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[IJIM] Editor Decision

1 message

Dr Muhammad Shabir Shaharudin <shabir@ump.edu.my>

Wed, Apr 21, 2021 at 1:26 PM

To: Aloysius Haryono <aloysius.haryono@student.sgu.ac.id>, "Tanika Dewi Sofianti, Assoc. Prof. Dr" <tanika.sofianti@squ.ac.id>, "Dena Hendriana, Dr." <dena.hendriana@squ.ac.id>

Aloysius Haryono, Tanika Dewi Sofianti, Assoc. Prof. Dr, Dena Hendriana, Dr.:

We have reached a decision regarding your submission to International Journal of Industrial Management, "Application of HFACS-HFIX Framework in NTSC's Findings and Recommendations: Wamena Air Accidents' Case Study".

Our decision is: Revisions Required

- 1. Why specifically address human factor errors? why not other factors?
- 2. State clearly the gaps and contribution of the paper.
- 3. Compare HFACS Model (Shappell et al., 2003), HFIX Model (Shappell et al., 2007) and your current proposed model.
- 4. Pls explain further Figure 3.
- 5. It would be better if authors can visualize the accident and layer in the proper way.
- 6. Please check all references were cited in the text also available in the list.
- 7. Provide limitation and suggestion of future research.
- 8. Update references 2020 and 2021 from good journals.
- 9. Please proofread to ensure there is grammatical issue in the paper.

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Dr Muhammad Shabir Shaharudin

International Journal of Industrial Management



Dr. Tanika D. Sofianti ST MT <tanika.sofianti@sgu.ac.id>

[IJIM] Editor Decision

1 message

Dr Muhammad Shabir Shaharudin <shabir@ump.edu.my>

Mon, May 17, 2021 at 9:10 PM

To: Aloysius Haryono <aloysius.haryono@student.sgu.ac.id>, "Tanika Dewi Sofianti, Assoc. Prof. Dr" <tanika.sofianti@squ.ac.id>, "Dena Hendriana, Dr." <dena.hendriana@squ.ac.id>

Aloysius Haryono, Tanika Dewi Sofianti, Assoc. Prof. Dr, Dena Hendriana, Dr.:

We have not received an improved manuscript from you after our initial round of peer reviews. We would appreciate it if you could send us the manuscript before 28 May 2021 so that this manuscript can be included in the next upcoming issue.

Below is the previous email with comments from reviewers that need to be addressed:

We have reached a decision regarding your submission to International Journal of Industrial Management, "Application of HFACS-HFIX Framework in NTSC's Findings and Recommendations: Wamena Air Accidents' Case Study".

Our decision is: Revisions Required

Dr Muhammad Shabir Shaharudin Universiti Malaysia Pahang Phone +60183633952 shabir@ump.edu.my

Dr Muhammad Shabir Shaharudin

Reviewer B: Recommendation: Revisions Required

18. Recommendation*

ACCEPT with minor revisions by the author(s)

19. Comments for the author(s)*

Dear authors, thank you for your submission. These are my comments to further improve your work:

- 1) The citation format are seriously flawed. For example, "(Chen et al., 2017) approached the study with HFACS, HFIX, AHP and Zero One Goal Programming (ZOGP) methods for one of near miss incident case study in one commercial flight".....it should be Chen et al (2017) approached the study.....the brackets of the year for all citation format should be observed.
- 2) Research methodology should be detailed out. The background of the pilots, engineers, Air Traffic Controllers (ATC), authority inspector's pilots, and NTSC's investigators should be greatly discussed as demographic analysis.
- 3) Eleven validation experts and practitioners interviewed consist of two engineers, three Air Traffic Controller (ATC), four pilots, and two authority inspector's pilots who have aviation experience in Papua more than ten years and so on is mentioned. The interview analysis and validation analysis should be discussed in the paper. The authors should present the thematic analysis component of the paper.

4) The Literature review can be further expanded. For example, the authors can describe the overview, or accident trend, before coming to the focus of the study.

20. Comments to the editor (if any)*

Dear authors, thank you for your submission. These are my comments to further improve your work:

- 1) The citation format are seriously flawed. For example, "(Chen et al., 2017) approached the study with HFACS, HFIX, AHP and Zero One Goal Programming (ZOGP) methods for one of near miss incident case study in one commercial flight".....it should be Chen et al (2017) approached the study.....the brackets of the year for all citation format should be observed.
- 2) Research methodology should be detailed out. The background of the pilots, engineers, Air Traffic Controllers (ATC), authority inspector's pilots, and NTSC's investigators should be greatly discussed as demographic analysis.
- 3) Eleven validation experts and practitioners interviewed consist of two engineers, three Air Traffic Controller (ATC), four pilots, and two authority inspector's pilots who have aviation experience in Papua more than ten years and so on is mentioned. The interview analysis and validation analysis should be discussed in the paper. The authors should present the thematic analysis component of the paper.
- 4) The Literature review can be further expanded. For example, the authors can describe the overview, or accident trend, before coming to the focus of the study.

