ILLEGAL, UNREPORTED, AND UNREGULATED SEAFOOD INDUSTRY IN KAKISTOSCRYPTOCRACY

Srirath GOHWONG[1]
1 Faculty of Social Sciences, Kasetsart University, Thailand; srirathg3@yahoo.com

ARTICLE HISTORY
Received: 21 April 2023 **Revised:** 10 May 2023 **Published:** 22 May 2023

ABSTRACT

The objective of the study was to study the state of the art of the illegal, unreported, and unregulated seafood industry in Kakistoscryptocracy. Documentary research was conducted in the study. The research revealed that decentralized autonomous organizations (DAOs) and decentralized applications (DApps) were the blockchain utilization in the seafood industry. Proof-of-Work (PoW) and Proof-of-Stake (PoS) were two important consensus techniques. OceanDAO, Ethereum, and Fishcoin were three examples of blockchain in the seafood industry. Additionally, the seafood business deployed blockchain along with RFID and QR code.

Keywords: Illegal, Unreported, and Unregulated Seafood Industry, Kakistoscryptocracy

CITATION INFORMATION: Gohwong, S. (2023). Illegal, Unreported, and Unregulated Seafood Industry in Kakistoscryptocracy. *Procedia of Multidisciplinary Research, 1*(5), 60.

SIGNIFICANCE OF PROBLEM

The seafood industry is a major global industry worth around US$150 billion annually. This includes the production, processing, distribution, and marketing of seafood through a wide range of activities from fishing and aquaculture to seafood processing and distribution. It, therefore, provides jobs for millions of people, including fishermen, aquaculture farmers, and seafood processors. Moreover, the production of fisheries and aquaculture has been consistently rising since the 1950s, resulting in consumption growth of 90%. Nonetheless, numerous fishing and seafood-related actions defy national or global laws and rules or are conducted without appropriate supervision and documentation. For example, nearly 90% of the world's wild fish populations are either overexploited or completely exhausted. Next, almost 60% of seafood within the supply chain is either wasted or utilized in an ineffective manner. Then, in 2014, seafood theft amounted to over 700 kg per second. Due to its serious drawbacks, illegal, unreported, and unregulated (IUU) fishing is a global crime. This illegal practice not only threatens the sustainability of targeted seafood stocks (including fish and other marine organisms) but also threatens the livelihoods of millions of people who depend on fishing for their income and food security. However, controls to stop IUU fishing are insufficient. These include international agreements and initiatives like the United Nations Convention on the Law of the Sea (UNCLOS) 1982, the Port State Measures Agreement, and the FAO’s Global Record of Fishing Vessels, Refrigerated Transport Vessels and Supply Vessels (Developed from UNCLOS, 1982; OECD, 2004; Link, 2010; Esteves, Diler, and Genç, 2016; FAO, 2016, 2023; Kituyi and Thomson, 2018; Petrossian, 2019; Eachmile Technologies, 2021). The majority of the aforementioned issues in the fishery and aquaculture sectors of the seafood industry are traceability issues against opportunism and business disobedience. Therefore, to address the above-mentioned IUU issues, involved actors (such as fishers, retailers, non-government-based cryptocurrency (NGC) firms, etc.) use cutting-edge IT such as blockchain, RFID, and quick response (QR) code (Developed from Petrossian, 2019; Blaha and Katafono, 2020). The use of IT in the seafood industry enables the non-state actors previously mentioned, both firms and general people, who thought they were the godlike rulers of the new territory outside the reach of the government, to use blockchain, NGC, RFID, and QR code to conduct the seafood industry for their own gain without the government’s control This is called kakistoscryptocracy, coined by Srirath Gohwong, Ph.D. (Copyrights), in the seafood industry. **Therefore, the goal of the study is to ascertain the state of the art of the illegal, unreported, and unregulated seafood industry in Kakistoscryptocracy.**

