

Abisia Peer Review

ENGW3302: Project 2

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1 Summary

This paper reviews literature around the use of augmented reality (AR) technology in product manufacturing. It shows how the literature has concluded that AR can be used to modularize manufacturing instruction sets and present information more clearly. It reviews 7 sources and organizes their conclusions into 6 categories: Training Effectiveness, Operator Efficiency, Manufacturing Errors, Intuitiveness of Use, Safety, and Cost. It explains how sources were chosen, and provides a context memo for background knowledge.

2 Major Points

The paper does an excellent job of organizing sources according to their results. The author showcases the important metrics in the field, and the relative importance of the papers is easy to understand as a result. Paragraphs rarely cite fewer than 2 sources which is a good indicator that actual literature review work is being done. The review is notably lacking in figures. It presents information that could be either more effectively presented in a figure, or more easily understood with a figure, “Operators are usually evaluated on the time required to complete the task, as well as the number of errors made.” is one such example. This whole paragraph is another example:

“In terms of reducing errors, three sources found AR to be helpful, with no sources dissenting. Perhaps the most discussed area of AR in these sources was its intuitiveness of use. Most of the sources in this review found this technology to be very usable, even to trainees. The ability of AR to present instructions in a more understandable way is perhaps its most beneficial aspect. Two sources cited AR increase both user safety and a user’s perception of safety, both important aspects to overall productivity. Lastly, the reduction of cost was cited by three sources. ”

The context memo contributes very little in terms of understanding the paper. “Mass Customization” was a necessary term to explain, but the first paragraph does not give the reader any perspective on the field of research. It also redefines AR, which is done in the first sentence of the review.

3 Minor Points

- The introduction does not introduce the piece as a literature review. Something like: “In this paper we will review/summarize/analyze results in ...”
- Last sentence of abstract is convoluted (also should it say six not seven?)
- “reference [6]” can just be “[6]”