Micro Focus Applications Value Profile & CMMI

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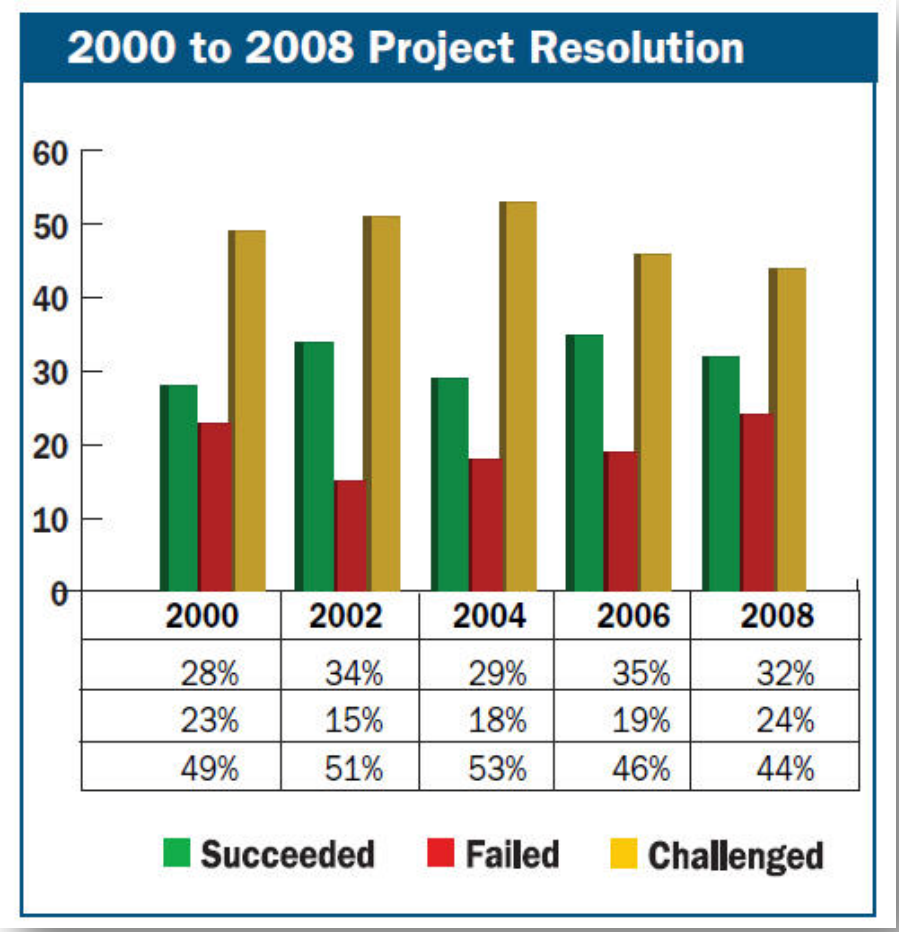
Micro Focus

Agenda

- Framing the Issue – Why did we develop the AVP ?
- AVP Overview
- CMMI & The AVP
- Q&A

