INTRODUCTION TO CHOOSING BY ADVANTAGES
Introduction to Choosing By Advantages

PAZ ARROYO, QUALITY LEADER
DPR CONSTRUCTION

3/25/2020
Agenda

• Introduction
• Why CBA is useful to construction?
• CBA Basics
• Example
• Case studies
• Questions
Why Choosing By Advantages (CBA)?
Decision Making is Challenging

• A better way of make group decisions that stick.
  • More collaborative
  • More transparent
  • More value for money

• Making decisions with conflicting interests its hard.

• Most people is not skilled on CBA.

• Projects teams get stuck and waste time waiting for someone else to make decisions.
CBA applications
My journey using the wheel

2010
• Read Jim Suhr Book

2011
• Research on other methods
• Attended CBA Workshop

2012
• Gensler

2013
• HVAC for NZE

2014
• PhD, UC Berkeley
• Norway

2016
• Design Project, Chile

2018
• UK
• Canada
• CollabDecisions

2020
• Book Chapter

2018
• UK
• Canada
• CollabDecisions

2019
• Choosing By Advantages Decisionmaking System

2020
• Lean Construction - Core Concepts and New Frontiers

2021
• Choosing By Advantages Decisionmaking System

2022
• Lean Construction - Core Concepts and New Frontiers

2023
• Choosing By Advantages Decisionmaking System

2024
• Lean Construction - Core Concepts and New Frontiers
Need in Construction
Decision-making is broken

• Many times teams wait for a decision, instead of leading it.
• Decisions are made too soon or too late.
• Too many specialist, no one looking at the project as a whole.
• No clear methods, whoever has more power or speaks louder makes decisions (not necessarily who knows more).
• Most people do not know rationale behind major decisions.
Why decision-making methods matter?

Methods → Decisions → Actions → Outcomes

(Suhr 1999)
Improving Group Decision-Making

**Providing Transparency**
- Create a clear and shared rationale for a decision.
- Compare the ‘value’ vs. the cost of the alternatives.

**Building Consensus**
- Optimize the whole not the pieces.
- Avoid conflicts and unnecessary iterations.

**Continuous Learning**
- Document decisions
- Help future iterations, when adding information.
- Save time, resources, and result in a better overall decision.

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CBA Developed by Jim Suhr (1999)
CBA Process for Complex Decisions

I. The Stage-Setting Phase
II. The Innovation Phase
III. The Decision-making Phase
IV. The Reconsideration Phase
V. The Implementation Phase.

Jim Suhr (1999)
CBA Endorsement

• “I believe CBA is the most powerful and effective approach for making decisions available. I am most impressed with the way it uses both objective and subjective data. Once you can understand and apply CBA, I challenge you to find a decision making process that offers a more important advantage. We use the approach informally for all manner of daily choices and more formally when the stakes are large.”

Gregory A. Howell, MSCE Stanford
President, Lean Construction Institute
Feb 8, 2011
Choosing By Advantages

• A decision-making system unified by:
  • Definitions
  • Principles
  • Models
  • Methods

• A decision-making process (Not a tool) that produces improvements in decision making.
• A set of skills to make better decisions than with other methods.
CBA Principles

Our Decision-making Vocabulary Matters

Our Decision-making Methods Matters

Our Decisions Matter

Pivotal Principle

Anchoring Principle

Methods Principle

Fundamental Rule

Choosing by Advantages Decisionmaking System

Jim Suhr (1999)
Cornerstone Principles

- Pivotal Principle
  Decision-makers must LEARN and skillfully use sound methods of decision-making.

- Fundamental Rule
  Decisions must be based on the importance of advantages.

- Anchoring Principle
  Decisions must be anchored to the relevant facts.

- Methods Principle
  Different types of decisions call for different sound methods of decision-making.

