

## REFERENCES

- Abeyratne, S., & Monfared, R. (2016). Blockchain Ready Manufacturing Supply Chain Using Distributed Ledger. *International Journal of Research in Engineering and Technology*, 05.
- Agarwal, R., Chandrasekaran, S., & Sridhar, M. (2016). *Imagining construction's digital future*. McKinsey & Company. <https://www.mckinsey.com/capabilities/operations/our-insights/imagining-constructions-digital-future#/>
- Agenbag, H., & Amoah, C. (2021). The impact of modern construction technology on the workforce in the construction industry. *IOP Conference Series: Earth and Environmental Science*, 654, 012001. <https://doi.org/10.1088/1755-1315/654/1/012001>
- Aggarwal, A. (2018). The Impact of Foreign Ownership on Research and Development Intensity and Technology Acquisition in Indian Industries: Pre and Post Global Financial Crisis. *Asian Development Review*, 35, 1–26.
- Alaghbari, W., Al-Sakkaf, A., & Sultan, B. (2019). Factors affecting construction labour productivity in Yemen. *International Journal of Construction Management*, 19, 79–91. <https://doi.org/10.1080/15623599.2017.1382091>
- Amaratunga, P., Baldry, D., Sarshar, M., & Newton, R. (2002). Quantitative and qualitative research in the built environment: Application of “mixed” research approach. *Work Study*, 51, 17–31. <https://doi.org/10.1108/00438020210415488>
- Arora, P., & Nagpal, R. (2022). Blockchain Technology and Its Applications: A Systematic Review of the Literature. *Proceedings of the International Conference on Innovative Computing & Communication (ICICC) 2022*. <http://dx.doi.org/10.2139/ssrn.4121824>
- Atlam, H., Alenezi, A., Alassafi, M., & Wills, G. (2018). Blockchain with Internet of Things: Benefits, Challenges and Future Directions. *International Journal of Intelligent Systems and Applications*, 10. <https://doi.org/10.5815/ijisa.2018.06.05>
- Azmi, N. A., Sweis, G., Sweis, R., & Sammour, F. (2022). Exploring Implementation of Blockchain for the Supply Chain Resilience and Sustainability of the Construction Industry in Saudi Arabia. *Sustainability*, 14(11). <https://doi.org/10.3390/su14116427>
- B. Rawat, D., Chaudhary, V., & Doku, R. (2021). Blockchain Technology: Emerging Applications and Use Cases for Secure and Trustworthy Smart Systems. *Journal of Cybersecurity and Privacy*, 1(1), 4–18. <https://doi.org/10.3390/jcp1010002>

- Babich, V., & Hilary, G. (2019). Blockchain and other Distributed Ledger Technologies in Operations. *Foundations and Trends® in Technology Information and Operations Management*, 12, 152–172. <https://doi.org/10.1561/02000000084>
- Babu, S. S., & Sudhakar, D. B. (2016). Construction project management during economic crisis. *International Journal of Management*, 7(7).
- Bakhtiarizadeh, E., Shahzad, W., Poshdar, M., & Rotimi, J. (2021, September). *Applicability of Blockchain Technology in New Zealand's Prefabricated Construction Industry: A Potential Solution*.
- Besaiso, H. (2017). *How do Construction Arbitrators make their decisions? A Perspective from Palestine*.
- BLOCKCHAIN 101 FOR GOVERNMENTS. (2017). Institute for Austrian and International Tax Law of Vienna University of Business and Economics.
- Brydon-Miller, M., & Coghlan, D. (2014). The big picture: Implications and imperatives for the action research community from the SAGE Encyclopedia of Action Research. *Action Research*, 12, 224–233. <https://doi.org/10.1177/1476750314533135>
- Central Bank of Sri Lanka. (2021). *Annual Report 2021* [Annual Report]. Central Bank of Sri Lanka.
- Central Bank of Sri Lanka. (2023). *CENTRAL BANK OF SRI LANKA; ANNUAL REPORT* (pp. 62–63) [Annual Report]. Central Bank of Sri Lanka.
- Chan, C. T. W. (2012). The principal factors affecting construction project overhead expenses: An exploratory factor analysis approach. *Construction Management and Economics*, 30(10), 903–914. <https://doi.org/10.1080/01446193.2012.717706>
- Chung, I. B., Caldas, C., & Leite, F. (2022). An analysis of blockchain technology and smart contracts for Building Information Modeling. *Journal of Information Technology in Construction*, 27, 972–990. <https://doi.org/10.36680/j.itcon.2022.047>
- Dorri, A., Kanhere, S., & Jurdak, R. (2016). Blockchain in Internet of Things: Challenges and Solutions. *Arxiv*.
- Dutta, P., Choi, T.-M., Somani, S., & Butala, R. (2020). Blockchain Technology in Supply Chain Operations: Applications, Challenges and Research Opportunities. *Transportation Research Part E Logistics and Transportation Review*, 142. <https://doi.org/10.1016/j.tre.2020.102067>

