technology in corporate governance : transforming business industries / / edited by Kiran Sood [and three others]
Pubbl/distr/stampa	Hoboken, New Jersey : , : John Wiley & Sons, , [2023] ©2023
ISBN	1-119-86524-7 1-119-86523-9
Descrizione fisica	1 online resource (443 pages)
Disciplina	005.74
Soggetti	Blockchains (Databases)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Cover -- Title Page -- Copyright Page -- Contents -- Foreword -- Preface -- Acknowledgment -- Chapter 1 Role of Blockchain Technology in the Modern Era -- 1.1 Introduction -- 1.2 What is Blockchain Technology? -- 1.3 Blockchain Technology in Healthcare 4.0 -- 1.3.1 Area of Blockchain Technology-Based Healthcare 4.0 -- 1.3.2 Smart Blockchain Healthcare 4.0 -- 1.4 Energy Sector -- 1.5 Applications of Blockchain in the Energy Sector -- 1.5.1 Decentralized Storage and Control in Power Grid -- 1.5.2 Electricity Trading Law -- 1.5.3 Electric Vehicles -- 1.5.4 Decrease the Global Carbon Emission -- 1.6 Blockchain-Based Financial Sector -- 1.6.1 Legal Policies of the Financial Sector -- 1.6.2 Credit Risk -- 1.6.3 KYC and Product Personalization -- 1.6.4 Insurance Monetary Management -- 1.6.5 Collaborative Techniques in Financial Services Chain -- 1.7 Bitcoins and Blockchain Sustainability Issues -- 1.8 Conclusion -- References -- Part 1: Blockchain: Opportunities for Healthcare 4.0 -- Chapter 2 BTCG4: Blockchain Technology in Electronic Healthcare Systems -- 2.1 Introduction -- 2.1.1 Healthcare Industry -- 2.1.2 Requirement of Electronic Healthcare Industry -- 2.1.2.1 System Security -- 2.1.2.2 Interoperability -- 2.1.2.3 Sharing of Information -- 2.1.2.4 Mobility -- 2.1.2.5 Mobile Health -- 2.1.2.6 Wireless -- 2.1.2.7 Internet of Things -- 2.2 Overview of Blockchain -- 2.2.1 Distinct Characteristics of the Use of Blockchain in the Electronic Healthcare Industry -- 2.2.1.1

Decentralization of Storage -- 2.2.1.2 Authentication -- 2.2.1.3 Immutability -- 2.2.1.4 Improvement in Security -- 2.2.1.5 Efficiency -- 2.2.1.6 Distributed Ledger -- 2.3 Blockchain Applications -- 2.3.1.1 Smart Contracts -- 2.3.1.2 Spotting and Preventing Fraudulent Activity -- 2.3.1.3 Authentication of the User's Identity -- 2.4 Challenges Associated with Blockchain Technology.
