GSAW2005 Tutorial D:
Stakeholder Collaboration and Ground System Software Success

Length: Half Day

Overview:
Although we have tried hard for 50 years, the likelihood of software and system service and support being totally successful is only 5% - 10%. Software engineers admit software and system service provides the worst quality of any major product category. And the support is even worse.

The missing link in all of our methodologies is the integration of genuine collaboration into a complete process. My complete process associates its stages with the corresponding Spiral-Model development stages. Essentials of collaboration are commitment to stakeholders, communication in team-meaningful language, and evaluation of results as a stakeholder would.

Checklists and scorecards advance understanding in areas that are not yet well understood. My checklists and scorecards provide guidance on "what to do" and "how to do it" for genuine collaboration within the complete process, quality-success process and project-success process.

Quality success is summarized by not only a checklist and scorecard that synthesizes the Deming and Juran approaches to quality, but also a history of the quality movement. Process success integrates "critical success factors" and the inverses of "early warning signs for failure".

There are analogous cycles for processing data to solve complex problems and evolving cell proteins from DNA. Similarities allow us to learn characteristics of one cycle from the other two.

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Biography:
As cofounder of The UCI Center for Statistical Consulting, I collaborate on UCI and industrial problems involving statistics. Previously, I developed statistical solutions to problems in aerospace, petroleum and government. They ranged from determining dominant error sources in an inertial navigation system to analyzing user information-needs of scientists and engineers in the defense industry ... from information services planning and budgeting to information services charging and monthly reporting ... from measuring effectiveness of information technology to improving its safety.


Who Should Attend:
Intended participants are all stakeholders, from customers through software engineers and system engineers to users -- and especially their managers.