Jim Suhr (1999)
CBA Definitions

**Alternative:**
- Two or more people, things, or plans from which one is to be chosen

**Factor:**
- Element, part, or component of a decision

**Criterion:**
- Any standard in which a judgment is based – must have or want to have

**Attribute:**
- Characteristic, quantity, or quality of one alternative

**Advantage:**
- The beneficial difference between the attributes of two alternatives (one of which is the least preferred)
Advantage: A beneficial difference

Difference in height: 1ft 1in

Alternative: Michael Jordan
Attribute: 6ft 5in height

Alternative: Yao Ming
Attribute: 7ft 6in height

Factor Height

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CBA tips

- Do not choose by advantages and disadvantages or you are probably double counting.

- It is not about what factor is more important. It is about what factor will reveal important differences between the attributes of the alternatives.

- Decision making is subjective! Yes, but do the objective part first (What are the advantages of the alternatives?), and then do the subjective part (How do I value those advantages?). It really makes life easier!
CBA Steps for the Tabular Method

1. Identify alternatives
2. Define factors
3. Define must have/want to have criteria for each factor
4. Describe the attributes of each alternative
5. Decide the advantages of each alternative
6. Decide the importance of each advantage
7. Evaluate cost data

Reconsideration Phase

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Step 1: Identify alternatives

- IPhone 7
- IPhone 7 Plus?
**Step 2: Define factors & Step 3: Define criteria**

Only consider factors that differentiate alternatives.

<table>
<thead>
<tr>
<th>Factor (Criterion)</th>
<th>IPhone 7</th>
<th>IPhone 7 plus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions (Smaller is better*)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weigh (Less is better)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LCD screen resolution (More is better)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Camara (optical zoom is better)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Battery life (more is better)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Importance</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Step 4: Describe the attributes of each alternative

Underline the least preferred attribute in each factor

<table>
<thead>
<tr>
<th>Factor (Criterion)</th>
<th>IPhone 7</th>
<th>IPhone 7 plus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions (Smaller is better*)</td>
<td>Att.: 4.7” / 138.3 x 67.1 x 7.1 mm (5.44 x 2.64 x 0.28 in)</td>
<td>Att.: 5.5” / 158.2 x 77.9 x 7.3 mm (6.23 x 3.07 x 0.29 in)</td>
</tr>
<tr>
<td>Weigh (Less is better)</td>
<td>Att.: 138 g (4.87 oz)</td>
<td>Att.: 188 g (6.63 oz)</td>
</tr>
<tr>
<td>LCD screen resolution (More is better)</td>
<td>Att.: 1334 x 750 pixels (326 ppi)</td>
<td>Att.: 1920 x 1080 pixels (401 ppi)</td>
</tr>
<tr>
<td>Camara (optical zoom is better)</td>
<td>Att.: 12 pixels</td>
<td>Att.: 12 pixels with 2X optical zoom</td>
</tr>
<tr>
<td>Battery life (more is better)</td>
<td>Att.: 14 hours for talk time 3G</td>
<td>Att.: 21 hours for talk time 3G</td>
</tr>
</tbody>
</table>

