Eliminate all Alternatives that do not meet imperatives, carry non-imperatives over to CBA!

Started with 10 alternatives, and now there are 4.

Rapid Decision Making (RDM)
Emergency Management Response - Healthcare Acuity Models

Creating a Baseline for Variables (Version 2)

1. Frame the Problem
2. Define the Solution
3. Develop Alternatives
4. Exercises with project team, SME

5-KEY FACTORS OF ACUITY MODEL
- Time
- Regulation Requirements
- Reuse
- Scale
- Space

5. Classifications
- Local, Regional, & National health system requirements

GOVERNMENT CLIENT COMPLIANCE CONSIDERATIONS
- Price list available
- Immediate availability
- Total time frame
- Buy American Act compliant?
- Can cage code be verified?
- Add imperatives from questions/factors

HEALTHCARE CLIENT CONSIDERATIONS
- 10 Critical Questions
- Imperatives from Questions

1. Determine which Key Factors are Imperatives:
   - Outside Hospital
   - 2-weeks
   - Scale-350
2. Add Owner Imperatives:
   - Negative Pressure, etc.
3. Factors to consider, non-Imperatives:
   - Add reuse, etc.

Challenger the Imperatives with the 5 Whys...

1. Existing Hospital
   - Inpatient, Outside Solution - connected
   - Likely Best Use – COVID and NON-COVID Patients
2. Open Area Facility
   - Has Infrastructure
   - Likely Best Use – COVID and NON-COVID depending on Acuity (High or Low)
3. Closed Hospital
   - Reopen & Retrofit
   - Likely Best Use – COVID Patients
4. Facility Management
   - Food Service, Sterile Linens, Transport
   - Likely Best Use – Quarantine

Challenge the Imperatives with the 5 Whys...

Now Consider Attributes of Factors CBA/Scale of Values

Put these into your CBA with alternates

Sample CBA

Next Step: Choosing By Advantages (CBA)

Example Scenario

If there are four (4) alternatives that meet the requirements/imperatives, add the factors/values that will help determine which alternative model meets the owner criteria best.
Choosing by Advantages (CBA)

Instructions

1. Fill in the Alternatives.
2. Determine the Factors – fill in the Criteria accordingly. Do not include costs but you could include something like is a Capitol vs an Operating expense. Should be something that will be different between the Alternatives.
3. Now for each Factor/Criteria, fill in the information you know about each Alternative in columns B, D, F, H, J.
4. Once you’ve filled out the entire worksheet with your information you can now start to rate the information. This is where you could do different assessments if you have different scenarios like we discussed.
5. Start on the first Factor. Which Alternative is the worst in this row? In the Advantage row for this Factor, put a “!” symbol in the cell in column B, D, F, H, or J. Now compare each other Alternative to that one and determine if it is:
   - Slightly better
   - More better
   - Better
   - Much more better
   - Significantly better

6. Type that in the Advantage row for each and include the verbiage for the Factor. i.e. More better ease of installation.
7. Do this for each Alternative in the row.
8. Repeat steps 5-7 for each row.
9. Now for each unique Advantage, copy and paste it into the second Tab at the value you want to give it. For example, more better ease of installation – 83. Repeat until every unique Advantage has been given a value from 1-100. Not two items can be assigned the same number.
10. If you did this correctly, the corresponding numbers will now populate on the first tab and give you a total value at the bottom of each column.
11. Now is when you add in the costs. The graphing is tricky and I can’t always get it to work. You can try, otherwise I sometimes just graph it by hand. Fill out the Chart Data Table on the bottom right on the first tab. You may have to fiddle with it to get it to graph correctly on tab 3.
12. Repeat steps 9-11 if you want to apply a different thought process to how you weigh the information – like if you have a different Client/scenario that would cause you to weigh things differently.

Once you have the graph, it isn’t always the cheapest or the Alternate with the highest value, although it could be. Take a look at how much more/less you have to pay for more/less value.

There is no right answer – it’s whatever the Customer feels is best for them.
## Choosing by Advantages (CBA)

### CBA Example

### Choosing By Advantages Decision Study

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Alternative 1</th>
<th>Alternative 2</th>
<th>Alternative 3</th>
<th>Alternative 4</th>
<th>Alternative 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Productivity</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Value Added</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Interface Costs</td>
<td>$</td>
<td>$</td>
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<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Other Intial Costs</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Physical size of shop</td>
<td>6,000 SF</td>
<td>2,500 SF</td>
<td>17,500 SF</td>
<td>52,500 SF</td>
<td>19,500 SF</td>
</tr>
<tr>
<td>Willingness to provide VE and cost savings ideas</td>
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<td>30</td>
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<tr>
<td>QA/QC program</td>
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<tr>
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<tr>
<td>Flexibility</td>
<td>None</td>
<td>None</td>
<td>None</td>
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<tr>
<td>Total score</td>
<td>490</td>
<td>194</td>
<td>220</td>
<td>575</td>
<td>379</td>
</tr>
</tbody>
</table>

### Criteria:
- Sacramento based is preferred. Closer is better.
- Physical size of shop.
- Portfolio of other work displays high quality signage.
- Demonstrated ability to work with OSHPD.
- More experience is better.
- Slightly more experience in signage industry.
- Slightly more experience in signage industry.
- Slightly more willingness to provide VE and cost savings ideas.
- Better understanding of project requirements.
- More experience as engineer.
- Better QA/QC program and quality.
- Significantly closer fabrication shop.

### Alternative Rankings:
- Alternative 1: Alpha Signs
- Alternative 2: Amor Signs
- Alternative 3: Pacific Neon
- Alternative 4: AGS
- Alternative 5: Ellis & Ellis

### Emergency Management Response - Healthcare Acuity Models

### Rapid Decision Making (RDM)

### Choosing by Advantages (CBA)
Healthcare Client Considerations

1. What type of emergency/situation are we dealing with?
2. Is the emergency caused by an infectious pathogen and do we know the transmission routes of a pathogen (airborne, ...)?
3. What is the goal for patient placement?
4. Will you have similar patients within the same area or will it house mixture of conditions?
5. What are the safety features that are required given the clinical situation, do you have relevant PPE to support the clinical work necessary and do you have equipment to support clinical and facility operations (ventilators, pumps, generators, etc.)?
6. What capacity are we augmenting? (ICE, regular ward, etc.)
7. What is the capacity/total volume per acuity type?
8. What type of personnel can you provide to operate the solution (healthcare workers, support staff, etc.)?
9. What type of support services and associated contracts can you provide (food, waste management, medical gas, linen, etc.)?
10. Do you require additional healthcare worker training or clinical protocols to operate the space?

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