

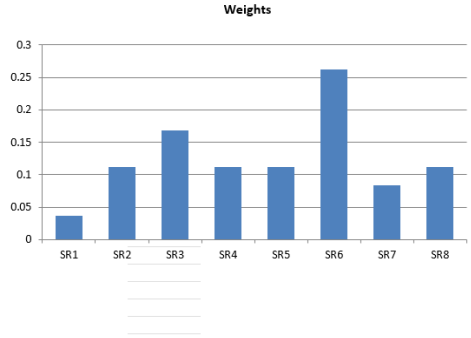
ATTACHMENT

This attachment contains the processing of criteria weighting from raw data on supply risk criteria using the BWM method with solver by Excel

This data starts from taking the criteria scores for each representative company in the supplier sector. then processed with a solver and produces a weighting score in the yellow "weight" column.

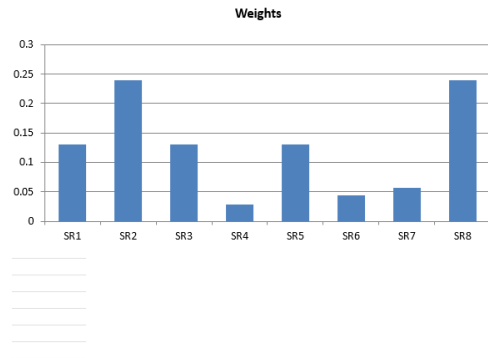
• Expert 1

| Criteria Number = 8 | Criterion 1 | Criterion 2 | Criterion 3 | Criterion 4 | Criterion 5 | Criterion 6 | Criterion 7 | Criterion 8 | |
|---------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--|
| Names of Criteria | SR1 | SR2 | SR3 | SR4 | SR5 | SR6 | SR7 | SR8 | |
| Select the Best | SR6 | | | | | | | | |
| Select the Worst | SR1 | | | | | | | | |
| Best to Others | SR1 | SR2 | SR3 | SR4 | SR5 | SR6 | SR7 | SR8 | |
| SR6 | 5 | 3 | 2 | 3 | 3 | 1 | 4 | 3 | |
| Others to the Worst | SR1 | | | | | | | | |
| SR1 | 1 | | | | | | | | |
| SR2 | 4 | | | | | | | | |
| SR3 | 3 | | | | | | | | |
| SR4 | 2 | | | | | | | | |
| SR5 | 5 | | | | | | | | |
| SR6 | 6 | | | | | | | | |
| SR7 | 4 | | | | | | | | |
| SR8 | 3 | | | | | | | | |
| Weights | SR1 | SR2 | SR3 | SR4 | SR5 | SR6 | SR7 | SR8 | |
| | 0.037383178 | 0.112149533 | 0.168224299 | 0.112149533 | 0.112149533 | 0.261682243 | 0.08411215 | 0.112149533 | |
| Ksi* | 0.074766355 | | | | | | | | |



