

## Review Form 1.7

Journal Name:	<b>Asian Research Journal of Mathematics</b>
Manuscript Number:	<b>Ms_ARJOM_118177</b>
Title of the Manuscript:	<b>A Comprehensive Study of Sales Predictions Using Time Series Analysis: Case Study- Walmart Sales</b>
Type of the Article	<b>Original Research Article</b>

### **General guideline for 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 guideline for Peer Review process, reviewers are requested to visit this link:

(<https://www.journaljeai.com/index.php/JEAI/editorial-policy> )

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**PART 1: Review Comments**

	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)
<p><b>Compulsory</b> REVISION comments</p> <ol style="list-style-type: none"> <li>1. <b>Is the manuscript important for scientific community?</b> (Please write few sentences on this manuscript)</li> <li>2. <b>Is the title of the article suitable?</b> (If not please suggest an alternative title)</li> <li>3. <b>Is the abstract of the article comprehensive?</b></li> <li>4. <b>Are subsections and structure of the manuscript appropriate?</b></li> <li>5. <b>Do you think the manuscript is scientifically correct?</b></li> <li>6. <b>Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</b></li> </ol> <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<ol style="list-style-type: none"> <li>1. <b>Yes, the manuscript is suitable for scientific community. It will provide the knowledge bank about the millet trend in India over the period of time of the dataset.</b></li> <li>2. <b>Yes, the article title is suitable.</b></li> <li>3. <b>Yes, the abstract is comprehensive.</b></li> <li>4. <b>Yes. Nevertheless, the subsections Materials and Methods must be separated.</b></li> <li>5. <b>Yes, the manuscript is scientifically correct.</b></li> <li>6. <b>Yes, the reference is sufficient and recent.</b></li> </ol> <p>I recommend to the author to take the comments made in the manuscript into account while correcting it.</p>	
<p><b>Minor</b> REVISION comments</p> <ol style="list-style-type: none"> <li>1. <b>Is language/English quality of the article suitable for scholarly communications?</b></li> </ol>	<p><b>Yes, the language is suitable.</b></p>	
<p><b>Optional/General</b> comments</p>	<ol style="list-style-type: none"> <li>1. Indicate the aim of the study in the abstract</li> <li>2. Use the following outlines:</li> <li>3. Introduction</li> <li>4. Materials and Methods</li> <li>5. Results and Discussion</li> <li>6. Conclusion and Recommendations</li> <li>7. Separate method development and results.</li> <li>8. MAE and RMSE indicate the same model, that is, both indicate the minimal values for the same best model. So, use one of them.</li> <li>9. <b>“Background”</b> must be part of the introduction. Please merge it with the introduction.</li> <li>10. <b>“Importance of Time Series Analysis in Sales Forecasting”</b> must be a subsection of the introduction.</li> <li>11. <b>“Identification of Trends and Seasonal Patterns, Forecasting Accuracy, Resource Allocation and Inventory Management, Marketing and Promotion Strategies and Budgeting and Financial Planning”</b> must be part of the subsection of Materials.</li> <li>12. <b>“Holiday_Flag, Temperature, Fuel_Price, CPI (Consumer Price Index) and Unemployment”</b> description is not needed in the paper, the time series models used are not multiple linear regression models. Remove them from the paper.</li> <li>13. In <b>“Exploratory Data Analysis (EDA)”</b> and <b>“Time Series Model Building”</b>, separate method development and results. Develop the methods without using the statistics and figures from the results.</li> <li>14. Develop the equations of the models (ARIMA, SARIMA, PROPHET, EXPONENTIAL SMOOTHING and GAUSSIAN PROCESSES).</li> <li>15. In <b>“Model Analysis”</b>, define the model selection process in the methods section.</li> </ol>	

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	Put the gotten values of the model evaluation metric in the Results and Discussion section 16. <b>“Conclusion” and “Future Perspective and Recommendations”</b> must be in the Conclusion and Recommendations section.	
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**PART 2:**

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

**Reviewer Details:**

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