

Employing The Powers of Persuasion to "Sell" your Estimate

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An attempt to change attitudes or behaviors (or both) without using coercion or deception.

■ Persuasion

- A delicate mix of....
 - Rational argument
 - Social forces
 - Psychological forces

Most estimators
stop here!

- **Robert B. Cialdini, *Influence: The Psychology of Persuasion*, (revised; New York: Harper Collins, 2007)**

- 1. Reciprocity**
- 2. Commitment & Consistency**
- 3. Social proof**
- 4. Authority**
- 5. Likeability**
- 6. Scarcity**

Robert B. Cialdini, *Influence: The Psychology of Persuasion* (revised; New York: Quill, 1993)

One of the most potent weapons of influence and compliance:

We want to repay, in kind, what another person has provided us

The **key** to using the principle of reciprocity is to **be the first**.

Be the first to give concession.

Be the first to help.

Be the first to be courteous.

Be the first to be cooperative.

Be the first to give information.

Whatever you do first, will come back to you eventually

1. Reciprocity

i.e.: **We want to repay, in kind, what another person has provided us**

- e.g.:**
- give a flower then ask for a donation
 - LBJ called in favors; Carter had none to call in; political patronage
 - send prospect pre-printed return address labels with solicitation letter
 - small gifts and comped meals

1. Reciprocity

- **I.e.: We want to repay, in kind, what another person has provided us**
- **Technique 1:** If someone makes a concession, we are obligated to respond with a concession
- Making a concession gives the other party a feeling of responsibility for the outcome and greater satisfaction with resolution

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- **Technique 3: Contrast principle: sell the costly item first; or present the undesirable option first**

Cialdini

2. Commitment & Consistency

Our nearly obsessive desire to be (and to appear) consistent with what we have already done

Consistency is usually associated with strength, inconsistency with weakness: we want to look virtuous

2. Consistency

- **Technique 1: Elicit a commitment, then expect consistency**
- **Technique 2: Public, active, effortful commitments tend to be lasting commitments**
- **Technique 3: Get a large favor by first getting a small one (small commitments manipulate a person's self-image and position them for large commitment)**

2. Commitment & Consistency

- **Outcome 1: Commitments people own, take inner responsibility for, are profound**
- **Outcome 2: Commitments lead to inner change and grow their own legs**

2. Commitment & Consistency

Examples:

- Negotiating a car price
- “Hi, how are you?”
- Howard Dean’s campaign (meet ups and volunteers writing letters)
- Have customers not salespeople fill out sale agreements
- Testimonials
- Campaign leadership

One means we use to determine what is correct is to find out what other people think is correct.

