October 20-24, 2008
Crowne Plaza Washington National Airport • Washington D.C.

Keynote Presentations:
- Process Improvement: Status and Challenges
  Dr. Linda Ibrahim, Chief Engineer for Process Improvement, US Federal Aviation Administration (FFA)
- Successful Strategies for Software Process Improvement
  Kurt Bittner, Chief Technical Officer - Americas • Ivar Jacobson Consulting

45 Track and Feature Presentation
Vendor Expo
18 Full Day Tutorials
Over 200 Hours of Education for the Week!

Don’t miss this remarkable event!
Register today at www.icspi.com
From the ICSPI Conference Chair:

The International Software Process Improvement Certification (ISPIC) is available at ICSPI 2008.

Dear Software Process Improvement Professional,

This year’s conference is a very exciting event because for the first time, ICSPI will offer courses that support the SPIBOK and the International Software Process Improvement Certification (ISPIC). Eighteen courses taught by SPI experts and practitioners will provide in-depth coverage of the SPIBOK knowledge areas. The ISPIC exams will be conducted at the end of each course. This will be a great opportunity for SPI professionals to achieve this education-based international certification while gaining practical advice and knowledge that will help them be much more efficient at their job.

In addition to the supporting the ISPIC educational program, ICSPI 2008 continues to carry its mission in promoting and fostering its pragmatic approach to SPI. Many companies have invested millions of dollars on software process improvement efforts, without achieving the results they had hoped for. Everyone knows that a software process improvement initiative can be very exhausting to the organization’s technical and financial resources. Taking a pragmatic approach to your SPI effort is the only way to achieve reasonable results. ICSPI has been developed to provide only practical and “right to the point” approaches to SPI. This year’s program offers 45 experience-based presentations in addition to Keynotes by Dr. Linda Ibrahim and Kurt Bittner on successful strategies to Process Improvement.

I hope you will take advantage of this great experience and attend ICSPI 2008.

ICSPI 2008 Hotel Information
Crowne Plaza Washington National Airport
1480 Crystal Drive
Arlington, VA 22202
Phone: 703-416-1600 or 800-227-6963

ICSPI 2008 Program at a Glance

Tutorials marked with (CKA) or (AKA) will count as one day of training towards the requirements for the International Software Process Improvement Certification and will cover the Body of Knowledge areas as indicated.

