Blockchain and eGovernment Convergence for the Optimization of ODA Activities in Developing Countries: A Scoping Review

Uduakobong Ekanem
Department of Advanced Convergence,
Handong Global University,
Pohang, South Korea.
Uduakekanem09@handong.ac.kr

Yun Seon Kim
Department of Global Development and Entrepreneurship,
Handong Global University,
Pohang, South Korea.
Sean0831@handong.edu

***Abstract*—The blockchain technology, which is the underlying technology of bitcoin, has revolutionized different sectors like fintech, education, healthcare and even thepublic sector of many countries, further attesting to thepotency of ICT in spearheading the paradigm shift brought about by its adoption and use in organizations and economies. The decentralized nature of the blockchain makes its convergence with eGovernment suitable for enhancing transparent and trust-worthy public processes and can be used to facilitate the efficient management of activities of the DevelopmentAssistance Committee (DAC), accessible through the intervention programs of the Organization for Economic Co-operation and Development (OECD) as well as the Official Development Assistance (ODA) given to developing countries. This scoping reviewpaper presents insights to enable Donor Aid providers and International Cooperation Agencies that are preparing to carry out new intervention projects to optimize their activities, by increasing the transparencyand trustworthiness of their transactions. This study will also serve as a guide for researchers who wish to embark on evidence synthesis on the impact of blockchain technology and eGovernment convergence on the optimization of ODA activities in developing countries. Results from this study reveal that even though the blockchain technology has great prospects and can be applied as proposed: 1. There have been a very limited number of studies conducted on it so far; Certain factors like lack of political will, wrong implementation choices, and a lack of concreteguidelines can thwart the whole effort of the implementing organization. The authors also recommend steps for overcoming such hurdles andachieving optimal outcomes.**

Keywords—blockchain technology, convergence, eGovernment, ODA, scoping reviews.

I. INTRODUCTION

Blockchain technology is known for its capability in enabling transparent and traceable transactions, that areboth secure and inclusive [1, 2, 3,4]. Similarly, the use ofinformation and Communication technologies in delivering public services, a concept popularly referred to as eGovernment; has since its inception enabled governments to earn the trust of their citizens, leading to an improved state of development [5, 6]. This is mostly so especially in developed economies, where trends ranging from: increase in transparency, to improved productivity and accountability have been witnessed since ICT was incorporated into the delivery of public services [1, 7, 8, 9, 10, 11]. EGovernment has enabled countries to be digitally transformed, allowing citizens to access public services with relative ease, have clear knowledge and updated information on the performance of their government and can as well hold their governments accountable for failed or suspicious practices, thereby increasing their trust for the government [12, 13,14].

The blockchain technology and eGovernment can be very efficient in ensuring transparent and auditable transactions, thus, further increasing citizens' trust in government. The prospects of these technologies and benefits that can emanate from their convergence makes it a great fit for tackling the issues encountered during the implementation of ODA activities and can further enhance socio-economic development especially in developing countries [15]. According to insights from the OECD's Government at a Glance report 2023 [16], current global economic challenges can be eased if governments adopt practices that can build trust and enhance democratic resilience; by implication this is an encouragement to governments to further enhance their eGovernment systems, an action which has enabled developed countries to be nearly unmatchable in development pace.

This research was supported by the Korea International Cooperation Agency (KOICA).

Most developed countries have been able to attain theirrecorded successes in governance because of their continuous and consistent application of ICTs in optimizing public processes and services to their citizens, through process decentralization, capacity development, result oriented practices among others, a gesture which has not only resulted in the increase in the speed of their development but has also helped them maintain that status [17]. Essentially, besides being partof the OECD countries, which are known for their highlevel of development, countries like Denmark, Australia, South Korea, Estonia, the UAE and others have remained at the top of the eGovernment Development Index (EGDI) ranking, while countries like Rwanda, Belize, Cote d'Ivoire among others, havethrough the same reason been able to significantlyimprove their EGDI over the years [18]. This has helped them build and increase trust for government among its citizens as they have become more transparent, accountable and more inclusive as highlighted in the US news and world report [19, 20].