Software project success continues to decline…



2006 - 2008

Cost Overruns ↑ 7%

Time Overruns ↑ 7%

STANDISH GROUP

The Standish Group International, Inc.
2009 CHAOS Summary 2009

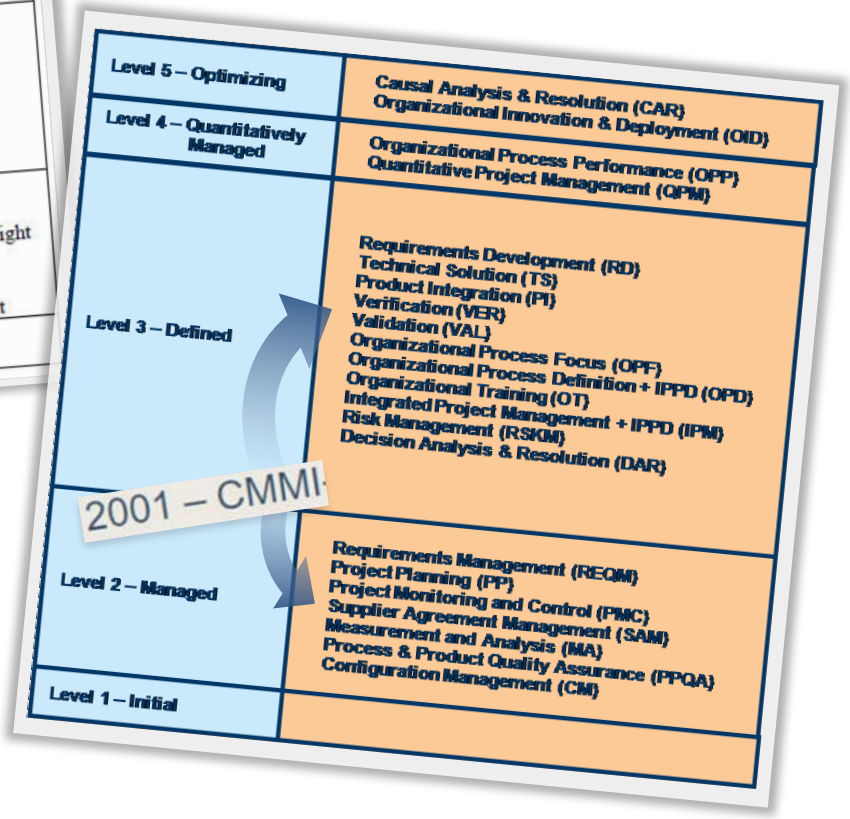
How much do you waste on rework – every year?

Number of Developers	Your Annual People Cost	Your Annual Waste on Rework
30	$3,000,000	$1,200,000
50	$5,000,000	$2,000,000
100	$10,000,000	$4,000,000
200	$20,000,000	$8,000,000
300	$30,000,000	$12,000,000
500	$50,000,000	$20,000,000
1000	$100,000,000	$40,000,000
3000	$300,000,000	$120,000,000

We've been talking about Requirements for a very long time…

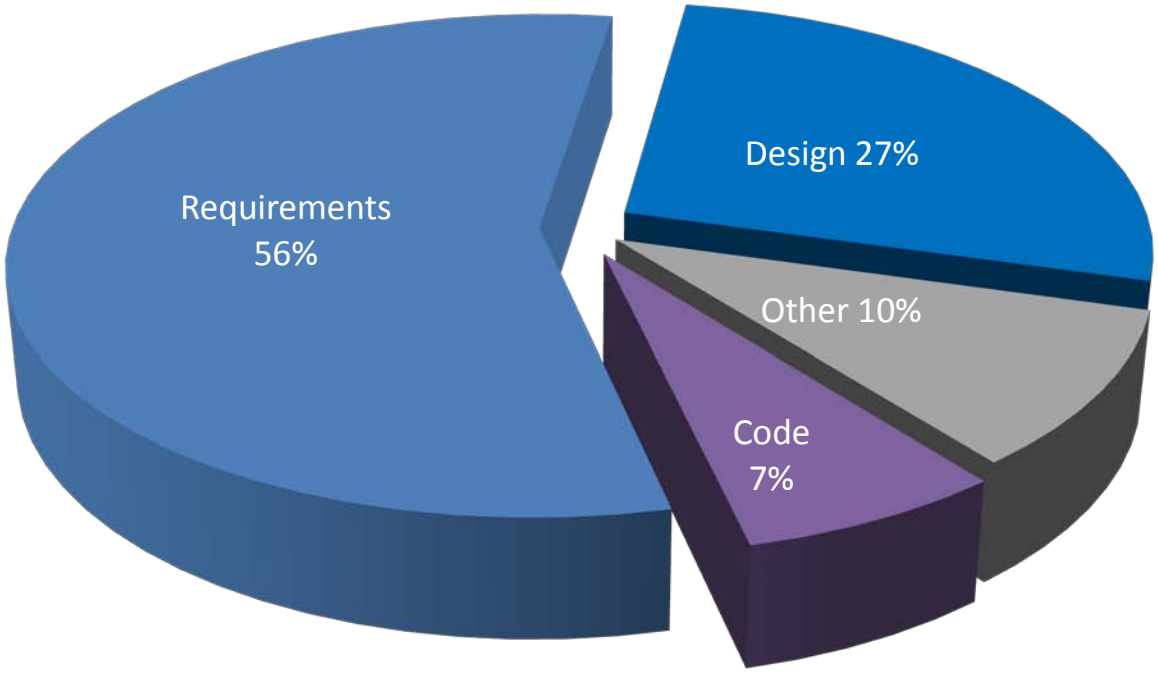
Level	Focus	Key Process Areas
Level 5 Optimizing	Continuous process improvement	- Defect Prevention - Technology Change Management - Process Change Management
Level 4 Managed	Product and process quality	- Quantitative Process Management - Software Quality Management
Level 3 Defined	Engineering processes and organizational support	- Organization Process Focus - Organization Process Definition - Training Program - Integrated Software Management - Software Product Engineering - Intergroup Coordination - Peer Review
Level 2 Repeatable	Project management processes	- Requirements Management - Software Project Planning - Software Project Tracking and Oversight - Software Subcontract Management - Software Quality Assurance - Software Configuration Management
Level 1 Initial	Competent people (and heroics)	