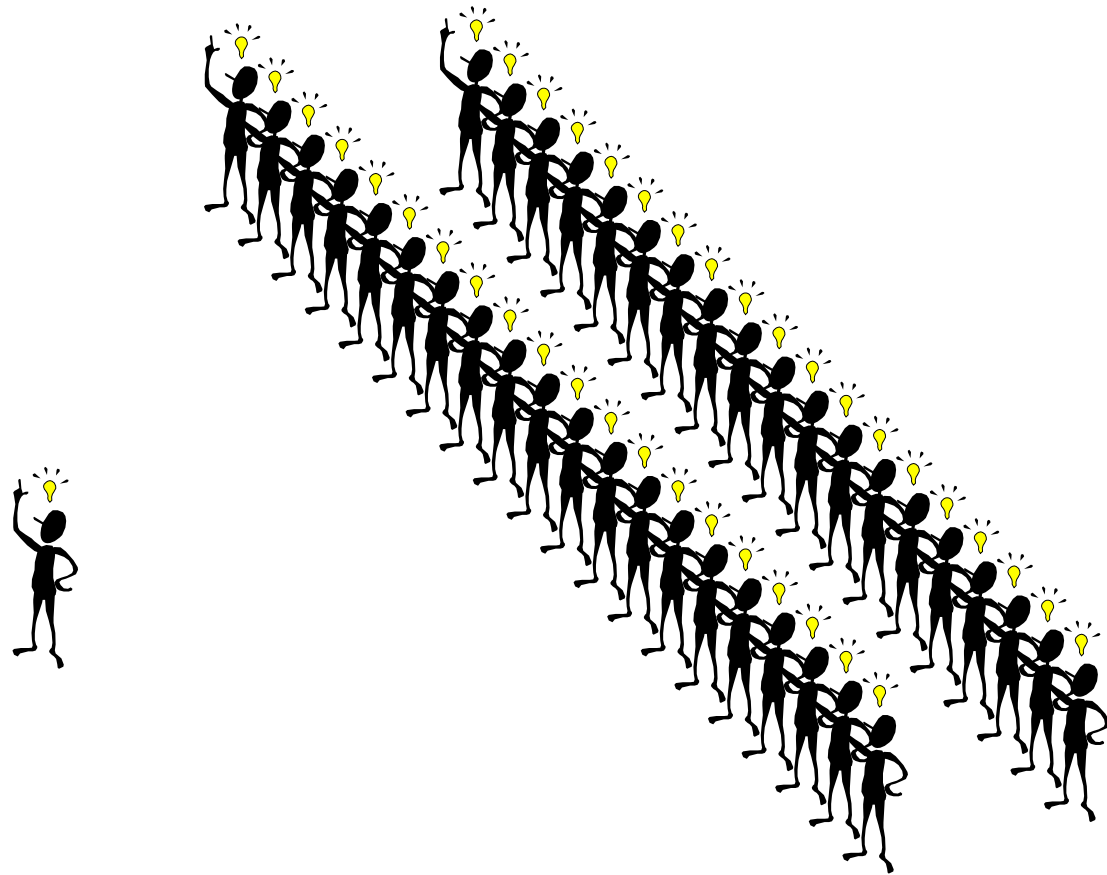
- The greater number of people who find an idea correct, the more the idea will be correct.
- Pluralistic ignorance: each person decides that since nobody is concerned, nothing is wrong
- Similarity: social proof operates most powerfully when we observe people just like us

Examples:

- Laugh tracks
- Faith communities
- Mob behavior
- Inaction toward crime or emergency
- Jonestown
- Applause
- Testimonials

Consensus & Group Think

POWER IN NUMBERS



4. Authority

- **We have a deep-seated sense of duty to authority**
- **Tests demonstrate that adults will do extreme things when instructed to do so by an authority figure**

4. Authority

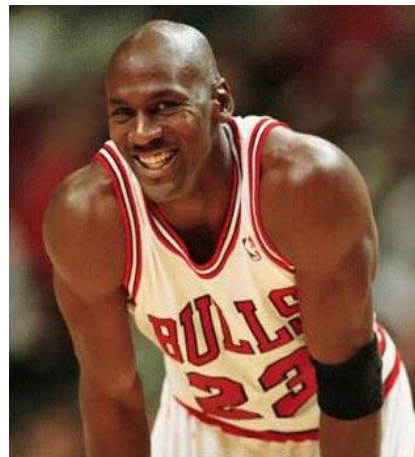
- **Titles**
- **Uniforms**
- **Clothes**
- **Trappings of status**



Cialdini

People are easily influenced by what they like:

We prefer to say yes to someone we know and like



Cialdini

Compliance factors:

- Similarity of opinion, life-style, background, personality traits
- Familiarity and contact
- Cooperation in shared goals
- Physical attractiveness
- Compliments
- Association with positive things (beauty, what's hip, food)
- Success
- Smile

Examples:

- Tupperware parties
- Peer solicitation
- Good cop / bad cop
- Eating together
- Celebrity endorsements

**Opportunities seem more valuable to us
when their availability is limited:**

**We want it even more when we are in
competition for it!**

How to make people want something more?