LITERATURE REVIEW

Blockchain, Radio Frequency Identification, and Quick Response Code

Blockchain was a distributed database with a decentralized and distributed digital ledger under cryptography for secure and immutable record transactions. It was maintained by a network of participants rather than a centralized authority. Data were collected and stored in a unique digital signature, a timestamp, and a record of one or more transactions, called a block. These permanent and unalterable blocks were continuously added by their users in the system to link them together as a chain. Data verification of the entire network was conducted by consensus mechanisms without a third party or a central authority such as Proof-of-Work (PoW), Proof-of-Stake (PoS), and Proof-of-Authority (PoA). Therefore, it was impossible to tamper with or hack the data in the blockchain. Additionally, blockchain could be used in a variety of sectors, including financial technology (FinTech), including non-government-based cryptocurrencies (NGCs) like Bitcoin, Ethereum, Ripple, Monero, etc., and amulets (such as Thai Buddhist amulets). Blockchain was not only the use of open databases (blockchain 1.0 as money during the period of 2008 to 2013) but also the use of databases in a range of smart affairs (blockchain 2.0 as smart contracts, decentralized autonomous organizations (DAOs), decentralized applications (DApps) during the period of 2013 to 2015, blockchain 3.0 as blockchain with Directed Acyclic Graph (DAG) and beyond the currency (such as the use of blockchain in government affairs), blockchain 4.0 as blockchain with Artificial Intelligence (AI)/ Internet of Things (IoT) and "cross-chain" function during the period of 2018-2019, and blockchain 5.0 as blockchain with Relictum Pro. Moreover, through the rich information environment of a web-enabled world, users of Radio Frequency Identification (RFID) and Quick Response code (QR code) as two advanced data-entry technologies could integrate them with blockchain in the supply chain to increase efficiency and accuracy. RFID is a radio-based technology used to identify and track real-time visibility into the location and status of products or assets in the supply chain by using small attached tags or chips in products, read by their RFID readers using radio waves. In addition, the QR code is a two-dimensions-barcode technology, made up of a square grid, which could be read both horizontally and vertically by smartphones or QR code readers. To provide quick and simple access to crucial details about the product and its path through the supply chain, QR codes could be printed on goods, packaging, and shipping labels. The information contained in a QR code is quickly read and decoded by the scanner, which can then act on the information to increase product visibility and traceability (Developed from Brabazon, Winter, Gandy, 2014; Cook, 2018; Digital Williams, 2019; Gohwong, 2021; Caton, 2022; Tanwar, 2022; Zelbst, P.J. and Sower, 2022).

Agency Theory and Transaction Cost Economics (TCE) under blockchain

Two well-known economic theories that made attempt to explain agent behavior in a principal-agent relationship were agency theory and transaction cost economics (TCE). Both of them emphasized the issue of asymmetric information between the principal and agent. Principal-agent theory, or agency theory, contended that opportunism or corruption due to conflicting interests may exist between principals (such as the government and politicians) and agents (such as bureaucrats) as a result of varying goals and information asymmetries. According to this theory, agents might act in their own interests rather than those of their principals. As a result, agencies might incur costs for monitoring agent behavior, offering incentives to align agents' interests with those of their principals, and enforcing contracts. Through smart contracts, decentralized autonomous organizations (DAOs), decentralized applications (DApps), tokens, and an immutable ledger for recording transactions in a secure and transparent manner, blockchain could lower the aforementioned agency costs by reducing information asymmetry and fraudulence, promoting traceability, and improving accountability and transparency in principal-agent relationships. In contrast to agency theory, TCE placed a strong emphasis on transaction costs, depending on the details of the transaction, which affected the decision regarding the governance structure. An organization could reduce the need for transactions, including market and two-parties-based transactions, and minimize them through internalizing transactions, which increased audit costs. With lower costs, including fees, commissions, audits, legal-and-regulatory compliance, than a traditional central entity, blockchain could lessen these costs by providing an accurate and tamper-proof record of transactions through its peer-to-peer network with a low cost of data storage and verification. In a manner similar to the agency theory, its administrators also used smart contracts, DAOs, DApps, tokens, and blockchain ledgers to cut transaction costs (Developed from Bamberg and Spremann, 1987; Suematsu, 2014; Swan, 2015; Caton, 2022).