1992 – Software CMM



2001 – CMMI

…and still can't get it right – Software Development time wasted (Rework)



Analyst Perspectives

Gartner

Requirements Form the Foundation of Software Quality

26 March 2009

Thomas E. Murphy

Gartner RAS Core Research Note G00165755

Development and testing teams can't effectively deliver software without appropriate requirements. Best practices and tools can drive improved quality and productivity.

Overview

A large number of defects are injected into software when the requirements are collected, but the defects aren't detected until the testing phase. Involving the quality assurance (QA) team in requirement reviews can detect and remove a high percentage of these defects, improving project efficiency and reducing costs.

Key Findings

- Finding and fixing defects during the development of the requirements is more than six times more cost-effective than doing so during the development phase.
- Requirement defects remain a large percentage of defects, and cause IT versus business friction.
- Communication defects are driven out by better requirement-eliciting practices.
- Involving the QA organization in a sign-off review leads to early defect detection and better testing.

Recommendations

- Before implementation begins, establish QA-driven requirement reviews.
- To minimize rework costs, invest in improving the quality of requirements.
- To reduce communication errors, use newer requirement-eliciting tools and prototyping with short cycles.

Sample cost savings from earlier attention to quality

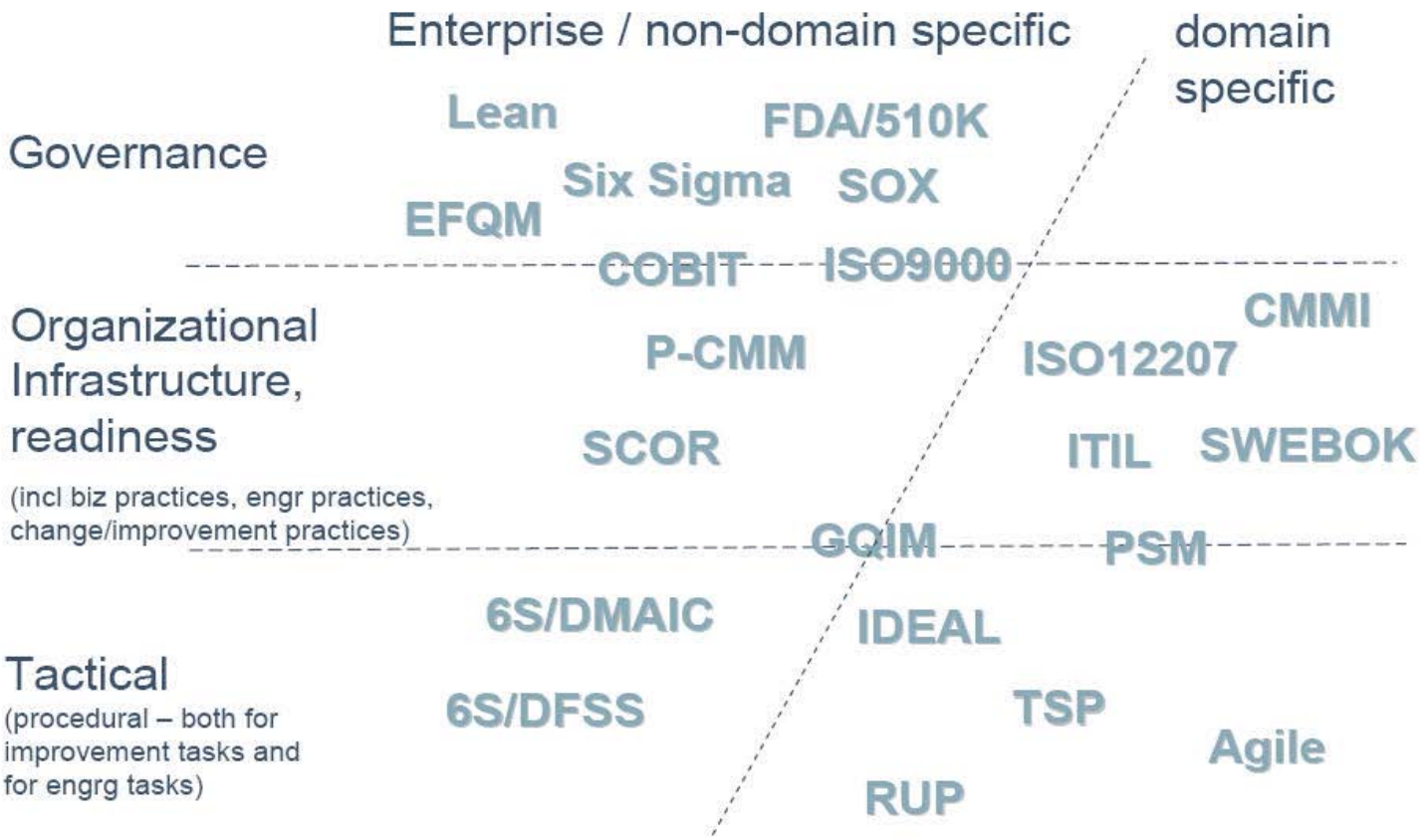