2.4.1 Unavailability of Uniformity -- 2.4.2 Decentralization of Storage and Leakage of Privacy -- 2.4.3 Handling of Critical Information -- 2.4.4 Scalability and Internet of Things Overhead -- 2.4.5 Vulnerabilities Specific to Blockchain Technology -- 2.4.6 General Vulnerabilities in Software -- 2.5 Opportunities of Blockchain in the Healthcare Industry -- 2.5.1 The Gem Health Network Facilitates the Exchange of Healthcare Data -- 2.5.2 MDREC -- 2.5.3 System of Pervasive Social Network -- 2.5.4 Virtual Resources -- 2.5.5 Data Recording for Body-Worn Sensing Devices Based on Context -- 2.5.6 MeDShare -- 2.5.7 Blockchain-Based Clinical and Precise Platform Trials -- 2.5.8 Access to Health-Related Information -- 2.6 Concluding Remarks -- References -- Chapter 3 Blockchain Technology and Healthcare: Towards Combating COVID-19 -- 3.1 Introduction -- 3.1.1 Blockchain Technology in Healthcare -- 3.1.2 Features of Blockchain Technology -- 3.1.3 Applications of Blockchain in Healthcare -- 3.1.4 Data Management -- 3.1.5 Electronic Health Record -- 3.1.6 Claims and Billing Management -- 3.1.7 Pandemic Data Tracking -- 3.1.8 Tracking PPE -- 3.1.9 Vaccine Monitoring -- 3.1.10 Future Vaccination -- 3.1.11 Digital Contact Tracing -- 3.1.12 Prescription Management -- 3.2 Combating COVID-19 -- 3.2.1 Handling Fake Infodemic Using MiPasa Platform -- 3.2.2 VIRI Platform Preventing Spread -- 3.2.3 WIShelter for Data Privacy -- 3.3 Reviving Capabilities -- 3.3.1 Blockchain in Healthcare - Global Scenario -- 3.3.2 Blockchain in Healthcare - Indian Scenario -- 3.4 Challenges in Adopting Blockchain in Healthcare -- 3.5 Conclusion -- References -- Chapter 4 Blockchain-Based Energy-Efficient Heterogeneous Sensor Networks in Healthcare System -- 4.1 Introduction -- 4.2 Related Work -- 4.2.1 Literature Gap -- 4.2.2 Fuzzy Improved Model (Improved Model Fuzzy).
4.3 Proposed Energy Protocol with Blockchain -- 4.4 Conclusion -- References -- Chapter 5 Development of a Safe Health Framework Using a Temporary Blockchain Technique -- 5.1 Introduction -- 5.2 Related Work -- 5.2.1 Blockchain-Based Healthcare Organization -- 5.2.2 Medrek -- 5.2.3 Stratum -- 5.2.4 Factor -- 5.2.5 Pocketbook -- 5.2.6 Tyrion -- 5.2.7 Roomed -- 5.3 Secure Framework (Sefira) for Healthcare System -- 5.3.1 Progressive Temporal Blockchain -- 5.3.2 Temporal Shadow -- 5.3.2.1 Context-Based Merkle Tree (CBMT) -- 5.3.2.2 Temporal Hash Signature (THS) -- 5.3.2.3 Context-Based Access Control (CBAC) in Smart Contract -- 5.3.2.4 Layered Architecture of SeFra -- 5.4 Conclusion -- References -- Chapter 6 Data Consistency, Transparency, and Privacy in Healthcare Systems Using Blockchain Technology -- 6.1 Introduction -- 6.2 The Cutting Edge in Genomics -- 6.2.1 Next Generation Sequencing (NGS) -- 6.2.2 EDGE Bioinformatics -- 6.2.3 Pharmacogenetics and Personalized Medicine -- 6.2.4 Prenatal Diagnosis -- 6.2.5 Diagnosis of Infectious Diseases -- 6.2.6 Gene Therapy and Genome Editing -- 6.2.7 Genomics with Blockchain Technology -- 6.3 Medical Records -- 6.3.1 Blockchain Architecture - Components and Types -- 6.3.2 Blockchain Benefits in Healthcare Records Maintenance -- 6.3.3 Brief Overview on the Blockchain-Enabled Patient Healthcare Record Management Process -- 6.3.3.1 Data Generation -- 6.3.3.2 Data Cleaning and Enrichment -- 6.3.3.3 Data Capturing -- 6.3.3.4 Data Consumption -- 6.3.3.5 Data Mining -- 6.4 Supply Chain Management -- 6.4.1 Pharmaceutical

Applications -- 6.4.2 Medical Devices and Medical Supplies -- 6.4.3 Internet of Healthy Things -- 6.4.4 Public Health -- References -- Part 2: Blockchain in the Energy Sector -- Chapter 7 Application of Blockchain Technology in Sustainable Energy Systems -- 7.1 Introduction -- 7.2 Blockchain.