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>M1: Software Quality Assurance and Quality Control Methods and Techniques and Testing Topics <strong>Dr. Magdy Hanna</strong> (AKA #7)</td>
<td><strong>Keynote Presentations</strong>&lt;br&gt;Process Improvement: Status and Challenges <strong>Dr. Linda Ibrahim</strong>&lt;br&gt;Successful Strategies for Software Process Improvement <strong>Kurt Bittner</strong></td>
<td>H1: Planning and Managing SPI Programs and SPI Projects <strong>Neil Potter</strong> (CKA #4)&lt;br&gt;H2: A Survey of Software Engineering Topics <strong>Dr. Timothy Korson</strong> (CKA #6)</td>
<td>F1: Implementing Software Process Change <strong>Neil Potter</strong> (CKA #5)</td>
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<tr>
<td>M2: Implementing Software Process Change <strong>Dr. Rebecca Staton-Reinstein</strong> (CKA #5)</td>
<td><strong>Feature Presentations</strong>&lt;br&gt;Appraisals and CMMI Gotchas: Lessons in CMMI Use and Appraisal Preparation <strong>Neil Potter</strong>&lt;br&gt;Convincingly Calculating SPI ROI <strong>Robin Goldsmith</strong>&lt;br&gt;Lessons Learned: Project Management Techniques that can Span the Distance <strong>Marnie Hutcheson</strong>&lt;br&gt;Software Reviews: If They’re so Great; Why Isn’t Everyone Using Them? <strong>Clyneice Chaney</strong></td>
<td>H3: Evaluating Software Process Capability and Effectiveness <strong>Robin Goldsmith</strong> (CKA #3)&lt;br&gt;H4: Building the SQA Function Step by Step <strong>Dr. Rebecca Staton-Reinstein</strong> (AKA #8)</td>
<td>F2: Applying Agile and Software Development Techniques to Process Development <strong>Nelson Perez</strong> (CKA #1)</td>
</tr>
<tr>
<td>M3: Defining and Documenting Software Processes <strong>Robin Goldsmith</strong> (CKA #1)</td>
<td><strong>Panel Discussion on:</strong>&lt;br&gt;Agile and Process Improvement: Where is the fit?</td>
<td>H5: Risk-Based Analysis Methodologies for Software Development and Test Projects <strong>Marnie Hutcheson</strong> (AKA #5)</td>
<td>F3: Measuring Software Processes <strong>Alfred Sorkowitz</strong> (CKA #2)</td>
</tr>
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<td>M4: Verification and Validation Methods for Every Phase of Product Development and Deployment <strong>Marnie Hutcheson</strong> (AKA #6)</td>
<td>**M5: Agile Software Development Methods <strong>Alan S. Koch</strong> (AKA #7)</td>
<td>**M6: Managing and Planning Software Projects <strong>Clyneice Chaney</strong> (AKA #4)</td>
<td>**F4: Mastering the Software Product Lifecycle: Development to Support <strong>Dr. Timothy Korson</strong> (AKA #2)</td>
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<td><strong>F1: Implementing Software Process Change</strong> <strong>Neil Potter</strong> (CKA #5)</td>
<td><strong>F2: Applying Agile and Software Development Techniques to Process Development</strong> <strong>Nelson Perez</strong> (AKA #1)</td>
<td><strong>F5: Development and Configuration Management of Requirements</strong> <strong>AI Florence</strong> (AKA #1)</td>
<td><strong>F6: Hands-On Workshop on Measurements</strong> <strong>Marty Safirstein &amp; Cheryl Saar</strong> (AKA #10)</td>
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More details are available at www.icspi.com
<table>
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<tr>
<th>Time</th>
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<tr>
<td>7:00 – 8:00</td>
<td>Registration and Continental Breakfast</td>
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<td>8:00-8:15</td>
<td>Opening Remarks: Dr. Magdy Hanna, Conference Chair</td>
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<td>Process Improvement: Status and Challenges</td>
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<td>FEATURE Convincingly Calculating SPI ROI</td>
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<td>Robin Goldsmith, GoPro Management</td>
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<td>Predicting Software Defects</td>
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<td>Michael Allegra</td>
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<td>Quality Management I</td>
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<td>An IT Governance Solutions Experiences Using Multiple Reference Models</td>
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<td>Paul D. Byrnes &amp; Renato Chaves Vasques Integrated System Diagnostics</td>
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<td>9:30 - 10:30</td>
<td>Agile Approaches</td>
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<td>Traceability: A Proposal for a Scalable Approach, Agile To Formal</td>
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<td>Patricia A. Eglin, David Consulting Group</td>
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<td>9:30 - 10:30</td>
<td>Measurements</td>
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<td>Using Measurements to Understand, Predict, and Report the Impact of</td>
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<td>Process Deviations on End Product Delivery</td>
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<td>Patricia Lyles, PMP</td>
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<td>Computer Science Corp.</td>
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<td>9:30 - 10:30</td>
<td>Project Management</td>
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<td>Share the Wealth Through Good Risk Management</td>
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<td>Warren Scheinin</td>
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<td>Northrop Grumman Mission Systems</td>
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<td>10:45 - 11:45</td>
<td>Improving on Process Improvement: Are we Making Progress?</td>
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<td>Richard Léveillé, Synopsys Inc.</td>
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<td>10:45 - 11:45</td>
<td>Process Efficiency and Optimization through a Process Centric Organization</td>
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<td>Andreas R. Felschow, The Process Company, LLC</td>
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<td>Dr. Magdy Hanna, International Institute for Software Process</td>
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<td>11:45 - 12:30</td>
<td>Visit Exhibits/Vendor Presentations</td>
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<td>1:30 - 2:30</td>
<td>A Process for Ensuring Integrity of Releases</td>
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<td>Joe Levens</td>
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<td>Wolters Kluwer</td>
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<td>2:45 - 3:45</td>
<td>Making SPI Initiatives Succeed</td>
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<td>Morten Korsaa, DELTA Axiom</td>
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<td>2:45 - 3:45</td>
<td>SCAMPI Lead AppraiserSM Body of Knowledge</td>
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<td>(SLA BOK) Overview</td>
</tr>
<tr>
<td></td>
<td>Steve Masters, SEI</td>
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<tr>
<td>2:45 - 3:45</td>
<td>FEATURE Changing Organizations: Getting out of the Delta into the Future!</td>
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<tr>
<td></td>
<td>Clyneice Chaney, Project Performance Corporation</td>
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<tr>
<td>2:45 - 3:45</td>
<td>A Case Study on Implementing an Organizational Measurement Program</td>
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<td>Cheryl Saar</td>
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<td>2:45 - 3:45</td>
<td>Call 911 – Measurement Needs CPR</td>
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<td>Agnes E. Nanu, Booz Allen Hamilton</td>
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<td>2:45 - 3:45</td>
<td>Requirements Testing with FitNesse</td>
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<td>4:00 - 5:00</td>
<td>Accelerating Delivery of Reliable Software Solutions: How Quantiﬁed</td>
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<td>Software Development Optimizes Software Production</td>
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<td>Burke Cox</td>
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<td>4:00 - 5:00</td>
<td>The Business, the Technology and that Pesky End-User: Putting People Back</td>
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<td>Into the Software Development Process</td>
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<td>Harold Hambrose, Electronic Ink</td>
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<td>4:00 - 5:00</td>
<td>A Method to predict of Future Risk Elicitation in the Software Development</td>
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<td>Akihiro Hayashi, IBM Japan</td>
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<tr>
<td>4:00 - 5:00</td>
<td>FEATURE A Practical Approach to Measurement and Analysis:</td>
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<td>Using the ISO Measurement Information Model to Integrate</td>
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<td>Process Performance</td>
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<td>Dr. Donn Milton, Pragma Systems Corp</td>
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<td>5:00-6:30</td>
<td>Conference Reception</td>
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<td>Time</td>
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<td>Successful Strategies for Software Process Improvement</td>
</tr>
</tbody>
</table>
| 9:30-10:30 | **SPI**  
|           | **Quality Management**  
|           | **CMMI/CMMI**  
|           | **Reviews and Inspections**  
|           | **Agile Approaches**                                                                 |
|         | FASTrack® to CMMI®  
|         | Al Florence  
|         | MITRE Corporation  
|         | Effective identification of key user scenarios for testing complex software applications  
|         | Guy Verbest  
|         | Hewlett Packard  
|         | FEATURE  
|         | Appraisals and CMMI Gotchas: Lessons in CMMI Use and Appraisal Preparation  
|         | Neil Potter  
|         | The Process Group  
|         | Management responsibilities for the Inspection (Peer Review) Process  
|         | Roger Stewart  
|         | Stewart-Priven Group  
|         | FEATURE  
|         | Driving an Agile Peg in a CMMI Hole Making Multi-Culture Environments Work  
|         | Dr. Timothy Korson  
|         | Korson Consulting  
| 10:45-11:45 | FEATURE  
|           | Software Process Improvement’s Dirty Little Secret  
|           | Robin Goldsmith  
|           | GoPro Management  
|           | How to Design a World Class Quality Assurance Team  
|           | Iris C. Trout  
|           | Bloomberg, lp  
|           | FEATURE  
|           | Patience is a Virtue™- A Day in the Life of an SEPG Lead  
|           | Tammye Thornton  
|           | Naval Surface Warfare Center  
|          | The Agile Review Process (ARP™)  
|          | Dr. Magdy Hanna  
|          | International Institute for Software Process  
|          | FEATURE  
|          | Process QA: Learning about Collaboration From the Agile Methods  
|          | Alan S. Koch, PMP  
|          | Process, Inc.  
| 11:45-12:30 | Visit Exhibit/Vendor Presentations                                  |
| 12:30-1:30 | Lunch/Discussion Groups                                             |
| 1:30-2:30 | FEATURE  
|           | Process Improvement Common Sense  
|           | Denis Meredith  
|           | Independent Consultant  
|           | Measurements  
|           | Measurements Used By an Award Winning SPI Organization  
|           | Al Sorkwitz  
|           | Independent Consultant  
|           | Requirement Management  
|           | FEATURE  
|           | Writing Clear Software Requirements Using a Concise Template  
|           | Neil Potter  
|           | The Process Group  
|           | FEATURE  
|           | Software Reviews: If They’re so Great; Why Isn’t Everyone Using Them?  
|           | Clyneice Chaney  
|           | Project Performance Corporation  
|          | Delivering Measurable Business Value with Scrum  
|          | Ryan Shriver  
|          | Dominion Digital  
| 2:45-3:45 | Support CMMI Initiatives with Well Designed Measurement Constructs  
|           | Agnes E. Nanu  
|           | Booz Allen Hamilton  
|           | Help IT Demonstrate its Value: Measurement for Performance and Value  
|           | Clyneice Chaney  
|           | Project Performance Corporation  
|           | Requirements Development and Management  
|           | Al Florence  
|           | MITRE Corporation  
|           | FEATURE  
|           | Unleash the Power of Inspections  
|           | Dr. Rebecca Staton-Reinstein  
|           | Advantage Leadership, Inc  
|          | Agile Becoming Mainstream? Yikes!  
|          | Alan S Koch, PMP  
|          | Process, Inc.  
| 4:00-5:00 | The Software Process Improvement Open Forum  
|           | Agile and Process Improvement: Where is the fit?
**Keynote Presentation:** The Role of the Test Professional in the Agile Lifecycle  
**Dr. Linda Ibrahim,** Chief Engineer, Federal Aviation Administration  
Our process improvement field has been launched and has been evolving over the past 20 years. We have a host of process improvement models and standards, widespread organizational improvement initiatives, and an entire new profession of process improvement practitioners. We have made great strides in all these areas, and we have learned many lessons on the way. But issues and problems persist. This presentation provides perspectives on what has been happening, what is happening now, and what we need to do next regarding several challenges being faced by our process improvement community.