- Make it scarce
- Scarcity is one huge decision trigger
- People are more afraid of the pain of losing than the contentment of gaining
- Tell them what benefits they will lose

Cialdini

- 1. Reciprocity:** we want to repay, in kind, what another person has provided us
- 2. Consistency:** desire to be (and to appear) consistent with what we have already done
- 3. Social proof:** to determine what is correct find out what other people think is correct
- 4. Authority:** deep-seated sense of duty to authority
- 5. Likeability:** we say yes to someone we like
- 6. Scarcity:** limitation enhances desirability



How an Estimator Can Employ Tools of Persuasion

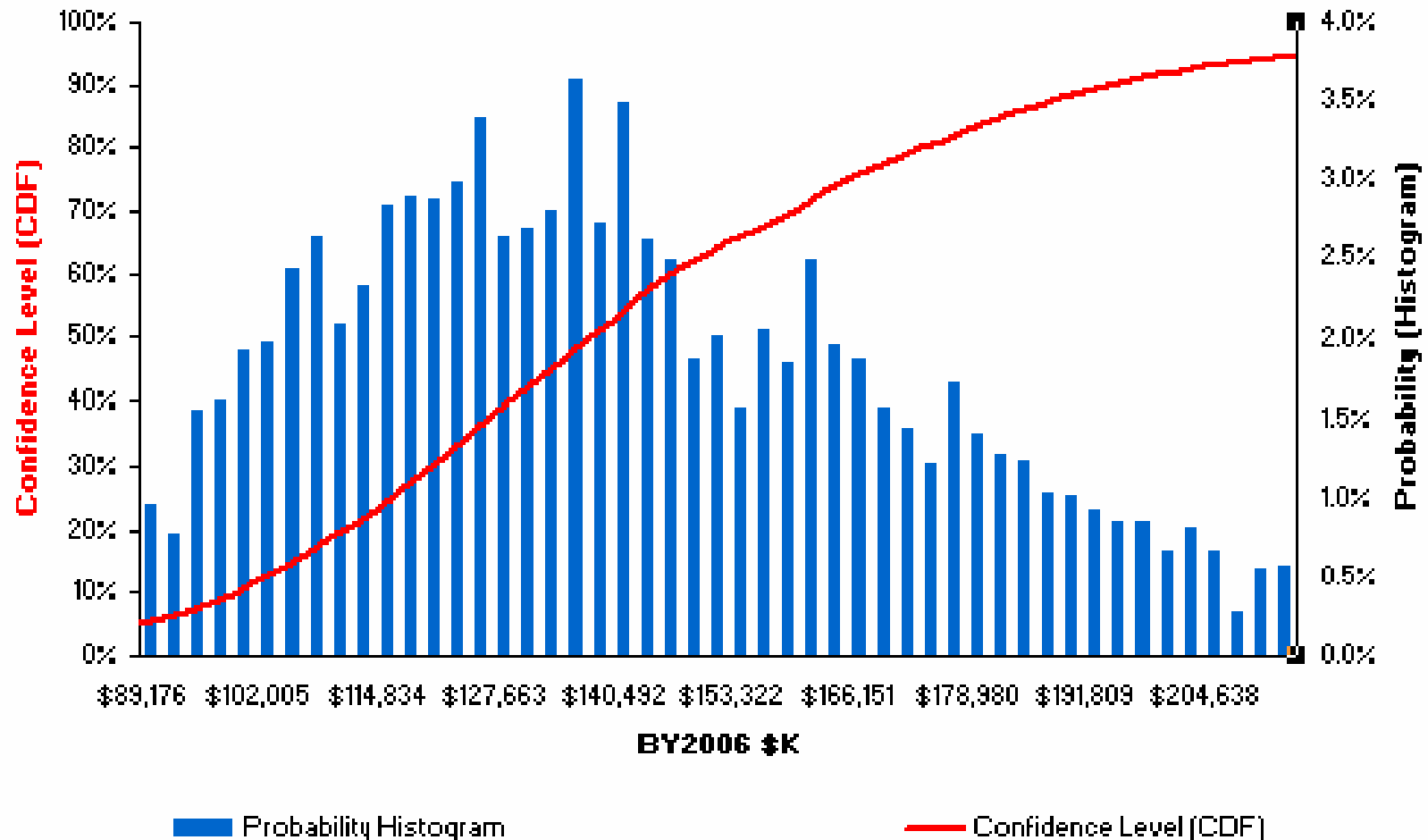
- **This is toolbox – not an arsenal**
- **Do not use all tools at the same time**
- **Build your influence over time**

