

International Journal on Advanced Science, Engineering and Information Technology

HOME	ABOUT	USER HOME	SEARCH	CURRENT	ARCHIVES	ANNOUNCEMENTS
----------------------	-----------------------	---------------------------	------------------------	-------------------------	--------------------------	-------------------------------

Home > User > Author > Submissions > #11688 > **Summary**

#11688 Summary

SUMMARY REVIEW EDITING

Submission

Authors	Cut Ita Erliana, - Syarifuddin, Ira Monika Br Ginting, Dahlan Abdullah
Title	Redesign Work Method Using Kaizen Engineering
Original file	11688-24372-1-SM.DOC 2020-04-15
Supp. files	None
Submitter	Dahlan Abdullah 
Date submitted	April 15, 2020 - 12:36 AM
Section	Articles
Editor	Rahmat Hidayat 
Abstract Views	17

Status

Status	Published Vol 11, No 1 (2021)
Initiated	2021-02-13
Last modified	2021-02-28

Submission Metadata

Authors

Name	Cut Ita Erliana 
Affiliation	Department of Industrial Engineering, Universitas Malikussaleh, Aceh, Indonesia
Country	Indonesia
Bio Statement	Department of Industrial Engineering
Name	- Syarifuddin 
Affiliation	Department of Industrial Engineering, Universitas Malikussaleh, Aceh, Indonesia
Country	Indonesia
Bio Statement	Department of Industrial Engineering
Principal contact for editorial correspondence.	
Name	Ira Monika Br Ginting 
Affiliation	Department of Industrial Engineering, Universitas Malikussaleh, Aceh, Indonesia
Country	Indonesia
Bio Statement	Department of Industrial Engineering
Name	Dahlan Abdullah 
Affiliation	Department of Informatics, Universitas Malikussaleh, Aceh, Indonesia
Country	Indonesia
Bio Statement	—

Title and Abstract

Title Redesign Work Method Using Kaizen Engineering

Abstract The technique of work procedures is studying techniques and principles to get the best work system design. One of the approaches in Redesign Work is Kaizen Engineering. The main advantage of Kaizen Engineering is increasing productivity, efficiency, and performance through the process of eliminating waste through small and continuous process improvements. One of the redesigns works processes that can be done is in the field of drinking water packaging. This research will be conducted at XYZ Ltd. as a mineral bottled water (in Indonesia known as Bottled Drinking Water / AMDK) company which was established in 1987. According to the observation, it is found that the number of demands is greater than the number of productions. The study's objective is to find out the proposed work method of XYZ Ltd. using kaizen engineering. The purpose is to make the packaging processing time shorter so that the number of produced products increased. Improvement was made by eliminating effective movements, bringing the layer table position closer, and creating a raft table design proposal to make the operators easier in doing their job. The time standard measurement result using the current work method is 70.98 seconds per person per cardboard. The measurement of the proposed work method improvement in the packaging processing decreased standard time to 55.54 seconds. It is 15.44 seconds or 21.75% lesser. This study showed that the proposed standard time could increase the output, reaching 18 boxes per person per hour.

Indexing

Keywords Mineral bottled water; kaizen engineering; motion; redesign work method.