- El Ioini, N., & Pahl, C. (2018). A Review of Distributed Ledger Technologies. In H. Panetto, C. Debruyne, H. A. Proper, C. A. Ardagna, D. Roman, & R. Meersman (Eds.), *On the Move to Meaningful Internet Systems. OTM 2018 Conferences* (pp. 277–288). Springer International Publishing.
- Farooq, S. (2022). EFFECT OF FINANCIAL CRISIS ON SUSTAINABILITY OF INDUSTRIAL SECTOR IN SRI LANKA. *Journal of Research in Social Development and Sustainability*, 1(2), 33–44.
- Fellows, R., & Liu, A. (2015). *Research Methods for Construction* (4th Edition). John Wiley & Sons, Ltd.
- Fernández, X., & Millán, P. (2015). From the Boom to the Collapse: A Technical Efficiency Analysis of the Spanish Construction Industry during the Financial Crisis. *Construction Economics and Building*, 15, 104. <https://doi.org/10.5130/ajceb.v15i1.4168>
- Genc, O. (2021). Identifying Principal Risk Factors of Turkish Construction Sector According to Their Probability of Occurrences: A Relative Importance Index (RII) and Exploratory Factor Analysis (EFA) Approach. *International Journal of Construction Management*. <https://doi.org/10.1080/15623599.2021.1946901>
- Ghazal, T. M., Kamrul Hasan, M., Alzoubi, H. M., Al Himmadi, M., Al-Dmour, N. A., Islam, S., Kamran, R., & Mago, B. (2022). Securing Smart Cities Using Blockchain Technology. *2022 1st International Conference on AI in Cybersecurity (ICAIC)*, 1–4. <https://doi.org/10.1109/ICAIC53980.2022.9896971>
- Gietzmann, M., & Grossetti, F. (2021). Blockchain and other distributed ledger technologies: Where is the accounting? *Journal of Accounting and Public Policy*, 40(5), 106881. <https://doi.org/10.1016/j.jaccpubpol.2021.106881>
- Götz, C. S., Karlsson, P., & Yitmen, I. (2022). Exploring applicability, interoperability and integrability of Blockchain-based digital twins for asset life cycle management. *Smart and Sustainable Built Environment*, 11(3), 532–558. <https://doi.org/10.1108/SASBE-08-2020-0115>
- Graham, S. (2019). *Implementation of Blockchain Technology in the Construction Industry*.
- H L, G., Athreya, A., Kumar, A., Holla, A., Nagarajath, S., & Kumar, V. (2020). *BLOCKCHAIN* (pp. 1–24). <https://doi.org/10.1002/9781119621201.ch1>
- Hadiwattege, C., Silva, D., & Pathirage, C. (2010). *Corruption in Sri Lankan Construction Industry*.

