

Review Form 3

Journal Name:	Current Journal of Applied Science and Technology
Manuscript Number:	Ms_CJAST_130623
Title of the Manuscript:	Design and implementation of a system for generating and certifying bank cheques using blockchain
Type of the Article	Original Research Article

PART 1: Comments

	Reviewer's comment	Author's Feedback (Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.	<div><input type="checkbox"/> This article addresses a relevant and contemporary topic by proposing an innovative system that uses blockchain technology to digitize and certify bank cheques.</div> <div><input type="checkbox"/> Its implementation has the potential to significantly impact banking system efficiency, payment security, and the adoption of decentralized technologies.</div> <div><input type="checkbox"/> The work holds considerable implications, particularly for regions with underdeveloped banking infrastructures, where physical processes present significant challenges.</div>	
Is the title of the article suitable? (If not please suggest an alternative title)	<div><input type="checkbox"/> The title is clear and appropriately reflects the content.</div> <div><input type="checkbox"/> If greater specificity is desired, consider: "Development of a Blockchain-Based System for Secure Digital Cheque Certification and Issuance."</div>	I have to change the title, New title : Blockchain-Based System for Secure Generation and Certification of Bank Cheques
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	<div><input type="checkbox"/> The abstract adequately outlines the objectives and methodology, but it would benefit from a brief mention of the results achieved.</div> <div><input type="checkbox"/> Suggestion: Add key advantages, such as processing time optimization and risk elimination associated with physical cheques.</div>	I have to add one sentence in abstract : "The system also optimises processing time and eliminates the risks associated with physical cheques, offering a more secure and efficient alternative."
Is the manuscript scientifically, correct? Please write here.	<div><input type="checkbox"/> The manuscript is technically robust and well-structured.</div> <div><input type="checkbox"/> The explanation of blockchain, smart contracts, and their application to bank cheques is coherent and detailed.</div> <div><input type="checkbox"/> It would be helpful to expand on technical limitations, such as transaction costs (gas fees) and implementation challenges in real-world banking scenarios.</div>	Gas fee limitation is more detailed and an alternative with layer 2 is shortly purposed
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	<div><input type="checkbox"/> The references are varied and relevant, but some are outdated (pre-2018). It is recommended to include recent works (2022–2024) that address advancements in blockchain and smart contracts for financial systems.</div> <div><input type="checkbox"/> Example topics: developments in Layer 2 solutions for Ethereum or private blockchain systems for banking.</div>	I have to add and update references

Review Form 3

<p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p><input type="checkbox"/> The English is understandable but contains grammatical errors and redundant phrases.</p> <p><input type="checkbox"/> Example: "We are offering the drawer of a bank the possibility of issuing a cheque digitally and managing it..." could be rephrased for greater clarity and precision.</p>	<ul style="list-style-type: none">• “We are offering the drawer of a bank the possibility of issuing a cheque digitally and managing it...” : We enable the drawer to digitally issue and manage a cheque.• “The Ethereum blockchain represents a significant advance in distributed ledger technologies. Unlike Bitcoin, which focuses primarily on cryptocurrency transactions, Ethereum provides a platform for the development of decentralised applications through the use of smart contracts.” : The Ethereum blockchain represents a significant advancement in distributed ledger technologies, offering a platform for developing decentralised applications via smart contracts, unlike Bitcoin, which primarily focuses on cryptocurrency transactions.• “Constraints on the use of cheques in the UEMOA and ECOWAS zones are mainly due to vulnerability to fraud, slow authentication and collection processes, and difficulties of access for certain populations. These factors limit its effectiveness as a means of payment. Banks therefore need to strengthen security measures and modernise their infrastructures to speed up verification and collection, thereby reducing financial risks and improving accessibility, particularly for small businesses and people in underserved areas.” : The use of cheques in UEMOA and ECOWAS is constrained by vulnerabilities to fraud, slow authentication and collection processes, and limited access for certain populations. To enhance their effectiveness, banks must strengthen security measures, modernise infrastructure, and improve accessibility for small businesses and underserved communities.• “According to a study by the BCEAO, in 2019, cheques will account for almost 10% of payments in the WAEMU zone and will be used particularly for large-value transactions.” : According to a BCEAO study, cheques accounted for nearly 10% of payments in the WAEMU zone in 2019, particularly for large-value transactions• “an Ethereum development environment or an Ethereum virtual machine (EVM): this is a local Ethereum network, designed for development and enabling contracts to be deployed, tests to be run and code to be debugged on your machine.” : an Ethereum development environment (e.g., EVM) serves as a local network for deploying contracts, running tests, and debugging code during development.• “With the rise of the web through the birth of web 3 with blockchain, the secure use of decentralised web services and technologies offered by the use of blockchain, the possibility of issuing assets in a secure manner and ensuring their continuity and integrity are all advantages to the dematerialisation of cheques” : With the advent of Web 3.0 and blockchain technology, the secure issuance and management of digital assets offer significant advantages for the dematerialisation of cheques, including enhanced security, continuity, and integrity• “IPFS also has an incentive layer known as Filecoin. This layer incentivises nodes around the world to store and retrieve this data. You can use a provider like Infura (which provides you with an IPFS node) or Pinata (which provides an easy-to-use service where you can 'pin' your files to IPFS and take the IPFS hash and store it on the blockchain)” : IPFS includes an incentive layer called Filecoin, encouraging global nodes to
--	---	---

Review Form 3

		<p>store and retrieve data. Providers like Infura (offering IPFS nodes) or Pinata (allowing file 'pinning' to IPFS with blockchain storage) simplify usage.</p> <ul style="list-style-type: none">“We will now look at the various messages sent by the aforementioned actors during the course of the platform's use cases.” : Next, we examine the messages exchanged between actors during platform interactions.“The players identified as being directly involved in our system are mainly: The drawer ... The supervisor can authenticate, assign rights, list requests, list cheques and list users.” : The key stakeholders in our system include: The drawer, who logs in, issues cheques, views requests, and tracks cheque statuses. The manager, who authenticates, approves requests, and lists issued cheques. The cashier, responsible for listing, collecting, and managing cashed cheques. The supervisor, who assigns rights, lists requests, cheques, and users.
<p>Optional/General comments</p>	<p><input type="checkbox"/> The discussion section could include more quantitative data to showcase the results of the system implementation.</p> <p><input type="checkbox"/> Additional visuals, such as process flow diagrams, could enhance clarity and visual presentation.</p> <p>Ethical Concerns: No apparent ethical issues were identified in the manuscript.</p> <p>This manuscript has high scientific and technical value but can be strengthened through minor revisions to language, references, and technical details. I recommend acceptance following the implementation of these suggestions.</p>	<p>I have to include the flow diagram of cheque generation process in the article.</p>

PART 2:

	Reviewer’s comment	Author’s comment <i>(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	