Good governance and data governance

The World Bank launched an initiative in 1989 to promote good governance. It released a report titled "Sub-Saharan Africa: From Crisis to Sustainable Growth." The report stressed that in order for African nations to achieve sustained economic growth and development, they must promote good governance, which had the following characteristics - efficiency, a fair judicial system, accountability, responsiveness, and participation (World Bank, 1989). Contrary to good governance, data governance has a long history that dates back to the early days of management in the private sector since the 1960s when firms first realized how important it was to manage their data as a strategic digital asset. Data governance was the process of putting into place and enforcing authority and control over data management, as well as corresponding assets under new laws like the EU's General Data Protection Regulation (GDPR). By promoting the four qualities of good governance—efficiency, accountability, responsiveness, and participation—through the use of IT, such as database technology, big data, and artificial intelligence, data governance served as the focal point of data management (Developed from Data Management Association International, 2017; Gohwong, 2020; Strengholt, 2020).

Garbage In, Garbage Out (GIGO)

The phrase "Garbage In, Garbage Out" was created by programmer George Fuechsel. It first appeared in the "Manual of Instruction for Automatic Data Processing Machine Techniques," an IBM training manual from 1957. The 1957 IBM Training Manual, often referred to as "The IBM 1401 - A User's Manual," was used to instruct users on how to use the IBM 1401 computer. GIGO most likely referred to the significance of making sure that the input data provided to the computer is accurate and properly formatted in order to obtain correct results (Developed from IBM Corporation, 1962; Lidwell, Holden, and Butler, 2011).

Kakistoscryptocracy

The kakistoscryptocracy, coined by Srirath Gohwong, Ph.D. (Copyrights), refers to the phenomenon in which firms, hedge funds, regular people, and net states acting as non-state actors act as Gods in this lawless manner by engaging in illegal activities for their own reasons and passion outside of the government's jurisdiction both within and across borders of the state under the virtual world and metaverse. These illegal activities, for example, included tax evasion, terrorism financing, drug trafficking, human trafficking, organ trafficking, financial fraud, cybercrimes, etc. (Gohwong, 2023).

Cyberocracy

The term "cyberocracy," coined by David Ronfeldt in 1991 and 1992, David Ronfeldt and John Arquilla in 2001, and David Ronfeldt and Danielle Varda in 2008, refers to a system of governance in which IT is primarily used to inform technocrats' decisions rather than conventional public policymakers. Algorithms, automation, and digital technologies are essential to technocrats' management of social and economic systems, public services, and policymaking. They also broaden the problems with the original version in a global context, such as the digital divide between developed and developing nations, accountability, and data governance in a global context (Developed from Ronfeldt, 1991, 1992; Arquilla and Ronfeldtand, 2001; Ronfeldt and Varda, 2008).

METHODOLOGY

This study used documentary research along with secondary data from a variety of sources, including textbooks, international treaties, and laws.