*Total Importance*
## Step 5: Decide the advantages of each alternative

<table>
<thead>
<tr>
<th>Factor (Criterion)</th>
<th>IPhone 7</th>
<th>IPhone 7 plus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions (Smaller is better*)</td>
<td>Att.: 4.7&quot; /138.3 x 67.1 x 7.1 mm (5.44 x 2.64 x 0.28 in)</td>
<td>Att.: 5.5&quot; /158.2 x 77.9 x 7.3 mm (6.23 x 3.07 x 0.29 in)</td>
</tr>
<tr>
<td></td>
<td>Adv.: 0.8&quot; smaller</td>
<td></td>
</tr>
<tr>
<td>Weigh (Less is better)</td>
<td>Att.: 138 g (4.87 oz)</td>
<td>Att.: 188 g (6.63 oz)</td>
</tr>
<tr>
<td></td>
<td>Adv.: 50 g less (1.76 oz)</td>
<td></td>
</tr>
<tr>
<td>LCD screen resolution (More is better)</td>
<td>Att.: 1334 x 750 pixels (326 ppi)</td>
<td>Att.: 1920 x 1080 pixels (401 ppi)</td>
</tr>
<tr>
<td></td>
<td>Adv.:</td>
<td>Adv.: 75 ppi more</td>
</tr>
<tr>
<td>Camara (optical zoom is better)</td>
<td>Att.: 12 pixels</td>
<td>Att.: 12 pixels with 2X optical zoom</td>
</tr>
<tr>
<td></td>
<td>Adv.:</td>
<td>Adv.: 2X optical zoom vs. none</td>
</tr>
<tr>
<td>Battery life (more is better)</td>
<td>Att.: 14 hours for talk time 3G</td>
<td>Att.: 21 hours for talk time 3G</td>
</tr>
<tr>
<td></td>
<td>Adv.:</td>
<td>Adv.: 7 hours more for talk time 3G</td>
</tr>
<tr>
<td>Total Importance</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Weighting Importance of the Advantages

- Decide the Importance of each advantage by first selecting the paramount advantage to establish a scale of importance. Weigh all advantages on the same scale. Always include zero.

- It is possible for more than one advantage to have the same weight of importance (same number on scale)
## Scale of Importance

<table>
<thead>
<tr>
<th>Score</th>
<th>Feature Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>7 more hours of talking time with 3G</td>
</tr>
<tr>
<td>90</td>
<td></td>
</tr>
<tr>
<td>80</td>
<td>2X optical zoom vs. none</td>
</tr>
<tr>
<td>70</td>
<td>0.8” smaller</td>
</tr>
<tr>
<td>60</td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>50 g less (1.76 oz)</td>
</tr>
<tr>
<td>40</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>75 ppi more</td>
</tr>
<tr>
<td>20</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>
Decide the importance of each advantage.

List the advantages of each alternative

Discuss the importance of each advantage
### Step 6: Decide the importance of each advantage

a. Circle (highlight) most important advantage per factor.  
b. Select the paramount advantage.  
c. Weigh the most important advantages.  
d. Weigh importance of remaining advantages.

<table>
<thead>
<tr>
<th>Factor (Criterion)</th>
<th>IPhone 7</th>
<th>IPhone 7 plus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions (Smaller is better*)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Att.: 4.7” /138.3 x 67.1 x 7.1 mm (5.44 x 2.64 x 0.28 in)</td>
<td>Adv.: 0.8” smaller</td>
<td>Imp.: 70</td>
</tr>
<tr>
<td>Att.: 5.5” /158.2 x 77.9 x 7.3 mm (6.23 x 3.07 x 0.29 in)</td>
<td>Adv.:</td>
<td>Imp.:</td>
</tr>
<tr>
<td>Weigh (Less is better)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Att.: 138 g (4.87 oz)</td>
<td>Adv.:</td>
<td>Imp.:</td>
</tr>
<tr>
<td>Att.: 188 g (6.63 oz)</td>
<td>Adv.: 50 g less (1.76 oz)</td>
<td>Imp.: 30</td>
</tr>
<tr>
<td>LCD screen resolution (More is better)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Att.: 1334 x 750 pixels (326 ppi)</td>
<td>Adv.:</td>
<td>Imp.:</td>
</tr>
<tr>
<td>Att.: 1920 x 1080 pixels (401 ppi)</td>
<td>Adv.:</td>
<td>Imp.: 20</td>
</tr>
<tr>
<td>Camara (optical zoom is better)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Att.: 12 pixels</td>
<td>Adv.:</td>
<td>Imp.:</td>
</tr>
<tr>
<td>Att.: 12 pixels with 2X optical zoom</td>
<td>Adv.: 2X optical zoom vs. none</td>
<td>Imp.: 80</td>
</tr>
<tr>
<td>Battery life (more is better)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Att.: 14 hours for talk time 3G</td>
<td>Adv.:</td>
<td>Imp.:</td>
</tr>
<tr>
<td>Att.: 21 hours for talk time 3G</td>
<td>Adv.: 7 hours more for talk time 3G</td>
<td>Imp.: 100</td>
</tr>
<tr>
<td>Total Importance</td>
<td>100</td>
<td>200</td>
</tr>
</tbody>
</table>
### What about Cost?