Cost of problem resolution	Requirements	Design	Development	Testing	Production	Resolution cost for 100 defects at $100/defect
	1x	2x	10x	50x	100x	
% resolved	0%	0%	0%	0%	100%	
cost	$0	$0	$0	$0	$1,000,000	$1,000,000
% resolved	10%	0%	0%	60%	30%	
cost	$1,000	$0	$0	$300,000	$300,000	$601,000
% resolved	10%	40%	25%	20%	5%	
cost	$1,000	$8,000	$25,000	$100,000	$50,000	$184,000

Forrester Research, 2006

Why Do a Value Profile

- Understand Current Capabilities
  - Where do you stand in the basic SDLC disciplines ?
  - What progress have you made ?
- Compare Capabilities with Industry Norms
  - Where do other companies stand ?
- Understand Business and Economic Implications
  - What are your Critical Business Issues ?
  - What is the economic impact of the CBI gaps ?
  - What is the value of closing the CBI gaps ?
- Determine a Strategy for Improvement
  - What is the long-term vision?
  - Which improvement steps are you ready for?
  - Where should you focus your efforts in the short term

Industry Models



What are we doing in an AVP ?

1) Business Issues

2) Financials

Application Development Budget	$1,500,000
Development Staff	50%
Project Management	10%

3) Processes

Test Environment Preparation		
Test Environments	Dedicated test environments are made available in a timely manner to cover different deployment environments	40%
Privacy	All data populating the test environments follow Corporate policies for data privacy, SOX, HIPAA, etc.	0%

4) Value of Improvement

Sources of Business Value	
Lower Costs	$252,332
Higher Quality	$87,293
Faster Time to Market	$50,194
Better Business Alignment	$100,660
Total	*$490,479*

