

Manuscript: **“The Technology Development and Management of Smart Manufacturing System: A Review On Theoretical and Technological Perspectives”**

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Peer review:

Reviewer 1: Sayeed, A, Texas Tech University, USA

Reviewer 2: Blinded

Reviewer 3: Muaaz Abdul Hadi, TU Graz, Austria

ESJ Manuscript Evaluation Form 2021

This form is designed to summarize the manuscript peer review that you have completed and to ensure that you have considered all appropriate criteria in your review. Your review should provide a clear statement, to the authors and editors, of the modifications necessary before the paper can be published or the specific reasons for rejection.

Please respond within the appointed time so that we can give the authors timely responses and feedback.

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University/Country: Texas Tech University, USA	
Date Manuscript Received: 29-10-2021	Date Review Report Submitted: 19-11-2021
Manuscript Title: The technology development and management of smart manufacturing system: A review on theoretical and technological perspectives	
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Evaluation Criteria:

Please give each evaluation item a numeric rating on a 5-point scale, along with a thorough explanation for each point rating.

<i>Questions</i>	<i>Rating Result</i> [Poor] 1-5 [Excellent]
1. The title is clear and it is adequate to the content of the article.	4
<i>Title is clear and provides the adequate content to the article. I suggested a little change mentioned in the comments to the authors.</i>	
2. The abstract clearly presents objects, methods and results.	5

<i>(Please insert your comments) The abstract is very clear about their work.</i>	
3. There are few grammatical errors and spelling mistakes in this article.	5
<i>The manuscript is written in very good English with very few grammatical errors.</i>	
4. The study methods are explained clearly.	5
<i>It is a review article and authors reviewed recent research works along the long history.</i>	
5. The results are clear and do not contain errors.	5
<i>(Please insert your comments)</i>	
6. The conclusions or summary are accurate and supported by the content.	5
<i>The conclusion of this manuscript supports their content.</i>	
7. The references are comprehensive and appropriate.	5
<i>Authors provided diversified and relevant references</i>	

Overall Recommendation (mark an X with your recommendation) :

Accepted, no revision needed	
Accepted, minor revision needed	4
Return for major revision and resubmission	
Reject	

Comments and Suggestions to the Author(s):

It is review article on the technology development and management of smart manufacturing system which authors explained clearly and provided with the relevant literature review. There is very correction needed.

My comments and suggestions are as below:

1. Authors could consider a little modification of their title such as: The technology development and management of smart **textile** manufacturing system: A review on theoretical and technological perspectives

Authors should mention textile industry early in the article that. First time they mentioned textile industry is on the page 13 under “**Relevance to Global Textile Complex**”

2. The whole manuscript's font is 11 which I find very uncommon. I would suggest authors to use font size as 12.
3. Authors should consider to have space between paragraphs. That makes the article easy to read.
4. Authors uses elaboration of many terminologies after they abbreviate them. After first time mentioned with the elaboration, they should consider using the abbreviation. For example, Diffusion of Innovation (DoI). After first time mentioning the whole, they should only use DoI.
5. Page 3: Rogers (1983) **identified** diffusion as "the process by which an innovation is communicated through certain channels over time among the members of a social system" (p.05).
In this sentence the word identified is not relevant. Author should consider replacing it by defined or explained or any other synonyms.
6. Authors provided definition of many terminologies directly from the previous scholar's reference with quotation marks. For example, Rogers (1983) defined innovation as "'an idea, practice, or object that is perceived as new by an individual or other unit of adoption"
It seems that Roger is the first person who defined what is innovation which is not true. Author should consider restating this in their own word. These implies to any definition they provide across the manuscript.
7. Page 12: "For instance, when any raw material is sent to any unit, the manufacturing unit can **machine** that raw material automatically."
Author should consider to replace the word machine with produce or manufacture or any similar word.
8. Page 13: "Moreover, incorporation of Computer Integrated Manufacturing (CIM) and advanced Enterprise Resource Planning (ERP) provide **it** the usage of computer networks across the interconnected production system by integrating advanced technologies in different functional areas effectively to achieve the goal of the enterprise (Nagalingam & Lin, 1999; Oztemel & Gursev, 2018)."
Authors should remove the word "it" after Enterprise Resource Planning (ERP) provide.
9. Page 13: Manufacturing system is considered to be a significant source of damaging the environment due to its high energy consumption with **low efficiency**.
Authors should clarify what they mean by low efficacy. If a manufacturing system has low efficacy, then that system should be closed

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Reviewer Name: Muaaz Abdul Hadi	
University/Country: TU Graz, Austria	
Date Manuscript Received: 01/12/2021	Date Review Report Submitted: 07/12/2021
Manuscript Title: The technology development and management of smart manufacturing system: A review on theoretical and technological perspectives	
ESJ Manuscript Number: 1134/21	
You agree your name is revealed to the author of the paper: Yes	
You approve, your name as a reviewer of this paper, is available in the “review history” of the paper: Yes	
You approve, this review report is available in the “review history” of the paper: Yes	

Evaluation Criteria:

Please give each evaluation item a numeric rating on a 5-point scale, along with a thorough explanation for each point rating.

<i>Questions</i>	<i>Rating Result</i> [Poor] 1-5 [Excellent]
1. The title is clear and it is adequate to the content of the article.	4
<i>The title is clear and appropriate for a review article</i>	
2. The abstract clearly presents objects, methods and results.	3

<i>The abstract summarizes the article with all sub-headings and pre-conclusions. However, what the researchers have done is explained in only one sentence. The researchers must elaborate their work in additional 2-3 sentences and reduce the introduction part of the abstract.</i>	
3. There are few grammatical errors and spelling mistakes in this article.	4
<i>There are minute errors. Proofreading by a professional could be done to enhance.</i>	
4. The study methods are explained clearly.	3
<i>Since this is a review article, the study methods are not mentioned. However, a flowchart or a separate chapter titled 'approach of study' could be added to explain this point.</i>	
5. The results are clear and do not contain errors.	3
<i>Flowcharts or a process flow diagram is very much necessary to indicate the step-by-step procedure for implementing SMS.</i>	
6. The conclusions or summary are accurate and supported by the content.	4
<i>Yes, but could be improved with the above-mentioned changes</i>	
7. The references are comprehensive and appropriate.	4
<i>The references seem legitimate.</i>	

Overall Recommendation (mark an X with your recommendation) :

Comments and Suggestions to the Author(s):

- First, good summarization of many papers -> good review paper
- The article could be much improved. The lack of figures, tables, flowcharts make the article a bit boring and lengthy at times.
- Flowchart depicting process flow could be added
- Difficult to implement a SMS in a manual manufacturing must be studied
- Consideration of adaptive assembly layouts? (For example, https://doi.org/10.1007/978-3-030-34272-2_23) or cognitive assembly layouts/processes?
- Conclusion must be further elaborated with hard facts.

Comments and Suggestions to the Editors Only:

The comments mentioned must be implemented to ensure acceptance.