**Keynote Presentation:** Successful Strategies for Software Process Improvement  
**Neil Potter,** Chief Officer Americas, Ivar Jacobson Consulting  
I find that many organizations fail at software improvement efforts because they try to change too much at once and do not take into account the barriers created by the culture and management approach of the organization. This presentation describes a proven approach to software process improvement that allows organizations to identify and address specific problem areas without having to completely change everything they are doing. This presentation presents results from real projects, looking at why large-scale process adoption efforts tend to fail with regularity and providing strategies for overcoming the barriers to success.

**Feature Presentation:** Appraisals and CMMI Gotchas - Lessons in CMMI Use and Appraisal Preparation  
**Neil Potter**  
So you're thinking about using CMMI or conducting a CMMI-based appraisal and arriving at Maturity Level X soon. Here are some lessons learned that can help you spend your efforts well and avoid some common hazards on your journey. This talk is for those using the CMMI, burned out from CMMI, or facing an appraisal soon. Participants will learn: Basic CMMI premise, Common blind spots/hazards, very focusing every practice and PA, appraisal Preperation (SCAMPI), mock interview vs. running the business.

**Feature Presentation:** Convincingly Calculating SPI ROI  
**Robin Goldsmith**  
Favorable financial Return on Investment (ROI) is the ultimate determinant of whether software process improvement (SPI) efforts have actually been beneficial. Yet, financial measurement is probably the least understood and least used tool for managing SPI. People commonly believe the calculations are the difficult part, but too often even correct calculations are based on inappropriate data. In this interactive presentation, Robin Goldsmith describes relevant calculations and how to use ROI Value Modeling™ and the powerful Problem Pyramid™ to reliably identify the appropriate SPI measures to include in the calculations.

**Feature Presentation:** Writing Clear Software Requirements Using a Concise Template  
**Neil Potter**  
Requirements development is an essential activity that can make or break any project. If you are a software developer or business analyst, you probably have had good and bad experiences of eliciting and defining requirements.

Requirements documents are usually full of long narrative and ambiguous paragraphs that make understanding the requirements a challenge for customers, developers and testers. In this session, Neil Potter will step through a straightforward requirements template that breaks requirements into unique items. The result is a requirements document that is easy to read, understand and change.

More details are available at www.icspi.com
Feature Presentations, October 21st & 22nd

**Feature Presentation:** Lessons Learned: Project Management Techniques that can Span the Distance
Marnie Hutcheson

Outsourcing and off shoring may appear to be an attractive financial alternative to our traditional processes, but overcoming the challenges of distance, disparate cultures and different perspectives is an ongoing challenge, and this is by no means a complete list of the “gottcha's” that appear in a project that gets spread around the planet. This presentation shares lessons learned in several distance managed projects and discusses technologies and management techniques that have been effective meeting these challenges.

Marnie Hutcheson is a columnist for MSDN Magazine and TechNET Magazine. She also creates technical courseware for Microsoft Corporation and travels around the world training the trainers who teach these technologies to the world. She is an internationally published author and speaker in the areas of software development, testing and quality assurance, and systems administration.

