Assignment 1

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Methodology

For this exercise I treated the three cases as discrete, each being an individual modification of the original spreadsheet.

Results

The OMOE of the baseline case (original, unaltered spreadsheet) is the lowest at 0.589. Case A came in third with an OMOE of 0.594. Case C was second with an OMOE of 0.614. And the best overall model as measured by OMOE was Case B at 0.749, a better than 27% improvement over the original model. The results are summarized below.

Case	OMOE
Baseline	0.589
Case A	0.594
Case B	0.749
Case C	0.614

Conclusion

If cost were not a consideration, Case B represents the best selection of the new SLC shop configuration.

It seems that the higher score of Case B is due to the relatively high value of the three affected attributes. On the QFD1, *Endurance* is 4th most heavily weighted. And on QFD3, *CIC*, *Stores*, and *Fuel Storage* (related to *Endurance Range*) are the three most significant attributes.