

Process Improvement in an Organization on Steroids: How to Maintain Quality as Your Organization Grows and Spreads Rapidly

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Agenda

- ▶ Who We Are
- ▶ Where We Come From
- ▶ History Of Our Process Improvement Efforts
- ▶ What We Encountered As We Expanded And What We Did About It
 - Leadership
 - Organization Culture
 - Training
 - Infrastructure
- ▶ Where We Are Going Now

Who are we and why are we here?

- ▶ Debbie McCoy
 - Over 15 years of consulting and software lifecycle experience
 - Primary emphasis in configuration management, quality assurance and process improvement
 - Jointly responsible for the implementation of standard processes and the achievement of process improvement goals within the Booz Allen Defense Systems Unit
- ▶ Kevin Martin
 - Over 10 years of systems development experience in multiple hardware and operating system environments
 - Technical expertise includes portal implementation, graphical user interface design, data modeling, and relational database design, management, and implementation
 - Jointly responsible for the implementation of standard processes and the achievement of process improvement goals within the Booz Allen Defense Systems Unit
- ▶ We'd like to share some of our process improvement lessons learned with you

Booz Allen Hamilton

Strategy and Technology Consultants to the World

- ▶ Booz Allen Hamilton, a global strategy and technology consulting firm, works with clients to deliver results that endure
- ▶ Our Mission: Help clients succeed
We are dedicated to creating tangible, lasting value with every assignment
- ▶ We've been at the forefront of consulting for businesses and governments for 90 years
 - Founded in 1914, privately owned
 - More than \$2.5 billion in sales (Fiscal Year ended 3/31/04)
 - More than 15,000 staff worldwide
 - Over 90 offices on 6 continents
 - Services: strategy, organization, operations, and information technology consulting and implementation
 - **Sustained annual growth of greater than 20% for the last eight years**

Worldwide Technology Business Organization Chart



Booz Allen Hamilton US Locations



History of CMM-based process improvement in Booz Allen's software development organizations

The adventure began in the early 90s

- ▶ First we tried a centralized, top down approach
- ▶ Then we tried a decentralized approach
- ▶ Finally we succeeded with a focused approach

