

Organizational Synthesis - CMMI[®], The Glue That Binds

Synthesizing:

- Business Process Model,
- ISO Standards,
- Life Cycle Management,
- Program Direction and
- CMMI[®]

into a Business Process Management System

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ASD'S Concurrent Initiatives



BAE Systems Concurrent Initiatives

The major concurrent initiatives and business drivers used for illustration of our organizational system synthesis as presented here include:

- ASD's Business Process Model
- ISO Standards
- BAE Systems Operational Framework and Life Cycle Management Process
- CMMI®

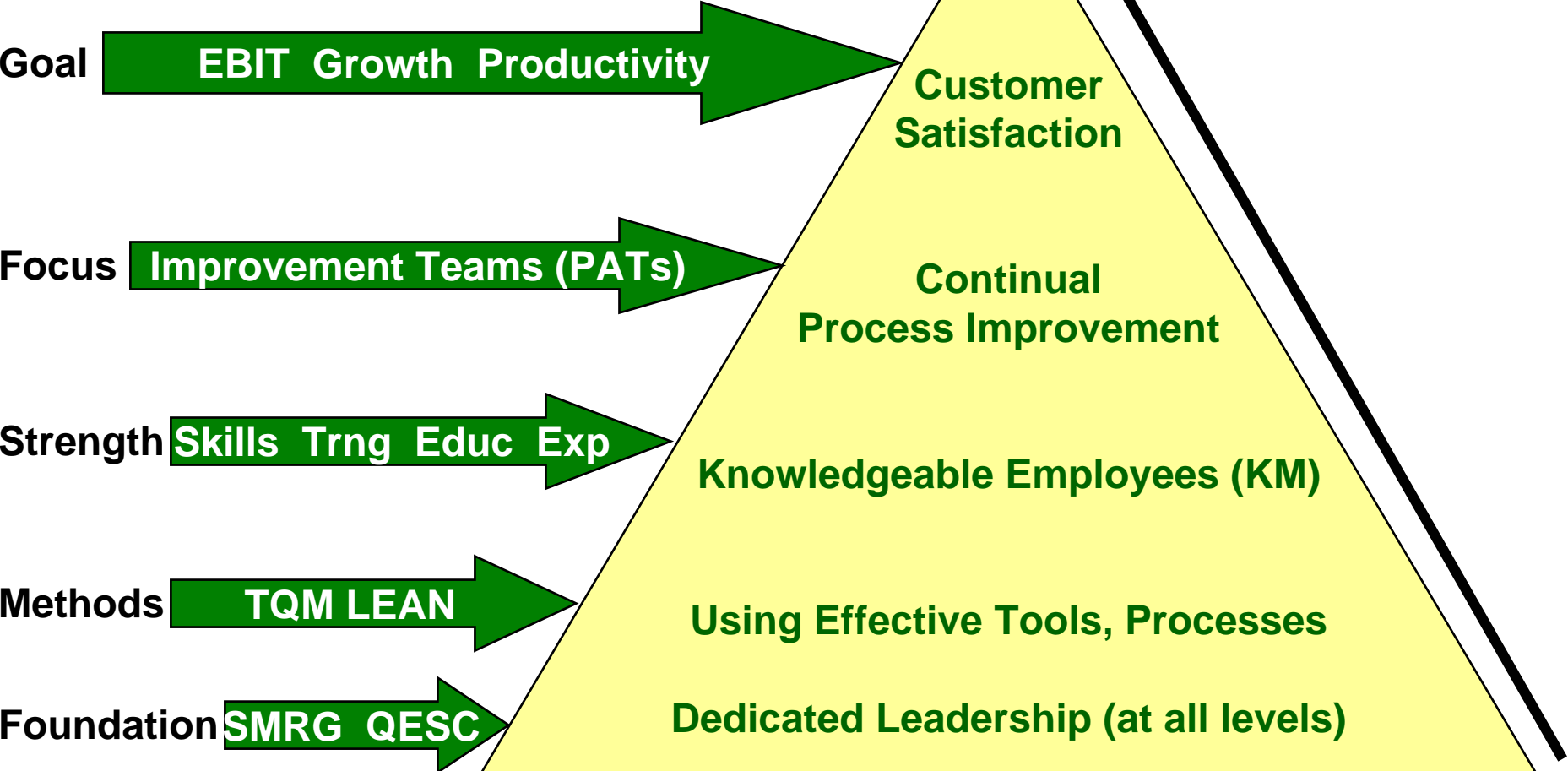
Change Is Inevitable

The pace at which change transpires and the complexity of that change is dependent upon the:

- 1) Number of concurrent change drivers
- 2) Degree to which the drivers are instituted
- 3) Cultural acceptance of the drivers
- 4) Capacity (Resources) to implement the change, and
- 5) Application of system synthesis