- Hamledari, H., & Fischer, M. (2020). *Construction Payment Automation Using Blockchain-Enabled Smart Contracts and Reality Capture Technologies* (CIFE Technical Report) [Technical Report]. STANFORD UNIVERSITY. <https://arxiv.org/ftp/arxiv/papers/2010/2010.15232.pdf>
- Hang, L., & Kim, D.-H. (2021). Optimal blockchain network construction methodology based on analysis of configurable components for enhancing Hyperledger Fabric performance. *Blockchain: Research and Applications*, 2(1), 100009. <https://doi.org/10.1016/j.bcra.2021.100009>
- Holotescu, V., & Vasiu, R. (2020). Challenges and Emerging Solutions for Public Blockchains. *BRAIN. BROAD RESEARCH IN ARTIFICIAL INTELLIGENCE AND NEUROSCIENCE*, 11, 58–83. <https://doi.org/10.18662/brain/11.1/15>
- Ibrahim, R., Harby, A. A., Nashwan, M. S., & Elhakeem, A. (2022). Financial Contract Administration in Construction via Cryptocurrency Blockchain and Smart Contract: A Proof of Concept. *Buildings*, 12(8). <https://doi.org/10.3390/buildings12081072>
- Jayalath, A., & Gunawardhana, T. (2017, October). *Towards Sustainable Constructions: Trends in Sri Lankan Construction Industry-A Review*.
- Jyoti, A., & Chauhan, D. (2020). Block chain Based Data Provenance In Supply chain. *International Journal of Innovative Technology and Exploring Engineering*, 9, 317–322. <https://doi.org/10.35940/ijitee.C7980.019320>
- Kaklauskas, A., Kelpsiene, L., Zavadskas, E., Bardauskiene, D., Kaklauskas, G., Urbonas, M., & Sorakas, V. (2011). Crisis management in construction and real estate: Conceptual modeling at the micro-, meso- and macro-levels. *Land Use Policy*, 28, 280–293. <https://doi.org/10.1016/j.landusepol.2010.06.008>
- Kalogeraki, M., & Antoniou, F. (2024). Claim Management and Dispute Resolution in the Construction Industry: Current Research Trends Using Novel Technologies. *Buildings*, 14(4). <https://doi.org/10.3390/buildings14040967>
- Kang, K., Liu, X., Jiang, Y., Lee, K., Kam Hang, Wan, S. K. W., Huang, G. Q., & Zhong, R. Y. (2023). Blockchain opportunities for construction industry in Hong Kong: A case study of RISC and site diary. *Construction Innovation*, 23(2), 443–466. <https://doi.org/10.1108/CI-08-2021-0153>
- Kim, K., Lee, G., & Kim, S. (2020). A Study on the Application of Blockchain Technology in the Construction Industry. *KSCE Journal of Civil Engineering*, 24(9), 2561–2571. <https://doi.org/10.1007/s12205-020-0188-x>
- Kiu, M. S., Chia, F. C., & Wong, P. F. (2019). The Potentials and Impacts of Blockchain Technology in Construction Industry: A Literature Review. *IOP*

*Conference Series: Materials Science and Engineering*, 495.  
<https://doi.org/10.1088/1757-899X/495/1/012005>

- Kothari, C. R. (2004). *Research Methodology: Methods and Techniques* (Second Edition). New Age International (P) Limited.
- Kouhizadeh, M., Saberi, S., & Sarkis, J. (2021). Blockchain technology and the sustainable supply chain: Theoretically exploring adoption barriers. *International Journal of Production Economics*, 231, 107831. <https://doi.org/10.1016/j.ijpe.2020.107831>
- Kumar Singh, A., Kumar, V. R. P., Dehdasht, G., Mohandes, S. R., Manu, P., & Pour Rahimian, F. (2023). Investigating the barriers to the adoption of blockchain technology in sustainable construction projects. *Journal of Cleaner Production*, 403, 136840. <https://doi.org/10.1016/j.jclepro.2023.136840>
- Kuperberg, M., & Geipel, M. (2021). Blockchain and BIM (Building Information Modeling): Progress in Academia and Industry. *CoRR*, abs/2104.00547. <https://arxiv.org/abs/2104.00547>
- Lamport, L. (1998). The Part-Time Parliament. *ACM Trans. Comput. Syst.*, 16(2), 133–169. <https://doi.org/10.1145/279227.279229>
- Lewis, R., McPartland, J. S., & Ranjan, R. (2017). Blockchain and Financial Market Innovation. *Economic Perspectives*, 2–12.
- Li, J., Greenwood, D., & Kassem, M. (2019). Blockchain in the built environment and construction industry: A systematic review, conceptual models and practical use cases. *Automation in Construction*, 102, 288–307. <https://doi.org/10.1016/j.autcon.2019.02.005>
- Li, J., & Kassem, M. (2021). Applications of distributed ledger technology (DLT) and Blockchain-enabled smart contracts in construction. *Automation in Construction*, 132, 103955. <https://doi.org/10.1016/j.autcon.2021.103955>
- Liu, Z., Jiang, L., Osmani, M., & Demian, P. (2019). Building Information Management (BIM) and Blockchain (BC) for Sustainable Building Design Information Management Framework. *Electronics*, 8(7). <https://doi.org/10.3390/electronics8070724>
- Mahmudnia, D., Arashpour, M., & Yang, R. (2022). Blockchain in construction management: Applications, advantages and limitations. *Automation in Construction*, 140, 104379. <https://doi.org/10.1016/j.autcon.2022.104379>
- Matthias, A. T., & Jayasinghe, S. (2022). Worsening economic crisis in Sri Lanka: Impacts on health. *The Lancet Global Health*, 10(7), e959.

