

4th Annual CMMI[®] Technology Conference & User Group CMMI

What Beyond CMMI Is Needed for Program Success?

— Pulling Value Through the Product Lifecycle —

Executive Plenary Session Nov. 16, 2004

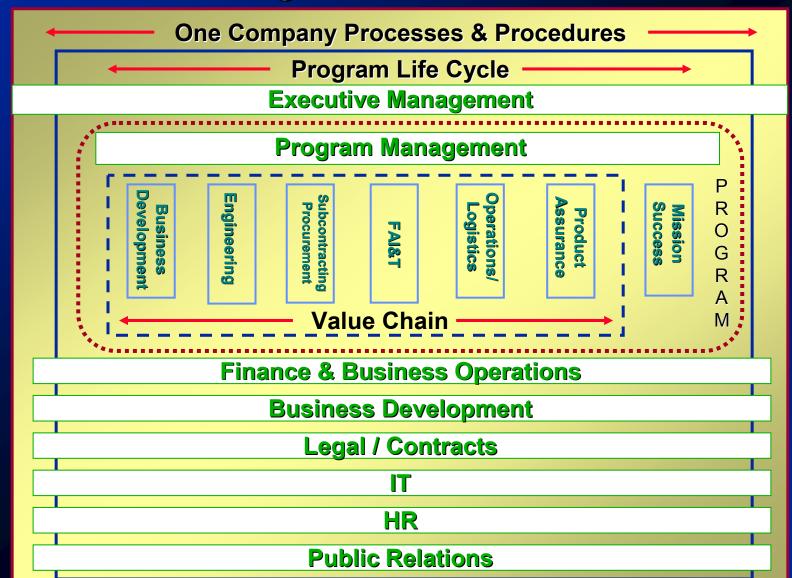
Ronald F. Paulson Vice President, Engineering Lockheed Martin Corporation

What Does Current CMMI® Model Provide?

- Provides horizontal process linkage for part of program value-chain (SW/SE/IPPD/SS)
- Provides means to assess whether necessary processes are in place
- Provides means to assess artifacts to demonstrate program is compliant with processes
- Assesses management by metrics to accomplish self-improvement

CMMI[®] model partially provides <u>what</u> is needed, but not <u>how</u> to implement for program success.

Program Value Chain



Improvements to CMMI[®] Products & Implementation



- Extend CMMI model to entire program value-chain (shaping-the-game to disposition)
- Extend CMMI model to other functions (e.g., services)
- Strengthen CMMI level credential so there is appraisal reuse (e.g., don't pay twice — once to get credentials and again when bidding a program)
- Ensure CMMI model applies to hardware and software
- Endorse customer application of the CMMI Acquisition Module

Extending the CMMI® model will help pull value through the product life cycle.



Steps to Successful Use of Processes

- Process generation (command media)
- Process implementation (program tailoring)
- Process management (business rhythm)

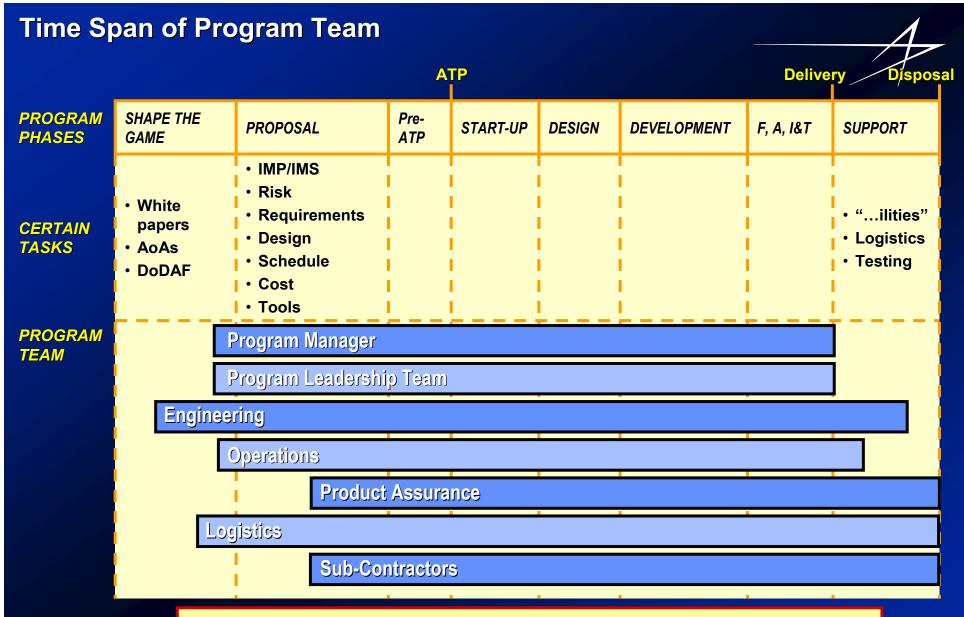
Lack of right process implementation and management is currently the primary cause of many red programs.



Processes Skilled & **Experienced Procedures** People TECHNOLOGY **Defined** Requirements **Tools** Performance

Program Management

Program
Managers
are the
leaders for
successful
program
execution.



Winning & Executing A Program Is A "Team Sport" (Program Team & Other Functions)

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Path Forward

- Strong interaction of customer with contractor to define capabilities/requirements of system-of-systems and systems
- Customer provides adequate schedule and budget (funding and funding profile) early in program to enable trades to define a robust system
- Programs executed with mature processes and efficient, effective value chains (including metrics)
- Programs executed by IPTs with excellent communication, system engineering and skill mix (design, SW, manufacturing, logistics, CM/DM, etc.)
- Programs executed with electronic integration, analysis, data storage, and process flow (more virtual, more tool integration, more integration with subcontractors, etc.)

What Is "The Right Stuff at the Right Time and the Right Place"?

It is....

- Delivering required capability to the customer oncost and on-schedule (customer)
- Profitably delivering required capability to the customer on-cost and on-schedule (contractor)
- Program execution with an optimized value-chain that effectively and efficiently delivers the required capability to the customer on-cost and on-schedule with minimum resources wasted (program team)

