

Review Form 3

Journal Name:	Asian Journal of Research in Computer Science
Manuscript Number:	Ms_AJRCOS_131198
Title of the Manuscript:	Assessing the Effectiveness of Cybersecurity Frameworks in Mitigating Cyberattacks in the Banking Sector and Its Applicability to Decentralized Finance (DeFi)
Type of the Article	

PART 1: Comments

	Reviewer’s comment Artificial Intelligence (AI) generated or assisted review comments are strictly prohibited during peer review.	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.	This document provides an important evaluation of how cybersecurity frameworks deal with cyber attacks in conventional banking systems and their applicability in Decentralized Finance (DeFi). It adds an important aspect of increasingly complex digital finance world by integrating the clash of security approaches between centralized and decentralized finance. The application of more sophisticated statistical methods, such as logistic regression, ANOVA, and Chi-Square testing, adds to the rigidity of the study’s methodology and enhances its usefulness to stakeholders, like policymakers, financial services providers, and cyber security specialists. This study contributes to the body of knowledge on improving the reliability of systems in the financial industry by pointing out the flaws of existing security frameworks and proposing AI-powered threat detection systems alongside some regulatory changes.	Noted
Is the title of the article suitable? (If not please suggest an alternative title)	The current title “Evaluating the Effectiveness of Cybersecurity Frameworks in Mitigating Cyberattacks Within the Banking Sector and Its Applicability To Decentralized Finance (DeFi)” captures the extent of the manuscript effectively. It is clear and informative while revealing the dual context of the study, which is the cyber security focus in conventional banking and its relevance to DeFi. Nonetheless, the title might still be more concise and clear. A possible reduced form can be, “Evaluating Cybersecurity Frameworks, Effectiveness in Banking and Applicability to Decentralized Finance (DeFi).” 3. The abstract of the manuscript is well integrated and describes the purpose, methods, main findings, and suggestions of the study coherently. It summarizes clearly about the effectiveness of the cyber security frameworks in the banking sector and its applicability within the scope of DeFi. Including statistical measures like the cited p values and F-statistics greatly enhances the credibility of the study and indicates its reliance on quantitative data. Strengths: Distinction and Composition - The abstract describes in sequence the research aim, methodology, key verdicts, and the outcomes within the framework of self-contained clarity and logic, so that the essence of the study can be easily understood.	Revision amended

Review Form 3

<p>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.</p>	<p>The summary of the document is complete and in proper order as it outlines the purpose, procedures, key findings, and suggested actions in the most orderly manner. It explains how traditional banking is done and how DeFi integrates with it, focusing on cybersecurity frameworks. The study becomes more credible and emphasizes its quantitative nature because of the presented statistical measures like p-values and F-statistics.</p> <p>Strengths:</p> <p>The summary has definite parameters set within which the research objectives, methodology, and key results, along with conclusions have been articulated such that they are easy to understand balancing clarity and logic which makes it convenient to grasp the significance of the study.</p> <p>This abstract shows how compliance, AI-based threat detection, and security audits are relevant in the DeFi sector, which is equally important for the IT and finance domains.</p> <p>Example Inclusion:</p> <p>“Data was obtained from financial sector reports, cyber security incident databases, and DeFi security audits, then analyzed through logistic regression, ANOVA, and Chi-Square tests.”</p> <p>Make the Conclusion Statement More Powerful - The abstract closes effectively, but it could be more powerful by specifying how the findings inform policy, cybersecurity framework, or further research gaps.</p> <p>“Adaptive regulatory frameworks alongside AI-augmented cybersecurity models and specific DeFi security measures are essential to mitigate the continually changing financial cyber threat environment.”</p>	<p>Corrected all</p>
<p>Is the manuscript scientifically, correct? Please write here.</p>	<p>The manuscript displays a well-defined, methodologically sound analysis of assessing the cybersecurity frameworks efficacy against cyberattacks within the banking industry and its relevance to Decentralized Finance (DeFi). The research design is multifaceted, comprising logistic regression, ANOVA, Chi-Square tests, hierarchical clustering and ARIMA modeling, which allow for adequate and comprehensive evaluation of the cybersecurity constructs.</p> <p>Strengths:</p> <p>Clear Research Objectives - The manuscript justifiably aims at addressing the gap of comparison between cybersecurity frameworks employed in traditional banking and DeFi, which is crucial to the changingscape of digital finance.</p> <p>Robust Methodology - Use of sophisticated statistical methods (logistic regression, ANOVA, ARIMA) has empirically substantiated the findings and added credibility to the quantitative aspects of the study.</p> <p>Thorough Literature Review - The manuscript presents a comprehensive analysis of various existing cybersecurity frameworks (e.g. NIST CSF, ISO/IEC 27001, PCI-DSS) and critiques their applicability within the banking security environment, which enhances the constructs of the study.</p> <p>The manuscript displays scientific diligence and adds to the body of knowledge on the cybersecurity issues of both classical and centralized financial systems. After a few changes, especially with respect to explaining statistical inconsistencies, AI discussions, and tailoring security recommendations for DeFi, the manuscript will become a noteworthy piece in cybersecurity research.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p>	<p>The references are fresh with many from 2022-2024</p>	

Review Form 3

Is the language/English quality of the article suitable for scholarly communications?	Yes	
<u>Optional/General</u> comments		

PART 2:

	Reviewer’s comment	Author’s comment (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)
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	