

# "EXECUTIVE SIX SIGMA FOR IT AND SOFTWARE ENGINEERING" WORKSHOP

## Agenda

Item	Topics	Duration
Six Sigma – Defined	Introduction to the Lean Six Sigma and DFSS (Design for Six Sigma) methodology and principles The multi-facet aspects of Six Sigma	30 min
The Software Business	Software Engineering economics Software Quality Cost of Quality in Software The Business Case	30 min
Six Sigma for Software	Application and Instantiation of Six Sigma to Software and IT (differences and commonalities) Six Sigma/DFSS and the software life cycle Six Sigma and other quality/process improvement frameworks (e.g., CMMI, PSP, TSP, ITIL, ...)	30 min
<b>Break</b>		15 min
Six Sigma Project in software and IT	Typical Six Sigma project in IT and software Six Sigma Project Maturity Grid	15 min
<b>Example of Real projects and Case studies</b>		
Defect Containment and/or Management	Two related projects on defects containment and management. How to increase the Defect Removal Effectiveness throughout the life cycle: reviews (requirement and design), development, integration and testing.	25 min
Inspection and Review	A case study on how Inspection been used as piloting experiment (low hanging fruits) for implementing Six Sigma within an various organizations	25 min
Requirements Engineering and Management	This project shows how to improve the requirements engineering and management process and how to set-up measurement for requirements.	25 min
<b>Lunch</b>		60 min
<b>Example of Real project, cont'd</b>		
EVMS – Earned Value Management System	An example from SAP, presentation made jointly made between Systonomy and SAP at the Amsterdam summit. This case study shows a DMAIC project on project tracking and the application of EVMS.	15 min
Regression Testing	Six Sigma project conducted to improve regression testing effectiveness	20 min
Usability Engineering	An example of DFSS application: DF <sub>x</sub> where x=usability	15 min
Relationships with other Frameworks	More discussions on other quality frameworks eg. CMMI, PSP, TSP, ITIL	45 min
Demonstration of Tools and Techniques	Presentation of Six Sigma tools and techniques	
Open Discussion and Conclusion	Q&A and other topics of interest	25 min