- McNamara, A., & Sepasgozar, S. (2021). Intelligent contract adoption in the construction industry: Concept development. *Automation in Construction*, 122. <https://doi.org/10.1016/j.autcon.2020.103452>
- Mendis, K., Jayatunge, D., Disaratna, V., & Perera, K. (2022). Implementation of government policies in the construction industry: The case of Sri Lanka. *A/Z : ITU Journal of Faculty of Architecture*, 19, 151–167. <https://doi.org/10.5505/itujfa.2022.48379>
- Msawil, M., Greenwood, D., & Kassem, M. (2022). A Systematic evaluation of blockchain-enabled contract administration in construction projects. *Automation in Construction*, 143, 104553. <https://doi.org/10.1016/j.autcon.2022.104553>
- Nakamoto, S. (2009). Bitcoin: A Peer-to-Peer Electronic Cash System. *Cryptography Mailing List at Htps://Metzdowd.Com*.
- Nanayakkara, S., Perera, S., Bandara, D., Weerasuriya, T., & Ayoub, J. (2019, November). *Blockchain technology and its potential for the construction industry*. <https://doi.org/10.6084/m9.figshare.10315331.v3>
- Nanayakkara, S., Perera, S., Senaratne, S., Weerasuriya, G. T., & Bandara, H. M. N. D. (2021). Blockchain and Smart Contracts: A Solution for Payment Issues in Construction Supply Chains. *Informatics*, 8(2). <https://doi.org/10.3390/informatics8020036>
- Narayanan, A., Bonneau, J., Felten, E., Miller, A., & Goldfeder, S. (2016). *Bitcoin and Cryptocurrency Technologies A Comprehensive Introduction*. Princeton University Press.
- Nawari, N. O., & Ravindran, S. (2019). Blockchain and the built environment: Potentials and limitations. *Journal of Building Engineering*, 25, 100832. <https://doi.org/10.1016/j.jobbe.2019.100832>
- NISTORESCU, T., & PLOSCARU, C. (2010). IMPACT OF ECONOMIC AND FINANCIAL CRISIS IN THE CONSTRUCTION INDUSTRY. *Management and Marketing Journal*, VIII, 25–36.
- Patel, S. S., Loosemore, M., Sharma, A., Greenwald, K. E., & Patel, R. B. (2022). *Corruption and disasters in the built environment: A literature review*. <https://api.semanticscholar.org/CorpusID:253426406>
- Pattini, G., Di Giuda, G., & Tagliabue, L. (2020). BLOCKCHAIN APPLICATION FOR CONTRACT SCHEMES IN THE CONSTRUCTION INDUSTRY. *Proceedings of International Structural Engineering and Construction*, 7. [https://doi.org/10.14455/ISEC.res.2020.7\(1\).AAE-21](https://doi.org/10.14455/ISEC.res.2020.7(1).AAE-21)