**Feature Presentation:** Software Reviews: If They're so Great; Why Isn’t Everyone Using Them?
Clyneice Chaney

Software inspections have proven very effective in capturing more defects early enough to avoid the cost of rework. Also, many types of defects can only be found by a thorough inspection. Yet, many organizations are struggling to make the inspection process effective and to achieve the real benefits of inspections. This course will examine the different elements that make an effective inspection process and help you establish a customized process for your organization. This course will present an Agile Review Process™ that different organizations can adopt based on the nature of the project. The ARP™ is a customizable process that overcomes problems with a traditional review processes.

Clyneice Chaney brings over 20 years of testing, quality assurance and process improvement experience. Clyneice holds certifications from American Society for Quality as a Certified Quality Manager, Quality Assurance Institute's Certified Quality Analyst, and Project Management Institute's Professional Project Manager. She has participated as an examiner for state quality awards for Georgia and Virginia.

**Feature Presentation:** Software Reviews: If They're so Great; Why Isn’t Everyone Using Them?
Dr. Magdy Hanna

Dr. Hanna is a recognized educator, speaker and consultant in several areas of software engineering. His distinguished seminars on various topics have been highly rated by software professionals. Dr. Hanna's experience with software goes back to the mid 1970's when he worked as a developer at the NCR center in Cairo, Egypt. Over the last thirty years, Dr. Hanna has worked in all aspects of software projects and processes in all capacities. Dr. Hanna is the founder, CEO and Chairman of the International Institute for Software Testing. ( www.iist.org ) the leading educational and professional development organization that provides education-based certifications to software test and quality professionals around the world.

**Feature Presentation:** Driving an Agile Peg in a CMMI Hole Making Multi-Culture Environments Work
Dr. Timothy Korson

In today's organizations, process improvement is being approached from 2 fundamentally different perspectives. Managers trying to encourage best practices as recommended by CMMI and SPICE find themselves at odds with developers trying to adopt best practices as recommended by the agile manifesto. This talk looks at how to approach process improvement in such an environment. Participants will learn: How CMMI and Agile blend at the Goal level, how CMMI and Agile Differ in Assumptions, and how to harmonize the Agile and CMMI approaches

Timothy Korson has had over a decade of substantial experience working on a large variety of systems developed using modern software engineering techniques. This experience includes distributed, real time, embedded systems as well as business information systems in an n-tier, client-server environment. Dr. Korson's typical involvement on a project is as a senior management consultant with additional technical responsibilities to ensure high quality, robust test and quality assurance processes and practices.

**Feature Presentation:** Process Improvement Common Sense
Denis Meredith

Having participated in a number of process improvement efforts, I have observed some repeated behaviors that are counterproductive. I will share those behaviors, some of their causes, and some ways to avoid them. Process improvement efforts in some organizations have been ineffective. A few common sense principles can improve the likelihood of success, if applied at the right time. Participants will learn: How to identify obstacles, How to set expectations and How to establishing conditions to enable success

Mr. Meredith graduated from the United States Naval Academy, and has completed graduate courses in Business Administration at the Pennsylvania State University, where he also taught computer courses. He has been a member of IEEE standards working groups. He holds CCP, CSTE, and CQA certificates. Denis has had articles published in Data Management, Systems Development, System Builder, and Software Quality Professional magazines and has written articles for Auerbach's Data Processing Management series. He is on the editorial review board of the American Society for Quality's Software Quality Professional and the International Institute for Software Testing's Journal of Software Testing Professionals.

More details are available at www.icspi.com
**Feature Presentation: ITIL: A Foundation for Project Success**
*Alan S. Koch*

At its heart, quality is a matter of meeting the business need. In most projects, obtaining a clear understanding of the business need and translating that understanding into project specifications and a project plan can be one of our biggest challenges. The Information Technology Infrastructure Library (ITIL®) is a process model for IT Service Management, just as the Capability Maturity Model Integration (CMMI®) is a process model for product engineering projects. Can a model that is not about projects help us with our development projects? Absolutely! ITIL can help us to assure the quality of the systems we develop by providing the basis for understanding the business need and taking action on that understanding. ITIL can be our foundation for project success by defining the context for our project and for the product we will build!

*Alan S. Koch, PMP/SCM* guides organizations as they learn about and adopt the most effective processes. He consults, trains, speaks and writes on effective Project Management methods, both traditional and Agile. For over nine years, he has been President of ASK Process, Inc. Mr. Koch is a certified Project Management Professional (PMP), a Certified ScrumMaster (SCM), and a published author (Agile Software Development, Evaluating the Methods For Your Organization, Artech House Books, 2005).

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**Feature Presentation: Changing Organizations: Getting Out of the Delta into the Future**
*Clyneice Chaney*

An organization's culture, people, process and structure are the elements that allow it to function. Implementing process improvement into an organization such as CMMI, ISO can vastly change that culture and often creates resistance and failed improvement efforts. Understanding organizational change and its principles can help process improvement implementers lead more successful projects with less resistance. This presentation discusses the approach used to introduce organizational change for a test organization as well as a CMMI implementation project.

*Clyneice Chaney* brings over 20 years of testing, quality assurance and process improvement experience. Clyneice holds certifications from American Society for Quality as a Certified Quality Manager, Quality Assurance Institute's Certified Quality Analyst, and Project Management Institute's Professional Project Manager. She has participated as an examiner for state quality awards for Georgia and Virginia.

