



**Outcome Assessments:
The Truth Shall Set You Free**

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Greg Davidson
Proposal Operations
Northrop Grumman Aerospace Systems

- **There should be a lessons learned database listing the reasons why lessons learned databases don't work**
- **How do people learn?**
- **Success = actual changes in behavior that bring about significant different outcomes**

Why Lessons Learned from pursuing new business pose particular challenges

- **More failures in business development than almost any other activity**
- **The consequences (and resulting pressures) on individuals are significant**
 - Pressure leads to distortion (intentional and unintentional)
 - Distortion occurs with both Wins and Losses
- **Some pressures are typical of how we structure for new business**
 - Senior Executives are often more comfortable with the certainty of execution than the ambiguity of BD
 - The experts with the best insight into the customer may be intimately involved in interpreting the results

- **It was their turn to win**
- **The customer just doesn't like us**
- **The customer is in bed with our competitor**
- **All they do is look at the price**
- **Our competitor lobbies Congress better than us**
- **Our competitor is willing to tell them anything**

- **Outcome includes three elements**
 - Win or loss
 - Cost to capture
 - Potential profitability of the business at award
- **We want to understand, achieve consensus and then widely communicate the reasons why we have been successful and unsuccessful in the past**

- **Summarize known debrief results**
 - Single summary page of Mission Suitability, Cost, Past Performance, Other scores
 - Mission Suitability - details of all known Strengths and Weaknesses of our team and competitor(s)
 - Details of Cost, Past Performance and other proposal factors
- **Collect all available Strategy documents, emails, etc.**
- **Generate an initial draft of timeline showing key events and turning points from the start of the capture through award**
- **Identify potential interviewees who are representative of our entire team and the customer if possible**
- **Conduct interviews**

- **Best time for interviews is in-between Award and Debrief**
- **The four questions**
 - Why do you think this happened (the root cause)?
 - Why do you believe this?
 - How could we test this?
 - What are the implications if true?
- **Each new interviewee can provide further information on details, perceptions and decision-making during the campaign**
 - Can also provide insight on the other hypotheses collected to-date

- **Assessment of core capture/proposal processes to determine accuracy and helpfulness**
 - PTW and Black Hat assessments
 - Gold Teams and Senior Strategy Reviews
 - Proposal Blue and Red Teams
 - Orals Preparations
- **Assessment vs. Prior Lessons Learned**
- **Other analysis topics**
 - Look at progress on institutional trends (such as proposal non-compliances)

Example of Hypothesis Testing

Hypothesis	Prior evidence	Test of hypothesis	Implications may be
<p>Insufficiently convincing story as to why a GEO spacecraft bus is suitable to a Mars LEO mission</p> <ol style="list-style-type: none"> JPL ranked GEO heritage low, does not like reuse from different orbit regimes, does not want a 2 axis solar array May not like the Earth-orbit to Mars conversion, or may not like the high orbit to low orbit conversion 	Initial comments from customer source	Debrief; G2 from current and former JPL employees	<ul style="list-style-type: none"> Don't compete unless we have the right product
<p>Negative past performance stories, XYZ Program cost; and ABC program management</p> <ol style="list-style-type: none"> Our risk adjusted cost made us the highest bidder after they talked with XYZ SPO. By covering their contractors cost wise, LM and Ball have never really overrun and so had no cost multiplier on their cost estimates, we on the other hand had a 1.5 cost multiplier for XYZ 	Known XYZ (and ABC program issues)	Debrief; talk with customers	<ul style="list-style-type: none"> End customer dissatisfaction on our programs, now and forever.
<p>Integrated Avionics story too risky;</p> <ol style="list-style-type: none"> TRW was the only non X2000 architecture & X2000 is scheduled to fly well before 2005 TRW adopted a revolutionary avionics architecture (packaging) & therefore had to redo all of the units (instead of an incremental upgrade approach) 	- LM and Ball may have earlier plans to fly a 750 computer	Debrief; G2 from current and former JPL employees	<ul style="list-style-type: none"> Consider alternate approaches to demonstrating the viability of IA or choosing alternate approach to upgrade avionics

Example of Hypothesis Testing - False

Hypothesis	Prior evidence	Test of hypothesis	Implications may be
<p>Insufficiently convincing story as to why a GEO spacecraft bus is suitable to a Mars LEO mission</p> <ol style="list-style-type: none"> JPL ranked GEO heritage low, does not like reuse from different orbit regimes, does not want a 2 axis solar array May not like the Earth-orbit to Mars conversion, or may not like the high orbit to low orbit conversion 	Initial comments from customer source	Debrief; G2 from current and former JPL employees, post debrief meeting with JPL Deputy Director <i>Initially raised as a weakness, but eliminated at orals,</i>	<ul style="list-style-type: none"> Don't compete unless we have the right product
<p>Negative past performance stories, XYZ Program cost; and ABC program management</p> <ol style="list-style-type: none"> Our risk adjusted cost made us the highest bidder after they talked with XYZ SPO. By covering their contractors cost wise, LM and Ball have never really overrun and so had no cost multiplier on their cost estimates, we on the other hand had a 1.5 cost multiplier for XYZ 	Known XYZ (and ABC program issues)	Debrief; talk with customers <i>Past Performance scores were as good as reasonably possible</i>	<ul style="list-style-type: none"> End customer dissatisfaction on our programs, now and forever.
<p>Integrated Avionics story too risky;</p> <ol style="list-style-type: none"> TRW was the only non X2000 architecture & X2000 is scheduled to fly well before 2005 TRW adopted a revolutionary avionics architecture (packaging) & therefore had to redo all of the units (instead of an incremental upgrade approach) 	- LM and Ball may have earlier plans to fly a 750 computer	Debrief; G2 from current and former JPL employees, post debrief meeting with JPL Deputy Director <i>Not a weakness</i>	<ul style="list-style-type: none"> Consider alternate approaches to demonstrating the viability of IA or choosing alternate approach to upgrade avionics