Language en

Supporting Agencies

Agencies —

References

- References**
- V. Veloso de Melo and W. Banzhaf, "Improving the prediction of material properties of concrete using Kaizen Programming with Simulated Annealing," *Neurocomputing*, vol. 246, pp. 25–44, Jul. 2017, doi: 10.1016/j.neucom.2016.12.077.
- M. G. Maarof and F. Mahmud, "A Review of Contributing Factors and Challenges in Implementing Kaizen in Small and Medium Enterprises," *Procedia Economics and Finance*, vol. 35, pp. 522–531, Jan. 2016, doi: 10.1016/S2212-5671(16)00065-4.
- P. Knechtges and M. C. Decker, "Application of Kaizen Methodology to Foster Departmental Engagement in Quality Improvement," *Journal of the American College of Radiology*, vol. 11, no. 12, Part A, pp. 1126–1130, Dec. 2014, doi: 10.1016/j.jacr.2014.08.027.
- Y. Mano, J. Akoten, Y. Yoshino, and T. Sonobe, "Teaching KAIZEN to small business owners: An experiment in a metalworking cluster in Nairobi," *Journal of the Japanese and International Economies*, vol. 33, pp. 25–42, Sep. 2014, doi: 10.1016/j.jjie.2013.10.008.
- A. Kapur et al., "Improving Efficiency and Safety in External Beam Radiation Therapy Treatment Delivery Using a Kaizen Approach," *International Journal of Radiation Oncology*Biophysics*, vol. 96, no. 2, Supplement, p. S73, Oct. 2016, doi: 10.1016/j.ijrobp.2016.06.186.
- H. A. Tetteh, "Kaizen: A Process Improvement Model for the Business of Health Care and Perioperative Nursing Professionals," *AORN Journal*, vol. 95, no. 1, pp. 104–108, Jan. 2012, doi: 10.1016/j.aorn.2011.11.001.
- M. P. D. Robert, *One Small Step Can Change Your Life: The Kaizen Way*, First Printing edition. New York: Workman Publishing Company, 2014.
- S. Kumar, A. K. Dhingra, and B. Singh, "Process improvement through Lean-Kaizen using value stream map: a case study in India," *Int J Adv Manuf Technol*, vol. 96, no. 5, pp. 2687–2698, May 2018, doi: 10.1007/s00170-018-1684-8.
- G. Alukal and A. Manos, *Lean Kaizen: A Simplified Approach to Process Improvements*. Milwaukee, Wis: ASQ Quality Press, 2006.
- J. P. Womack and D. T. Jones, *Lean Thinking: Banish Waste and Create Wealth in Your Corporation*. London: Simon & Schuster Ltd, 2003.
- T. Grünberg, "A review of improvement methods in manufacturing operations," *Work Study*, Apr. 2003, doi: 10.1108/00438020310462890.
- J. H. Marvel and C. R. Standridge, "Simulation-enhanced lean design process," *Journal of Industrial Engineering and Management*, vol. 2, no. 1, pp. 90–113, Jul. 2009, doi: 10.3926/jiem.v2n1.p90-113.
- W. E. Deming, *Elementary principles of the statistical control of quality;: A series of lectures*, 2nd edition. Tokyo: Nippon Kagaku Gijutsu Remmei, 1952.
- J. M. Juran, L. A. Seder, and F. M. Gryna, Eds., *Quality Control Handbook*. New York: McGraw-Hill Book Company, 1951.
- A. Chakraborty, M. Bhattacharya, S. Ghosh, and G. Sarkar, "Importance of Kaizen Concept in Medium Manufacturing Enterprises.," *International Journal of Management Strategy (IJMS)*, vol. 4, no. 6, pp. 1–11, 2013.
- N. Štefanić, N. Tošanović, and M. Hegedić, "Kaizen workshop as an important element of continuous improvement process," 2012.
- S. Kumar, A. K. Dhingra, and B. Singh, "Kaizen Selection for Continuous Improvement through VSM-Fuzzy-TOPSIS in Small-Scale Enterprises: An Indian Case Study," *Advances in Fuzzy Systems*, Jul. 12, 2018. <https://www.hindawi.com/journals/afs/2018/2723768/> (accessed May 31, 2020).
- V. Gasperz and Avanti, *Lean Six Sigma for Manufacturing and Services*. Bogor: Vinchirsto Publication, 2011.

M. Imai, *Gemba Kaizen: A Commonsense Approach to a Continuous Improvement Strategy*, 2版. New York: McGraw-Hill Professional Pub, 2012.

Y. Monden, *Toyota Production System: An Integrated Approach to Just-In-Time*, 4th Edition, 4 edition. Boca Raton: Productivity Press, 2011.

I. Z. Sitalaksana, *Teknik Perancangan Sistem Kerja*. Bandung: Penerbit ITB, 2006.

D. R. Kiran, "Chapter 11 - Kaizen and continuous improvement," in *Work Organization and Methods Engineering for Productivity*, D. R. Kiran, Ed. Butterworth-Heinemann, 2020, pp. 155–161.

Y. Umeda et al., "Exercise of digital kaizen activities based on 'digital triplet' concept," *Procedia Manufacturing*, vol. 45, pp. 325–330, Jan. 2020, doi: 10.1016/j.promfg.2020.04.025.

International Journal on Advanced Science, Engineering and Information Technology

[HOME](#) [ABOUT](#) [USER HOME](#) [SEARCH](#) [CURRENT](#) [ARCHIVES](#) [ANNOUNCEMENTS](#)

[Home](#) > [User](#) > [Author](#) > [Submissions](#) > [#11688](#) > **Editing**

#11688 Editing

SUMMARY REVIEW **EDITING**

Submission

Authors Cut Ita Erliana, - Syarifuddin, Ira Monika Br Ginting, Dahlan Abdullah 
 Title Redesign Work Method Using Kaizen Engineering
 Section Articles
 Editor Rahmat Hidayat 

Copyediting

REVIEW METADATA	REQUEST	UNDERWAY	COMPLETE
1. Initial Copyedit File: None	—	—	—
2. Author Copyedit File: None <input type="text" value="Browse... No file selected."/> <input type="button" value="Upload"/>	—	—	
3. Final Copyedit File: None	—	—	—

Copyedit Comments  No Comments [COPYEDIT INSTRUCTIONS](#)

Layout

Galley Format	FILE
1. PDF VIEW PROOF	11688-31855-1-PB.PDF 2021-02-26 5
Supplementary Files	FILE <i>None</i>

Layout Comments  No Comments

Proofreading

REVIEW METADATA	REQUEST	UNDERWAY	COMPLETE
1. Author	—	—	
2. Proofreader	—	—	—
3. Layout Editor	—	—	—

Proofreading Corrections  No Comments [PROOFING INSTRUCTIONS](#)

Published by INSIGHT - Indonesian Society for Knowledge and Human Development

International Journal on Advanced Science, Engineering and Information Technology

HOME	ABOUT	USER HOME	SEARCH	CURRENT	ARCHIVES	ANNOUNCEMENTS
----------------------	-----------------------	---------------------------	------------------------	-------------------------	--------------------------	-------------------------------