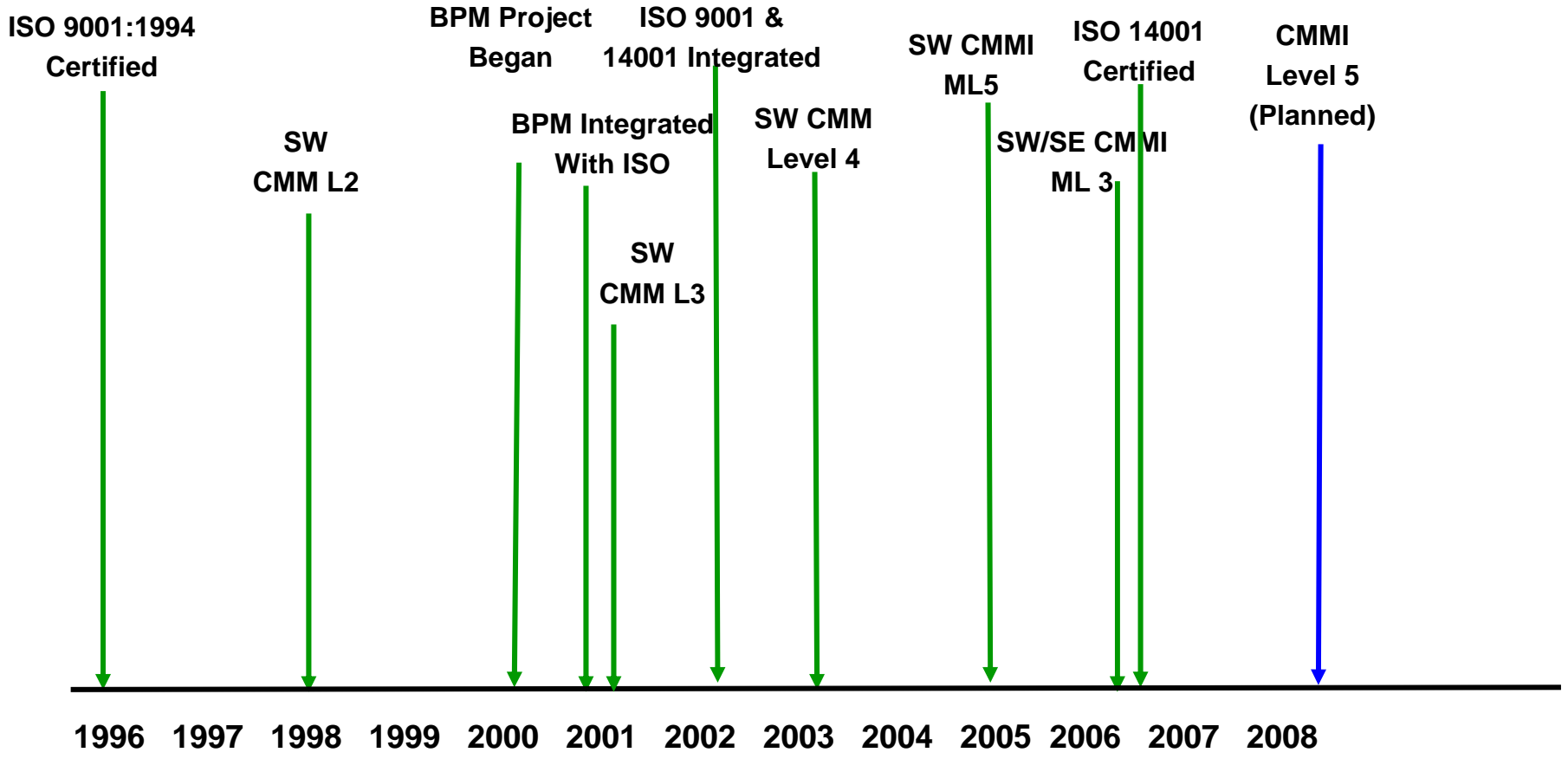
Our Business Approach

Compliant with ISO; Utilizes CMMI® Best Practices; Leverages Assets (PEOPLE, TOOLS)



CMMI® provided the suite of best practices applicable to software and systems engineering

ASD Process Improvement & History Milestones



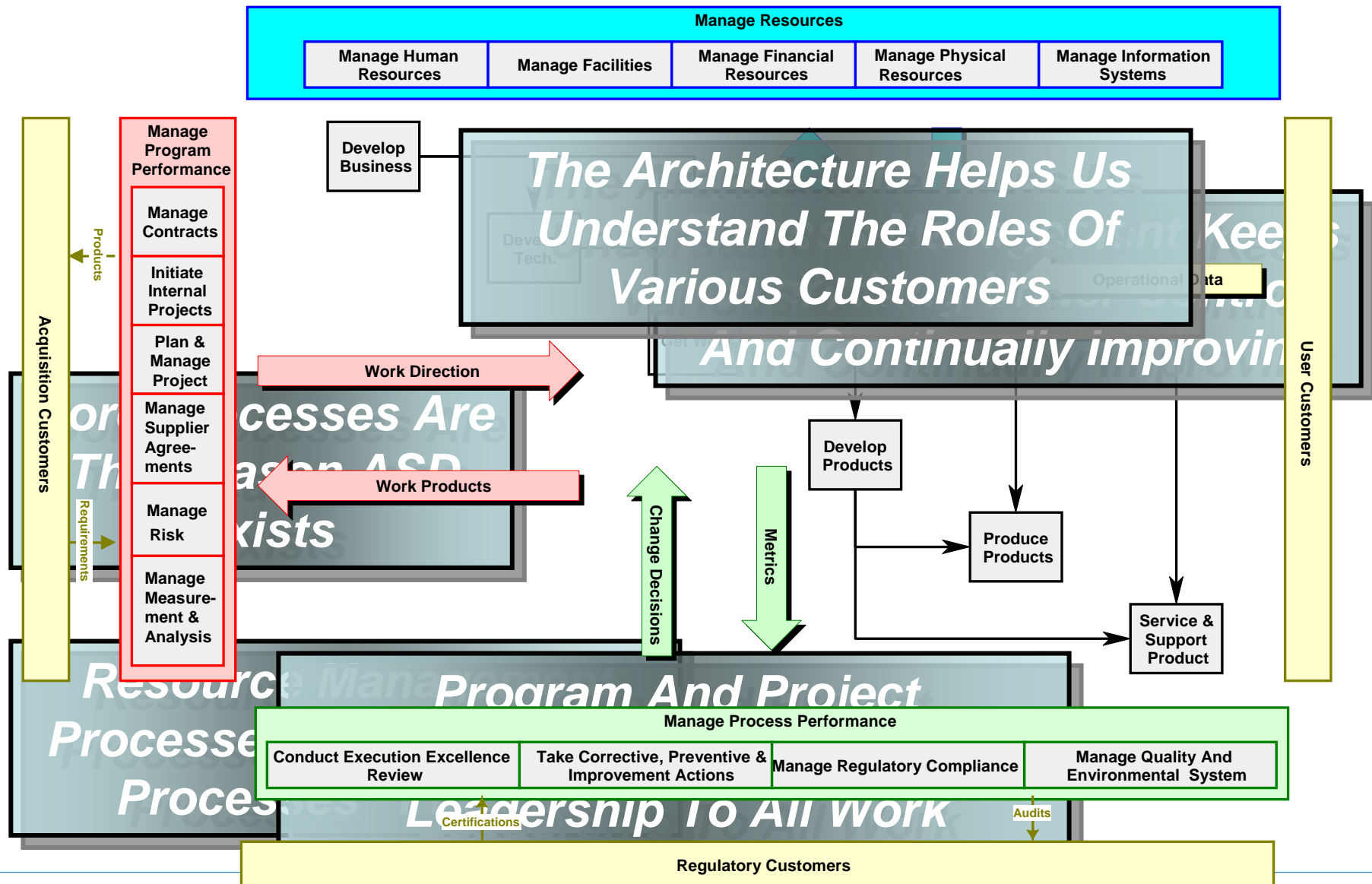
Business and Product Development Process Improvement

