Juan Franco

EDD 104, Section 60

Project #: Short Project Title (this will be filled-in next week when you get your project assignment)

**SOURCE:** Yan-pu, Y., Hong-liang, T., & Sheng-jie, J. (2019). Product Design Evaluation Method Using Consensus Measurement, Network Analysis, and AHP. *Mathematical Problems in Engineering*, doi: 10.1155/2019/4042024

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**Research Table**

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| Yan-pu, Y., Hong-liang, T., & Sheng-jie, J. (2019). Product Design Evaluation Method Using Consensus Measurement, Network Analysis, and AHP. *Mathematical Problems in Engineering*, doi: 10.1155/2019/4042024 | | |
| Evaluation\*  Is the source reliable? | Reliability:  [ √] High [ ] Medium [ ] Low | The source can be trusted as the journal is peer reviewed. The information is still current as the article just came out in 2019 during December. |
| Relevance:  [ ] High [√ ] Medium [ ] Low | It is medium relevance as they used a lot of references for the article. Some of the references go back as to 1980. |
| Authority:  [ ] High [√ ] Medium [ ] Low | I say the authority is medium as one of the authors is affiliated with the School of Construction Machinery, Chang’an University. Another of the authors is affiliated with Xi’an Research Institute of China Coal Research Institute. While the last author has no information on his affiliations. The URL is also a .com. |
| Purpose:  [ √] High [ ] Medium [ ] Low | The authors are not biased, as they even state that they have no conflicts of interest. There are no ads or direct links for products. |
| Evidence  What information, facts, figures etc., may be helpful for my project? | Design Alternatives | How to identify and improve the reliability of product evaluation opinions toward design alternatives has an important role in adding additional insurance and reducing uncertainty to successful product design(Yan-pu,2019). |
| Design Process | Identifying problem and requirements, finding design solutions, assessing and recording, and communicating results(Yan-pu,2019). |
| Decision Making | Decisions made in the concept development phase are critical for the success of product development and largely determine the quality, cost, and desirability of the end product(Yan-pu,2019). |
| Analytic Hierarchy Process (AHP) | A structured technique founded by Saaty for analyzing complex decisions, which has been used in many applications related to decision-making problems(Yan-pu,2019). |
| Summary | The article talks about making a better consensus by taking in the opinions of those in the group and allows for the results to reflect what the majority would prefer. With the consensus model it would be possible to help with the inconsistency in peoples’ opinions and find solutions. With the network analysis and the Analytic Hierarchy Process states to help with this process. They are both a technique that allows to value the opinions between the group and then to order them in a way so that the majority of the group will agree to it. | |
| Analysis | This research can be applied to our project as with any project, a group has to first decide what they want to do with it and how to go about it. So people are bound to have different opinions. Using some of the methods stated in this article, it can help come to a consensus. | |