1. Reciprocity Strategies

- **Contrast Principle— Show actuals from “higher cost” systems at beginning of presentation**
- **Build concessions into your estimate briefing**
 - Present highest cost case first
 - Show higher confidence level estimate rather than point estimate
 - Traditional cost presentations start with the point estimate then introduce risk at the end of the presentation
 - Consider showing risk adjusted estimate prior to explaining the point estimate
 - Show the Cumulative Distribution Function (CDF)
- **Offer your “customer” more than just the estimate**
 - Estimators often have more knowledge of the total program than the Program Manager – share your technical knowledge in the brief
 - Enhance quality of “non-estimating products”
 - Risk matrices
 - Schedules
 - Technical Documentation

CDF (with histogram) chart

BASELINE
Total
 Statistics
 Calculated with 2000 iterations



2. Commitment & Consistency Strategies

- **Know if your customer has made prior statements that could cause issues**
- **Try to get public statements regarding commitment to accurately represent anticipated cost of program**
 - Educate customer on GAO reports regarding insufficient estimates
 - Ask if they are committed to showing the most “realistic” estimate
- **Get a large favor by first getting a small one (small commitments manipulate a person’s self-image and position them for large commitment)**
 - Focus on selling methodology and bases of estimates prior to presenting total estimate
 - Get verbal buy-in for all elements
 - If they accept element level estimates and have made a commitment, they will accept the program level estimate in order to remain consistent

3. Social Proof Strategies

- **Statements regarding estimating/cost from leaders outside your organization**
- **Socialize your estimate prior to briefing the boss**
 - Quote members of the team (testimonials)
 - Know what other leaders (programs) at the same level as your customer are doing
 - “Our counterpart has increased their estimate by 30% over the last year”
- **Give your customer supporting evidence that he is not alone in his actions**

4. Authority Strategies

- **Introduce your qualifications and experience**
 - Don't brag
 - You can do this in preliminary conversations with your reviewer
- **One trick to demonstrate your trustworthiness is by admitting your own weaknesses**
 - If you are unclear on a particular area, be ready to admit it
 - This will actually lower the influence barrier
- **Before you give your strongest argument, mention a weakness first**
 - Mention that you do not have a good position, you have more to lose if the deal does not turn out well
 - Tell them even if they already know
 - Do not pretend to be in a position which you are not
 - As soon as you are able to point out your weakness, you are in the context of credibility
 - You show that you are being truthful
 - Higher credibility, lower barriers
- **Show your expertise and understanding of estimate – USE POST REPORTS**
 - Use POST reports to show comparisons

■ What are the big ticket items?

- The Pareto Chart can help you quickly spot the most expensive items in your estimate.

■ Creating Reports for Presentations

■ Analyzing Manpower Requirements

- If your WBS element costs are mostly calculated using time and materials equations (e.g., Unit Cost * Man Hours), you can apply the Pareto chart to an hours per activity breakdown and see where the main manpower requirements are in your estimate.