Movement from CMM to CMMI® triggers the start of synthesis –The “glue process” begins

ASD'S Business Process Model Initiative



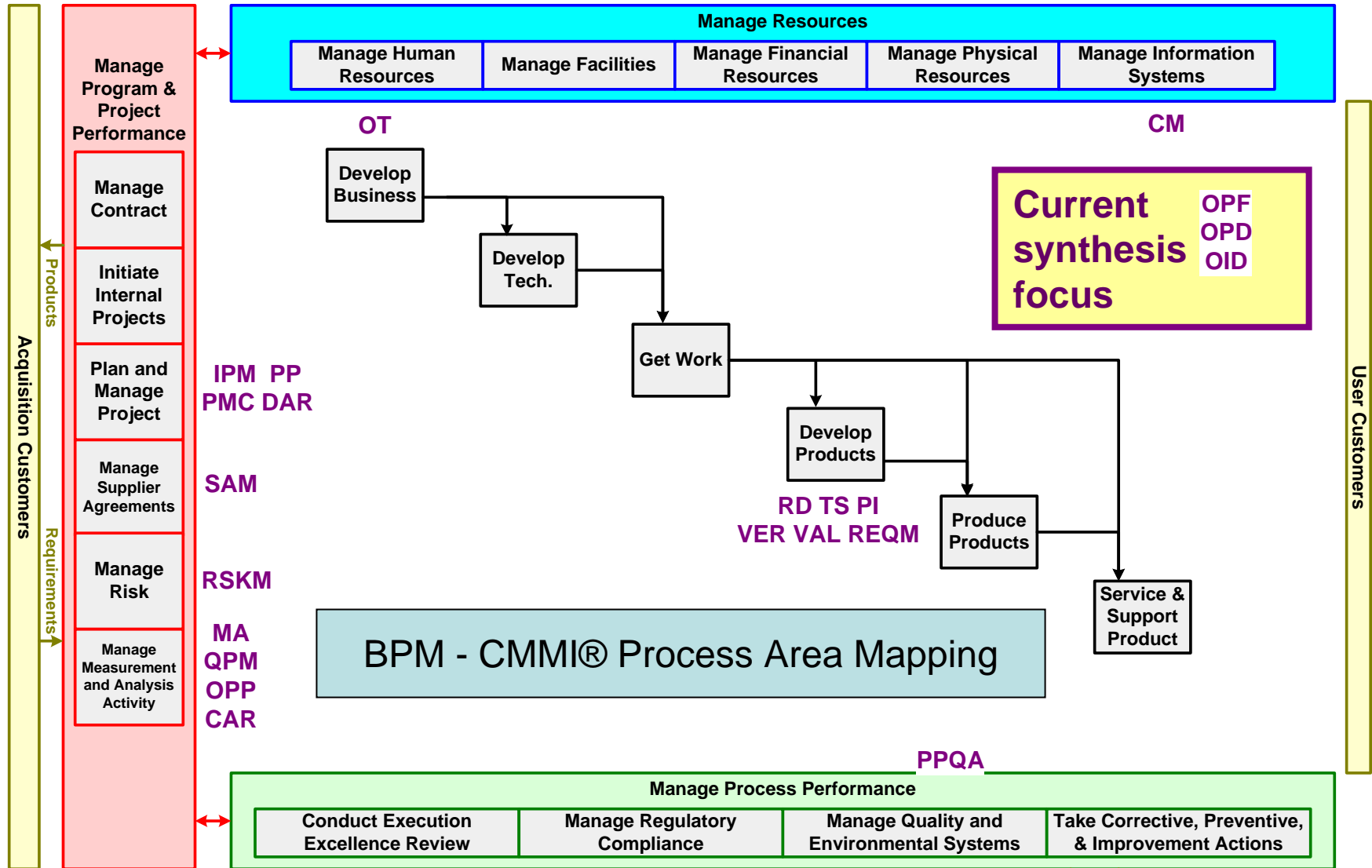
ASD's Business Process Model Architecture Copyright 2001 BAE Systems



0.0, Rev 09, 27 June 2005 Refer to BP00064 for Change History

ASD Business Process Model

Copyright 2001 BAE Systems



CMMI® institutionalization - the glue to cement the initiatives together under the BPM