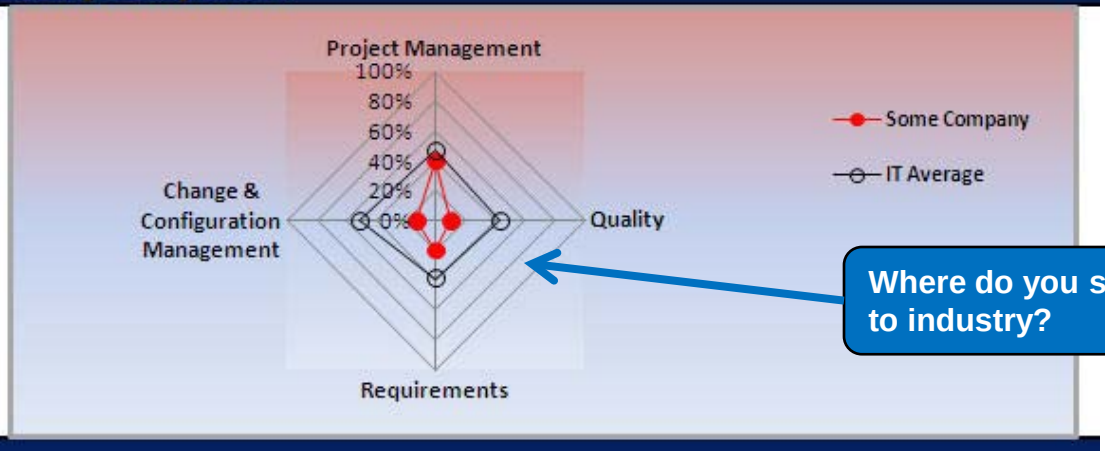
Process Analysis

Capability Profile

	Repeatability	Precision	Visibility/Controlled	Optimized
Project Management	Foundational Phases	Phase Management	Risk Management	Governance
40%	45%	60%	34%	20%
Quality	Quality Control	Quality Assurance	Quality Management	Quality Governance
10%	13%	13%	7%	7%
Change & Configuration Management	Essentials	Planning and Change Management	Activity/Asset Management	Governance
13%	8%	19%	19%	7%
Requirements	Document Focused	Stability Focused	Alignment Focused	Total RDM Focused
20%	42%	10%	9%	20%

Current Capability?

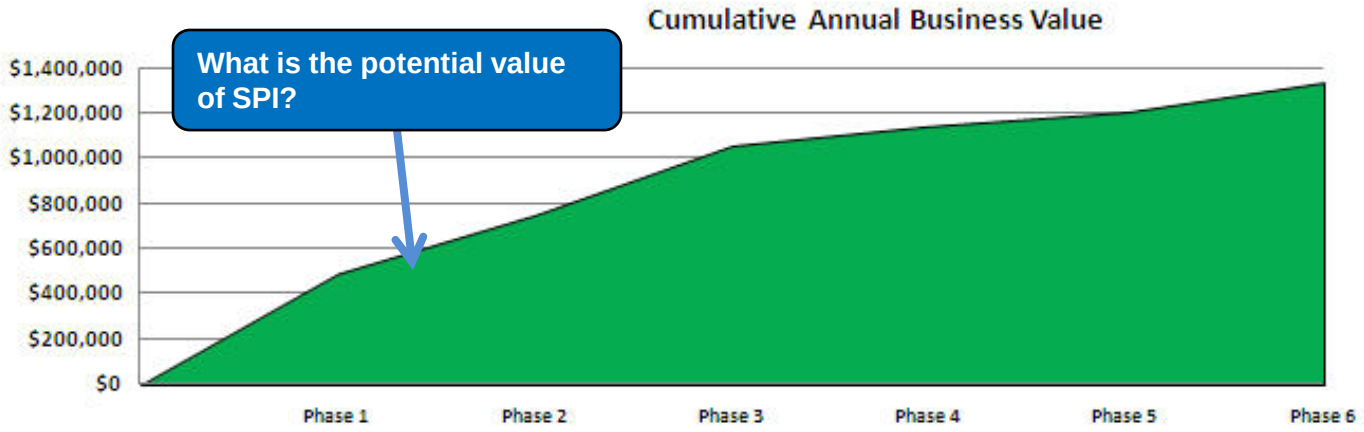
Industry Comparison



Where do you stand relative to industry?

Business Value of Improvement

Projected Value of Improved Capability



Improvement Value	
Phase 1	$490,479
Phase 2	$257,942
Phase 3	$305,922
Phase 4	$85,999
Phase 5	$62,146
Phase 6	$130,052
Total	*$1,332,541*

Phase One

Sources of Business Value		
Lower Costs	51.45%	$252,332
Higher Quality	17.80%	$87,293
Faster Time to Market	10.23%	$50,194
Better Business Alignment	20.52%	$100,660
Total	*100.00%*	*$490,479*

What is the potential value of a Phase 1 improvement program?

