

Accepted Manuscript

Title: Multiple attribute decision-making approach based on dual hesitant fuzzy Frank aggregation operators

Authors: Xiaoan Tang, Shanlin Yang, Witold Pedrycz

PII: S1568-4946(18)30191-1
DOI: <https://doi.org/10.1016/j.asoc.2018.03.055>
Reference: ASOC 4809

To appear in: *Applied Soft Computing*

Received date: 16-10-2017
Revised date: 16-2-2018
Accepted date: 28-3-2018



Please cite this article as: Xiaoan Tang, Shanlin Yang, Witold Pedrycz, Multiple attribute decision-making approach based on dual hesitant fuzzy Frank aggregation operators, *Applied Soft Computing Journal* <https://doi.org/10.1016/j.asoc.2018.03.055>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Multiple attribute decision-making approach based on dual hesitant fuzzy Frank aggregation operators

Xiaoan Tang^{a,b,c*}, Shanlin Yang^{a,b}, Witold Pedrycz^{c,d,e}

^aSchool of Management, Hefei University of Technology, Hefei, Box 270, Hefei 230009, Anhui, P.R. China;

^bKey Laboratory of Process Optimization and Intelligent Decision-making, Ministry of Education, Hefei, Box 270, Hefei 230009, Anhui, P.R. China;

^cDepartment of Electrical & Computer Engineering, University of Alberta, Edmonton T6R 2V4 AB Canada;

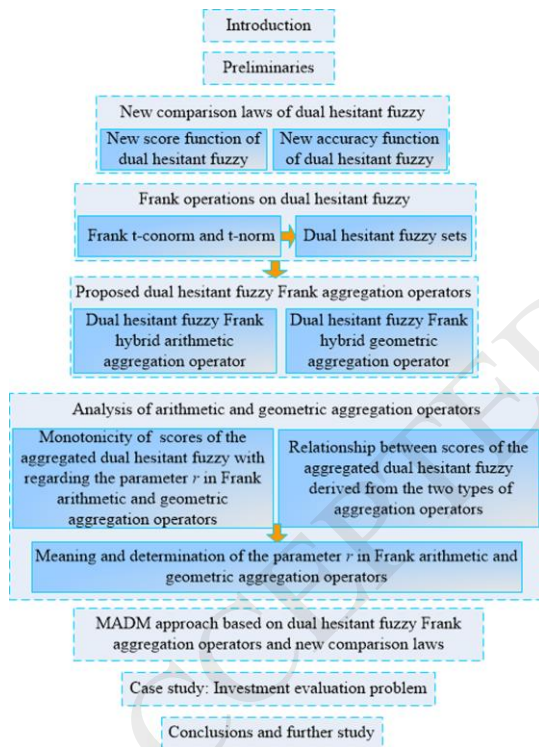
^dDepartment of Electrical and Computer Engineering, Faculty of Engineering, King Abdulaziz University, Jeddah, 21589, Saudi Arabia;

^eSystems Research Institute, Polish Academy of Sciences, Warsaw, Poland

* Corresponding author. Tel: +86 0551 62904930; fax: +86 0551 62905263.

E-mail address: sichuanshengxiaoan@163 (Xiaoan Tang).

Graphical abstract



Highlights

- New score and accuracy functions of dual hesitant fuzzy elements are designed.
- Some Frank operational rules of dual hesitant fuzzy sets are developed.
- Frank hybrid weighted arithmetic and geometric aggregation operators are proposed.
- Monotonicity of the two types of aggregation operators regarding the parameter in Frank operations and

Download English Version:

<https://daneshyari.com/en/article/6903662>

Download Persian Version:

<https://daneshyari.com/article/6903662>

[Daneshyari.com](https://daneshyari.com)