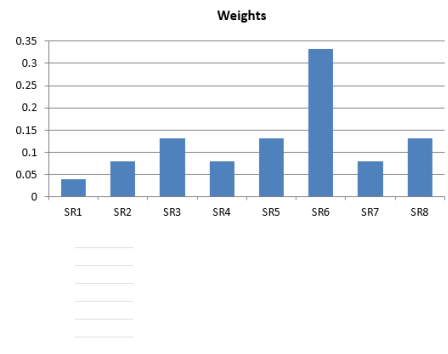
• Expert 2

| Criteria Number = 8 | Criterion 1 | Criterion 2 | Criterion 3 | Criterion 4 | Criterion 5 | Criterion 6 | Criterion 7 | Criterion 8 | |
|---------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--|
| Names of Criteria | SR1 | SR2 | SR3 | SR4 | SR5 | SR6 | SR7 | SR8 | |
| Select the Best | SR2 | | | | | | | | |
| Select the Worst | SR4 | | | | | | | | |
| Best to Others | SR1 | SR2 | SR3 | SR4 | SR5 | SR6 | SR7 | SR8 | |
| SR2 | 3 | 1 | 3 | 3 | 3 | 9 | 7 | 1 | |
| Others to the Worst | SR4 | | | | | | | | |
| SR1 | 3 | | | | | | | | |
| SR2 | 7 | | | | | | | | |
| SR3 | 7 | | | | | | | | |
| SR4 | 1 | | | | | | | | |
| SR5 | 3 | | | | | | | | |
| SR6 | 7 | | | | | | | | |
| SR7 | 7 | | | | | | | | |
| SR8 | 3 | | | | | | | | |
| Weights | SR1 | SR2 | SR3 | SR4 | SR5 | SR6 | SR7 | SR8 | |
| | 0.131153564 | 0.239162381 | 0.131153564 | 0.028288024 | 0.131153564 | 0.043717855 | 0.05620867 | 0.239162381 | |
| Ksi* | 0.15429831 | | | | | | | | |



• Expert 3

| Criteria Number = 8 | Criterion 1 | Criterion 2 | Criterion 3 | Criterion 4 | Criterion 5 | Criterion 6 | Criterion 7 | Criterion 8 | |
|---------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--|
| Names of Criteria | SR1 | SR2 | SR3 | SR4 | SR5 | SR6 | SR7 | SR8 | |
| Select the Best | SR6 | | | | | | | | |
| Select the Worst | SR1 | | | | | | | | |
| Best to Others | SR1 | SR2 | SR3 | SR4 | SR5 | SR6 | SR7 | SR8 | |
| SR6 | 7 | 5 | 3 | 5 | 3 | 1 | 5 | 3 | |
| Others to the Worst | SR1 | | | | | | | | |
| SR1 | 1 | | | | | | | | |
| SR2 | 3 | | | | | | | | |
| SR3 | 3 | | | | | | | | |
| SR4 | 3 | | | | | | | | |
| SR5 | 5 | | | | | | | | |
| SR6 | 7 | | | | | | | | |
| SR7 | 3 | | | | | | | | |
| SR8 | 3 | | | | | | | | |
| Weights | SR1 | SR2 | SR3 | SR4 | SR5 | SR6 | SR7 | SR8 | |
| | 0.03858025 | 0.0787037 | 0.13117284 | 0.0787037 | 0.13117284 | 0.33179012 | 0.0787037 | 0.13117284 | |
| Ksi* | 0.0617284 | | | | | | | | |



Then after obtaining the weighted scores from the three experts, the average calculation is carried out. so that the results obtained are as in the table below

| Criteria | Consistency Value (Ksi*) | | | Average |
|--------------------|--------------------------|----------|----------|---------|
| | Expert 1 | Expert 2 | Expert 3 | |
| <i>Supply Risk</i> | 0.075 | 0.154 | 0.062 | 0.097 |

| Criteria | Criteria Weight | | | Average | Ranking |
|----------|-----------------|----------|----------|---------|---------|
| | Expert 1 | Expert 2 | Expert 3 | | |
| SR1 | 0.037 | 0.131 | 0.039 | 0.069 | 8 |
| SR2 | 0.112 | 0.239 | 0.079 | 0.143 | 4 |
| SR3 | 0.168 | 0.131 | 0.131 | 0.144 | 3 |
| SR4 | 0.112 | 0.028 | 0.079 | 0.073 | 6 |
| SR5 | 0.112 | 0.131 | 0.131 | 0.125 | 5 |
| SR6 | 0.262 | 0.044 | 0.332 | 0.212 | 1 |
| SR7 | 0.084 | 0.056 | 0.079 | 0.073 | 7 |
| SR8 | 0.112 | 0.239 | 0.131 | 0.161 | 2 |

So in the table below we get the weighting values and consistency ratios for the supply risk criteria

| consistency value (ξ^*) | <i>Supply Risk Criteria</i> | | | | | | | |
|-------------------------------|-----------------------------|----------------------|---------------|-----------------------|-------------------------------|---------|-----------|------------------|
| 0.097 | Geographic Location | Product availability | Delivery time | Official Requirements | Number of suppliers available | Quality | Guarantee | Payment Accuracy |
| Weight | 0.069 | 0.143 | 0.144 | 0.073 | 0.125 | 0.212 | 0.073 | 0.161 |

**this calculation also applies to all other criteria*