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Evaluating the importance of the weight factors in DEA optimisation

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Abstract: In Data Envelopment Analysis (DEA) efficiency of business units are evaluated based on the general assessment of unit outputs divided by unit inputs. Users can specify those inputs including: Costs of equipment, overhead, salaries, etc. and output can be directly related to revenue or any other non-monetary output such as performance. In order to utilize DEA approach effectively, a decision support tool is also developed to allow DMU decision makers to change input and outputs attributes on the fly and see the change impact on the DMU efficiency. This helps those users understand the value of the DEA analysis and see the change impact resulting from its measurements of DMU efficiency in this data set.