ISO Standards Initiatives

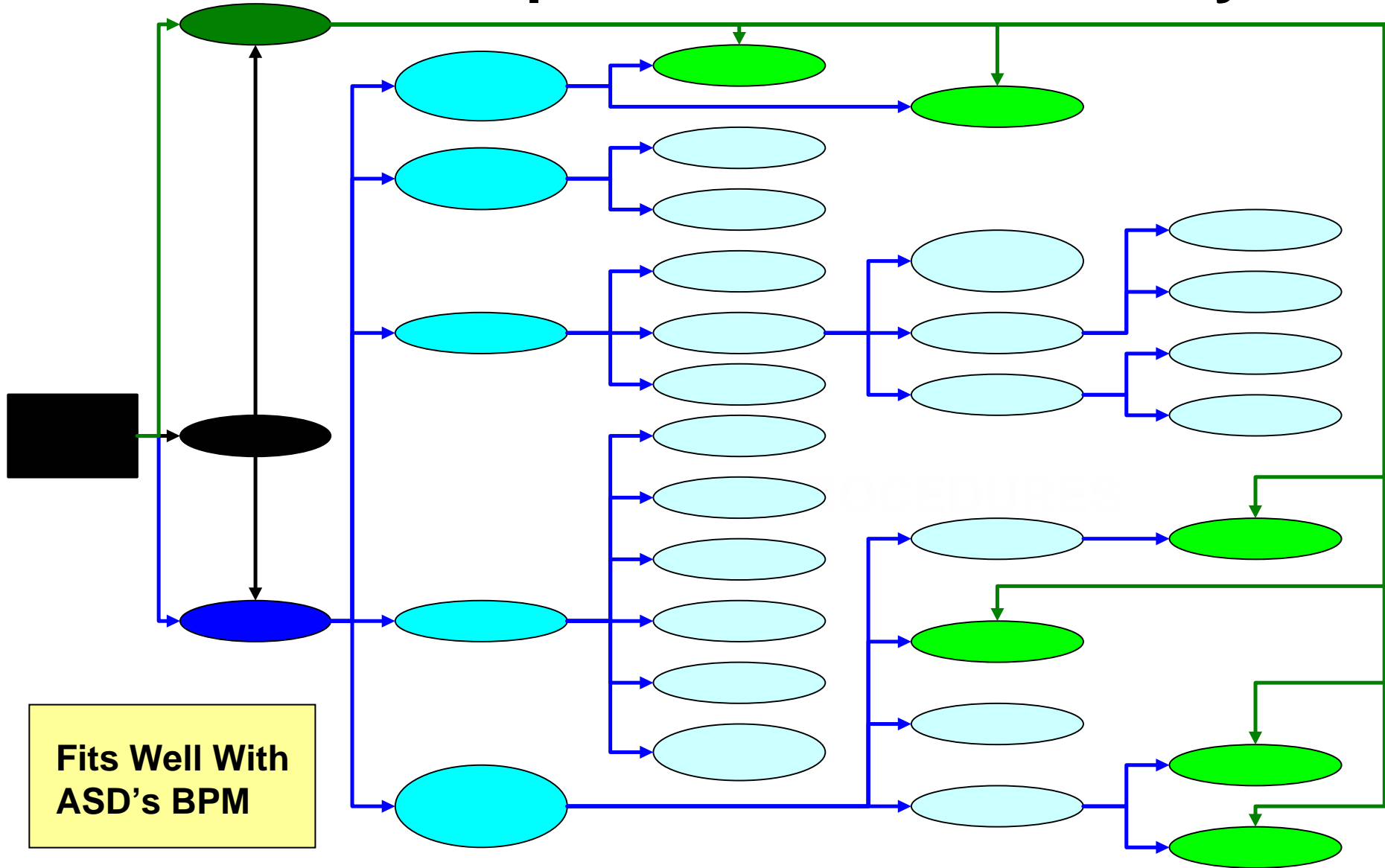


ISO 9001 and ISO 14001

ISO 9001 standard emphasized

- Defining sequence and interaction of processes
- Customer requirements and customer satisfaction, for both external and internal customers
- Process measurement and/or monitoring; data-driven decision making
- Continual improvement
- Increased emphasis on management responsibility

ISO 9001: Implied Process Hierarchy



CMMI® and ISO are looked upon as people and process enablers to accomplish performance sharing, lean initiatives, safety, and other critical business support initiatives

BAE Systems Operational Framework (OF) Life Cycle Management (LCM) Business Process

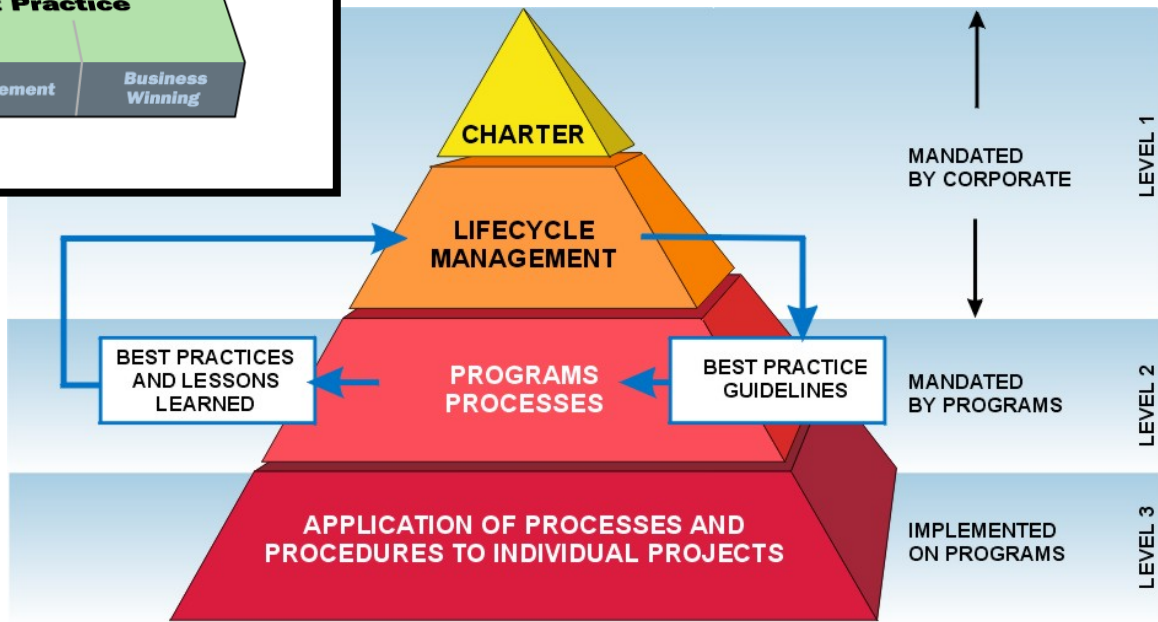
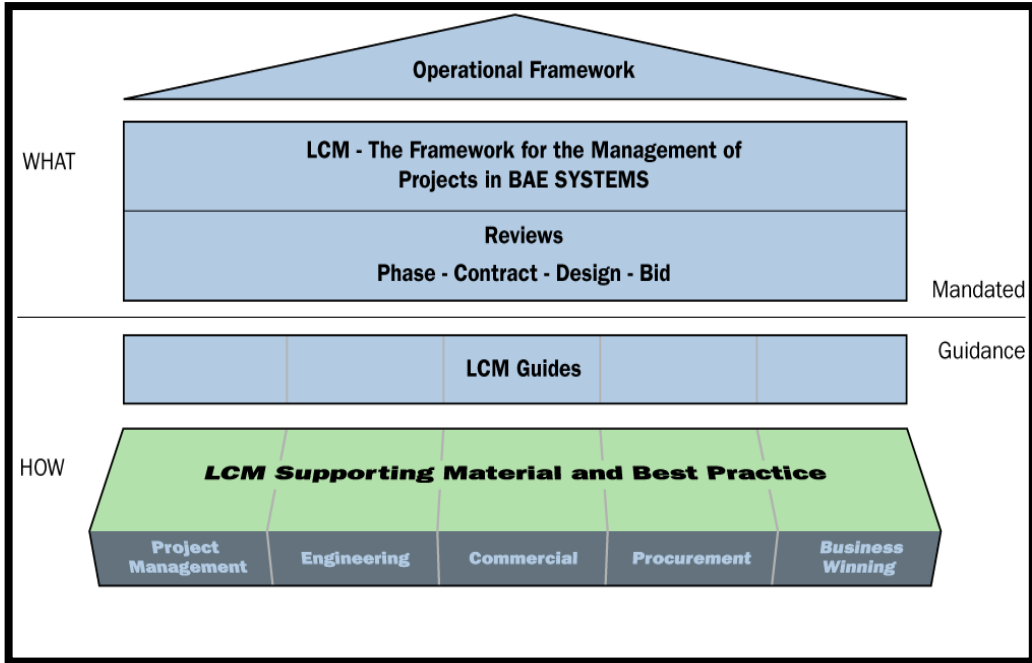


