A) Case factor

1. Case Nature

- Nominal data

2. Dispute amount (follow the category of arbitration Fee only and not the arbitration amount)

- ordinal data

B) Arbitrator factor

1. Seniority of Arbitrator (6/5/8)  
 - Use Maximum years to set as 100%. And extrapolate the rest (0 years = 0% \* a set weight)

- Ordinal data

2. Professional background (9/8/9)  
 - (follow case nature matching the professional background; if match + xx   
 Weight, if not match weight = 0) (1= 100%, 0=0% fixed)

- Is there a fixed number of professional backgrounds?

- nominal data

3. The total cases of being an arbitrator (7/7/7)  
 - Use maximum total cases to set as 100%. And extrapolate the rest ( 0 years = 0% \* a set weight)  
 - ordinal

4. The total cases of being an arbitrator on that nature of dispute (9/9/8)

- Use maximum total cases to set as 100%. And extrapolate the rest ( 0 years = 0% \* a set weight). Follow case nature matching the number of that nature of dispute only.  
- nominal w/ ordinal

- is there a fixed number of nature of disputes?

5. The number of acceptances on that arbitration fee (5/5/4)  
 - Use maximum total cases to set as 100%. And extrapolate the rest ( 0 years = 0% \* a set weight). Follow category of arbitration fee matching the number of that category of arbitration fee only.

- nominal w/ ordinal.

- total accepted = total accepted in 4th factor

6. The case nature of rejected arbitration case (3/5/4)  
 Use no. of rejected cases (arbitrary value decided by Tim set at 10 cases/month) to set the 0% of rejected cases for that arbitrator of that nature of case.

7. The dispute amount range (category of arbitration fee!!!) of rejected arbitration case (3/5/4)

Use no. of rejected cases (arbitrary value decided by Tim set at 10 cases/month) to set the 0% of rejected cases for that arbitrator of that nature of cases

* Factor 4, 5 and factors 6, 7 need to be looked up and matched up according to the given spreadsheet?
* If so, then the dispute amount (eg. 4,500) cant be found in the spreadsheet.

8. 5 case/month max per arbitrator limit

-Factor 8 is not set for any of the data? Not set because it is same for the data given but could change.

- is this limit same for everyone? Yes but could change.

For future consideration:-

1) Appeal

2) Response on time or not

**Arbitrator Factor**

Data of 3 arbitrators

**Henry Tsin**

1. 18 years
2. Quantity Surveyor
3. 1
4. Construction cases – 1 case
5. $12,500 – 1 case
6. Construction cases x 3 & Building Management cases x 1
7. Under $80,000 x 3, $500,000 – $1,000,000 x 1

**Harrison Cheung**

1. 18 years
2. Engineer
3. 5
4. Construction cases x 4 , Building Management cases x 1
5. $4,500 x 3 cases, $12,500 x 1 case, $40,000 x 1 case
6. Construction cases x 2
7. Under $9,000 x 2

**Hughes Tang**

1. 5 years
2. Nil
3. 2
4. Construction cases x 2
5. $4,500 x 1 case, $25,000 x 1 case
6. Nil
7. Nil

Total data points: 22

Data with missing 3-7: 15.

Data with Nil 2: 11

Data with >0 case accepted or >0 case rejected: 7  
Output??? What about the case which was given?

So I need to make up my data lol

Should the output of my system be that this case needs to go to 1 arbitrator or many?

In data, which amount is paired up with which case nature?