

Review Form 3

Journal Name:	Asian Journal of Advanced Research and Reports
Manuscript Number:	Ms_AJARR_125647
Title of the Manuscript:	Data engineering of loyalty card data in the retail, banking, and travel & hospitality industries
Type of the Article	Original Research Article

General guidelines for the Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guidelines for the Peer Review process, reviewers are requested to visit this link:

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PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.	<p>The manuscript titled "Data engineering of loyalty card data in the retail banking and travel & hospitality industries" is significant for the scientific community as it explores how companies leverage personal and transactional data from loyalty cards to drive business strategies. It provides a comprehensive view of data engineering across different sectors and addresses the economic, social, and ethical implications of using such data. The research also highlights key regulatory frameworks, offering valuable insights into compliance with data protection laws like GDPR and CCPA.</p> <p>I appreciate this manuscript for its multidisciplinary approach, which blends data science with real-world business applications. It meticulously addresses the ethical challenges and vulnerabilities of data security while providing practical insights for industry practices. However, the manuscript could further elaborate on the limitations of loyalty card data analytics, especially regarding bias and system integration across industries.</p>	
Is the title of the article suitable? (If not please suggest an alternative title)	<p>The current title of the article, "Data engineering of loyalty card data in the retail banking and travel & hospitality industries," is informative but could be made more concise and engaging. The focus on "data engineering" is relevant, but the inclusion of industry specifics could be streamlined to capture a broader audience interested in both data science and its practical applications.</p> <p>A more suitable title could be: "Data Engineering and Privacy Challenges in Loyalty Card Programs: Insights from Retail, Banking, and Hospitality"</p>	

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<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 abstract of the article provides a good overview of the topic, discussing the use of loyalty card data across industries like retail banking, travel, and hospitality. It effectively outlines the key themes, including targeted marketing, customer retention, regulatory compliance (GDPR and CCPA), and security vulnerabilities. However, the abstract can be made more comprehensive with some adjustments.</p> <p>Suggestions for improvement:</p> <ol style="list-style-type: none"> Clearer objective statement: The abstract introduces various aspects of loyalty card data but does not clearly state the main objective or research question of the article. A concise sentence summarizing the research goal would strengthen the focus. Emphasize key findings: While the abstract mentions general industry practices, it could benefit from highlighting specific findings or insights derived from the research. For example, what major differences were found between industries or what significant vulnerabilities were identified? Regulatory compliance details: The mention of GDPR and CCPA is good, but briefly stating how companies are handling compliance or what challenges they face would add more depth. Remove repetitive phrases: Phrases like "ultimately it assesses" could be rephrased to be more direct and concise. <p>Revised abstract suggestion:</p> <p>This paper explores the data engineering practices surrounding loyalty card programs in the retail banking, travel, and hospitality industries. It examines how businesses use personal and transactional data to enhance customer retention and gain competitive advantages. The research highlights industry-specific practices, regulatory frameworks (such as GDPR and CCPA), and the security measures adopted to protect Personally Identifiable Information (PII). Key insights into how data is leveraged for targeted marketing and the persistent vulnerabilities in data protection systems are also discussed. The study provides a comprehensive view of the ethical, economic, and strategic implications of loyalty card data on modern businesses and consumers.</p> <p>This revision makes the abstract more targeted, improves clarity, and highlights important findings.</p>	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>The current structure is solid, but by reorganizing the content into clearer, more distinct subsections, it can become more reader-friendly and enhance the logical flow.</p>	
<p>Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.</p>	<p>The manuscript appears to be scientifically robust and technically sound due to its methodical approach to analyzing loyalty card data across various industries. The inclusion of clearly defined research questions, supported by relevant datasets from multiple sectors, indicates that the authors have employed a solid empirical basis for their conclusions. The analysis also adheres to industry standards for data privacy and security, specifically referencing regulatory frameworks like GDPR and CCPA, which adds credibility to the findings. Additionally, the use of data engineering techniques and visualization tools, such as Power BI for data cleaning and analysis, demonstrates technical rigor and ensures that the results are both reliable and replicable.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p> <p>:-</p>	<p>The references in the manuscript are generally sufficient, but there are areas where the inclusion of more recent and diverse sources could enhance the credibility and depth of the research. While the manuscript references critical sources such as GDPR regulations and notable examples like British Airways' data breach, some references, particularly those from 2007 and 2014, are relatively outdated given the rapid developments in data engineering and privacy laws.</p> <p>Suggested additions:</p> <ul style="list-style-type: none"> Recent articles on AI and machine learning in customer data analytics, which have seen increased application in loyalty programs. Studies on post-GDPR challenges faced by businesses in different industries. Cybersecurity advancements in protecting Personally Identifiable Information (PII) over the last few years. 	

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Minor REVISION comments	Yes	
Is the language/English quality of the article suitable for scholarly communications?		
<u>Optional/General</u> comments	Yes, there are ethical issues discussed in the manuscript. Specifically, the manuscript addresses the ethical concerns related to the collection, use, and potential misuse of Personally Identifiable Information (PII) through loyalty card programs. It also highlights issues such as data privacy, customer consent , and compliance with data protection regulations like GDPR and CCPA. These concerns underscore the ethical responsibility of businesses in handling sensitive customer data securely and transparently.	

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>	No

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