

**Review Form 3**

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|--------------------------|---|
| Journal Name:            | <b>Current Journal of Applied Science and Technology</b>  |
| Manuscript Number:       | <b>Ms_CJAST_123675</b>  |
| Title of the Manuscript: | <b>Integrating Automation and Big Data in Lithium-Ion Battery Manufacturing: A case Study of the Ultium Cells Joint Venture</b> |
| Type of the Article      | <b>Review</b>   |

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**PART 1: Review Comments**

| <b>Compulsory</b> 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> |
|--|---|---|
| <p>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>                        | <p><b>This title is important for better investment of lithium ion battery in the current and future Lithium ion battery business industry. Integrating Automation and Big Data system helps this battery industry get higher attention for big investment and data science since</b> data science is all about how we take data, use it to acquire knowledge, and then use that knowledge to do the following:</p> <ul style="list-style-type: none"> <li>• Make decisions</li> <li>• Predict the future</li> <li>• Understand the past/present</li> <li>• Create new industries/products</li> </ul> <p>The automated system has reduced the cost of battery manufacturing to compete with Internal Combustion Engine (ICE).</p> |   |
| <p>Is the title of the article suitable? (If not please suggest an alternative title)</p>  | <p><b>yes</b></p>   |   |
| <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><b>The abstract don't introduce the topic and don't show the demand that there is interest to write this review why the authors are striving. In addition to this the abstract shall suggest strong view point that can motivate the scientific community to deal with.</b></p>  |   |
| <p>Are subsections and structure of the manuscript appropriate?</p>  | <p><b>The structure of the manuscript missed sections reflecting</b></p> <ol style="list-style-type: none"> <li>1. <b>the case studies such as</b> automating logistics system, Implementing vision system</li> <li>2. mechanisms of Automation and big data that have contributed to Lithium-ion battery manufacturing by enhancing productivity, production efficiency, and quality assurance.</li> <li>3. <b>Requirements such as</b> experienced professional engineers, reliable network system, cost and longer stabilization period</li> </ol>   |   |
| <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><b>The reason why this manuscript is scientifically robust and technically sound is that because it deals on Integrating Automation and Big Data system useful to the battery industry.</b></p>  |   |
| <p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p>   | <p><b>All the references are recent and useful.</b></p>   |   |
| <p><u>Minor</u> REVISION comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p>   |   |   |
| <p><u>Optional/General</u> comments</p>  | <p>If the authors improve this manuscript, it can be useful to the scientific community</p>   |   |

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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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|----------------------------------|-------------------------------------|
| Name:                            | <b>Taame Abraha Berhe</b>           |
| Department, University & Country | <b>Adigrat University, Ethiopia</b> |