On the other hand, countries that are not very proactivein using of ICTs to deliver public services have remained at the bottom of the EGDI ranking and their development level have been impaired by different menaces which subjects their citizens to trusting them less and in a bid to survive engage in ill practices that are unhealthy for socio-economic development [18, 19]. To assist the countries with stunted development in matching up with the developed economies, the Organisation for Economic Co-operation and Development (OECD), through the intervention program of Official Development Assistance (ODA) by the Development Assistance Committee (DAC), facilitates the provision of concessional low-interest loans and grants. However, impediments such as mismanagement, lack of accountability, bureaucracy and transparency deficits have inhibited a corresponding level of development in those countries [5, 21, 22].

Explicitly, to empower developing countries in efficiently utilizing the various aids and assistance they receive, as well, enable donors to track the usage of their donations and measuring the underlying impact on the recipients in comparison to expected outcomes; thisstudy highlights the prospects and benefits of blockchain and eGovernment convergence in optimizing ODA activities in developing countries.

The authors conducted scoping reviews of available studies and knowledge synthesis on blockchain and eGovernment convergence for optimizing ODA activities in developing countries, mainly to highlight the benefits and prospects of blockchain and eGovernment convergence. The sub-objectives of the study are to: ***i.*** examine how extant setbacks can be overhauled through the integration of Blockchain technology and its capabilities with the existing eGovernment system; ***ii.*** facilitate the decentralization of processes; ***iii.*** serve as guide to policy makers, ***iv.*** provide a pathway when conducting further research that are aimed at improving the activities of the DAC in developing countries; and to: ***v.*** narrow the gap to the actualization of the SDGs.

This study follows the principles of ***Population, Concept and Outcome (PCO),*** a framework used to guide the development of search strategy and research questions for scoping reviews, where ODA in developing countries is the ***population***, Blockchain and eGovernment convergence - the ***concept*** and optimization of ODA activities ***outcome***. The research question which will be answered in this study is as follows: What are the prospects of blockchain andeGovernment convergence in optimizing ODA activities in developing countries?

Findings obtained from this scoping review will provide answers to the research question bysynthesizing all available evidence and evaluating the quality of the evidence in line with the PRISMA-ScR protocols. The paper consists of an introduction section which gives a general background and overview of theresearch, as well as the rationale for the study and research question; the methods section which describesthe different actions taken to complete the study, the results section has a charted summary of the research findings followed by the discussion section which presents the summary of results, limitations and conclusion.

II. METHODS

To provide an overview of the extant literature in the topic and explore studies that can provide answers to the research question, this study followed the Preferred Reporting Items for Systematic reviews and Meta-Analysis extension for Scoping Reviews (PRISMA- ScR) checklist 2020 [23], the PRISMA-ScR protocol was designed by the Joanna Briggs Institute (JBI) withexperts specifically for this kind of study [24].

Searches were conducted to access the available literature in the area, the search terms were identified and keyword search conducted across five different databases which were: google scholar, Web of Science, Wiley, PubMed and Plos. This was done after thesearch criteria were specified, followed by setting the search expressions, screening and analysis of extracteddata. The search criteria included specified inclusion and exclusion criteria which indicated the language, title and abstract, publication type and date as well as the full text reviews, as follows:

Language: *English*
Publication type: *Conference and journal articles, government reports, blog posts, book chapters andother grey areas and literature.*
Date of Publication: *2008-18-31 to 2023-06-30*
Title & abstract: *All or at least two keywords found inthe title: Blockchain, eGovernment, ODA and/or any other*

synonyms.

Full text: *Must be within the scope of ODA, social services, humanitarian services and/or any other synonyms.*

The rationale for these criteria were as follows: the considered date was from when the bitcoin white paperby Satoshi Nakamoto was released, as it was the first application of the blockchain technology; to the month prior to when this research was initiated. Also, the main concepts were the blockchain and eGovernment convergence or integration, while the outcome and population were to optimize ODA in developing countries.