Acquisition by BAE Systems

BAE Systems Operational Framework (OF)
 (governance framework for all Business Units)



Life Cycle Management (LCM)



Another Synthesis Opportunity - OF

- 1) All employees have an awareness of the Operational Framework
- 2) Local policies and processes are in place to implement the requirements of the Operational Framework and all mandated policies and processes
- 3) Appropriate training and monitoring processes are put in place to ensure proper implementation of the Operational Framework

Synthesizing Activities



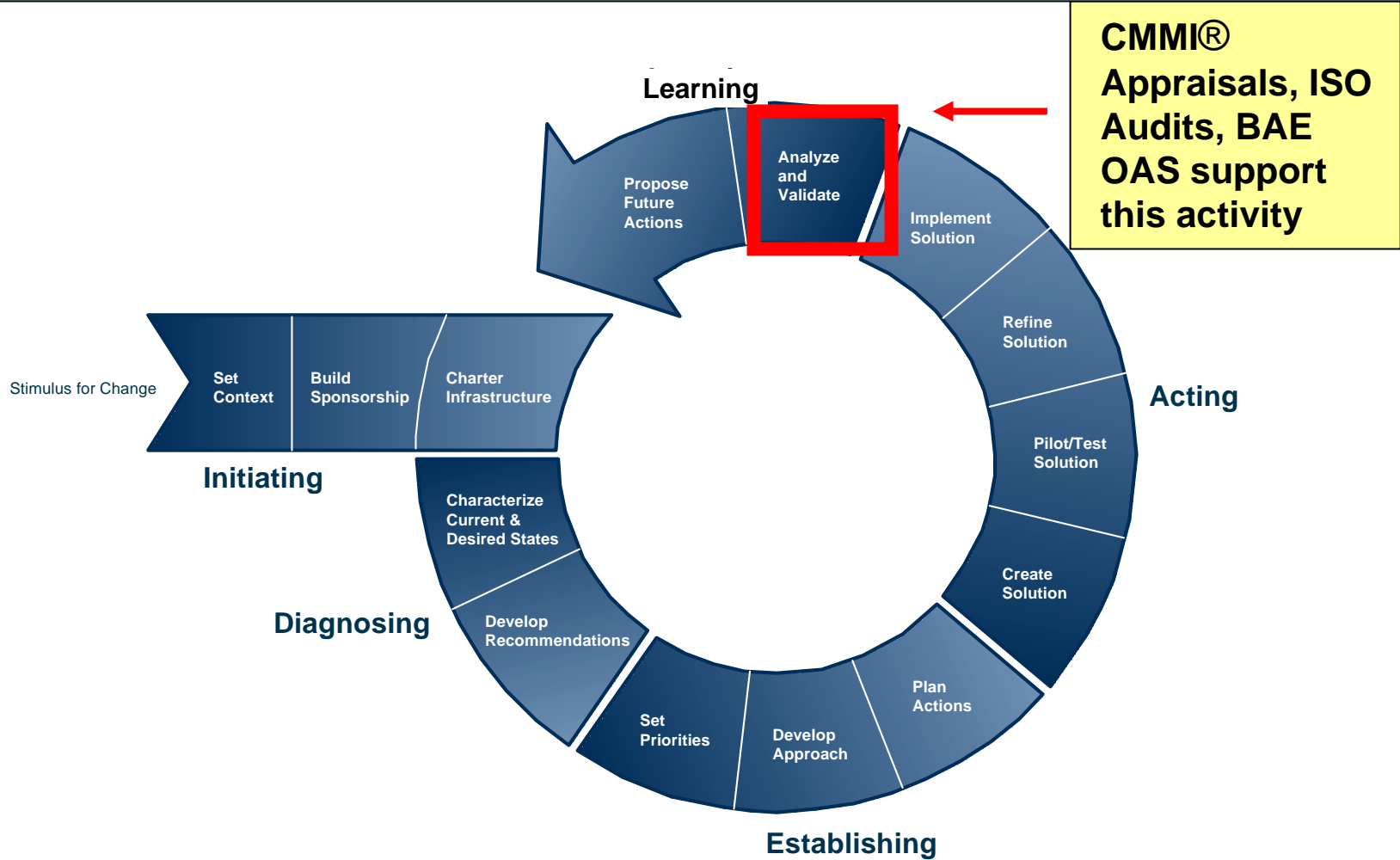
ASD's Process Based Management Vision

*The Workforce
Procedures Are
Executed In The
Conduct Of
Business
Operations And
Results Are
Measured*

*The
Business
Results Are
Reviewed And
Improvements
Implemented*



SEI's IDEAL™ Approach to Process Improvement

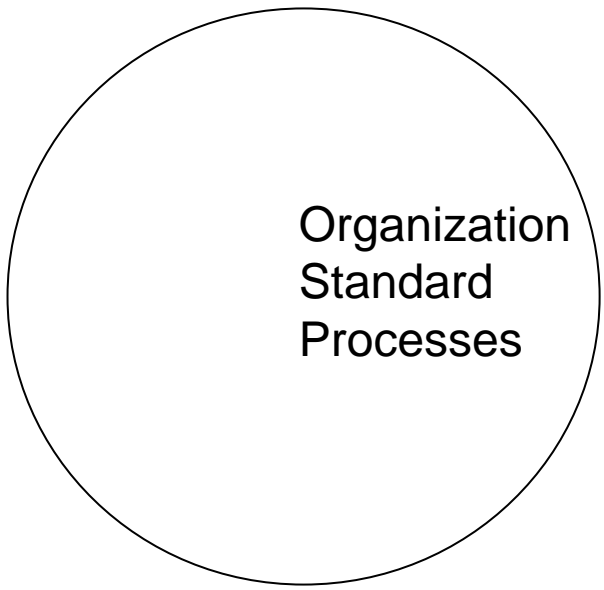


Legacy Documentation (Stove Pipe Initiatives)

