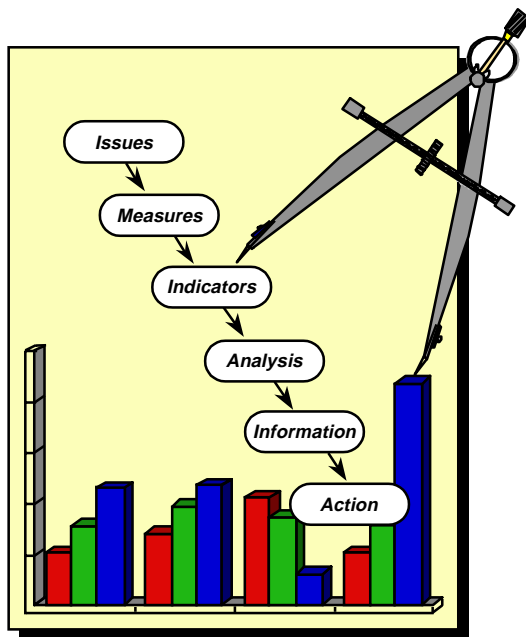


# ***Practical Software Measurement***

***A guide to objective program insight***



## ***Software Product Engineering Measurement***

***July 22, 1997***

***Joint Logistics Commanders  
Joint Group on Systems Engineering***

***Office of the Under Secretary of Defense  
Acquisition and Technology***

## ***Workshop Background***

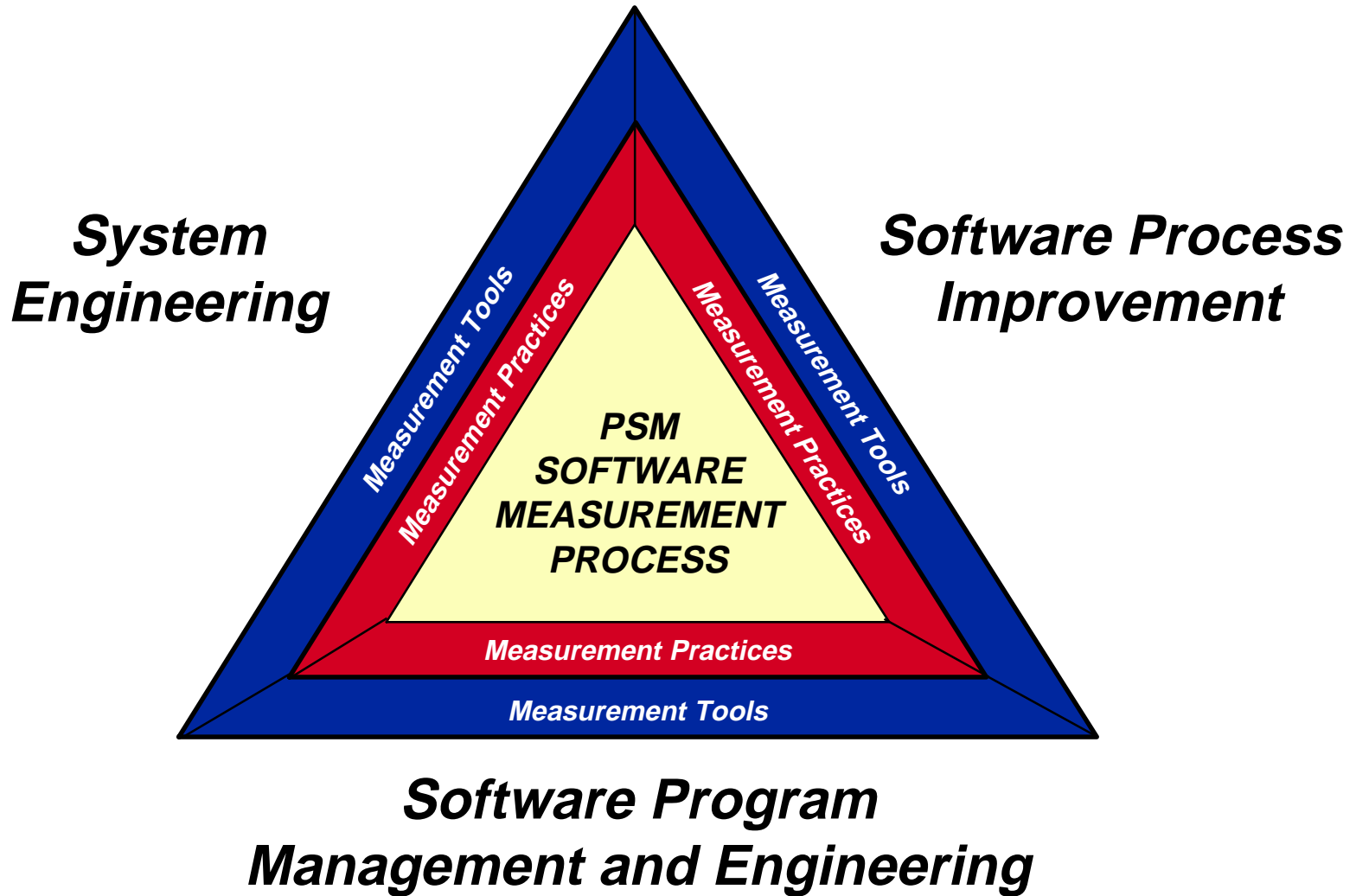
- ***SPE is a working group of the PSM IPT***
- ***An initial SPE workshop was held in August 1996***
- ***SPE WG meetings in October 1996 and February 1997***
- ***Study group meeting in June 1997***
- ***SPE Goal: To produce a product measurement framework that reflects the PSM philosophy***