FINDING

The state of the art of the illegal, unreported, and unregulated seafood industry in Kakistoscryptocracy is shown in Figure 1 that the DAOs and dApps are how blockchain is being used in the seafood industry. OceanDAO, a community-led funding platform for ocean conservation and sustainability projects, is an example of a DAO. It is built on the DAOstack platform with AI and decentralized data NFTs and datatokens, which interoperate with ERC721 and ERC20 wallets, exchanges, and DAOs. It allows the community to vote on and fund ocean conservation projects that promote sustainable seafood practices. Furthermore, it is supported by money from the Ocean Protocol Foundation, Ocean network rewards, and apps and services in the Ocean data ecosystem. It makes use of smart contracts and dApps that were built on top of the Ethereum blockchain to automate different parts of funding for sustainability and ocean conservation projects. For an example of dApps, "Origin", created by Bureau Veritas, is the world's first traceability label platform based on blockchain technology. It enables businesses and consumers to track the entire lifecycle of their products, from raw materials to final delivery, by providing visibility into the supply chain through blockchain and QR codes. Another example of dApps, the Fishcoin platform and digital currency enables sustainable seafood supply chains through smart contracts, dApp, and the Ethereum blockchain. It uses dApp to make it possible for buyers and sellers of seafood to conduct secure and transparent transactions. Moreover, the involved actors in the seafood industry are fishers, transporters, preprocessors-exporters (preprocessors with export licenses), importers-processors-exporters (preprocessors with both import and export licenses), Importers-Wholesalers/Warehouses-Exporters (wholesalers with both import and export licenses), consumers, retailers (including hotels, restaurants, caterers, supermarkets, etc.), stockholders in NGCs (such as Ethereum, Fishcoin), and regulatory entities (government bodies). The seafood industry primarily uses three advanced technologies, such as blockchain, RFID, and QR code, to promote efficiency, accountability, responsiveness, and participation in its businesses (Developed from Brabazon, Winter, Gandy, 2014; Swan, 2015; Bureau Veritas Group, 2018; Williams, 2019; Blaha and Katafono, 2020; Caton, 2022; Ocean Protocol Foundation and BigchainDB GmbH, 2022; Tanwar, 2022; Fishcoin, 2023; Gohwong, 2021, 2023; and Tolentino-Zondervan, Ngoc, and Roskam, 2023).

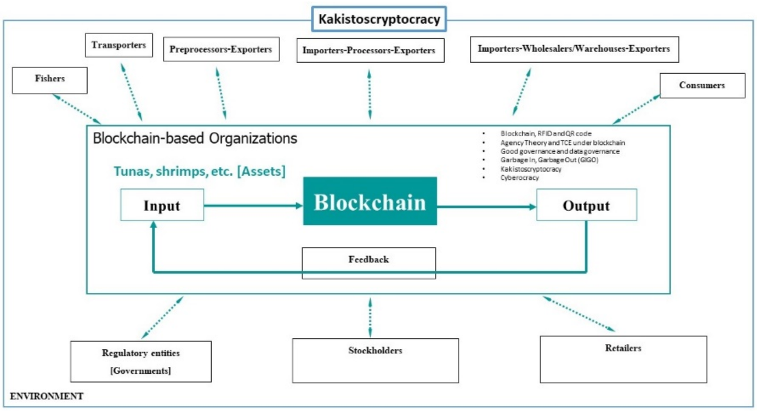

Figure 1 The IUU seafood industry in Kakistoscryptocracy
Developed from IBM Corporation (1962), World Bank (1989), Ronfeldt (1991, 1992), Arquilla and Ronfeldt (eds.) (2001), Ronfeldt and Varda (2008), Brabazon, Winter, Gandy (2014), Swan (2015), Data Management Association International (2017), Williams (2019), Blaha and Katafono (2020); Caton (ed.) (2022), Ocean Protocol Foundation and BigchainDB GmbH (2022), Tanwar (2022), Fishcoin (2023), Gohwong (2021, 2023), and Tolentino-Zondervan, Ngoc, and Roskam (2023)

