Quality Management Journal

Decision Letter (UQMJ-2020-0032.R1)

From: tom_foster@byu.edu

To: feriafrinaldi@eng.unand.ac.id

CC:

Subject: Quality Management Journal - Decision on Manuscript ID UQMJ-2020-0032.R1

Body: 03-Aug-2020

Dear Dr AFRINALDI:

Ref: Selecting the Best Quality Inspection Alternative Based on the Quality, Economic and Environmental Considerations

Our reviewers have now considered your paper and have recommended publication in Quality Management Journal. We are pleased to accept your paper in its current form which will now be forwarded to the publisher for copy editing and typesetting. The reviewer comments are included at the bottom of this letter. Please email me your author bios. Use prior version of the QMJ as a guide.

You will receive proofs for checking, and instructions for transfer of copyright in due course.

The publisher also requests that proofs are checked through the publisher's tracking system and returned within 48 hours of receipt.

Thank you for your contribution to Quality Management Journal and we look forward to receiving further submissions from you.

Sincerely,
Dr Foster
Editor in Chief, Quality Management Journal
tom_foster@byu.edu

Reviewer(s)' Comments to Author:

Date Sent: 03-Aug-2020

Close Window

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Decision Letter (UQMJ-2020-0032)

From: tom_foster@byu.edu

To: feriafrinaldi@eng.unand.ac.id

CC:

Subject: Quality Management Journal - Decision on Manuscript ID UQMJ-2020-0032

Body: 03-Jun-2020

Dear Dr AFRINALDI:

Your manuscript entitled "Selecting the Best Quality Inspection Alternative Based on the Quality, Economic and Environmental Considerations", which you submitted to Quality Management Journal, has been reviewed. The reviewer comments are included at the bottom of this letter.

The reviewer(s) would like to see some revisions made to your manuscript before publication. Therefore, I invite you to respond to the reviewer(s)' comments and revise your manuscript.

When you revise your manuscript please highlight the changes you make in the manuscript by using the track changes mode in MS Word or by using bold or coloured text.

To start the revision, please click on the link below:

*** PLEASE NOTE: This is a two-step process. After clicking on the link, you will be directed to a webpage to confirm. ***

https://mc.manuscriptcentral.com/qmj?URL_MASK=c3e7a71040194de09692878f0d2601a3

This will direct you to the first page of your revised manuscript. Please enter your responses to the comments made by the reviewer(s) in the space provided. You can use this space to document any changes you made to the original manuscript. Please be as specific as possible in your response to the reviewer(s).

This link will remain active until you have submitted your revised manuscript. If you begin a revision and intend to finish it at a later time, please note that your draft will appear in the "Revised Manuscripts in Draft" queue in your Author Center.

IMPORTANT: Your original files are available to you when you upload your revised manuscript. Please delete any redundant files before completing the submission.

Because we are trying to facilitate timely publication of manuscripts submitted to Quality Management Journal, your revised manuscript should be uploaded by 02-Aug-2020. If it is not possible for you to submit your revision by this date, we may have to consider your paper as a new submission.

Once again, thank you for submitting your manuscript to Quality Management Journal and I look forward to receiving your revision.

Sincerely,
Dr Foster
Editor in Chief, Quality Management Journal
tom_foster@byu.edu

Reviewer(s)' Comments to Author:

Reviewer recommendations and comments:
Reviewer: 1
This paper is indeed a good attempt to compare the different approaches that can be used in quality inspection. The model so developed that are validated in a real-life environment using a case study approach proffers good insights on the efficacy of the model.
However, the authors may want to refine the flow better in terms of structuring it in a more coherent manner. Currently, there seems to be a lot of descriptive text which may put the reader off. The use of tables to present the model and the results would make the paper a lot more interesting to read.
Moreover, the authors are requested to work on the recommendations given in the individual sections of the review.

However, the introduction does not explicitly state why this research is important to address the

issues at hand, though it is implied in the arguments given.

The literature review is quite exhaustive detailing the various works with respect to "No Inspection", "100% Inspection" and "Sampling Inspection". However, the paper does not talk about the gaps in the literature with respect to inspection. The flow of discussions looks a bit incoherent and the paper gets into discussions of the proposed mathematical model without explaining how the previous works form the conceptual basis for the present work. Furthermore, the paper looks very lengthy and some pruning on the unwanted discussions would help the reader to stay interested.

COMMENTS about methodology: The research methodology is certainly appropriate. However, the flow of discussions is found wanting. I suppose that the research methodology is captured in the section "Material and Methods" but the methodology is not well explained. This section needs to be augmented with a lot more clarity on what the paper attempts to do.

The presentation of results needs to be improved. Currently, the proposed mathematical model and the application of the model in a real-life case is presented in the form of protracted, running text. This looks extremely lengthy, uninteresting, and disjointed. There is a need to present the results in a lot more structured manner, perhaps using tables.
Discussions on recommendations for future research is missing in this paper. This section must be added.

Minor typographical or grammatical errors that can easily be corrected

The lengthy discussions on the proposed model can be structured and summarized with additional tables.

Reviewer: 2

2. On page 4, it assumes 100 percent inspection is a measurement of error free to supply perfect products only to customer. This assumption is not always true.
3. The discussion of risks for the internal and external failures in this article is, in fact, the partial impact of type I error and type II error respectively. The author did not explain why the new measurement is better than the traditional method. Moreover, the internal and external failures are not equivalent to internal failure cost and external failure cost respectively.

The Literature Review is not rigorous enough to depict the big issue in acceptance sampling theory to justify the importance of the study. In particular, the author should have discussed other sampling plans, such as double, multiple and sequential sampling and compared the total amount of each required inspection plan with the single sampling plan.

2. The construct of this article focuses on consumer's risk and LTPD. It ignores the acceptable quality level (AQL). LTPD is the poorest level of quality that the buyer is willing to accept in an individual lot. However, the assumption of customer returns whole lot of goods if the defective product in the lot exceeds LTPD is inappropriate. Once the lot exceeds AQL, whole lot will be rejected.
3. On page 16, both expressions of "External failure cost" and the "Environment impact due to external failure" are not true since LTPD is wrongly adopted. For the same reason, equations (3) and (4) for expected total cost and environmental impact are incorrect. Therefore, the proposed model might be invalid.
4. In the case study, n = 677 for a lot of N = 9000 units is much bigger than the sample sizes in ANSI/ASQ Z1.4-2003 that n = 200 (Level 2) or n = 315 (Level 3).
5. It does not prove the proposed model is better than a single sampling plan. Adopted case study is inappropriate method to determine a better model.

The case study argument in Conclusion is better to be moved to the Discussion section.

Once the lot exceeds AQL, whole lot will be rejected.

COMMENTS about figures and tables: The "N" in the first row of Table 2 and 3 should be "n".

The model requests some cost data that are not so easy to be collected in most of companies. Moreover, the result of this article is not applicable since it makes a wrong assumption that consumer returns whole lot of goods if the defective product in the lot exceeds LTPD.

Date Sent: 03-Jun-2020

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