■ View Most Expensive CLIN items

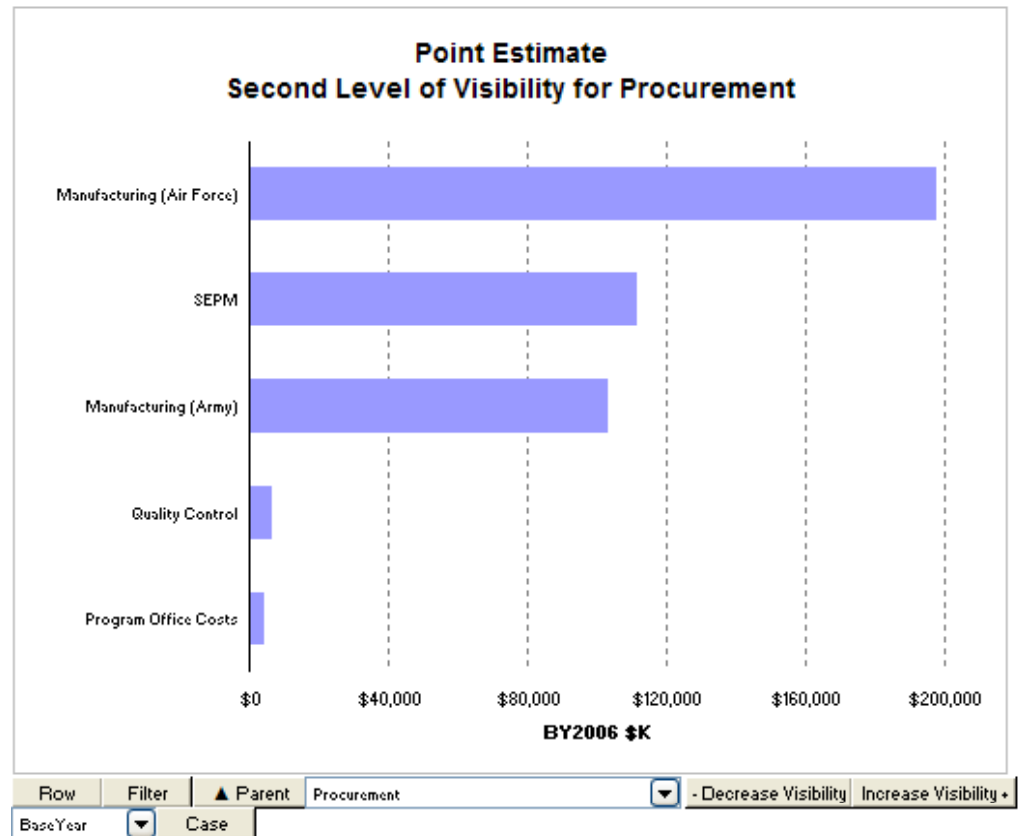
- If your WBS is set up by contract line items (CLINs), you can see how the various CLINs rank by cost.

Pareto Chart for Point Estimate in 07 - Detailed LCC Estimate.aceit

Costs in BY2006 \$K

Thursday, 15 November 2007, 4:36 pm

Pareto Chart



Ranked Total Results for Point Estimate

WBS	Point Estimate	% of Total
Procurement	\$420,892.143	
Manufacturing (Air Force)	\$197,498.536	46.9%
SEPM	\$111,103.485	26.4%
Manufacturing (Army)	\$102,781.153	24.4%
Quality Control	\$5,888.543	1.4%
Program Office Costs	\$3,620.427	0.9%



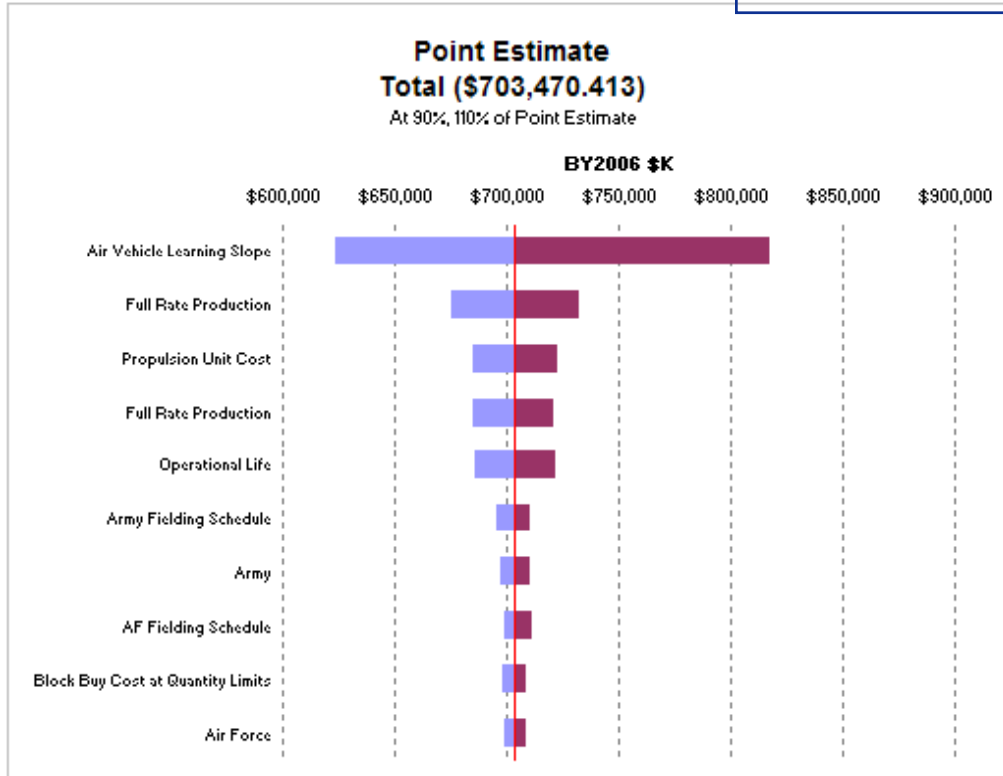
Automated Cost Estimating Integrated Tools