Next, the blockchain-based projects in the seafood industry according to Food and Agriculture Organization (FAO)'s survey, for example, are "Provenance Indonesia" for Tuna, "WWF-New Zealand, ConsenSys, Sea Quest, TraSeable Solutions Fiji" for Tuna, "Pacifical, Atato Pacific and import markets" for Tuna, "OpenSC, WWFAustralia, BCG Digital Ventures Australia" for Patagonian toothfish, "Bumble Bee Foods, SAP Indonesia" for Yellowfin tuna, "Fishcoin" for any seafood, and "Sustainable Shrimp Partnership Ecuador" for Farmed shrimp. Two key consensus methods are PoW and PoS. Although the main goal of using blockchain technology is to lower the risk of erroneous data entry from human errors and intentional data tampering by digitizing processes to make them simpler and automating tedious operations by dApps, the majority of projects, based on FAO's data, still rely on the human entry of fish data. These human-based systems enable all involved actors to intentionally enter inaccurate data or falsify

data for their own gain. Inconsistent data entry and verification among different participants may also result in discrepancies and errors in the blockchain system. As a result, the integrity of data that are uploaded to the blockchain may be placed into doubt. (Adapted from Whitman, M.E. and Mattord, H.J. 2018; Blaha and Katafono, 2020; Tanwar, 2022).
Then, while RFID is frequently employed for whole fish, QR codes are frequently used for fish components, such as fillets or steaks, as shown in Figure 2. RFID can be used to verify that the fish being sold is actually the species and origin claimed by the seller, it can help to lower the risk of fraud. Contrary to RFID, QR codes can help consumers make informed decisions about the seafood they purchase, promoting sustainability and reducing the risk of seafood fraud. Additionally, both data of RFID and QR code are stored in the blockchain (Developed from Blaha and Katafono, 2020; Patro, Jayaraman, Salah, and Yaqoob, 2022).

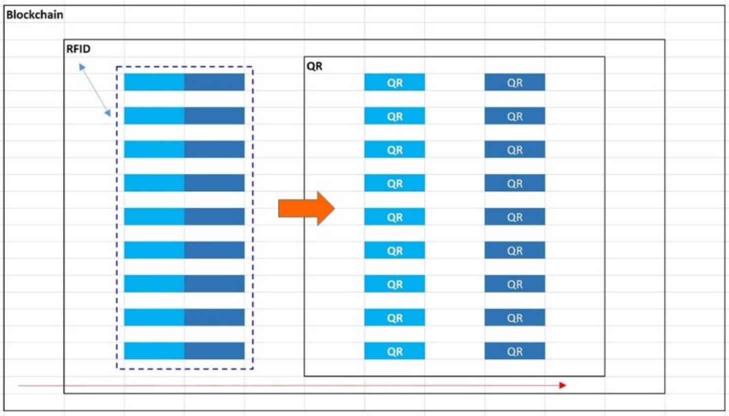

Figure 2 RFID and QR code under blockchain in the seafood industry Developed from Blaha and Katafono (2020); Patro, Jayaraman, Salah, and Yaqoob (2022).

DISCUSSION

According to agency theory and TCE, the issue of inaccurate data entry in blockchain directly drove the IUU seafood industry into Kakistoscryptocracy by promoting opportunism among all involved actors in the sector due to the information asymmetry between regulatory officers as principals and all involved actors as agents. Based on the consideration of all engaged actors, the compromised data verification in the blockchain resulted in GIGO and the system's instability. As a result, in both the virtual world and the metaverse, all participating actors unilaterally handled their own business, including any illegal, unreported, and unregulated affairs. In both worlds, there were two supportive entities to the aforementioned uncontrollable actions, including emails services, financial services, and forums of underground websites, also known as the deep web or dark web, (such as ProtonMail (dark web version) via Tor; Elude mail and exchange, including a privacy-based NGC like Monero (XMR), via TOR), and NGCs (such as Monero) with the support of NGCs trading, especially Monero, on the platforms of NGCs exchange, for both worlds, like Binance, Kraken, and Bitfinex. These NGCs exchangers allowed all involved actors to conveniently undertake money laundering. The initial solutions were cyberocracy and Corsairs. Cyberocracy was the increase of automated mechanisms like AI and algorithms on state affairs' surface internet, while Corsairs were part of IUU actors who acted on behalf of government agencies by providing information about smuggling and piracy/ illegal fishing in international waters (Developed from Ronfeldt and Varda, 2008; Binance, 2023a, 2023b, 2023c; Bitfinex, 2023a, 2023b; Elude, 2023a, 2023b; Gohwong, 2023; Kraken, 2023a, 2023b; Proton, 2023).