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**Feature Presentation: Unleash the Power of Inspections**
*Dr. Rebecca Staton-Reinstein*

Long before Testers have an opportunity to examine deliverables folks are inserting defects into Requirements, Design and Code. Defect creation is not their intent but it is the result of flawed software processes. Testers are expected to find all of the defects quickly, yet they may also be using flawed processes. Learn about the most powerful Static Testing Tool ever devised, the Formal Inspection. Testers, BAs, customers, designers and developers can play a crucial role in making this process even more effective by being part of Inspection or Peer Review Teams throughout the Life Cycle. People can also apply this robust technique to discover defects in their own processes. Learn how to apply your critical and analytical skills to find more defects more efficiently.

*Rebecca Staton-Reinstein, Ph.D., CSQA, president of Advantage Leadership, Inc., helps IT departments create robust strategic plans that get bottom line results and alignment with the larger organization. She works with companies that want to deploy full quality assurance, quality control and quality improvement to improve the quality of their software, reduce costs and improve customer satisfaction. Her solutions are based on over 25 years of experience as a quality manager, corporate officer, consultant and business owner. She was trained in the Inspection methodology by both Michael Fagan and Tom Gilb and has taught the approach to thousands of quality professionals, internal customers and IT personnel.*

**Feature Presentation: Software Process Improvement’s Dirty Little Secret**
*Robin Goldsmith*

Formal software improvement initiatives, such as Six Sigma and capability maturity model-fitting, often leave a significant but seldom-recognized gap that inadvertently can neutralize or even counteract much of the costly initiatives’ benefits. In this interactive presentation, Robin Goldsmith reveals how such high-overhead initiatives often lose sight of key weakest-link exceptions to their seemingly comprehensive practices for improving software processes. Participants will learn: Where high-overhead formal software process improvement initiatives do focus, key areas that such initiatives often overlook and thus defeat their purposes, and methods to detect and address such oversight exceptions.

*Robin Goldsmith* is internationally recognized as an authority on business engineering and software acquisition/development quality, testing, and productivity. He is a frequent speaker at leading conferences and formerly International Vice President of the Association for Systems Management. Robin is the author of the book “Discovering REAL Business Requirements for Software Project Success”.

*Dr. Donn Milton*

The CMMI’s Level 2 Process Area, Measurement and Analysis, includes a set of somewhat onerous requirements for establishing and operating a measurement program. Traditional approaches for implementing a CMMI-compliant measurement program typically suffer from the following: Too many complex activities must be completed before any measurement and analysis can be performed, data collection is not integrated with process performance, data collection procedures are onerous and error-prone and measurement data is not collected and organized so as to enable real-time, fact-based management insight.

*Dr. Donn Milton* has more than 30 years of experience in software project management, software development, and the practice of government contract law. He joined pragma Systems in 1987 to lead its transformation from consulting to commercial product development.
Monday Tutorials, October 20th, 8:30-4:30

M1: Software Quality Assurance and Quality Control Methods and Techniques and Testing Topics (CKA #7)
Dr. Magdy Hanna

Many software organizations try to achieve software quality by focusing on testing activities that are normally done after the product has been put together by the development team. Every project manager and every QA manager knows that this is not a very effective way to assure the quality of the application. The reason is that when the testers execute their tests against the application and find bugs, those bug reports go back to the development team, which in turn tries to fix problems under time pressure. And you know the rest of the story: more bugs get created and the cycle continues. More bugs, more bug reports and more bugs.

Dr. Hanna is a recognized educator, speaker and consultant in several areas of software engineering. His distinguished seminars on various topics have been highly rated by software professionals. Dr. Hanna's experience with software goes back to the mid 1970's when he worked as a developer at the NCR center in Cairo, Egypt. Over the last thirty years, Dr. Hanna has worked in all aspects of software projects and processes in all capacities.

M2: Implementing Software Process Change (CKA #5)
Dr. Rebecca Staton-Reinstein

Today’s competitive environment means that yesterday’s processes may not be capable of getting the bottom-line results that company’s demand. Government and nonprofit organizations are feeling the same pressure to improve efficiency and effectiveness in cost effective ways. Our understanding continues to evolve from Total Quality Management through today’s Six Sigma/Lean and tomorrow’s new approach. The fundamentals of process improvement have not changed and underlie every successful new approach. Learn to apply these proven principles and techniques to your processes for improved productivity and quality. Learn to use processes improvement as your engine of success.

Rebecca Staton-Reinstein, Ph.D., CSQA, president of Advantage Leadership, Inc., helps IT departments create robust strategic plans that get bottom line results and alignment with the larger organization. She works with companies that want to deploy full quality assurance, quality control and quality improvement to improve the quality of their software, reduce costs and improve customer satisfaction. Her solutions are based on over 25 years of experience as a quality manager, corporate officer, consultant and business owner. She was trained in the inspection methodology by both Michael Fagan and Tom Gilb and has taught the approach to thousands of quality professionals, internal customers and IT personnel. She has begun to encapsulate her proven quality practices in a series of e-Books including Get Great Requirements and The Hard Job of Making Software Work.

M3: Defining and Documenting Software Process (CKA #1)
Robin Goldsmith

Your software process is the way you do things that produces your results. To improve your software, you must improve your software process; and first and foremost that requires accurately identifying your REAL software process, which often is not readily apparent. Life cycle and process capability maturity models can provide guidance but frequently by themselves are not sufficient for defining your specific software process. This interactive workshop describes how to identify and use a variety of techniques to document procedural aspects of your software process. Moreover, it addresses the vitally important and seldom-recognized non-procedural aspects of your software process which so influence procedural effectiveness and efficiency. Exercises enhance learning by allowing participants to practice applying practical techniques to realistic examples.

Robin Goldsmith is internationally recognized as an authority on business engineering and software acquisition/development quality, testing, and productivity. He is a frequent speaker at leading conferences and formerly International Vice President of the Association for Systems Management. Robin is the author of the book: “Discovering REAL Business Requirements for Software Project Success”.