POST Tornado Chart

Tornado Chart for Point Estimate in 07 - Detailed LCC Estimate.aceit

Costs in BY2006 \$K, Bounds based upon a fixed +10/-10% change to driver variables
 Tuesday, 20 November 2007, 12:18 am

Tornado Chart



Fixed Range

- Determine the High Volatility Items in the Estimate (based on model RI\$K results)

- The Tornado Chart can identify the most “risky” items in your program.

- Determine the High Volatility Items in the Estimate (based on fixed range)

- The Tornado Chart can identify which items contribute most to the volatility in the estimate by varying the inputs a fixed amount.

- Identify free variables to use in CAIV calculations

Drivers & Results

Drivers (excluding Rollup)	Row	Target Row Results			Fixed Range Inputs		
		Delta	-10%	+10%	Point Estimate	-10%	+10%
Air Vehicle Learning Slope	248	\$193,378.832	\$623,697.752	\$817,076.584	90	81	99
Full Rate Production	237	\$55,472.027	\$675,785.792	\$731,257.819	115	104	127
Propulsion Unit Cost	226	\$36,875.005	\$685,032.910	\$721,907.916	\$535.127	\$481.615	\$588.640
Full Rate Production	240	\$35,561.820	\$684,796.249	\$720,358.068	55	50	61
Operational Life	269	\$35,302.993	\$685,812.295	\$721,115.288	10	9	11
Army Fielding Schedule	275	\$14,034.033	\$695,810.570	\$709,844.603	570	513	627
Army	280	\$12,717.641	\$697,111.245	\$709,828.886	22800	20520	25080
AF Fielding Schedule	274	\$11,364.290	\$699,068.913	\$710,433.202	1190	1071	1309
Block Buy Cost at Quantity Limits	231	\$9,573.730	\$698,683.548	\$708,257.278	\$667.717	\$600.945	\$734.489
Air Force	279	\$8,736.680	\$699,101.726	\$707,838.405	47600	42840	52360
AF Replenishment Spares	284	\$8,537.563	\$699,198.242	\$707,735.805	34	31	37