<table>
<thead>
<tr>
<th>Factor (Criterion)</th>
<th>iPhone 7</th>
<th>iPhone 7 plus</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions (Smaller is better*)</td>
<td>Att.: 4.7” / 138.3 x 67.1 x 7.1 mm (5.44 x 2.64 x 0.28 in)</td>
<td>Att.: 5.5” / 158.2 x 77.9 x 7.3 mm (6.23 x 3.07 x 0.29 in)</td>
<td>$749</td>
</tr>
<tr>
<td></td>
<td>Adv.: 0.8” smaller</td>
<td>Imp.: 70</td>
<td>$849</td>
</tr>
<tr>
<td>Weigh (Less is better)</td>
<td>Att.: 138 g (4.87 oz)</td>
<td>Att.: 188 g (6.63 oz)</td>
<td>$749</td>
</tr>
<tr>
<td></td>
<td>Adv.: 50 g less (1.76 oz)</td>
<td>Imp.: 30</td>
<td>$849</td>
</tr>
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<td>LCD screen resolution (More is better)</td>
<td>Att.: 1334 x 750 pixels (326 ppi)</td>
<td>Att.: 1920 x 1080 pixels (401 ppi)</td>
<td>$749</td>
</tr>
<tr>
<td></td>
<td>Adv.:</td>
<td>Imp.:</td>
<td>$749</td>
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<td>Camara (optical zoom is better)</td>
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<td>Att.: 12 pixels with 2X optical zoom</td>
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<td></td>
<td>Adv.:</td>
<td>Imp.:</td>
<td>$749</td>
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<td>Battery life (more is better)</td>
<td>Att.: 14 hours for talk time 3G</td>
<td>Att.: 21 hours for talk time 3G</td>
<td>$749</td>
</tr>
<tr>
<td></td>
<td>Adv.:</td>
<td>Imp.:</td>
<td>$749</td>
</tr>
<tr>
<td>Total Importance</td>
<td>100</td>
<td>200</td>
<td>$749</td>
</tr>
</tbody>
</table>
Cost is independent of value measured as IOA.

- $849 and $\text{lofA} = 200$
- $749$ and $\text{lofA} = 100$
Money Differences

- Money decisions are interdependent decisions
- Money differences are abstract messages, not advantages.
- A money scale is NOT a valid importance scale.
- Do not assign importance scores to money attributes or money differences.

Jim Suhr (1999)
Fundamental Rule for Money Decisions

Different types of decisions, including different types of money decisions, require different methods of decision making.

But for all types of decisions, the fundamental rule of sound decision making is the same:

Decisions must be based on
the ______________ of ______________
not the importance of dollars.

Jim Suhr (1999)
Fundamental Rule for Money Decisions

Different types of decisions, including different types of money decisions, require different methods of decision making.

But for all types of decisions, the fundamental rule of sound decision making is the same:

Decisions must be based on the IMPORTANCE of ADVANTAGES not the importance of dollars.

Jim Suhr (1999)
CBA for Mutually-Exclusive Alternatives

CBA has different methods

• Very simple methods for very simple decisions
  • Recognition response CBA
  • Instant CBA
  • Simplified two list method

• For complex decisions
  • Two list method
  • Tabular method
Case Study

- Context: Choosing a structural system for the Stanford University Green Dorm project.
Case Study

- The design team used WRC to evaluate 2 alternatives:
  - wood bearing wall structure
  - steel frame with metallic deck and concrete topping

- They considered 10 factors and costs.
CBA Steps for the Tabular Method

1. Identify alternatives
2. Define factors
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### Factor (Criterion) vs. Alternative 1: Wood Bearing Wall Structure vs. Alternative 2: Steel frame / Metallic Deck/Concrete Topping

