Glocal Policy and Strategies for Blockchain: Building Ecosystems and Sustainability

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Blockchain is a technology that allows for the secure and transparent recording and sharing of data without the need for a central authority or intermediary. It is essentially a distributed ledger maintained and updated by a network of computers or nodes rather than a single entity. One example of how blockchain technology can be used in education is through the issuance and verification of academic credentials, such as diplomas or degrees. Traditionally, these credentials are issued by universities or other educational institutions and are often subject to fraud or misrepresentation. Blockchain technology can help to address these issues by providing a secure and tamper-proof way to store and share academic credentials.

In a blockchain-based credentialing system, a student's academic achievements would be recorded and verified on a blockchain ledger rather than on a paper certificate or transcript. The student would have full control over their credentials and would be able to share them with potential employers or other institutions in a secure and verifiable way.

For example, the Massachusetts Institute of Technology (MIT) has developed a blockchain-based system called Blockcerts that allows students to receive and share digital academic credentials. The system is based on the Bitcoin blockchain and uses cryptographic keys to ensure the authenticity and integrity of the credentials.

By using blockchain technology for credentialing, students can have greater control over their academic records and more easily share their achievements with potential employers or other institutions. It also helps to prevent fraud or misrepresentation, as the credentials are verified and secured through the blockchain ledger.

The current book, "Glocal Policy and Strategies for Blockchain: Building Ecosystems and Sustainability" under review, focuses on the intersection of blockchain technology and policy, exploring how governments and other organizations can develop effective strategies for integrating blockchain into their operations while addressing the unique challenges posed by the technology. There are eleven chapters which are organised under different sections.

The first chapter, "Blockchain: A Legal

Perspective," examines the legal perspective of blockchain technology and discusses the opportunities, risks, and challenges associated with its use. It follows a three-pronged approach, discussing legal and regulatory compliance issues, business applications, risks, and their mitigation, as well as the potential for using the technology for the public good.

The second chapter, "A Blockchain-Based Tourism Industry: How Promising Can It Be?", discusses that Blockchain technology has the potential to transform the tourism industry by improving trust, automating processes, and reducing costs through its characteristics such as decentralization, disintermediation, security, transparency, and immutability. However, the adoption of blockchain in tourism is limited due to several challenges, including a lack of awareness and expertise, high energy consumption, and regulatory frameworks for data management and income taxation. Despite these challenges, the potential benefits of blockchain technology make it an essential area to watch in the future for the tourism industry.

In the third chapter, "Strategic Planning and Policy Framework for Implementation of Blockchain Technology in Education in India," the authors discuss the potential of blockchain technology in various sectors, including education, and the Indian government's initiatives toward its adoption. This chapter highlights the strategic planning and policy framework for implementing the technology in India and provides an overview of its current status and challenges in education. The authors of this chapter aim to showcase the multidimensional use of blockchain and its potential for future growth in India.

Chapter 4, "Investigation of Purchasing Applications After Digital Change in Industrial Markets," discusses how the demands and needs of consumers in global markets have changed due to cultural interaction and increased use of the Internet for online shopping, leading to a rise in the demand for fast delivery and product diversity. The text also mentions how companies have started using online web pages in supplier selection and exploring the purchasing processes in industrial markets and the impact of digital transformation on them.

Chapter 5, "From Black to Green: Eco-Friendly Learning With Blockchain Technology," discusses the potential use of blockchain technology in education systems and how it can be designed to create environmentally-friendly learning environments. Despite concerns about the energy consumption and emissions associated with blockchain, the authors suggest that there is not enough data to support this claim. The chapter outlines a framework for integrating green technologies and blockchain in education and presents suggestions for creating eco-friendly learning environments.

The 6th chapter, "Blockchain: An Exploratory Review of Applications in Marketing," explores the potential of blockchain technology and its strategic benefits, including the ability to revolutionize existing business models and speed up processes while reducing transaction costs. It emphasizes the importance of business professionals understanding the implications of blockchain technology and integrating it into strategic initiatives. The chapter explains blockchain in the context of business strategies and provides examples of its applications.

In Chapter 7, "Augmenting Learner Support Services with the Use of Blockchain Technology", the author explores the potential applications of Blockchain technology in managing

internal processes in education, specifically in Open and Distance Learning systems and learner support services in India. It discusses the introduction and recent developments of Blockchain, as well as the strategies of the Indian government to adopt it, while also addressing the challenges of implementation and the implications of using Blockchain technology in education.

Chapter 8, "Get Ready for Blockchain Technology: A Probe Into Its Potential for Indian Schools", is about how blockchain technology could potentially improve schooling in India by providing enhanced digital accuracy, openness, cost-saving operations, and a constructivist learning paradigm. The author proposes a Framework for Blockchain Implementation (FBI) in school operations to contribute to the effective implementation of the technology. The article is desk research that reviews existing literature and evaluates the potential of blockchain technology in Indian schools.

Chapter 9 looks into the "Potential of the Internet of Things (IoT) and Blockchain Technology in the Collaboration and Integration of the Retail Supply Chain" and reports that the use of Industry 4.0 technologies in supply chain management has become a popular topic due to their ability to enhance efficiency, performance, and sustainability. However, the retail industry is facing challenges related to collaboration and integration, and this study uses a literature review to explore the potential of technologies such as IoT and blockchain to address these challenges. The study identifies various characteristics, themes, and potential solutions for collaboration and integration in the retail supply chain and provides recommendations for small and medium-sized enterprises.

The authors of Chapter 10, "Internal

Audit Functions in Cyber Security Governance: Turkey's Bank Sector Case", discuss the growing concern over cyber-attacks in the banking sector due to the increased use of technology and digital transformation. It emphasizes the need for validation of cybersecurity governance mechanisms to ensure financial transactions occur within acceptable risk levels. The article proposes exploring blockchain technology as a potential solution for implementing continuous audit methods in cybersecurity governance.

The last chapter of this book, "The Impact of Blockchain Technology on Accounting, Auditing, and Assurance Practices: Turkey Case", reviews national and international literature to examine the impact of blockchain technology on accounting, auditing, and assurance practices. The advantages and disadvantages of blockchain technology are evaluated, and it is concluded that blockchain has a significant effect on these practices.

To sum up, the book is an excellent resource that focuses on exploring the intersection of blockchain technology and policy. The book covers a range of topics, including the potential applications of blockchain in both the public and private sectors, legal and regulatory compliance issues, business applications and risks, and the potential for using blockchain technology for the public good. The book also examines the impact of blockchain technology on accounting, auditing, and assurance practices. The book aims to provide insights into effective strategies for integrating blockchain technology into organizations while addressing the unique challenges posed by the technology. This book can be a useful resource for policymakers, business leaders, academics, researchers, and anyone interested in understanding the potential impact of blockchain

technology on various industries and its associated legal and regulatory issues. The book covers a broad range of topics related to blockchain technology, including its applications, challenges, and opportunities in different sectors, making it a valuable resource for individuals seeking to gain a deeper understanding of this emerging technology. Additionally, the book's examination of the impact of blockchain technology on accounting, auditing, and assurance practices could be particularly useful for professionals working in these fields.