Example of Hypothesis Testing

Hypothesis	Prior evidence	Test of hypothesis	Implications may be
<p>Lack of Mars knowledge led to proposal errors</p> <ol style="list-style-type: none"> TRW does not understand it's weaknesses w.r.t. going to Mars (their question areas in the orals) LM addressed specific lessons learned / risk areas in their technical proposal that we may have completely ignored due to "not knowing what we don't know". 	<p>Only 6 hours of meetings with the customer before the RFP</p>	<p>Debrief identifies specific technical weaknesses that we were unaware of</p>	<ul style="list-style-type: none"> Need a campaign, over time, to develop relationships and domain knowledge Hire/involve more ex-JPL'ers, ex-Mars personnel
<p>Inadequate prior work on MRO</p> <p>LM simply had the time, experience, and personnel to work the customer's problem (high res imagery + high bandwidth com, in a sure fire program) in more depth than we did</p> <ul style="list-style-type: none"> Lack of investment led to claims rather than demonstrated analyses (perceived in our telecomm area, for example). Didn't demonstrate investment before RFP 	<ul style="list-style-type: none"> LM had a \$3M pre-Phase A/B study working with JPL Program Manager Ball performed summer 2000 study 	<p>Debrief identifies specific technical weaknesses that would likely have been addressed if there was more time or a second iteration</p>	<ul style="list-style-type: none"> Spend the resources necessary to understand and work the customer's problem to the level necessary for success in future bids. Need to change JPL procurement approach to fund such work
<p>Lack of TRW team familiarity with JPL Mars customer</p>	<ol style="list-style-type: none"> The voice of our proposal had an unfamiliar accent/language Rankings LM/Ball/TRW/SA in order of access to JPL Lack of on-site presence at JPL that LM has; Balls' Mr. P is a fixture in the Bldg 180 cafeteria 	<p>Debrief identifies lack of understanding of customer hot buttons</p>	<ul style="list-style-type: none"> Need a campaign, over time, to develop relationships and domain knowledge Hire/involve more ex-JPL'ers, ex-Mars personnel

Example of Hypothesis Testing - Validated

Hypothesis	Prior evidence	Test of hypothesis	Implications may be
<p>Lack of Mars knowledge led to proposal errors</p> <ol style="list-style-type: none"> 1. TRW does not understand it's weaknesses w.r.t. going to Mars (their question areas in the orals) 2. LM addressed specific lessons learned / risk areas in their technical proposal that we may have completely ignored due to "not knowing what we don't know". 	<p>Only 6 hours of meetings with the customer before the RFP</p>	<p>Debrief identifies specific technical weaknesses that we were unaware of</p> <p><i>Two Unacceptable Weaknesses in regarding aerobraking and cruise</i></p>	<ul style="list-style-type: none"> • Need a campaign, over time, to develop relationships and domain knowledge • Hire/involve more ex-JPL'ers, ex-Mars personnel
<p>Inadequate prior work on MRO</p> <p>LM simply had the time, experience, and personnel to work the customer's problem (high res imagery + high bandwidth com, in a sure fire program) in more depth than we did</p> <ul style="list-style-type: none"> • Lack of investment led to claims rather than demonstrated analyses (perceived in our telecomm area, for example). Didn't demonstrate investment before RFP 	<ul style="list-style-type: none"> • LM had a \$3M pre-Phase A/B study working with JPL Program Manager • Ball performed summer 2000 study 	<p>Debrief identifies specific technical weaknesses that would likely have been addressed if there was more time or a second iteration</p> <p><i>Weakness W8 due to lack of aerobraking models; debrief conceded JPL could have paid LM to generate the products that helped their score</i></p>	<ul style="list-style-type: none"> • Spend the resources necessary to understand and work the customer's problem to the level necessary for success in future bids. • Need to change JPL procurement approach to fund such work
<p>Lack of TRW team familiarity with JPL Mars customer</p>	<ol style="list-style-type: none"> 1. The voice of our proposal had an unfamiliar accent/language 2. Rankings LM/Ball/TRW/SA in order of access to JPL 3. Lack of on-site presence at JPL that LM has; Balls' Mr. P is a fixture in the Bldg 180 cafeteria 	<p>Debrief identifies lack of understanding of customer hot buttons</p> <p><i>Lack of understanding demonstrated</i></p>	<ul style="list-style-type: none"> • Need a campaign, over time, to develop relationships and domain knowledge • Hire/involve more ex-JPL'ers, ex-Mars personnel

- **Harness the “energy” of your management and your proposal team**
 - Avoid mutually incompatible “lessons learned” stories
 - Reduce the time wasted in the future on pointless strategy excursions
- **Develop an understanding of “win factors” for your organization and marketplace**