7.3 Blockchain Applications in Energy Sector -- 7.3.1 Blockchain Applications in Smart Grid -- 7.3.2 Blockchain Applications in Energy Trading -- 7.3.3 Blockchain Applications in Micro-Grid -- 7.3.4 Blockchain in Electric Vehicles -- 7.3.5 Blockchain Applications in Cyber Physical Security -- 7.4 Blockchain as New Substructure -- 7.5 Limitations of Blockchain -- 7.6 Conclusions -- References -- Chapter 8 Revamping Energy Sector with a Trusted Network: Blockchain Technology -- 8.1 Introduction -- 8.2 Energy Digital Transformation -- 8.2.1 Digitalization, Decarbonization, and Decentralization of the Energy Sector -- 8.2.2 Blockchain: A Disruptive Technology of the Energy Value Chain -- 8.2.3 Blockchain Advancing DERs -- 8.3 Energy Trading Mechanisms -- 8.3.1 Blockchain P2P Energy Trading: A New Financing Mechanism -- 8.3.2 Blockchain-Based Virtual Power Plant (VPP) Model -- 8.3.3 Blockchain Technology for Electric Vehicle (EV) Charging and Discharging -- 8.4 Blockchain Unlocking New Demand Side Management Models -- 8.4.1 Blockchain in the Energy Efficiency Market -- 8.4.2 New Blockchain-Enabled Demand Response (DR) Models -- 8.4.3 Blockchain-Based Energy Performance Contracting -- 8.5 Energy Blockchain's Social and Environmental Impacts -- 8.5.1 Blockchain Market for Carbon Credits and RECs -- 8.5.2 Fighting Energy Poverty -- 8.6 Conclusion -- References -- Part 3: The Impact of Blockchain on the Financial Industry -- Chapter 9 Process Innovation and Unification of KYC Document Management System with Blockchain in Banking -- 9.1 Introduction -- 9.2 Blockchain -- 9.3 Blockchain Technology Applications Sectors -- 9.4 Know Your Customer (KYC) -- 9.4.1 KYC Advantages -- 9.4.2 KYC Document List -- 9.4.3 Re-KYC -- 9.4.4 Types of KYC Verification -- 9.4.5 KYC Through Manual Verification Process -- 9.4.6 Typical KYC Verification Process - Issues and Challenges.
9.5 Electronic Know Your Customer (e-KYC) -- 9.5.1 e-KYC Documents Management System Using Blockchain -- 9.6 Blockchain KYC Verification Process Advantages -- 9.7 Taxonomy of Blockchain Systems -- 9.8 Literature Survey -- 9.9 Potential Use-Cases of Blockchain Technology in Banks -- 9.10 Blockchain KYC-AML Solution -- 9.11 Conclusion -- References -- Chapter 10 Applying Blockchain Technology to Address NPA Issues During the COVID-19 Pandemic -- 10.1 Introduction -- 10.2 ACT 1: Foundation of Non-Performing Assets Management and Blockchain Technology -- 10.3 Induction to Non-Performing Assets -- 10.4 Charter for NPA Management -- 10.5 Reasons for Growth of NPAs -- 10.6 Induction to Blockchain Technology -- 10.7 Possible Applications of Blockchain Technology -- 10.8 ACT II Confrontation Stage -- 10.9 Investigation of Loan Quality-Related Issues in the Indian Banking System -- 10.10 Stage 3 - Treatment Stage for Bad Loans Through Blockchain in Indian Banks -- 10.11 The Challenges of the Blockchain Technology in Financial Sector -- 10.12 Conclusion -- References -- Chapter 11 Blockchain and Smart Contracts for Insurance Industry -- 11.1 Introduction -- 11.1.1 Blockchain in Insurance -- 11.1.2 Blockchain in Insurance Applications -- 11.2 Smart Contracts by Insurance Providers Using Blockchain Technologies -- 11.2.1 Blockchain: A Built-In Data -- 11.2.2 Advanced Insurance Automation -- 11.2.3 Cyber Security in Insurance through Blockchain -- 11.3 Review of Literature -- 11.4 Opportunities Provided by Blockchain Technology -- 11.5 How Blockchain Technologies Work