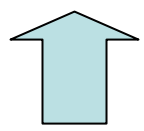
Business Process Model



ISO – HW Oriented

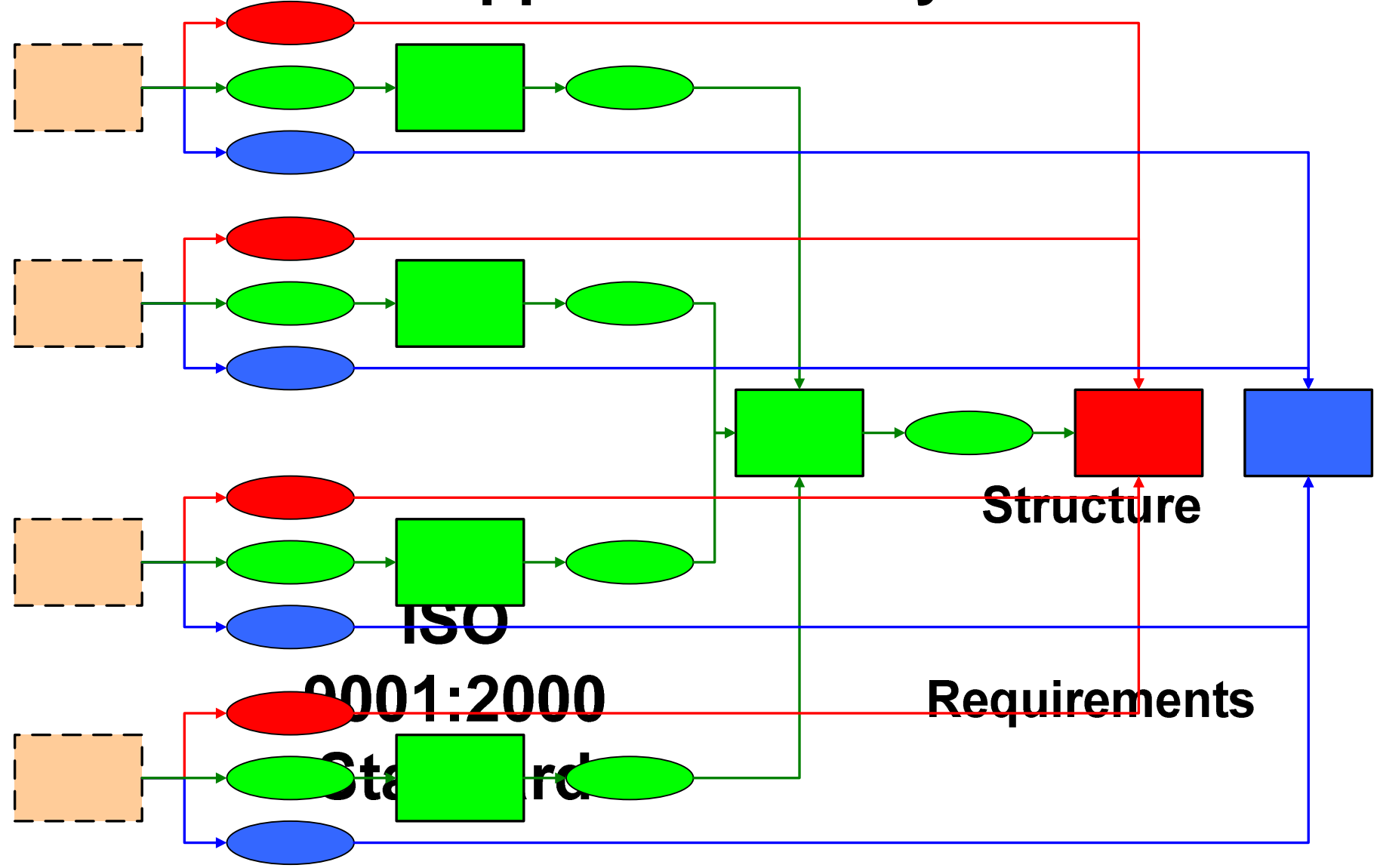


CMM – SW Oriented



**CMMI® for Systems Engineering and Software Engineering v1.1
And CMMI® for Development v 1.2 reduces overlap**

General Approach For Synthesis

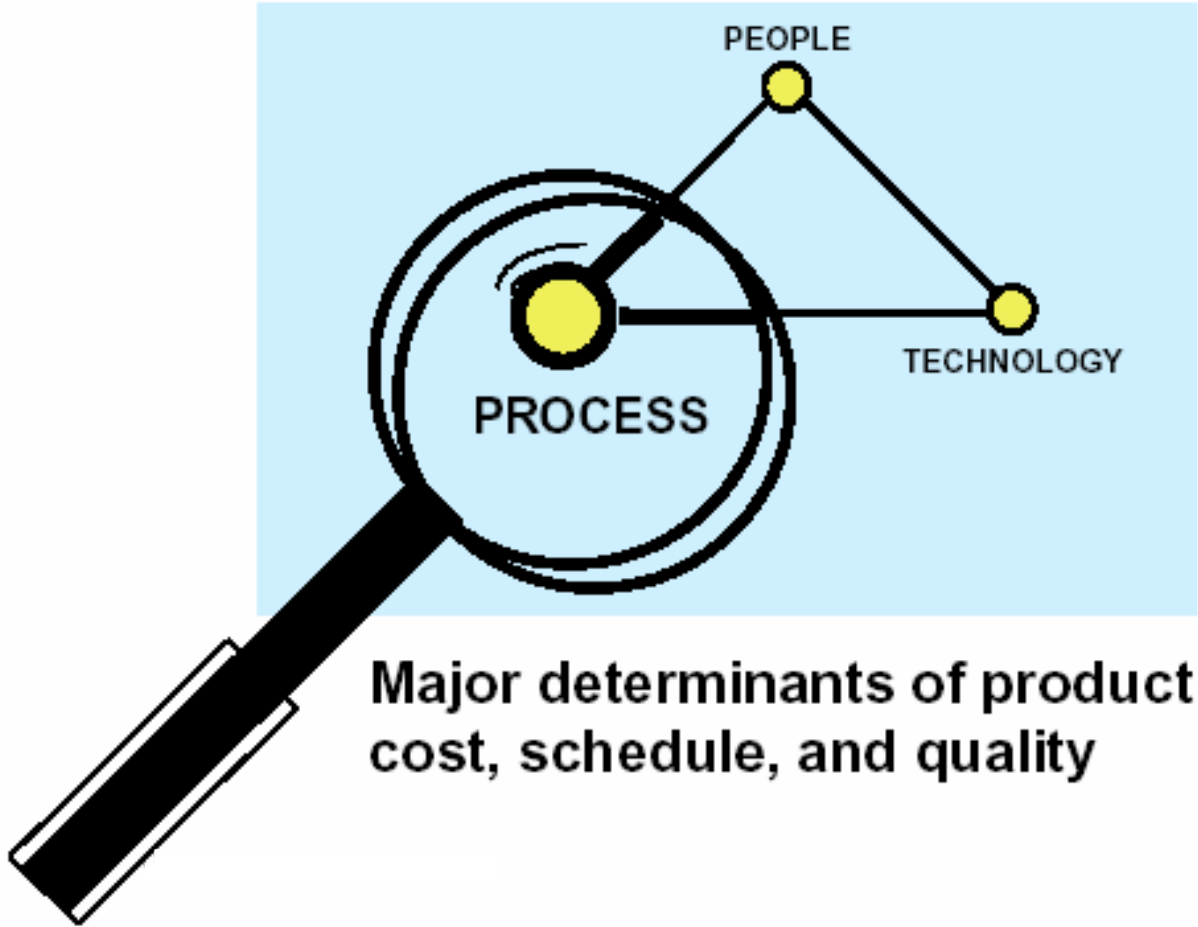


ISO 9001:2000 Standard

Requirements

Terminology

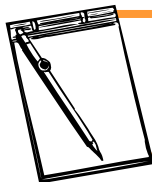
Why Focus on Processes?



Process Institutionalization

Process institutionalization has been achieved when:

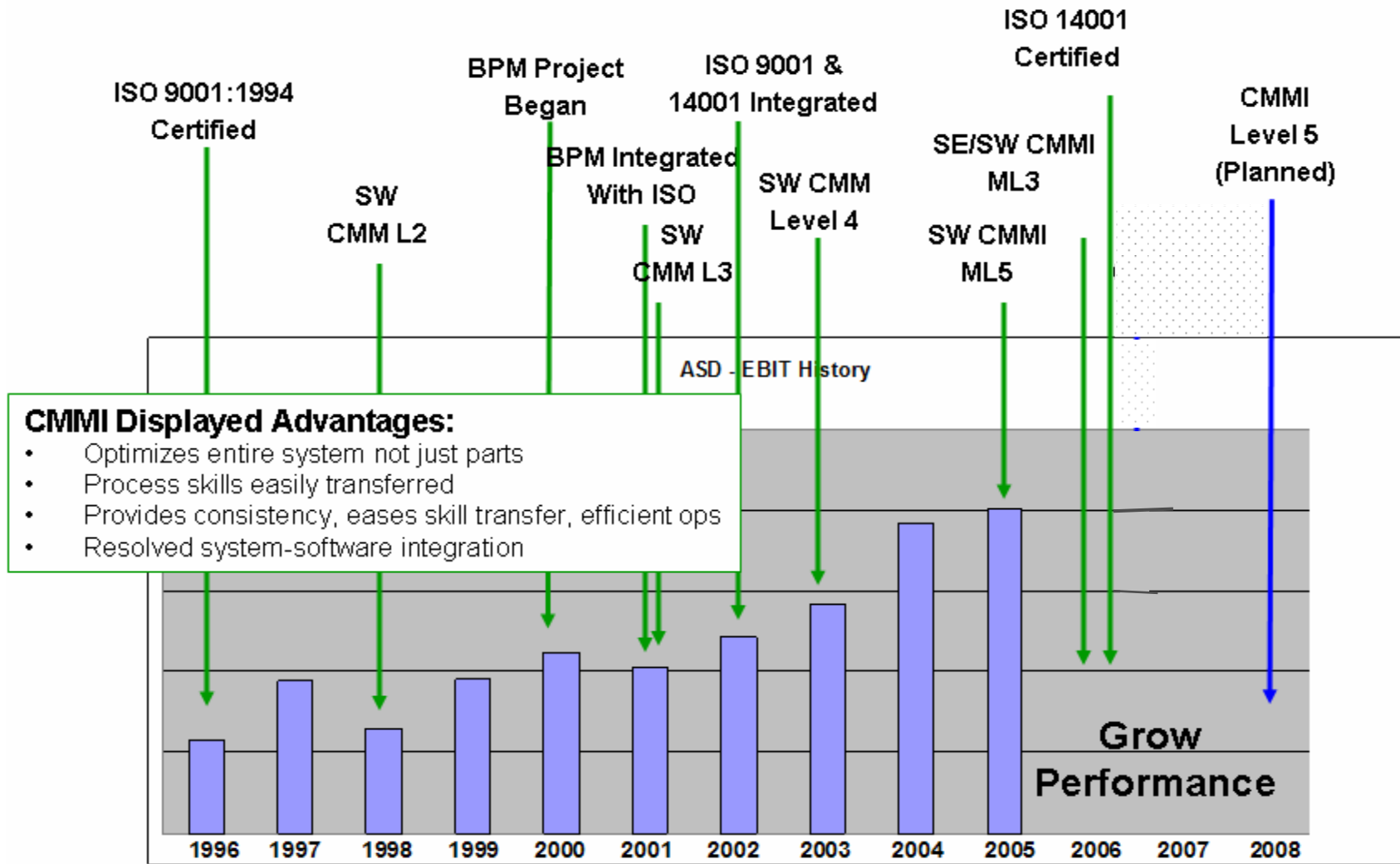
- A policy relating to the process exists
- The process is defined and documented
- Training exists and has been delivered
- Required resources are allocated
- The majority of the process is or has been exercised frequently (as appropriate to the project lifecycle)
- The execution of the process is measured, managed, and verified, and corrective actions are taken
- It is clear that the staff understand their processes, can discuss related artifacts, and believe in the effects



Institutionalization: The ingrained way of doing business that an organization follows routinely as part of its corporate culture.