CONCLUSION

The illegal, unreported, and unregulated seafood industry in Kakistoscryptocracy is a serious problem for sustainable development under the UN's Sustainable Development Goals (SDGs). Blockchain, RFID, QR code are used by all involved actors in the industry against the IUU activities. However, the problem of erroneous data entry in human-based IT systems compromises the efficiency and information security of blockchains. Cyberocracy and Corsairs are the initial solutions to the problem.

REFERENCES

Arquilla, J. and Ronfeldt, D.(eds.). (2001). Networks and Netwars: The Future of Terror, Crime, and Militancy. Santa Monica, CA: RAND Corporation,2001.

Bamberg, G. and Spremann, K. (ed.). (1987). Agency Theory, Information, and Incentives. Berlin: Springer-Verlag.

Binance. (2023a). Trading data. Retrieved from https://www.binance.com/en/markets/trading_data.

Binance. (2023b). Binance Convert. Retrieved from https://www.binance.com/en/convert/XMR_BTC.

Binance. (2023c). Metaverse ETP Price. Retrieved from https://www.binance.com/en/price/metaverse.

Bitfinex. (2023a). XMR/USD. Retrieved from https://trading.bitfinex.com/t/XMR:USD?type=exchange.

Bitfinex. (2023b). SENATE /USD. Retrieved from https://trading.bitfinex.com/t/SENATE:USD

Blaha, F. and Katafono, K. (2020). Blockchain Application in Seafood Value Chains [FAO Fisheries and Aquaculture Circular No. 1207]. Rome: FAO.

Brabazon, T., Winter, M., Gandy, B. (2014). Digital Wine: How QR Codes Facilitate New Markets for Small Wine Industries. London: Springer.

Bureau Veritas Group. (2018). Origin: Bureau Veritas first traceability label. Retrieved from https://www.facebook.com/watch/?v=1411125969014900&ref=sharing.

Caton, J.L. (ed.). (2022). The Economics of Blockchain and Cryptocurrency: A Transaction Costs Revolution. Cheltenham: Edward Elgar Publishing.

Cook, B. (2018). Blockchain: Transforming the Seafood Supply Chain. Retrieved From http://awsassets.wwfnz.panda.org/downloads/draft_blockchain_report_1_4_1.pdf

Data Management Association International. (2017). DAMA-DMBOK: Data management body of knowledge (2nd Ed.). AZ: Technics Publications.

Eachmile Technologies. (2021). Transforming global seafood & agriculture supply chains: From the point of harvest to consumption. Retrieved from https://eachmile.co/.

Elude. (2023a). Elude mail xhnq zfmx ehy3..: Sign in. Retrieved From http://eludemailxhnqzfmxehy3bk5guyhlxbunfyhkcksv4gvx6d3wcf6smad.onion/signin

Elude. (2023b). Exchange. Retrieved From http://eludemailxhnqzfmxehy3bk5guyhlxbunfyhkcksv4gvx6d3wcf6smad.onion/exchange.

Esteves, E., Diler, A., and Genç, İ.Y. (2016). General Introduction to Seafood Quality and Safety Maintenance and Applications. In İ. Yüksel Genç, E. Esteves and A. Diler (eds.). Handbook of seafood: quality and safety maintenance and applications. NY: Nova Science Publishers.

FAO. (2016). Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (Revised edition). Rome: FAO.

FAO. (2023). Global Record of Fishing Vessels, Refrigerated Transport Vessels and Supply Vessels. Retrieved from https://www.fao.org/global-record/en/.