<table>
<thead>
<tr>
<th>Factor (Criterion)</th>
<th>Alternative 1: Wood Bearing Wall Structure</th>
<th>Alternative 2: Steel frame / Metallic Deck/Concrete Topping</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Construction Speed</td>
<td>Att.: Slow when constructed on site.</td>
<td>Att.: Fast to construct.</td>
</tr>
<tr>
<td>(The faster, the better)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adv.: Faster to construct</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Imp.:</td>
<td></td>
</tr>
<tr>
<td>2. Earthquake Losses</td>
<td>Att.: May result in significant architectural, structural, and content damage.</td>
<td>Att.: May result in moderate architectural, structural, and content damage.</td>
</tr>
<tr>
<td>(The lower EQ losses, the better)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adv.: Significantly less EQ losses than wood</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Imp.:</td>
<td></td>
</tr>
<tr>
<td>(The less maintenance required, the better)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adv.: Easy to maintain</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Imp.:</td>
<td></td>
</tr>
<tr>
<td>4. CO₂ Emissions - Embodied energy.</td>
<td>Att.: Wood stores carbon and has a low embodied energy, and it is light.</td>
<td>Att.: Steel and concrete have high embodied carbon.</td>
</tr>
<tr>
<td>(The less CO₂ emissions, the better)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adv.: Emits significantly less CO₂</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Imp.:</td>
<td></td>
</tr>
<tr>
<td>5. Thermal Mass</td>
<td>Att.: Has only thin concrete or gypcrete topping slabs on the floors providing little thermal mass.</td>
<td>Att.: Exposed concrete over metal deck and floors provides thermal mass.</td>
</tr>
<tr>
<td>(The more thermal mass, the better)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adv.: Higher expected thermal mass</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Imp.:</td>
<td></td>
</tr>
<tr>
<td>6. Insulation</td>
<td>Att.: Good insulation material</td>
<td>Att.: Good insulation material</td>
</tr>
<tr>
<td>Criterion: The higher insulation, the better</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adv.:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Imp.:</td>
<td></td>
</tr>
<tr>
<td>(The more interesting for research, the better)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adv.:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Imp.:</td>
<td></td>
</tr>
<tr>
<td>8. Thermal Comfort</td>
<td>Att.: Low thermal mass, which is less effective in reducing overheating.</td>
<td>Att.: High thermal mass, which reduces the likelihood for overheating.</td>
</tr>
<tr>
<td>(The higher thermal mass, the better)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adv.:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Imp.:</td>
<td></td>
</tr>
<tr>
<td>9. Deconstructability</td>
<td>Att.: Difficult to deconstruct because of all the nailing.</td>
<td>Att.: Bolted beams and columns are easy to disassemble. Concrete over metal deck requires down cycling.</td>
</tr>
<tr>
<td>(The easier to deconstruct, the better)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adv.:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Imp.:</td>
<td></td>
</tr>
<tr>
<td>10. Flexibility</td>
<td>Att.: Relatively inflexible. Most room walls are bearing walls.</td>
<td>Att.: Has a post and beam system that is extremely flexible.</td>
</tr>
<tr>
<td>(The more flexible, the better)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adv.:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Imp.:</td>
<td></td>
</tr>
<tr>
<td><strong>Total IofAs</strong></td>
<td>80</td>
<td>350</td>
</tr>
</tbody>
</table>
First Cost & Lifecycle Cost in CBA

**First Cost**
- Wood: $6,350,000
- Steel: $6,550,000

**Lifecycle Cost – 50 years**
- Wood: $0
- Steel: $4,000,000
Case Study 2
For selecting a series of interiors, MEP, and landscape decisions.
Implementation Example

Project Background:

• Large complex project in Silicon Valley
• Large, multi-disciplinary team in three different countries
• Minimal exposure to Lean principles
• Unique, iconic architecture
• Difficult jurisdiction in the SF Bay Area
• Highly engaged Owner
• Early onboarding of GC / Design Assist
• Aggressive schedule and budget targets