Firstly, a search was conducted with a combination of all the keywords, but there was no result, thus, the need to refine it to display results for each keyword, combined or at least two keywords instead of all at once. When this was done, the search expression was iteratively revised to accommodate the synonyms and variations of the main keywords. E.g., Blockchain OR (blockchain technology, smart contracts, DLT); eGovernment OR (government, governance, E- governance, e-Government; ODA OR (Official Development Assistance, social services, humanitarianservices, technical cooperation, foreign aid).

These keyword reviews and revisions were done to increase the precision of the search result relativeto the study objective. On completing the search steps earlier described, a total of 290 articles were found. These articles included journal articles, conference papers/proceedings, book chapters, blogs and other related articles that were found including unpublished peer reviewed/published papers and grey literature; this is permitted in scoping reviews to provide a morepublication-bias-free outcome, since it is believed that scoping reviews are only necessary if the studied area aims to identify research gaps, present recommendations for further research, there are usuallyfew formally or published peer-reviewed journal publications in the studied area, thus, including grey literatures is very vital to scoping reviews [25, 26].

III. RESULTS

The searched literature were saved in the Zotero [27] -an efficient referencing tool, where references were later screened for duplicates before being exported to Rayyan [28] – a powerful AI tool used for performing scoping reviews. This enabled the authors to independently conduct the scoping review process in line with agreed criteria and protocol of PRISMA-ScR [23] to minimize the risk of bias.

During the review process, from title to abstract and full text reviews, there were different conflict and disagreements by the reviewers which were resolved after deliberations, thus, at the end of the screening process, the initial number of 290 articles found from the initial search which was so general reduced to 170 after the first revised review, then further reduced to 149 after the exclusion of duplicates and to 64 after theabstract and full text reviews. Of the 64 articles, only 4 articles met the inclusion criteria since the rest were outof the scope of the current study. These criteria were iteratively revised by the authors to ensure minimal bias and meaningful conclusion. The summary of the searchand selection process are presented in figure 1 below:

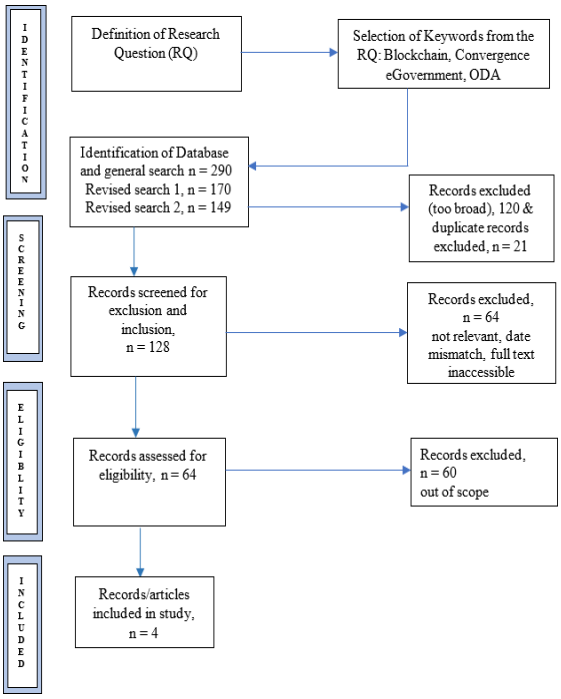

Fig. 1: Flow of the Study search and selection process

From the results, the authors observed that although there are several prospects and applications of blockchain converged with e-government in different fields published in conferences, peer reviewed journalsand book chapters; those on ODA, foreign aid or humanitarian services to developing countries wereonly seen in blogs and reports of internationalorganisations and were very limited. Also, the application of blockchain in the context of the includedstudy incorporates eGovernment, since it describes theprocess of deploying ICTs (the Blockchain technology)to improve public services, which in this case is on ODA, social impact, humanitarian sector and development aid programmes.