## ***SPE Definition***

***Within a project, Software Product Engineering comprises those software engineering activities used to produce products that meet identified customer needs.***

**PRACTICAL SOFTWARE MEASUREMENT**

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## ***SPE Direction***

- ***A primary goal of SPE Measurement is to develop and promote the understanding of the relationships among and usage of the PSM elements.***
- ***Functionality and quality are the initial attribute categories of interest for measurement in SPE.***
- ***SPE will follow the PM precedence of issue driven measurement.***
- ***The definition of an issue will be consistent with the usage in PSM PM.***
- ***If an issue cannot be measured solely within the context of a product and it's environment, it will be excluded from PSM SPE.***

## ***Workshop Description***

- ***Discuss SPE definitions, goals, and objectives***
- ***Review and discuss survey questions***
  - ***identify impacts to SPE***
  - ***identify relationship to other TWG efforts***
- ***Examine existing SPE issues with intent to***
  - ***identify the more global issues for SPE, and***
  - ***formulate a set of related requirements that must be met by the SPE measurement program***
  - ***identify the areas SPE will need to address***

## ***Workshop Objectives***

- ***Identify a more global or foundational set of SPE issues.***
- ***Determine and categorize the unique needs of each category of customer:***
  - ***user***
  - ***developer***
  - ***maintainer***
- ***Formulate an initial set of issue-related requirements that must be met by the SPE measurement program.***

## ***Workshop Format***

- ***Background presentation***
- ***Group discussions***
  - ***brief participant introduction***
  - ***establish focus areas for small groups***
  - ***share issues & experiences***
  - ***consolidate results***
- ***Small group activities***
- ***Questionnaire review and discussion***



## ***Intended Audience***

***We hope to bring together representatives from each of the categories of “customer”;***

- ***Users*** (e.g., operational, sponsor, independent testers),
- ***Developers*** (e.g., program manager, contractor's development manager, COTS selector, system integrator, designers, SQA group, programmers, development testers), and
- ***Maintainers*** (e.g., sustaining organization, in-service support agent).

## ***Intended Output***

- ***A defined baseline of definitions, goals, objectives, and scope for SPE***
- ***A draft set of contextual (global) SPE measurement issues***
- ***Establishment of a set of measurement issues underlying SPE***
- ***Draft requirements for SPE effort planning***
- ***SPE perspectives from a broader customer base***
- ***Draft relationship statements about SPE relative to other measurement efforts***