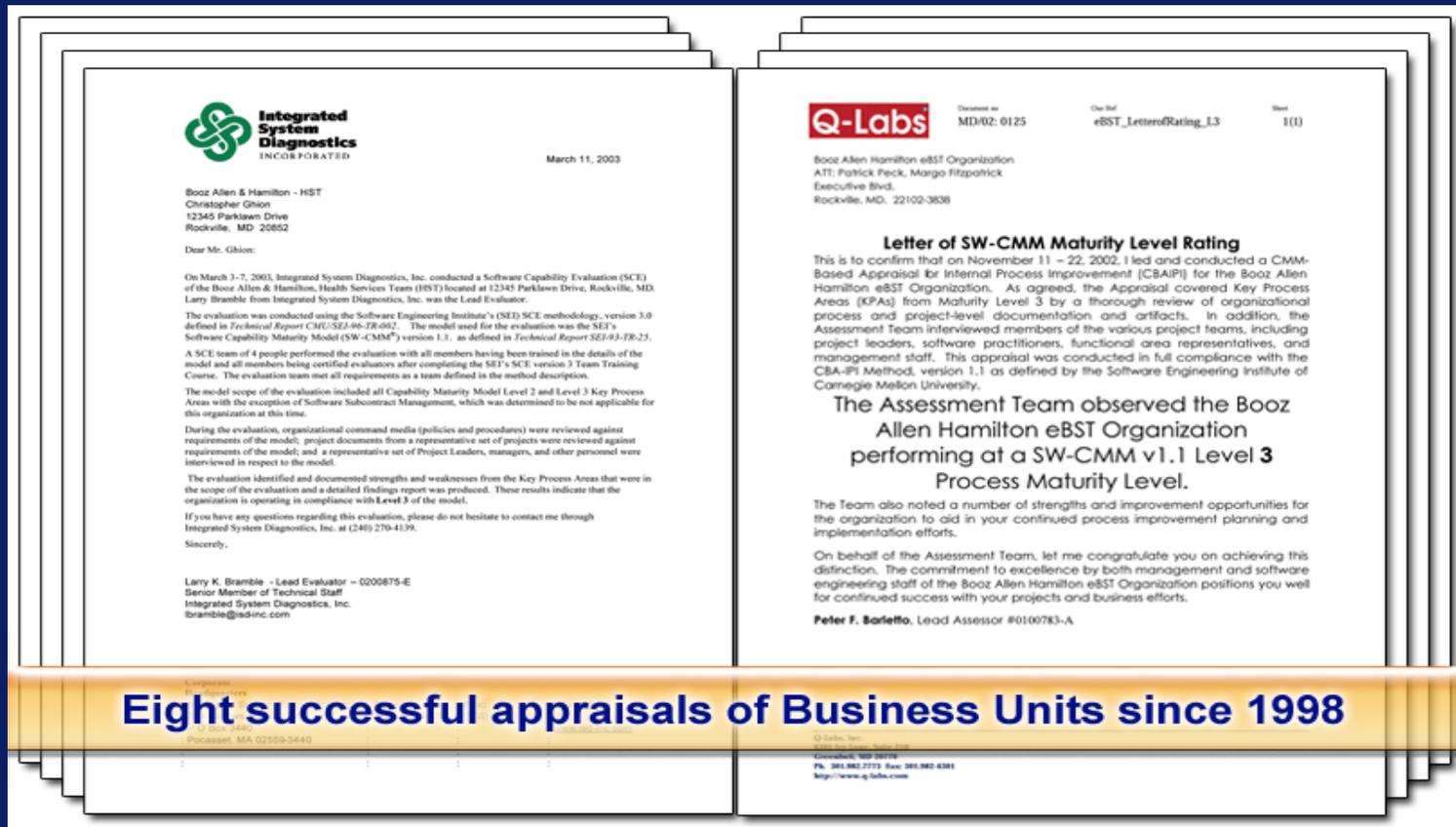


The focused approach . . .

- ▶ Identify specific objectives
- ▶ Select target unit
- ▶ Gather needed resources from across the organization
- ▶ Plan and implement the initiative
- ▶ Assess the results
- ▶ **Leverage results to other projects, units, geographies**



... yielded outstanding results!!



Rapid organizational growth and expansion create numerous challenges for sustaining quality

- ▶ These challenges occur in a number of different areas but this presentation will focus on those experienced in the following areas:
 - Leadership
 - Organization Culture
 - Training
 - Infrastructure

Leadership is a primary success factor for maintaining the quality and momentum of process improvement

Organization growth and expansion create the following leadership challenges:

- ▶ Sufficient qualified leaders
 - Required buy-in by both Strategic and Tactical Leaders
 - Identify key projects and recruit their leaders
- ▶ Leaders at the right levels of the organization
 - Need Leaders at all levels of organization to provide direction but also leadership by example
- ▶ Champions in the right locations (geographies)

Leadership (Cont.)

- ▶ Strategic hires and internal promotions
 - Mix of Client Staff and PI Experts vital to the success
 - Client Staff provides the buy-in
 - PI Experts provide individuals without inherent project pressures
- ▶ Need to Include Marketing Teams as early as Possible
- ▶ Development of Bid Guidelines
 - Controversial, but forces marketing team to explicitly address PI/PM costs
- ▶ Broad management involvement
 - Develop and publish inclusion guidelines so that the larger community is aware of who will be effected
- ▶ Relocation where feasible or extended staff assistance visits

Elements of organizational culture can present significant barriers to implementing process improvement

- ▶ Have you ever encountered these evidences of cultural challenges to be overcome?
We encountered all of them!
 - “That’s not how we do things here”
 - “Our clients don’t want us to waste their time and money on that CMM stuff!”
 - “Our clients are very satisfied with the products they are receiving, we don’t need to change a thing!”
- ▶ Strategies to overcome such organizational resistance to change
 - Involve key practitioners in the EPG and have them identify best practices from their business unit to incorporate into the OSP
 - Shield clients from initial institutionalization costs through internal investment, ensure that the benefits accrue to both the client and the business unit
 - Identify project staff’s points of pain and help them address those – long hours, high cost variances, Hero mentality

Culture Change (Cont.)

- ▶ Quality Assurance
 - Created and centralized a Quality Assurance Group
 - Quality Assurance group need training in the model and in our Processes
 - Limited Quality Assurance resources mandated they be centrally managed

Delivering quality training to large numbers of geographically dispersed staff in the required timeframe is challenging

- ▶ Early process improvement training
 - Developed by those who developed the processes
 - Designed for small instructor-led training sessions
 - Few qualified instructors
 - Adequate and very responsive to needs of small organization
 - Not sufficiently scaleable
- ▶ Transition to corporate training organization, the Center for Performance Excellence
 - Reduce administrative burden on PI organization
 - Professional instructional design expertise
 - Larger scale but less responsive in some ways
 - Transition to alternate delivery means such as web-based training
 - ***Freed up PI personnel so they could concentrate on working with the projects***

A successful process improvement initiative must be supported by a robust infrastructure

- ▶ Standardization of tools – how much standardization is necessary and desirable
- ▶ Connectivity issues – bandwidth, firewalls, access controls
- ▶ Tool purchases, license management
- ▶ Lab staffing and service level agreements
- ▶ Communications planning

Where to next?

- ▶ Transition to CMMI compliant organizational processes
- ▶ Leverage existing CMM compliant processes to largest extent possible
- ▶ Employ lessons learned from CMM effort
- ▶ Involve representatives from each business unit in effort
- ▶ Pilot the processes through a successful Level 3 appraisal
- ▶ Transition the processes from pilot to business units

We'd love to hear from you!

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