The included studies highlighted the benefits of blockchain in aid, ODA and humanitarian sector. Theyalso pointed out some hinderances to the use of blockchain in the aid and humanitarian sector despite the known impacts of the technology as well as some recommendations to organisations. The studies that satisfied the inclusion criteria were processed for data extraction and the summary is presented in table 1 below:

Table 1: Summary of included studies [29, 30, 31, 32]

Article title	Authors	Journal	Date of Publication	Population	Context	Concept	Methodology	Outcomes	Key Findings
Blockchain For Social Impact n Aid and Development	[29]	Journal of International Humanitarian Action	26/10/2018	Aid sector	Humanitarian actions and development aid	Blockchain	Essay and Surveys	Recommendation on steps to be taken to implement the blockchain system especially in the humanitarian sector, to include having carefully selected implementation choices, clear ethical guidelines, common M&E framework.	The blockchain technology has great potentials if applied including in the humanitarian sector
Blockchain humanitarianism and crypto-colonialism	[30]	Patterns	12/01/2022	Humanitarian sector	humanitarianism and crypto-colonialism	Blockchain	Not explicit, but author uses argumentation, Debate and conceptualisation in the study	Rather than just promote the idea of the blockchain technology in humanitarian sector for hidden personal gains, the political barriers should be tackled by having NGO, PPP, developers and the government should deeply consider the impact on the environment and how the political tussles can be minimised if not eliminated	The successful implementation of blockchain technology in humanitarian sector has been limited by political factors, addressing such issues would break more barriers in the application of the blockchain the humanitarian sector.
Blockchain For Social Impact n Aid and Development	[31]	Humanitarian Advisory Group	14/04/2020	Social impact	Aid development	Blockchain	Not explicit but the author used a narration and story telling method to share the research	Blockchain usage examples in the humanitarian sector as well as the recommendation to still take conscious actions towards ensuring the security of the systems. Recommends the continuous use and integration of the blockchain technology	In the humanitarian sector, blockchain can be efficient for data autonomy and management, transparent processes, crowdfunding, tracking supply chains, coordination and boost humanitarian financing, manage information
Blockchain for Humanitarian action and Development aid (Major infectious diseases)	[32]	The International Bank for Reconstruction and Development / The World Bank	2017	Tuberculosis patients	Healthcare	Blockchain	Randomaise Controlled Trials	Proposed the implementation of a blockchain based health-system to monitor the process of TB interventions and distribution of relief materials.	Despite the amount spent on TB vaccines and chemotherapy, it has remained a major cause of death globally (death caused by infectious diseases

IV. DISCUSSION

Blockchain technology and eGovernment offer huge opportunities for businesses to optimize their processes, the public sector can particularly leverage on the opportunities provided by these technologies to improve their productivity, optimize processes, increase transparency and increase the trust of citizens in government. The use of the blockchain in the publicsector is so broad, from managing health care [33] to education [34], climate change [35, p. 10], land title registration [36], to running the entire public administration of a government [8]. Specifically, OECD, DAC and technical aid providers as well as other foreign aid providers to developing countries can use this technology to redeem the rather "sorry state of aid" in developing countries especially in Africa [21, 22]; and can enable more developing regions to transition into developed like it happened in SouthKorea, Czech Republic, Poland and the Unites Arab Emirate and a few other countries [37, 38, 39]. These sorts of individual prosperity can collectively lead to the actualization of the SDGs as expected, since the gapbetween developed and developing economies will be decreased and global partnerships as well as peaceful coexistence will be promoted.

Study limitations: The limitations identified in the course of this study were that:

i. Since no assessment of the methodological quality of the includedstudies is generally performed in this study, there is a need to conduct a systematic study which is more thoroughfor more evidence.

ii. Also, the heterogeneity of the data used inthis study can result in a measurement bias and can lead to inaccurate mapping of the existing data in the prospects of blockchain technology converged with eGovernment for the optimization of ODA activities in developing countries.

iii. Some of the included articles are not published journal articles, while others are systematic studies; thus, the results might be insufficient do draw meaningfulconclusions, implying the need for a systematic review with a larger scope to follow this study.