- Pattini, G., Seghezzi, E., & Di Giuda, G. (2021). DIGITALIZATION IN CONSTRUCTION: BLOCKCHAIN APPLICABILITY IN THE INDUSTRY. *Proceedings of International Structural Engineering and Construction*, 8. [https://doi.org/10.14455/ISEC.2021.8\(1\).AAE-06](https://doi.org/10.14455/ISEC.2021.8(1).AAE-06)
- Perera, S., Nanayakkara, S., Rodrigo, M. N. N., Senaratne, S., & Weinand, R. (2020). Blockchain technology: Is it hype or real in the construction industry? *Journal of Industrial Information Integration*, 17, 100125. <https://doi.org/10.1016/j.jii.2020.100125>
- Pheng, L. S., & Hou, L. S. (2019). The Economy and the Construction Industry. In *Construction Quality and the Economy: A Study at the Firm Level* (pp. 21–54). Springer Singapore. [https://doi.org/10.1007/978-981-13-5847-0\\_2](https://doi.org/10.1007/978-981-13-5847-0_2)
- Pradhan, N. R., & Singh, A. P. (2021). Smart contracts for automated control system in Blockchain based smart cities. *Journal of Ambient Intelligence and Smart Environments*, 13(3), 253–267. <https://doi.org/10.3233/AIS-210601>
- Rathnayaka, L. S. D., Malsha Nadeetharu, B. K., & Kulatunga, U. (2023). Applicability of electronic document management system (EDMS) for the cost management of mega construction projects in Sri Lanka. *Journal of Financial Management of Property and Construction*, ahead-of-print(ahead-of-print). <https://doi.org/10.1108/JFMPC-01-2023-0005>
- Rodrigo, M. N. N., Perera, S., Senaratne, S., & Xiaohua, J. (2018, December). *BLOCKCHAIN FOR CONSTRUCTION SUPPLY CHAINS: A LITERATURE SYNTHESIS*.
- Ruddock, S. (2009). *The Scope of the Construction Sector: Determining its Value* (pp. 79–94). <https://doi.org/10.4324/9780203938577.ch4>
- Runeson, G. (2018). Research Methods: A Practical Guide for Students and Researchers. *Construction Economics and Building*, 18, 83. <https://doi.org/10.5130/AJCEB.v18i1.5979>
- Saliya, C. A. (2023). Financial Crisis in Sri Lanka: Impact of Institutional Factors on External Debts. In *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4505509>
- Serpell, A., & Heredia, B. (2004). Supply chain management in construction: Diagnosis and application issues. *Globalisation and Construction*, 455.
- Sfakianaki, E., Iliadis, T., & Zafeiris, E. (2015). Crisis management under an economic recession in construction: The Greek case. *International Journal of Management and Decision Making*, 14, 373. <https://doi.org/10.1504/IJMDM.2015.074015>

- Sharma, P. K., & Park, J. H. (2018). Blockchain based hybrid network architecture for the smart city. *Future Generation Computer Systems*, 86, 650–655. <https://doi.org/10.1016/j.future.2018.04.060>
- Sharma, R. (2022). *Sri Lanka Crisis 2022: The Biggest Economic Debacle & Political Turmoil Since 1948*.
- SHOJAEI, A. (2019). EXPLORING APPLICATIONS OF BLOCKCHAIN TECHNOLOGY IN THE CONSTRUCTION INDUSTRY. *Interdependence between Structural Engineering and Construction Management*, 1–6.
- Shrimali, B., & Patel, H. B. (2022). Blockchain state-of-the-art: Architecture, use cases, consensus, challenges and opportunities. *Journal of King Saud University - Computer and Information Sciences*, 34(9), 6793–6807. <https://doi.org/10.1016/j.jksuci.2021.08.005>
- Sigalov, K., Ye, X., König, M., Hagedorn, P., Blum, F., Severin, B., Hettmer, M., Hückinghaus, P., Wölkerling, J., & Groß, D. (2021). Automated Payment and Contract Management in the Construction Industry by Integrating Building Information Modeling and Blockchain-Based Smart Contracts. *Applied Sciences*, 11(16). <https://doi.org/10.3390/app11167653>
- Sikorski, J. J., Haughton, J., & Kraft, M. (2017). Blockchain technology in the chemical industry: Machine-to-machine electricity market. *Applied Energy*, 195, 234–246.
- Singh, A. K., Kumar, V. R. P., Dehdasht, G., Mohandes, S. R., Manu, P., & Rahimian, F. P. (2023). Investigating barriers to blockchain adoption in construction supply chain management: A fuzzy-based MCDM approach. *Technological Forecasting and Social Change*, 196, 122849. <https://doi.org/10.1016/j.techfore.2023.122849>
- Sun, J., Yan, J., & Zhang, K. (2016). Blockchain-based sharing services: What blockchain technology can contribute to smart cities. *Financial Innovation*, 2. <https://doi.org/10.1186/s40854-016-0040-y>
- Sunyaev, A. (2020). Distributed Ledger Technology. In *Internet Computing: Principles of Distributed Systems and Emerging Internet-Based Technologies* (pp. 265–299). Springer International Publishing. [https://doi.org/10.1007/978-3-030-34957-8\\_9](https://doi.org/10.1007/978-3-030-34957-8_9)
- Underwood, S. (2016). Blockchain beyond Bitcoin. *Communications of the ACM*, 59, 15–17. <https://doi.org/10.1145/2994581>