Reviewer C: Recommendation: Revisions Required	

18. Recommendation*

ACCEPT without change, apart from any routine editing

19. Comments for the author(s)*

- 1. Emphasize the theoretical contribution/novelty in this study.
- 2. Ensure the APA 7th format is cited accordingly, along with the references
- 3. Highlight the discussions in the results accordingly.
- 4. Kindly send for proofreading for a more solid well-written article.
- 5. Highlight the latest literature only references are within 2016-2019. The rest are quite old.
- 6. Formatting divide the paragraphs to make it just 4-5 sentences in one paragraph.

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ORIGINAL ARTICLE

Application of HFACS-HFIX Framework in NTSC's Findings and Recommendations: Wamena Air Accidents' Case Study

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ABSTRACT – Wamena airport experienced accidents in 2002, 2008, 2009, 2013, 2015, and 2016. All accidents were cargo flights and in approach and landing flight phases. As the Swiss Cheese concept, accident happened when errors penetrated safety defenses' layers in straight line. Structuring NTSC's investigations, under HFACS framework to understand the human factor failures type and HFIX strategy to close the failures by applying the recommendations, need to be done in air accident investigation. Eleven aviation experts and practitioners were interviewed in this study, to validate the framework. There were layers without any failures in accident 2008, 2013, and 2016. Accident in 2016 has no recommendation due operators' safety actions were considered relevant to block failures. Accidents in 2002, 2009, 2013, and 2015 have failure in a layer which intervened by two or more recommendations. There were failures remain open in accident 2002, 2009, 2013, and 2016. Repetitive failure, error or violation of repetitive accidents in 2002, 2009, 2013, 2015, and 2016 is un-stabilized approach and has not been blocked with effective interventions. HFACS and HFIX are useful to framework the accident investigation, preventing similar accident happened in the future.

ARTICLE HISTORY

Received: xxxx Revised: xxxx Accepted: xxxx

KEYWORDS

Swiss Cheese NTSC HFACS HFIX Un-Stabilized Approach

INTRODUCTION

As Swiss Cheese Concept, accident is not caused by single factor but when four all layers: Organizational Influences, Unsafe Supervisions, Precondition for Unsafe Acts, and Unsafe Acts of defenses penetrated in straight line and result in accident (Reason, 1990). An aircraft accident is where an aircraft experienced mishap event and result in aircraft substantial damage and person suffers serious injury or death, incident means occurrence other than accident stated in Civil Aviation Safety Regulation 830 (CASR 830, 2014). The accidents can happen in a route of flight or on an airport, and the study is focusing in air accidents which happened on Wamena airport. Accident in 2002 has been investigated and recommendations have been made by Indonesia National Transportation Safety Committee (NTSC) or Komite Nasional Keselamatan Transportasi (KNKT) but following accidents in 2008, 2009, 2013, 2015, and 2016 happened with similar causes. Wamena's accidents between 2002 until 2017 contributed six accidents of 24 accidents which occurred on the airports all over Papua during that years. Human Factors Analysis Classification System (HFACS) framework (Shappell et al., 2003) as investigation tool to guide identifying failures in each safety defense's layers, and Human Factors Intervention (HFIX) framework is required to intervened the failures from investigation's recommendations or safety actions (Shappell et al., 2007). The significance of the study is done by a 29-year aviation experience practitioner author, two doctorate level co-authors. Eleven validation experts and practitioners interviewed consist of two engineers, three Air Traffic Controller (ATC), four pilots, and two authority inspector's pilots who have aviation experience in Papua more than ten years. The study's objective is to structure the accidents findings and recommendations into these frameworks, analyzing comprehensively for all layers. The expected outcome by identifying the investigation's weaknesses, layers of defense will not be penetrated, and if interventions' action done effectively will result next accidents with similar causes will be avoided.

RELATED WORK

HFACS framework widely used by researchers in aviation, (Efthymiou et al., 2019) studied about fifty Controlled Flight into Terrain (CFIT) between 2007 until 2017. Daramola 2014 analyzed accidents happened in Nigeria between 1985 until 2008 comparing accidents and fatality rates with global average levels using HFACS framework. Harris et al., 2008 studied of 41 accidents in Republic of China (ROC) between 1999 until 2006 frame-working with HFACS. Harris et al., also did a research about 523 military accidents of Republic of China (ROC) Air Force to identify poor pilots training deficiencies with two major causals are errors of judgment and poor decision-making in 2013. Widyanti et al., 2018 analyzing 53 Indonesian air accidents between 2001 until 2012 the incorporating with Hofstede's national cultures with HFACS's framework. In this study the Indonesian characteristics of high collectivistic, low uncertainty avoidance,

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