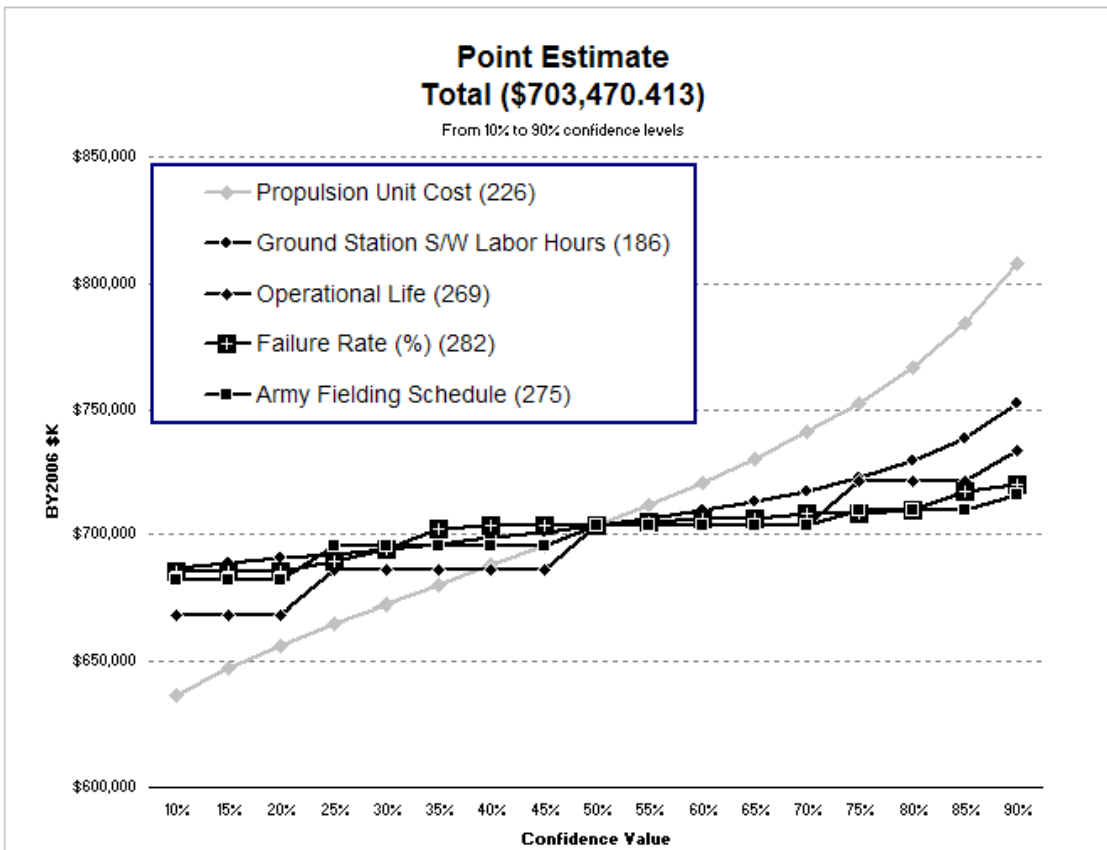
For example, vary each variable by +/- 10% and measure the effect on the target row

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Spider Chart for Point Estimate in 07 - Detailed LCC Estimate.aceit

Costs in BY2006 \$K, Bounds based upon driver variable percentiles derived from 2000 iterations
 Tuesday, 20 November 2007, 11:07 pm