M4: Verification and Validation Methods for Every Phase of Product Development and Deployment (AKA #6)
Marnie Hutcheson

Verification and Validation is not something you do just at the end of development. V and V is part of each phase of development and deployment. –Or at least it should be. This course teaches you test design techniques you can use at each phase of development and test. Static test design techniques are used to design tests starting with the requirements, and moving through scenario development, functional design, detailed design, and into coding. We then explore dynamic test design techniques that take us from unit testing, through module integration, system testing and into User Acceptance and Beta testing. Exercises accompany each technique.

Marnie Hutcheson is a columnist for MSDN Magazine and TechNET Magazine. She also creates technical courseware for Microsoft Corporation and travels around the world training the trainers who teach these technologies to the world. She is an internationally published author and speaker in the areas of software development, testing and quality assurance, and systems administration.

M5: Agile Software Development Methods (AKA #7)
Alan S. Koch

As the Agile software development methods are becoming mainstream, more and more organizations are integrating them into their tool sets and adapting them to meet their projects’ unique needs. Such adaptation can be difficult without a clear knowledge of what Agility is and is not, a comprehension of the values and principles that underlie them, and an understanding of how those values and principles manifest in Agile practices.

Alan S. Koch, PMP/ SCM guides organizations as they learn about and adopt the most effective processes. He consults, trains, speaks and writes on effective Project Management methods, both traditional and Agile. For over nine years, he has been President of ASK Process, Inc. Mr. Koch is a certified Project Management Professional (PMP), a Certified ScrumMaster (SCM), and a published author (Agile Software Development, Evaluating the Methods For Your Organization, Artech House Books, 2005)

More details are available at www.icspi.com
Projects and project management operate in an environment broader than that of the project itself. The project management team must understand this broader context; managing the day-to-day activities of the project is necessary for success but not sufficient. Participants will learn: What a “project” is and what differentiates it from the activities that are performed every day in operating and maintaining the business, some of the reasons why projects fail and Some of the factors that help projects to succeed.

**Clyneice Chaney** brings over 20 years of testing, quality assurance and process improvement experience. Clyneice holds certifications from American Society for Quality as a Certified Quality Manager, Quality Assurance Institute’s Certified Quality Analyst, and Project Management Institute’s Professional Project Manager. She has participated as an examiner for state quality awards for Georgia and Virginia.

**H1: Planning and Managing SPI Programs and SPI Projects (CKA #4)**
Neil Potter

In this tutorial you will learn how to develop an improvement action plan based on the business goals and problems of your organization. This approach addresses the frustration that many people experience when improvement programs do not relate to the project work being done. You will learn about: setting compelling goals for your improvement program, directing all improvement towards achieving business goals and solving the organization’s problems, developing an action plan based on the defined goals and problems, using an improvement model or standard to address the goals and problems, planning for process deployment, deriving metrics for the goals and identifying potential future problems (risks) with the action plan and mitigating the highest priority risks.

**Neil Potter** is co-founder of The Process Group, a software process improvement consultancy. He has 23 years of experience in software and process engineering. Neil is an SEI authorized lead appraiser for SCAMPI appraisals, certified high-maturity appraiser, Intro to CMMI instructor and Six Sigma Greenbelt. He has a B.Sc. in Computer Science from the University of Essex (UK) and is the co-author of Making Process Improvement Work - A Concise Action Guide for Software Managers and Practitioners, Addison-Wesley.

**H2: A Survey of Software Engineering Topics (CKA #6)**
Dr. Timothy Korson

Any effective software process improvement effort must consider every aspect of the software engineering process, yet most software professionals only have knowledge and experience in specific aspects of software development. To assist software professionals in understanding the scope of topics relevant to software development, the IEEE Computer Society has sponsored the development of the Software Engineering Body of Knowledge. If you are charged with software process improvement, but your knowledge and experience does not cover the scope of topics covered in the IEEE Software Engineering Body of Knowledge, then you need to take this tutorial.

**Timothy Korson** has had over a decade of substantial experience working on a large variety of systems developed using modern software engineering techniques. This experience includes distributed, real time, embedded systems as well as business information systems in an n-tier, client-server environment. Dr. Korson’s typical involvement on a project is as a senior management consultant with additional technical responsibilities to ensure high quality, robust test and quality assurance processes and practices.

**H3: Evaluating Software Process Capability and Effectiveness (CKA #3)**
Robin Goldsmith

Your process is the way you do things that produces your results. A process’s capability determines how well it will and will not be able to produce. To maintain and improve results, it is essential to measure and evaluate the capability and effectiveness of both the overall process and its individual procedural and non-procedural elements. Direct process measures are the most important for evaluating and guiding improvements to a specific process, but they take understanding and skill which many organizations lack. Instead, many organizations find it easier to evaluate their processes indirectly by comparing them to generalized “canned” capability maturity models, frequently without being aware of the shortcomings of such evaluations. This interactive workshop describes strengths and weaknesses of both direct and indirect process evaluation approaches, including the informal indirect approach which is most common. Exercises enhance learning by allowing participants to practice applying practical techniques to realistic examples.

**Robin Goldsmith** is internationally recognized as an authority on business engineering and software acquisition/development quality, testing, and productivity. He is a frequent speaker at leading conferences and formerly International Vice President of the Association for Systems Management. Robin is the author of the book: “Discovering REAL Business Requirements for Software Project Success”.

**H4: Building the SQA Function Step by Step (AKA #8)**
Dr. Rebecca Staton-Reinstein

In today’s competitive environment, high quality software that can serve both the operational and strategic needs of the organization is a necessity. Information Technology departments are under extreme pressure to create, maintain, purchase and outsource software that can help distinguish the company in the market place. IT departments are more business and customer oriented than ever before but many traditional quality techniques have been abandoned without replacing them, resulting in poor software quality, over-extended budgets and disappointed customers. Learn the basic processes, methods and techniques that assure quality systems. Learn the quality techniques that set industry leaders apart and create world class IT departments. Learn to apply internationally recognized standards, techniques, processes and procedures that get the improved results you need to improve your output and demonstrate your value to the organization.