AVP Supports:
CMMI Infrastructure Institutionalization

- Institutionalization means that the process is ingrained in the way the work is performed: “That’s the way we do things around here.”
- The organization builds an infrastructure that contains effective, usable, and consistently applied processes (e.g., GP 2.3)

GP 2.3: Provide Resources

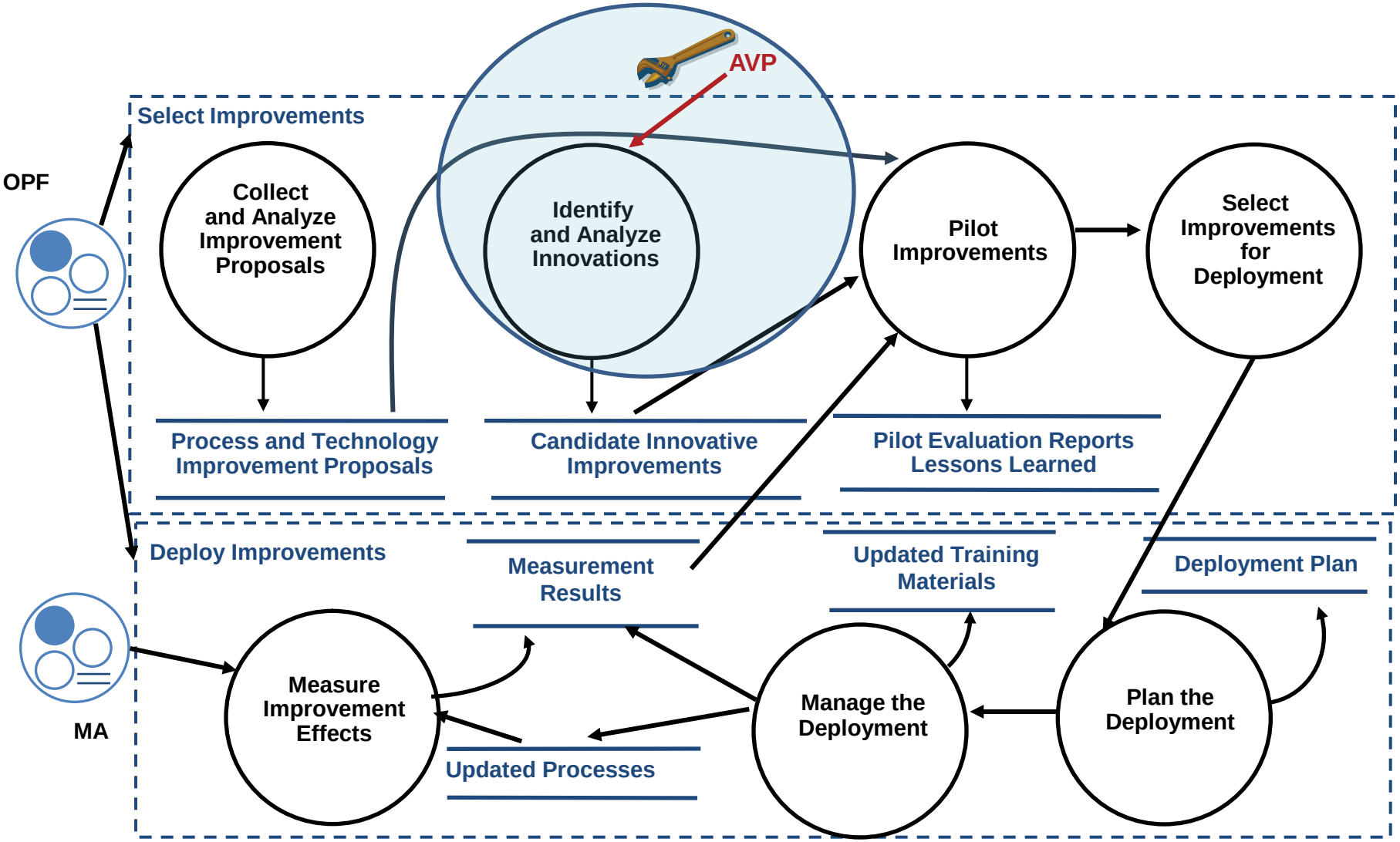
Provide adequate resources for performing the <x> process, developing the work products, and providing the services of the process.

The “Value” of AVP during CMMI Appraisals

With AVP, a detailed analysis on capability is created to help support “GP 2.3 – Provide Resources” from a holistic view in knowing what are your gaps/strengths and what technology improvements could be helpful in supporting the specific process areas.