Fishcoin. (2023). Seafood Traceability Powered by Blockchain. Retrieved from https://fishcoin.co/.
Gohwong, S. (2021). Public Management Information Systems. BKK: Faculty of Social Sciences, Department of Political Science and Public Administration, Kasetsart University, Bang Khen campus.
Gohwong, S. (2023). Kakistoscryptocracy. Manuscript submitted for publication.
IBM Corporation. (1962). Reference Manual IBM 1401 Data Processing System (A24-1403-5 edition). New York, NY: IBM Corporation.
Kituyi, M. and Thomson, P. (2018). 90% of fish stocks are used up - fisheries subsidies must stop emptying the ocean. Retrieved from https://www.weforum.org/agenda/2018/07/fish-stocks-are-used-up-fisheries-subsidies-must-stop.
Kraken. (2023a). Monero. Retrieved from https://www.kraken.com/prices/monero.
Kraken. (2023b). SENATE DAO. Retrieved from https://www.kraken.com/prices/senate-dao.
Lidwell, W., Holden, K., and Butler, J. (2011). Universal Principles of Design. Beverly, MA: Rockport Publishers.
Link, J.S. (2010). Ecosystem-Based Fisheries Management: Confronting Tradeoffs. NY: Cambridge University Press.
Ocean Protocol Foundation and BigchainDB GmbH. (2022). Ocean Protocol: Tools for the Web3 Data Economy. Retrieved from https://oceanprotocol.com/tech-whitepaper.pdf
OECD. (2004). Fish Piracy: Combating Illegal, Unreported and Unregulated Fishing. Paris: OECD Publications. DOI: https://doi.org/10.1787/9789264016804-en.
Patro, P.K., Jayaraman, R., Salah, K. and Yaqoob, I. (2022). Blockchain-Based Traceability for the Fishery Supply Chain. IEEE Access (10), 81134 - 81154. DOI: https://doi.org/10.1109/ACCESS.2022.3196162.
Petrossian, G.A. (2019). The Last Fish Swimming: the Global Crime of Illegal Fishing. Santa Barbara, CA: Praeger.
Proton. 2023. Proton - Privacy by default. Retrieved from https://protonmailrmez3lotccipshtkleegetolb73fuirgj7r4o4vfu7ozyd.onion/
Ronfeldt, D. (1991). Cyberocracy, Cyberspace, and Cyberology: Political Effects of the Information Revolution. Santa Monica, CA: RAND.
Ronfeldt, D. (1992). Cyberocracy Is Coming. The Information Society 8(4), 243-296.
Ronfeldt, D. and Varda, D. (2008). The Prospects for Cyberocracy (Revisited) (December 1, 2008). Available at SSRN: https://ssrn.com/abstract=1325809.
Strengholt, P. (2020). Data Management at Scale. CA: O'Reilly Media.
Suematsu, C. (2014). Transaction Cost Management: Strategies and Practices for a Global Open Economy. Cham: Springer International Publishing.
Swan, M. (2015). Blockchain: Blueprint for a New Economy. CA: O'Reilly Media.
Tanwar, S. (2022). Blockchain Technology: From Theory to Practice. Singapore: Springer Nature Singapore.
Tolentino-Zondervan, F., Ngoc, P.T.A., and Roskam, J.L. (2023). Use cases and future prospects of blockchain applications in global fishery and aquaculture value chains. Aquaculture 565 (February 2023), 1 - 11.
United Nations Convention on the Law of the Sea, Dec.10, 1982, 1833 U.N.T.S. 3. Retrieved from https://treaties.un.org/doc/publication/CTC/Ch_XXI_6_english_p.pdf.
Williams, S.P. (2019). Blockchain: The Next Everything. London: Scribner.
World Bank. (1989). Sub-Saharan Africa: From Crisis to Sustainable Growth. DC: World Bank.
Zelbst, P.J. and Sower, V.E. (2022). RFID for the Supply Chain and Operations Professional. New York, NY: Business Expert Press.

Data Availability Statement: The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Conflicts of Interest: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Publisher's Note: All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.