Making Six Sigma Tools Work for You in Developing Superior Products - 2 day Orange Belt Training

Time : 7 - 8 June 2010

Location: National University of Singapore, Computing 1, Seminar Room 8

GOAL:

The student will be able to use the key problem resolution and problem avoidance tools, identify potentially good six sigma project opportunities, function well on a six sigma team, and directly use the tools and execute basic six sigma projects. The student will have hands-on tool usage.

COURSE OUTLINE

1 Learning the Six Sigma key capabilities & tools

- Definitional concepts
- What constitutes s a good system quality level
- Building "trustworthy" systems
- Where to look for six sigma projects
- The cost of failures
- The best failure analysis tool
- How to select the best sigma project improvement opportunities
- What makes a good metric?
- The power of a good metrics

2 The power of statistical inference

- Statistical and analysis tools will expedite the analysis process and eliminating errors
- Identifying the real problem to solve
- The five most important six sigma project development tools
- A single test case

3 Real life project improvement examples

- Project pitfalls to avoid
- The path to failure
- System vulnerabilities
- Legacy system and software problems
- Genesis of failures
  - Electrical ○ Mechanical ○ HMI
  - NDF and how to lower this by an order of magnitude

4 Design for Six Sigma

- Tools we can use to attack the number system problem
- CMI level impact on design reliability
- Keene Software Development Process Reliability Prediction Model
- Collaborative & Analysis tools to develop defect free products
- Six sigma roles for Orange Belts, Black Belts & Master Blacks
- How we can be the best we can be

Why Six Sigma will be an enduring product improvement and problem avoidance strategy

Your international Trainer

Dr. Samuel J. Keene, Fellow of IEEE

Consulting Engineer in Six Sigma and Software and System Reliability
Keene and Associates

Dr. Keene is an independent consultant and a Six Sigma Senior Master Black Belt. He teaches Black Belts and Green Belts, mentors Black Belt projects and certifies new Black Belts. When Sam was at Seagate, he executed at least two major cross-functional projects each year. Sam also led Seagate's Master Black Belt Council, comprising the leading MBB's at each Seagate location, worldwide. This council promotes best practices, develops and organizes tools and procedures and promotes cross-organization project facilitation. He was one of 13 Six Sigma professionals participating with the ASQ developing the Body of Knowledge for the Black Belt certification exam,

Dr. Keene is a Recognized International Resource in the R &QA field. He is a Past President of the IEEE Reliability Society and received the 1996 "Reliability Engineer of the Year" Award. He received the IBM Outstanding Contribution award for his multimillion dollar savings through failure analysis activities. The ASQ presented Sam the Allan Chop award in 1999. He has also been recognized with the Outstanding Education Award from the Reliability Society. He holds the office of Fellow of the IEEE, for his technical accomplishments, and is the recipient of the IEEE 2000 Medallion Award. He produced eight video tutorials on different aspects of " Software Development", "Reliability", and "Concurrent Engineering" and he has published over 150 technical papers and book chapters. He is listed in "Who's Who in the United States". He was invited to participate with the ASQ Six Sigma body to develop the Six Sigma body of knowledge for the Black Belt Certification exam.

Dr. Keene has worked or consulted with Bendix Radio, NASA, IBM, Loral, Lockheed Martin, Storage Technology Corporation, Hughes Aircraft, Raytheon, and Seagate Technologies. Sam's strengths are a broad technical background, strong technical network, and excellent people and project facilitation skills. Dr. Keene has also taught at George Washington University, Prairie View A&M, and the University of Colorado. Plus he has taught numerous short courses on time management, creativity, problem solving, delegation, transformational leadership, as well as on reliability topics. Dr. Keene is currently the Technical Activities Vice President of the IEEE Reliability Society and serves on the Board of Governors of the IEEE Technology Management Council.

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Registration Form

How to Register

You can pay by **credit card** by filling up the following form.
For other ways of payment (e.g., **bank transfer, cheque**), please contact Registration Chair **Dr. Yang LIU** by
Tel: (+65) 6516 1510
Email: liuyang@comp.nus.edu.sg

1 COURSE PRICES

PLEASE ☑ THE APPROPRIATE BOX.

INDIVIDUAL STANDARD PRICE

☐ Individual S$ 700

☐ **EARLY BIRD DISCOUNT** – I would like to enjoy **S$70 off** the individual standard price when I register and pay **before 26 May, 2010**

GROUP DISCOUNTED PRICES

☐ Group of 3 S$ 665 Per Person

☐ Group of 5 S$ 644 Per Person

* Early Bird Discount and Group Saver Discounts cannot be combined.
* Course documentation, refreshments & lunches are included. Travel and accommodation are NOT included.

GROUP SAVER DISCOUNTS

Learn as a team and enjoy greater saving. Discounts apply only to group bookings from the same organisation at the same time.

- Group of 3 or more: 5%
- Group of 5 or more: 8%

2 DELEGATE DETAILS

PLEASE PHOTOCOPY FOR ADDITIONAL DELEGATES AND/OR DELEGATE WITH DIFFERENT ADDRESSES.

ORGANISATION: _____

DELEGATE 1 ☐ Mr ☐ Mrs ☐ Ms ☐ Dr ☐ Others ☐ Rank _____
First Name: _____ Last Name: _____
Job Title: _____ Department: _____
Email: _____ Phone: _____

DELEGATE 2 ☐ Mr ☐ Mrs ☐ Ms ☐ Dr ☐ Others ☐ Rank _____
First Name: _____ Last Name: _____
Job Title: _____ Department: _____
Email: _____ Phone: _____

DELEGATE 3 ☐ Mr ☐ Mrs ☐ Ms ☐ Dr ☐ Others ☐ Rank _____
First Name: _____ Last Name: _____
Job Title: _____ Department: _____
Email: _____ Phone: _____

PAYMENT / INVOICE CONTACT DETAILS
First Name: _____ Last Name: _____
Job Title: _____ Department: _____
Email: _____ Phone: _____ Fax: _____
Mailing Address: _____
Postal Code: _____ Country: _____

Signature: _____ Date: _____

Payment by Credit Card

I, Cardholder's name:

_____, authorize SSIRI 2010 to charge my Credit Card:

- ☐ VISA ☐ MasterCard
- Credit card number:

  _____

  Expiration date (month/year):
  _____/_____
- Security code: _____ (the 3 last numbers on the back of credit card)

for the total amount (in SGD):

_____

Date (day/month/year):
_____/_____/_____
Cardholder Signature :

_____

Tutorial of SSIRI 2010