Source CMMI Version 1.2

Process Influence on EBIT



Business and Product Development Process Improvement Correlates with financial performance

Business Advantages of Organizational Synthesis

- More efficient use of resources in developing, documenting, deploying, maintaining, and knowledge management
- Consistency in understanding, less confusion – unified process alignment
- Improved communication due to common language, processes

CMMI® Glue: Efficient resources, unified process alignment, improved communication

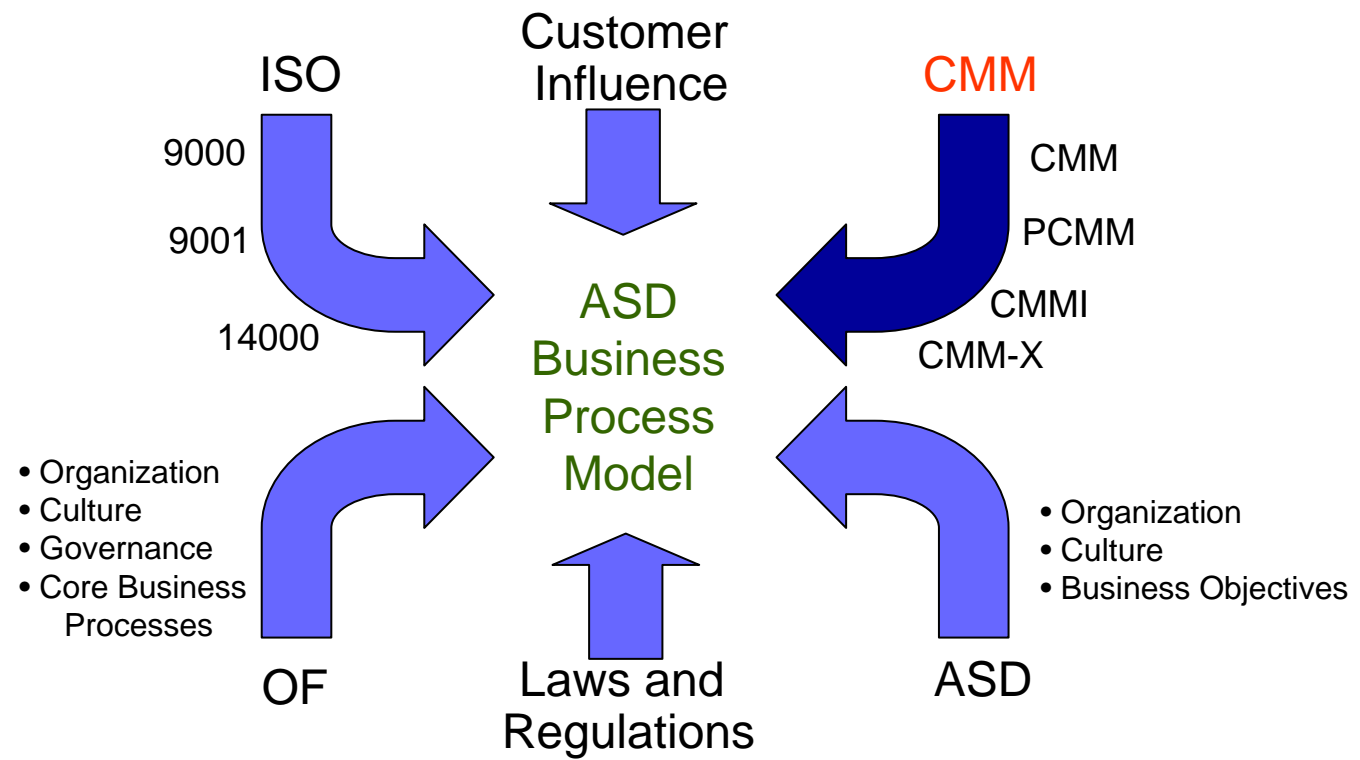
Summary



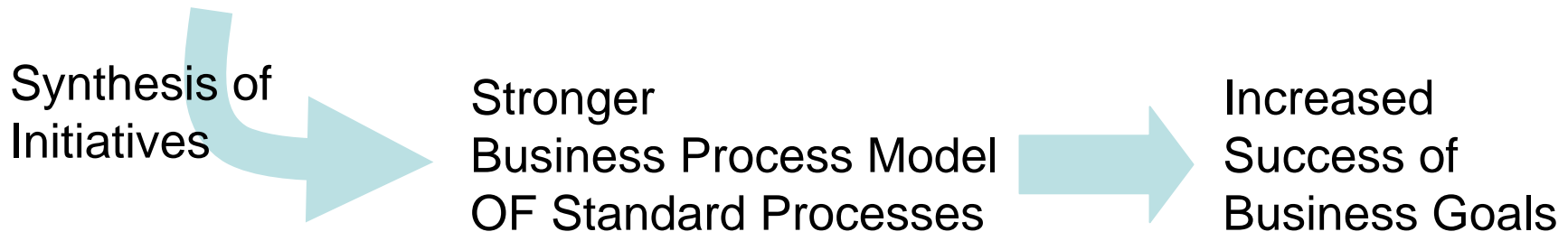
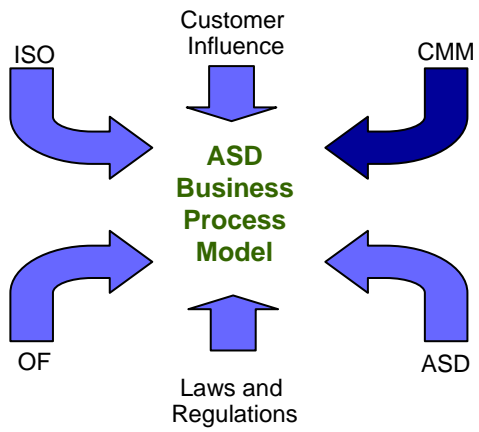
In Summary

- 1) Synthesis of the Organizational System presents an opportunity to operate in an effective business manner, improving coordination by reducing redundancy
- 2) For ASD, CMMI® and the need for institutionalization provided the glue to bind the organizational initiatives into a synthesized operation
- 3) Change happens – embrace the opportunity

Key Enabler – CMM Practices



The Glue Results In ...



Organizational synthesis is a journey, not a destination.

Integrating the organizational system is an evolutionary activity even if the company maintains its current initiatives, driven by the business need to change and improve.