V. CONCLUSION AND FUTURE STUDIES

The prospects and potential benefits of using a blockchain system converged with eGovernment has impacted different areas in the public sector. Since the release of the bitcoin white paper in October 2008 till June 2023, various studies have been conducted to highlight these prospects and challenges, to provide recommendations to organisations and developsolutions that can help them incorporate the potentials of the blockchain with their businesses.

Studies have identified different applications of blockchain and eGovernment and how it can be beneficial to the public sector, however, the applicationon how it can improve ODA activities in developing countries is limited. Considering how impactful such studies can be to driving decisions on the entire development aid value chain and sustainable development goals; this implies a study gap that needsto be bridged to enable the optimization of ODA and foreign aid provision and intervention programs by the OECD through DAC to developing economies. The authors recommend the conduct of a systematic review in future studies (since it is more comprehensive than a

scoping review) of articles published, empirical studies and peer-reviewed journal articles on foreign aid to developing countries in general, it should not only be limited to theinterventions by OECD, but development assistance across different global offices including the United Nations, World Bank, International Monetary Fund (IMF), International Economic Development Council (IEDC). Such research can serve as a guide to policy and decision makers in enacting policies that can ensure result oriented and impactful aid activities in developing countries, further contributing to the SDGs.

VI. CONFLICT OF INTERESTS

The authors declare that they have no conflicting interest in this work and there is no external or internal influence on the results of the study.

REFERENCES

[1] E. Abodei, A. Norta, I. Azogu, C. Udokwu, and D. Draheim, "Blockchain Technology for Enabling Transparent and Traceable Government Collaboration in Public Project Processes of Developing Economies," presentedat the Digital Transformation for ASustainable Society in the 21st Century, I. Pappas, P. Mikalef, Y. Dwivedi, L. Jaccheri, J. Krogstie, and M. Mantymaki, Eds., 2019, pp. 464–475. doi: 10.1007/978-3-030-29374-1_38.

[2] I. Merrell, "Blockchain for decentralised rural development and governance," *Blockchain: Research and Applications*, vol. 3, no. 3, p. 100086, Sep. 2022, doi: 10.1016/j.bcra.2022.100086.

[3] A. Dubey, "Here is everything you need to know about BlockChain | ESDS," Apr. 17, 2018. https://www.esds.co.in/blog/everything-need-know-blockchain/ (accessed Mar. 28, 2023).

[4] J. Beyers, "Everything You Need to Know About Blockchain Technology," *EuroScientist journal*, Jan. 20, 2022. https://www.euroscientist.com/everything-you-need-to-know-about-blockchain-technology/ (accessed Jul. 25, 2023).

[5] U. Ekanem and Y.-S. Kim, "Empirical Study of Factors Influencing Adoption of Blockchain Technology Converged with E-Government in Nigerian Public Sector," *International Journal of Contents*, vol. 19, pp. 67–81,Mar. 2023, doi: 10.5392/IJoC.2023.19.1.067.

[6] K. J. Bwalya, *The e-government development discourse: analysing contemporary and future growth prospects in developing and emerging economies*. AOSIS, 2018.

[7] I. Lykidis, G. Drosatos, and K. Rantos, "The Use of Blockchain Technology in e-Government Services," *Computers*, vol. 10, no.12, Art. no. 12, Dec. 2021, doi: 10.3390/computers10120168.

[8] S. Khan, M. Shael, M. Majdalawieh, N. Nizamuddin, and M. Nicho, "Blockchain for Governments: The Case of the Dubai Government," *Sustainability*, vol. 14, no. 11, Art. no. 11, Jan. 2022, doi:10.3390/su14116576.

[9] M. Khayyat, F. Alhemdi, and R. Alnunu, "The Challenges and Benefits of Blockchain in E-government," *Int. J. Comput. Sci. Netw. Secur*, vol. 20, pp. 15–20, 2020.

