

# Correction to “Quantitative Methods for Tradeoff Analyses”

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There are many popular methods for combining data in a tradeoff study. One of these is forming the product of the scores and weights [Daniels, Werner and Bahill, 2001]. Unfortunately, in this publication the printed formula was wrong.

The equation should have the weights in the exponent, like this:

$$f = \prod_{i=1}^n x_i^{w_i}$$

In this equation,  $n$  represents the number of Figures of Merit (FoMs) that are to be combined,  $x_i$  represents the output of the scoring function for the  $i^{\text{th}}$  FoM and  $w_i$  represents the weight of importance assigned to the  $i^{\text{th}}$  FoM. The Product Tradeoff Function is commonly used for example in computing cost to benefit ratios and in doing risk analyses.

Unfortunately, the published equation on page 195 multiplied the weight times the score, like this:

$$f = \prod_{i=1}^n x_i w_i$$

Formulated like this, the weights have absolutely no effect. We apologize for any confusion this may have caused.

## Acknowledgment

We thank Harley Henning for pointing out this typographical error.

## REFERENCE

- J. Daniels, P. W. Werner and A. T. Bahill, “Quantitative Methods for Tradeoff Analyses,” *System Engineering*, 4(3): 190–212, 2001.