Spider Chart



Drivers & Results

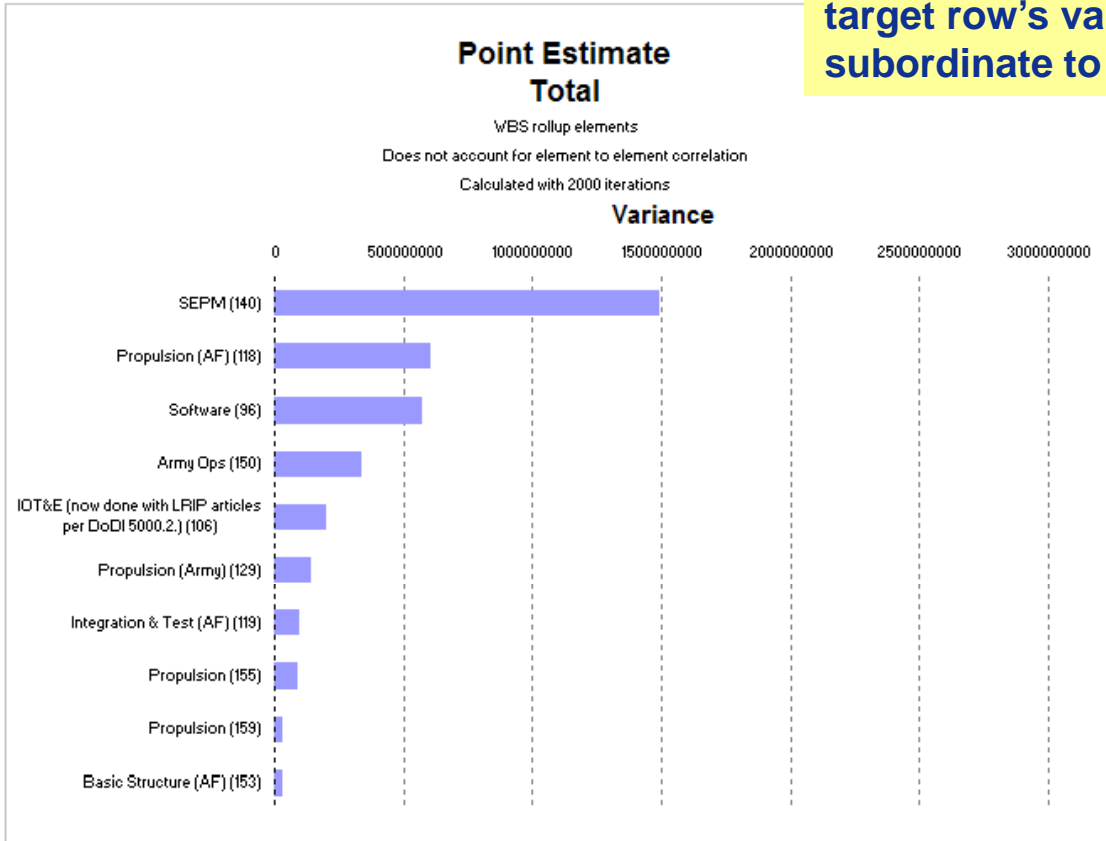
Drivers (excluding Rollup, Zero Uncertainty)	Row	Delta	Target Row Results									
			10%	15%	20%	25%	30%	35%	40%	45%	50%	55%
Propulsion Unit Cost	226	\$170,984.509	\$636,856.168	\$647,377.499	\$656,417.468	\$664,706.175	\$672,544.192	\$680,217.240	\$687,803.886	\$695,523.665	\$703,476.584	\$711,785.216
Ground Station S/W Labor Hours	186	\$65,623.999	\$686,541.859	\$688,565.214	\$690,489.187	\$692,402.419	\$694,360.275	\$696,402.779	\$698,578.993	\$700,917.411	\$703,464.589	\$706,309.702
Operational Life	269	\$64,995.685	\$668,140.290	\$668,140.290	\$668,140.290	\$685,812.295	\$685,812.295	\$685,812.295	\$685,812.295	\$685,812.295	\$703,470.413	\$703,470.413
Failure Rate (%)	282	\$34,651.222	\$685,444.963	\$685,444.963	\$685,444.963	\$689,314.206	\$694,467.490	\$702,185.455	\$703,470.413	\$703,470.413	\$703,470.413	\$704,754.985
Army Fielding Schedule	275	\$34,107.825	\$681,718.415	\$681,718.415	\$681,718.415	\$695,810.570	\$695,810.570	\$695,810.570	\$695,810.570	\$695,810.570	\$703,470.413	\$703,470.413

- Identify Cost drivers of the Estimate
 - The chart shows the volatility of the estimate based on the changes to inputs in the model, making it is easy to see the magnitude of costs and determine which elements are the major cost drivers of the estimate.
- View Spending Trends
 - Since the Spider Chart graphs changes at various points in a continuum, you can spot pivot points in the estimate to make sure the cost doesn't spiral out of control.

Without Correlation

Identifies the top x contributors to a target row's variance from the rows subordinate to it in the WBS hierarchy

Variance Chart



- Identify Which WBS Elements contribute the Most to the Uncertainty of the Total Estimate
- Identify Which Input Variables contribute the Most to the Uncertainty of the Total Estimate

5. Likeability Strategies

- **Similarity**
 - Find something that is genuinely in common between you and the other party
 - It really has to be genuine or the other party can see through it immediately
 - Something which you are able to find a real connection with that person and create an interesting conversation
- **The way to bring down the influence barrier is to let the other party see that you like him. This is more important than he liking you.**
- **Speak his language**
 - Avoid estimating jargon
 - Explain new concepts in simplistic terms

6. Scarcity Strategies

- **“If we can’t have it, we want it. We make a decision we want it.”**
- **Before any negotiation, think about what is unique and uncommon that we have to offer.**
 - And they can’t get it if they do not move in our direction
 - What is there to lose for them if they do not say yes to us
- **Sometimes, we can be more persuasive if we are able to present what stands to be lost than emphasizing what stands to be gained.**
 - Emphasize the benefits that the parties will lose if they do not come to an agreement
 - Tell them what benefits they will lose
 - People feel the need to know what they will stand to lose