[10] K. Vassil, "Estonian e-Government Ecosystem".

[11] A. Cheshmehzangi, "ICT for Low Levels of Corruption in Cities: From ICT Diffusion to Sustainable Justice and Achieving just Communities," in *ICT, Cities, and Reaching Positive Peace*, A. Cheshmehzangi, Ed., in Urban Sustainability. Singapore: Springer Nature, 2022, pp. 177–196. doi: 10.1007/978-981-19-3167-3_9.

[12] C. Alexopoulos, Y. Charalabidis, M. A. Loutsaris, and Z. Lachana, "How Blockchain Technology Changes Government: A Systematic Analysis of Applications," *International Journal of Public Administrationin the Digital Age*, vol. 8, no. 1, pp. 1–20, Aug.2021, doi: 10.4018/IJPADA.20210101.oa10.

[13] S. Grimmelikhuijsen, "Linking transparency, knowledge and citizen trust in government: an experiment," *International Review of Administrative Sciences*, vol. 78, no. 1, pp. 50–73, Mar. 2012, doi: 10.1177/0020852311429667.

[14] N. Lopes, H. R. Rao, S. A. McKenna, S. Yang, E. Estevez, and M. Nielsen, "Pannel: Digital Transformation Impact on Society," in *2019 Sixth International Conference on Edemocracy & EGovernment (ICEDEG)*, L. Teran, A. Meier, and J. Pincay, Eds., in International Conference on eDemocracy and eGovernment ICEDEG. New York: IEEE, 2019, pp. 19–21. Accessed: Jul. 17, 2023. [Online]. Available: https://www.webofscience.com/wos/woscc/summary/bc6bc121-ae2e-400f-89f3-f4839a6db768-983f8e8d/relevance/1

[15] G. Herbert and L. Loudon, "The size and growth potential of the digital economy in ODA-eligible countries," 2020.

[16] OECD, *Government at a Glance 2023*. in Government at a Glance. OECD, 2023. doi: 10.1787/3d5c5d31-en.

[17] T. Curristine, Z. Lonti, and I. Joumard, "Improving Public Sector Efficiency: Challenges and Opportunities," *OECD Journal on Budgeting*, vol. 7, no. 1, 2007, doi: 10.1787/budget-v7-art6-en.

[18] "E-Government Development Index (EGDI) leaders 2020," *Statista*. https://www.statista.com/statistics/421580/egdi-e-government-development-index-ranking/ (accessed Sep. 12, 2022).

[19] Transparency International, "Corruption Perceptions Index 2022," Transparency International, ISBN: 978-3-96076-233-1, Jan. 2023. [Online]. Available: www.transparency.org/cpi