**Rebecca Staton-Reinstein**, Ph.D., CSQA, president of Advantage Leadership, Inc., helps IT departments create robust strategic plans that get bottom line results and alignment with the larger organization. She works with companies that want to deploy full quality assurance, quality control and quality improvement to improve the quality of their software, reduce costs and improve customer satisfaction. Her solutions are based on over 25 years of experience as a quality manager, corporate officer, consultant and business owner. She was trained in the Inspection methodology by both Michael Fagan and Tom Gilb and has taught the approach to thousands of quality professionals, internal customers and IT personnel. She has begun to encapsulate her proven quality practices in a series of e-Books including Get Great Requirements and The Hard Job of Making Software Work.
Thursday & Friday Tutorials, October 23rd & 24th, 8:30-4:30

H5: Risk-Based Analysis Methodologies for Software Development and Test (AKA #5)
Marnie Hutcheson

This seminar presents “Best Practice” risk-based methodology for planning, sizing, managing and successfully executing the test effort that is both defensible and reproducible. The methods presented in this tutorial have been used to test a rich variety of Internet/Intranet applications and traditional client server applications including: e-commerce, telecommunications, ERP and other business applications, embedded firmware, and game software. These methods can be applied to traditional test efforts and more importantly, they are useful in keeping up with and adding measurable value to Agile and eXtreme efforts. The seminar is filled with real world examples of how testers successfully managed their test efforts and demonstrated the value of testing.

Marnie Hutcheson is a columnist for MSDN Magazine and TechNET Magazine. She also creates technical courseware for Microsoft Corporation and travels around the world training the trainers who teach these technologies to the world. She is an internationally published author and speaker in the areas of software development, testing, and quality assurance, and systems administration.

H6: New Direction for the Inspection (Peer Review) Process (AKA #11)
Lew Priven & Roger Stewart

The objective of the tutorial is to expose the participants to new ways of adapting the traditional inspection process to today’s development environment by: Addressing the MYTHS that inhibit organizations from adopting the inspection process, demonstrating the ease and importance of inspecting requirements and design documents, identifying what data needs to be collected, analyzed, and used to be useful for management (ROI) and inspectors, introducing computerized tools to support collecting, tracking and analyzing inspection data, reviewing how to deal with issues related to distributed development, different development processes, different type of products, etc., focusing on the role of management and their responsibilities for the success of the inspection process and discussing how to get started with inspections.

Lew Priven is an experienced executive with an extensive management and technical background – including system and software development, software quality training, management development training, human resource management, and executive management. Prior to co-founding the Stewart-Priven Group, LLC, Priven was an Associate with Michael Fagan Associates, where he trained over 2,000 students at 24 company locations in the Fagan Inspection Process. Before joining Michael Fagan Associates, Priven was Chief Operating Officer of Wellspring Resources, LLC. Among his responsibilities at Wellspring, he managed the rapid growth of the Washington, DC application development center. To help manage the growth, he introduced and made extensive use of inspections to ensure the quality and timely delivery of software supporting the delivery of outsourced benefits administration services.

Roger Stewart is an experienced Lead Systems Engineer and Program Manager with an extensive management and technical background – including Systems Engineering, Software Development, System Integration, System Testing, and Process Improvement. Prior to co-founding the Stewart-Priven Group LLC, Stewart was an Associate with Michael Fagan Associates, where he trained over 3,000 students at 30 company locations in the Fagan Inspection Process. Before joining Michael Fagan, the founder of software inspections, Stewart worked for IBM Federal Systems, and later Lockheed-Martin Federal Systems, developing large complex software systems for the Space Shuttle, Satellite Command and Control, Air Traffic Control, and military avionics systems. He also worked in the commercial sector developing Banking and Telecommunications networking and operating system software.

F1: Implementing Software Process Change (CKA #5)
Neil Potter

In this tutorial we describe techniques for implementing an improvement plan and deploying new practices across the organization. These techniques address the problems of resistance, unwieldy solutions, and slow deployment. You will learn about: Applying selling strategies to deploy new practices, increasing the speed of deployment by working with the willing and the needy first, reducing the risk of failure by building and deploying solutions in increments, delaying policy document creation and edicts until each solution has been practiced and is well tested, using existing resources to increase the speed of deployment.

Neil Potter is co-founder of The Process Group, a software process improvement consultancy. He has 23 years of experience in software and process engineering. Neil is an SEI authorized lead appraiser for SCAMPI appraisals, certified high-maturity appraiser, Intro to CMMI instructor and Six Sigma Greenbelt. He has a B.Sc. in Computer Science from the University of Essex (UK) and is the co-author of Making Process Improvement Work - A Concise Action Guide for Software Managers and Practitioners, Addison-Wesley.

F2: Applying Agile and Software Development Techniques to Process Development (CKA #1)
Nelson Perez

This tutorial presents techniques borrowed from the Agile and software development world to both design processes and to reduce the overall time to achieve institutionalization of new processes. The topics to be covered are: Overview of agile techniques, applying Agile methods to process improvement, strategies to facilitate the change process, applying software development techniques to process development, process tailoring, process development planning, effective process rollout management strategies and lessons learned from a real-world example.