Home > User > Author > Submissions > #11688 > **Review**

#11688 Review

SUMMARY **REVIEW** EDITING

Submission

Authors	Cut Ita Erliana, - Syarifuddin, Ira Monika Br Ginting, Dahlan Abdullah 
Title	Redesign Work Method Using Kaizen Engineering
Section	Articles
Editor	Rahmat Hidayat 

PeerReview

Round 1

Review Version	11688-24373-1-RV.DOC 2020-04-15
Initiated	2020-05-01
Last modified	2020-05-02
Uploaded file	None
Editor Version	None
Author Version	11688-28099-1-ED.DOC 2020-09-04

Round 2

Review Version	11688-24373-2-RV.DOC 2020-09-05
Initiated	2020-09-05
Last modified	2020-10-15
Uploaded file	None
Editor Version	None
Author Version	11688-28099-2-ED.DOC 2020-12-25

Round 3

Review Version	11688-24373-3-RV.DOC 2020-12-28
Initiated	2020-12-28
Last modified	2020-12-29
Uploaded file	None
Editor Version	None
Author Version	11688-28099-3-ED.DOCX 2021-01-03

Round 4

Review Version	11688-24373-4-RV.DOCX 2021-01-05
Initiated	2021-01-05
Last modified	2021-01-05
Uploaded file	None

Editor Decision

Decision	Accept Submission 2021-01-05
Notify Editor	 Editor/Author Email Record  2021-01-01
Editor Version	None
Author Version	None
Upload Author Version	<input data-bbox="590 272 873 303" type="text" value="Browse... No file selected."/> <input data-bbox="879 272 951 303" type="button" value="Upload"/>

Published by INSIGHT - Indonesian Society for Knowledge and Human Development

Editor/Author Correspondence

Editor Subject: [IJASEIT] Revision Required [DELETE](#)
2020-05-03
05:58 AM Dahlan Abdullah:

We have reached a decision regarding your submission to International Journal on Advanced Science, Engineering and Information Technology, "Redesign Work Method Using Kaizen Engineering in PT Ima Montaz Sejahtera".

Our decision is to: Revision Required

Editor

Reviewer A:

Dear Authors,

Thank you for submitting your manuscript, which was very interesting, and I think with some work would have a valuable contribution to the literature. However, your paper has not met our requirement yet. The number of pages of your paper is only 4 pages. The number of pages should range from 6 to 11 pages, excluding the references.

Good luck!

Sincerely,

International Journal on Advanced Science, Engineering and Information Technology
<http://insightsociety.org/ijaseit/index.php/ijaseit>

Editor Subject: [IJASEIT] Revision Required [DELETE](#)
2020-10-15
06:07 AM Dahlan Abdullah:

We have reached a decision regarding your submission to International Journal on Advanced Science, Engineering and Information Technology, "Redesign Work Method Using Kaizen Engineering in PT Ima Montaz Sejahtera".

Our decision is to: Revision Required

Editor

Reviewer A:

1. The company name does not need to be mentioned
 2. Interpretation of study results needs to be more comprehensive and in-depth by referring to several relevant references
 3. The research contribution needs to be described in the introduction and conclusion
 4. Literature review is added for the latest articles
-

International Journal on Advanced Science, Engineering and Information Technology
<http://insightsociety.org/ijaseit/index.php/ijaseit>

Editor Subject: [IJASEIT] Revision Required [DELETE](#)
2020-12-24
09:11 PM Dahlan Abdullah:

We have reached a decision regarding your submission to International Journal on Advanced Science, Engineering and Information Technology, "Redesign Work Method Using Kaizen Engineering in PT Ima Montaz Sejahtera".

Our decision is to: Revision Required

Please update your abstract into 220-250 words and your reference 70% in (2017-2020)

from journal indexed by Scopus. Citation and Reference in Paper must using Mendeley with IEEE Style.

Please submit your revision in 10 days. More than 10 days of paper will be rejected from the system. Re-upload your revision into journal system NOT via email.

Editor

Reviewer A:

1. The company name does not need to be mentioned
2. Interpretation of study results needs to be more comprehensive and in-depth by referring to several relevant references
3. The research contribution needs to be described in the introduction and conclusion
4. Literature review is added for the latest articles

International Journal on Advanced Science, Engineering and Information Technology
<http://insightsociety.org/ijaseit/index.php/ijaseit>

Editor 2021-01-01 03:04 PM	Subject: [IJASEIT] Accepted with Minor Revision	DELETE
----------------------------------	---	------------------------

We have reached a decision regarding your submission to International Journal on Advanced Science, Engineering and Information Technology, "Redesign Work Method Using Kaizen Engineering in PT Ima Montaz Sejahtera".

Our decision is to: Accepted with Minor Revision

Editor

Reviewer A:

The paper has a more comprehensive description.

I suggest not to mention the name of the company in this article unless the company has formally authorized the publication by mentioning their company name in the article

International Journal on Advanced Science, Engineering and Information Technology
<http://insightsociety.org/ijaseit/index.php/ijaseit>