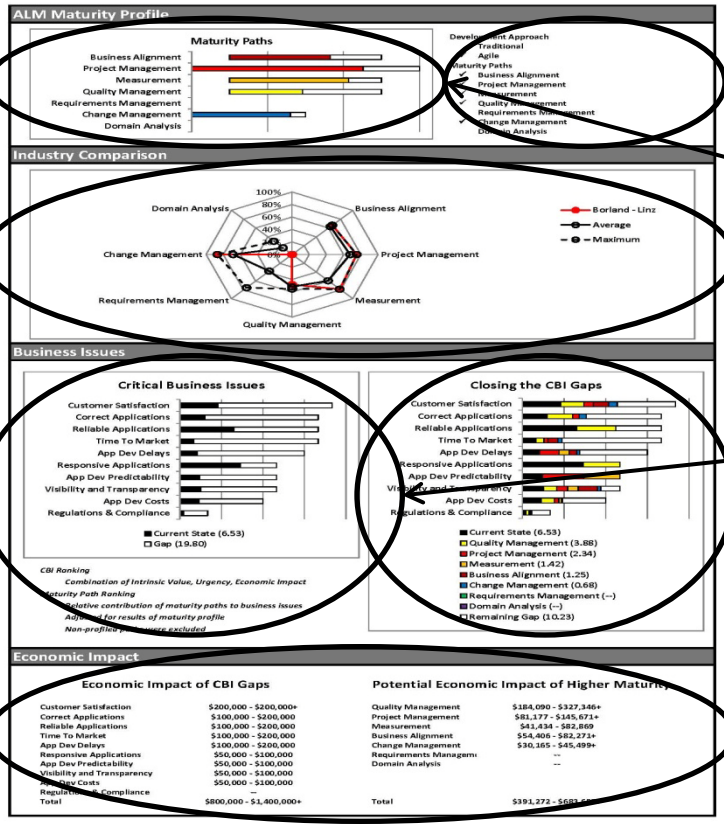
GG1: Achieve Specific Goals	GP 1.1: Perform Specific Practices
GG2: Institutionalize a Managed Process	GP 2.1: Establish an Organizational Policy GP 2.2: Plan the Process GP 2.3: Provide Resources GP 2.4: Assign Responsibility GP 2.5: Train People GP 2.6: Manage Configurations GP 2.7: Identify and Involve Relevant Stakeholders GP 2.8: Monitor and Control the Process GP 2.9: Objectively Evaluate Adherence GP 2.10: Review Status with Higher Level Management
GG3: Institutionalize a Defined Process	GP 3.1: Establish a Defined Process GP 3.2: Collect Improvement Information
GG4: Institutionalize a Quantitatively Managed Process	GP 4.1: Establish Quantitative Objectives for the Process GP 4.2: Stabilize Subprocess Performance
GG5: Institutionalize an Optimizing Process	GP 5.1: Ensure Continuous Process Improvement GP 5.2: Correct Root Causes of Problems

AVP Supports Identifying Possible Innovations



The Relationship of AVP ⟷ OID

For those organizations targeting to define and deploy high maturity practices within their organization, the AVP enables an even stronger implementation of Organizational Innovation and Deployment (OID) practices especially surrounding the “active” search outside the organization’s IT domain. Basically, OID’s specific practice (SP) 1.2 “Identify and Analyze Innovations” is fully optimized to increase the organization’s quality and process performance.



What Disciplines Were Profiled?
What Development Approach?

What Progress Have You Made?

How Do You Compare With Others?