[20] "The Most Transparent Countries." https://www.usnews.com/news/best-countries/most-transparent-countries (accessedAug. 15, 2023).
[21] J. Peron, "The Sorry Record of Foreign Aid in Africa | James Peron," Aug. 01, 2001. https://fee.org/articles/the-sorry-record-of-foreign-aid-in-africa/ (accessed Jul. 13, 2023).
[22] D. Moyo, "Why Foreign Aid Is Hurting Africa," *Wall Street Journal*, Mar. 22, 2009. Accessed: Jul. 13, 2023. [Online]. Available: https://www.wsj.com/articles/SB123758895999200083
[23] M. J. Page *et al.*, "The PRISMA 2020 statement: an updated guideline for reporting systematic reviews," *BMJ*, p. n71, Mar. 2021,doi: 10.1136/bmj.n71.
[24] A. C. Tricco, "Scoping reviews: What they are& How you can do them".
[25] J. Adams *et al.*, "Searching and synthesising 'grey literature' and 'grey information' in publichealth: critical reflections on three case studies," *Systematic Reviews*, vol. 5, no. 1, p. 164, Sep. 2016, doi: 10.1186/s13643-016-0337-y.
[26] C. U. Library, "Find grey literature - Systematic& scoping reviews - Research Toolkit - Curtin Library." https://researchtoolkit.library.curtin.edu.au/searching/systematic-and-scoping-reviews/find-grey-literature (accessed Aug. 15, 2023).
[27] "quick start guide [Zotero Documentation]." https://www.zotero.org/support/quick_start_gui de (accessed Aug. 15, 2023).
[28] "Rayyan - AI Powered Tool for Systematic Literature Reviews," Nov. 08, 2021. https://www.rayyan.ai/ (accessed Aug. 15, 2023).
[29] B. R. Bloom *et al.*, "Blockchain for humanitarian action and development aid," in *Major Infectious Diseases*, K. K. Holmes, S. Bertozzi, B. R. Bloom, and P. Jha, Eds., 3rd ed.Washington (DC): c, 2017. Accessed: Jun. 29, 2023. [Online]. Available: http://www.ncbi.nlm.nih.gov/books/NBK52517 4/
[30] T. Riani, "Blockchain for social impact in aid and development," *Humanitarian Advisory Group*, Apr. 10, 2020. https://humanitarianadvisorygroup.org/blockcha in-for-social-impact-in-aid-and-development/ (accessed Jun. 30, 2023).
[31] A. Zwitter and M. Boisse-Despiaux, "Blockchain for humanitarian action and development aid," *Journal of International Humanitarian Action*, vol. 3, no. 1, p. 16, Oct. 2018, doi: 10.1186/s41018-018-0044-5.
[32] O. Jutel, "Blockchain humanitarianism and crypto-colonialism," *Patterns (N Y)*, vol. 3, no.1, p. 100422, Jan. 2022, doi: 10.1016/j.patter.2021.100422.
[33] Md. S. Islam, M. A. B. Ameedeen, Md. A. Rahman, H. Ajra, and Z. B. Ismail, "Healthcare-Chain: Blockchain-Enabled Decentralized Trustworthy System in Healthcare Management Industry 4.0 with Cyber Safeguard," *Computers*, vol. 12, no. 2, p. 46, Feb. 2023, doi: 10.3390/computers12020046.
[34] M. Sarala and B. L. Muralidhara, "A survey on blockchain-based student certificate management system," presented at the 14th International Conference on Theory and Practice of Electronic Governance (ICEGOV 2021), E. Loukis, M. Macadar, and M. Nielsen, Eds., 2021, pp. 44–50. doi: 10.1145/3494193.3494199.
[35] J. Thomason *et al.*, "Chapter 10 - Blockchain—Powering and Empowering the Poor in Developing Countries," in *Transforming Climate Finance and Green Investment with Blockchains*, A. Marke, Ed., Academic Press, 2018, pp. 137–152. doi: 10.1016/B978-0-12- 814447-3.00010-0.
[36] Ngoc-Hoa Nguyen, Binh Minh Nguyen, Thanh-Chung Dao, Ba-Lam Do, and IEEE, "Towards Blockchainizing Land Valuation Certificate Management Procedures in Vietnam," presentedat the 2020 RIVF International Conference on Computing & Communication Technologies (RIVF2020), 2020, pp. 316–321.
[37] "From aid recipient to donor: Korea's inspirational development path," Dec. 02, 2021. https://blogs.worldbank.org/eastasiapacific/aid-recipient-donor-korea-inspirational- development-path (accessed Aug. 15, 2023).
[38] C. Provost, "OECD donors consider pulling plug on aid to richer developing countries," *The Guardian*, Mar. 12, 2014. Accessed: Aug. 15, 2023. [Online]. Available: https://www.theguardian.com/global-development/2014/mar/12/oecd-donors-aid-middle-income-countries
[39] admin, "The future of overseas aid: the countries projected to graduate from recipientsto donors," *ONE*, Apr. 29, 2014. https://www.one.org/international/blog/the-future-of-overseas-aid-the-countries-projected-to-graduate-from-recipients-to-donors/ (accessed Aug. 15, 2023).