



Ground System  
Architectures Workshop

# GSAW 2002

## Breakout Session 11A:

### Business Cases and Acquisition Strategies

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## Business Cases and Acquisition Strategies

- Acquisition decisions continue to be driven by business case, cost and risk considerations
- Continuing emphasis on COTS and reuse emphasize need for cost/benefit/risk trade-offs
- Successful acquisitions mitigate cost and schedule risk caused by disconnects between product capabilities and system requirements
- Successful strategies need to address supportability, maintenance, and product improvement drivers
- Well defined ground system architectures can have a strong impact on the reduction of system life cycle costs



## Business Case Definition

- Business case: Materials prepared for decision makers to show that the idea being considered is a good one and that the numbers that surround it make financial sense
- Source: *Making the Software Business Case: Improvement by the Numbers*, Donald J. Reifer, Addison-Wesley, 2002



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# Business Case Principles

- Decisions are made relative to alternatives
- If possible, money should be used as a common denominator
- Sunk costs are irrelevant
- Investment decisions should recognize the time value of money
- Separable decisions should be consider separately
- Decisions should consider both quantitative and qualitative factors
- The risks associated with the decision should be quantified if possible
- The timing associated with making decisions is critical
- Decision processes should be periodically assessed and continually improved

Source: *Making the Software Business Case*, Don Reifer



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Breakout Session  
11A Presenters

## Business Cases and Acquisition Strategies

- Greg Hollister, United Space Networks
  - *Universal Space Network Commercial Antenna Network Evaluation (CANE) Overview*
- Daniel Vanderwarker, The Aerospace Corporation
  - *Strategies for Implementing a Product Line Approach to Software Reuse at the NRO*
- Stephen Book, MCR, Inc.
  - *Schedule Risk Analysis: Why It is Important and How to Do It*
- Don Reifer and Ricardo Valerdi, University of Southern California Center for Software Engineering
  - *COSYSMO: Constructive Systems Engineering Cost Model*
  - Note: Material to be presented by Marilee Wheaton