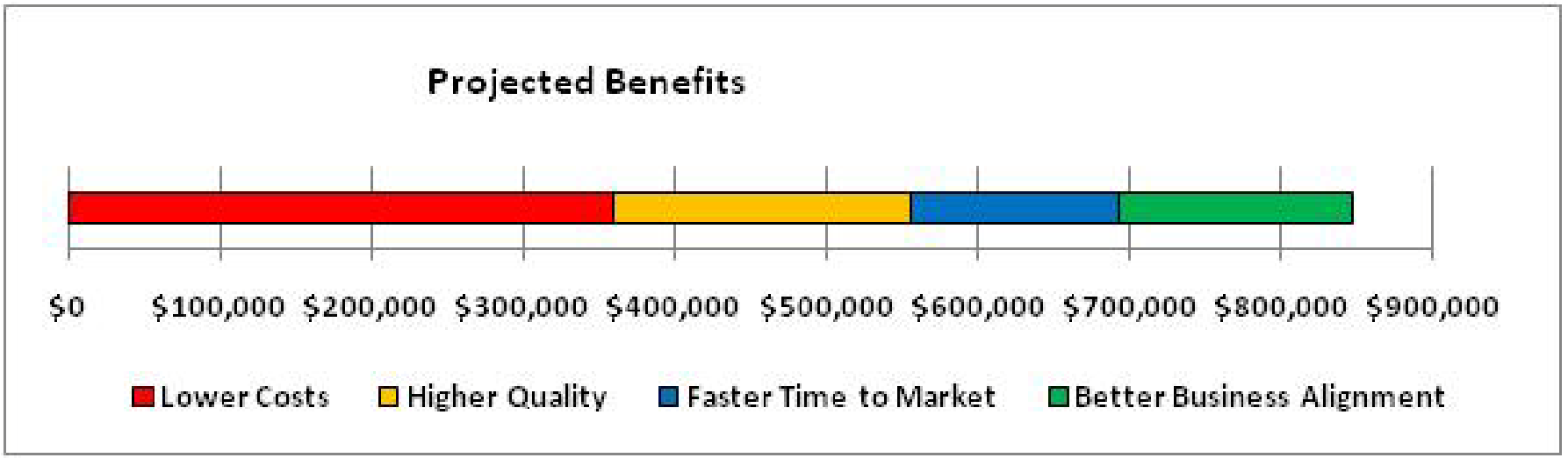
What Are Your CBI’s

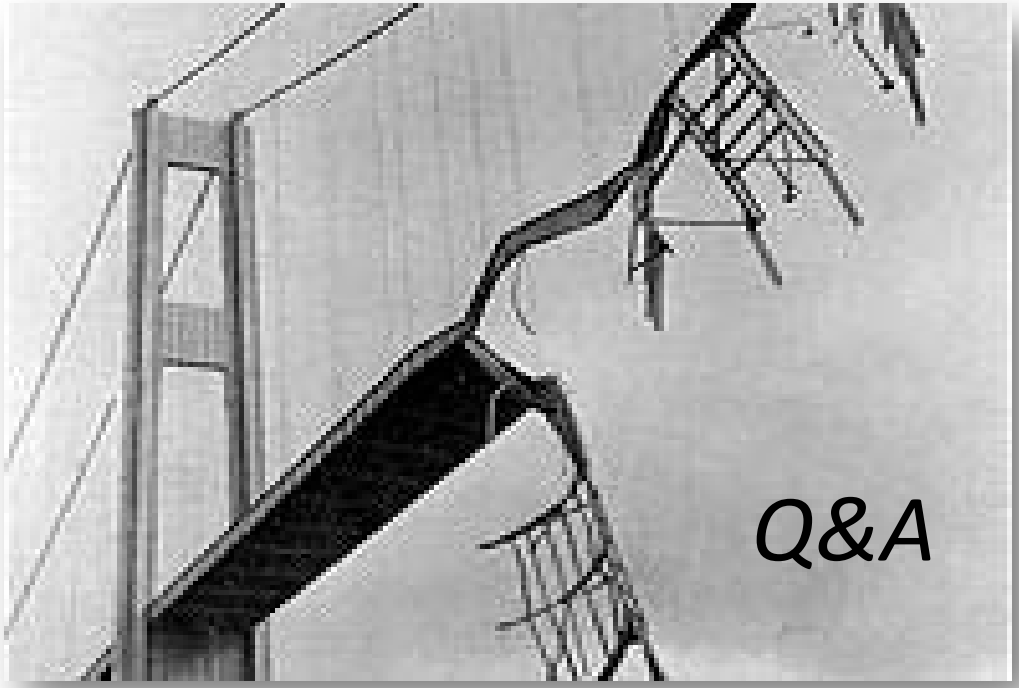
How Could You Close The CBI Gaps?

What Is The Economic Impact?

Example: The Economic Opportunity

- Organization with $7M annual development budget
- $850k projected annual benefit
- Just by optimizing requirements definition & management




Q&A