- Waisapi, J. (2023). The Role of The Construction Dispute Board in The Settlement of Construction Disputes. *Eduvest - Journal of Universal Studies*, 3, 1498–1505. <https://doi.org/10.59188/eduvest.v3i8.891>
- Walliman, N. (2011). *Research Methods: The Basics*. <https://doi.org/10.4324/9780203836071>
- Wang, J., Wu, P., Wang, X., & Shou, W. (2017). *The outlook of blockchain technology for construction engineering management*. 4(1), 67–75. <https://doi.org/10.15302/J-FEM-2017006>
- Wang, X., Liu, L., Liu, J., & Huang, X. (2022). Understanding the Determinants of Blockchain Technology Adoption in the Construction Industry. *Buildings*, 12(10). <https://doi.org/10.3390/buildings12101709>
- Williams, C. (2007). Research Methods. *Journal of Business & Economic Research – March*, 5. <https://doi.org/10.19030/jber.v5i3.2532>
- World Economic Forum. (2015, Autumn). World Economic Forum. *How Will Blockchain Technology Transform Financial Services?* <https://www.weforum.org/agenda/2015/11/how-will-blockchain-technology-transform-financial-services/>
- Wu, L., Lu, W., & Xu, J. (2022). Blockchain-based smart contract for smart payment in construction: A focus on the payment freezing and disbursement cycle. *Frontiers of Engineering Management*, 9(2), 177–195. <https://doi.org/10.1007/s42524-021-0184-y>
- Xiaoning, Q., & Papadonikolaki, E. (2019, September). *The Influence of Blockchain Technology on Trust in construction Supply Chain Management*.
- Xu, M., Chen, X., & Kou, G. (2019). A systematic review of blockchain. *Financial Innovation*, 5(1), 27. <https://doi.org/10.1186/s40854-019-0147-z>
- Xue, X., Wang, Y., Shen, Q., & Yu, X. (2007). Coordination mechanisms for construction supply chain management in the Internet environment. *International Journal of Project Management*, 25(2), 150–157. <https://doi.org/10.1016/j.ijproman.2006.09.006>
- Yaga, D., Mell, P., Roby, N., & Scarfone, K. (2018). Blockchain Technology Overview. *ArXiv*, *abs/1906.11078*. <https://api.semanticscholar.org/CorpusID:69842399>
- Yang, R., Wakefield, R., Lyu, S., Jayasuriya, S., Han, F., Yi, X., Yang, X., Amarasinghe, G., & Chen, S. (2020). Public and private blockchain in

construction business process and information integration. *Automation in Construction*, 118, 103276. <https://doi.org/10.1016/j.autcon.2020.103276>

Zhao, J., Fan, S., & Yan, J. (2016). Overview of business innovations and research opportunities in blockchain and introduction to the special issue. *Financial Innovation*, 2. <https://doi.org/10.1186/s40854-016-0049-2>

Zheng, Z., Xie, S., Dai, H.-N., Chen, X., & Wang, H. (2017, June). *An Overview of Blockchain Technology: Architecture, Consensus, and Future Trends*. <https://doi.org/10.1109/BigDataCongress.2017.85>

Zheng, Z., Xie, S., Dai, H.-N., Chen, X., & Wang, H. (2018). Blockchain challenges and opportunities: A survey. *International Journal of Web and Grid Services*, 14, 352. <https://doi.org/10.1504/IJWGS.2018.095647>