Nelson Perez is president of Sierra’s Edge, Inc. (an SEI Partner). With over 25 years of work experience, he has worked the entire life cycle and held numerous management and engineering positions on such high visibility programs as the B2 Stealth Bomber; NASA Space Shuttle; and National Missile Defense. Perez received his initial process training at TRW’s Defense Systems Group while Dr. Barry Boehm was its Chief Scientist. He started working with the S/W CMM in 1996 as the process architect (as well as project manager and avionics simulation lead) on the US Air Force/TRW Special Operations Forces Extendable Integration Support Environment (SOF EISE) program. He turned around the program using agile techniques while employing the philosophies of W. Edward Deming, in particular those from his book “The New Economics”. Perez reduced the lifecycle from 36 to 17 months, reduced defects uncovered during system testing from 5000 to 2, performed several CMM level 5 causal analysis and improvement cycles, and forged a strong multi-contractor integrated product team.

More details are available at www.icspi.com
F3: Measuring Software Processes (CKA #2)
Alfred Sorkowitz

As most Software Process Improvement (SPI) professionals know, there's more to developing quality software than writing and testing programs. They understand that the quality of a software product is largely governed by the quality of the Software Life Cycle Process (SLCP) used to develop and maintain it. This process can be defined, measured, and continuously improved.

This tutorial lays out the general concepts, issues, and framework for measuring the software process in order to support an organization's management information needs. This includes measuring the software process in order to find areas for improvement. Measurement is a key enabler for process improvement and enhanced product quality, as well as a mechanism for feedback and control. This tutorial was designed to provide the Software Process Improvement professional with the measurement and analysis knowledge necessary to perform effectively.

Mr. Al Sorkowitz was a Computer Scientist with the Department of the Navy where he was responsible for developing large, real-time software intensive systems. Prior to joining the Dept of the Navy, he was Director of the Standards and Quality Control Staff, at the Department of Housing and Urban Development. While at HUD, he initiated a successful testing procedure to improve the quality of unit testing that utilizes automated tools and testing metrics. A paper on this effort was published in a special issue of the IEEE Computer Society magazine "Computer" devoted to Software Quality Assurance, and was later reprinted and widely distributed in the Department of Defense Computer Institute "Selected Computer Articles".

F4: Mastering the Software Product Lifecycle: Development to Support (AKA #2)
Dr. Timothy Korson

Too often software process improvement efforts produce un-integrated collections of processes and procedures that each try to optimize some aspect of software development, but as a whole actually reduce software quality. In this tutorial we focus on fine tuning and customizing an entire software development lifecycle on the goal of delivering quality to the stakeholders. Participants will learn:

- How to understand quality from the stakeholders point of view, how to be able to configure the appropriate process, design support activities that will maximize value to the stakeholders

Dr. Timothy Korson has had a decade of substantial experience working on a large variety of systems developed using modern software engineering techniques. This experience includes distributed, real-time, embedded systems as well as business information systems in an n-tier, client-server environment. Dr. Korsons' typical involvement on a project is as a senior management consultant with additional technical responsibilities to ensure high quality, robust test and quality assurance processes and practices. Dr. Korson has authored numerous articles, and co-authored a book on Object Technology Centers. He has given frequent invited lectures at major international conferences and has contributed to the discipline through original research. The lectures and training classes he presents are highly rated by the attendees.

F5: Development and Configuration Management of Requirements (AKA #1)
Al Florence

Some of the biggest challenges faced by engineers are those of requirements elicitation, analysis, specification (writing requirements), and management. Engineering teams may have the best of everything: best management, technical staff, resources, budget, schedule, customer, and even Capability Maturity Model Integration (CMMI ®) Level 5 processes. But, if they do not have a good set of well-defined requirements that are properly managed, understood and agreed to by all stakeholders, they are at grave risk. This tutorial presents effective practices for requirements development and management. This includes the solicitation of user needs, converting them to system level requirements, allocating requirements to design entities, and baselining the physical, functional and performance characteristics of the requirements. The importance of controlling changes to these characteristics with impact assessments conducted by all stakeholders against their interests not limited to cost, schedule, function and interfaces will be stressed. This tutorial addresses the roles and responsibilities of the supplier and acquirer in requirements development, management and configuration control boards (CCBs). Configuration Management (CM) principles and activities associated with requirements will also be covered.

Mr. Florence, at major technology firms (currently at The MITRE Corporation), has been involved in all phases of the life cycle in engineering and management on diversified projects: spacecraft; aircraft; missiles; weapon systems; particle accelerators and information systems. He has developed processes for all CMM ® Key Process Areas at all levels through Level 5 and is currently involved with CMMI ® Process Areas. He is a frequent conference presenter and has many technical publications. Mr. Florence holds a BS degree from the University of New Mexico in mathematics and physics and has done graduate work in computer science at the University of California in Los Angeles and University of Southern California.

F6: Hands-On Workshop on Measurements (AKA #10)
Marty Safirstein & Cheryl Saar

This tutorial covers the development of a measurement program using common measures for a typical software development organization. It includes identifying goal-based measures using the GQ(J)M approach, and concepts around collecting, storing, reporting, analyzing, and improving measures. A case study approach with participant exercises is used to facilitate understanding. (SPIBOK: Implementing measurement programs)

Marty Safirstein has over 30 years experience in information systems including 6 years at Allstate. He is currently leading the development and deployment of the Management Review process and the measurement reporting for the entire Process department. He has presented the topic of IT Architecture Governance, and presented several estimation and measurement topics at ICSPi 2006 and ICSPI 2007.

Cheryl Saar is the manager of the Process and Quality Measurements team at Allstate Insurance, where she manages and consults on the implementation and ongoing support of measurement processes throughout the Allstate Technology and Operations organization. Ms. Saar has over twenty-five years IT experience in estimation, metrics, project and people management, software development, testing, education, and technical telephone and onsite support. She has previously presented measurement topics at ICSPi, Software Process Symposium, and IT Financial and Asset Management Summit conferences.

More details are available at www.icspi.com
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