Arroyo & Long (2017)
Early Design Process - No Decisions

- Complex problems with non-traditional solutions
- Initial “spray and pray” approach
  - Numerous system studies, no focus
- Lack of definitive decision strategy:
  - Reinventing the design process
  - Not anchored to project schedule
  - Competing design priorities
  - Poor documentation
  - Lack of accountability
  - Ambiguous scoring methodology
  - Lack of commitment to decisions

Arroyo & Long (2017)
## Types of A3 Design Decisions

<table>
<thead>
<tr>
<th>#</th>
<th>Description</th>
<th>#</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Modular vs. Non-modular IDF Closets</td>
<td>13</td>
<td>Soils Management</td>
</tr>
<tr>
<td>2</td>
<td>Single vs. Double Walled Cistern</td>
<td>14</td>
<td>Select of Soil for Settlement Displacement</td>
</tr>
<tr>
<td>3</td>
<td>L2 Zoning Requirements for Open Office</td>
<td>15</td>
<td>APGD vs. Precast Concrete Piles</td>
</tr>
<tr>
<td>4</td>
<td>Modular vs. Non-modular Electrical Rooms</td>
<td>16</td>
<td>Access to Basement Bike Storage</td>
</tr>
<tr>
<td>5</td>
<td>Exhaust Locations for Basement AHU’s</td>
<td>17</td>
<td>Security &amp; Maintenance at CUP</td>
</tr>
<tr>
<td>6</td>
<td>UG Infrastructure Support on SOG</td>
<td>18</td>
<td>PG&amp;E Access to Main Electrical Room</td>
</tr>
<tr>
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Arroyo & Long (2017)
Large Project Savings

Arroyo & Long (2017)
Results of Implementing CBA

• Satisfied client
• Paper trail to document facts and decision
• Decisions started to “stick” with the Owner and project stakeholders
• Increased design efficiency (less rework)
• Team developed a level of trust and respect (in the trenches together)
• Project team started working together across contractual lines

Arroyo & Long (2017)
Results of Implementing CBA

• By the numbers:
  • Early A3’s averaged 5.3 meetings per decision
  • After initial “break-in” period, meeting efficiencies increased by 37% or 3.3 meetings per decision
  • Studied A3’s resulted in $9.7M in savings or 10.93% of the original estimates
  • Resulted in an average of $96,468 per A3 meeting
  • Resulted in an average of $12,596 per hour for all meeting participants

Arroyo & Long (2017)
Case Study 3
Choosing an ERP system
Choosing an ERP System
CBA Implementation Example

- Too much information (6 software vendors, 7 possible combinations, RFP collected 300+ criteria).
- No one alternative complied with everyone's desires and expectations.

Implementing CBA
- Getting everyone on a room / share perspectives
- Seek facts – identify attributes
- Agree on criteria and decide advantages
- Differentiate value and cost

Results
- Getting to a decision that everyone buy-in even if it is not the best for your individual group, you understand it’s the overall best.
Questions
Conclusions
What else did you hear?

• Decisions require proactive action and engagement of stakeholders
• Decision-making methods matter
• CBA provides a transparent way of making decisions, helps build consensus, and allows for learning.
• Paramount Decisions is a resource you can use with your team.
CBA Resources

• Platform to share knowledge about collaborative decision-making, videos, webinars.
  • [http://collabdecisions.com](http://collabdecisions.com)

• CBA Papers, case studies and research.
  • [http://iglc.net/papers](http://iglc.net/papers)
Contact LCI

WWW.LEANCONSTRUCTIONIRELAND.IE
WWW.LINKEDIN.COM/GROUPS/4332330
WWW.FACEBOOK.COM/LEANCONSTRUCTIONIRELAND
TWITTER.COM/LCI_IRELAND
INFO@LEANCONSTRUCTIONIRELAND.IE