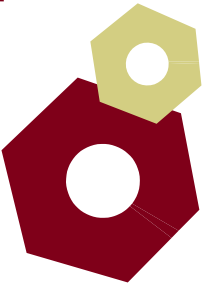




# Function Points: The Nuts and Bolts of What and How

**Joe Schofield, SEI Authorized CMMI Introduction Course Instructor, Certified Function Point Counting Specialist, CSMS, CQA, LSS/BB, . . .**

# Function Points Overview – Fact or Fiction?



**The most widely used standard software size metric throughout industry is Function Points.**

**The metric used by Lockheed-Martin to size their software products is Lines of Code.**

**Capers Jones of Software Productivity Research refers to Lines of Code measurement as professional malpractice.**

**Function Points are now an ISO/IEC standard (20926:2003).**

**“Gut feel” (Pillsbury dough boy approach) is the best way to estimate projects early in the life cycle.**

**Function Point counting is as new as XP.**

**Statistical analysis has demonstrated the integrity of Function Point counting by trained counters.**

**Function Points were first developed in 1989.**



## Function Point Course – **Fact** or **Fiction**?

**Function Point counting incorporates which of the following principles:**

- a) count all the functionality provided to the customer**
- b) count only the functionality provided to the customer**
- c) counting must be independent of technology**
- d) counting must demonstrate that you have the biggest project**
- e) counting must ignore the complexity of the system**
- f) Some of the above**

**A person can be certified as a Function Point counting guru:**

- a) Certification exams are offered about quarterly worldwide**
- b) Certification is temporary**
- c) Certification is permanent**
- d) Certified individuals are known as Certified Function Point Counting Specialists**
- e) Some of the above**



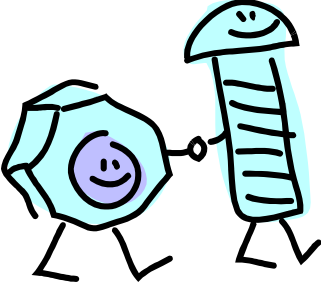
## Function Point Course – **Fact** or **Fiction**?

**Function Points are calculated by counting:**

- a) screens
- b) reports
- c) artifacts
- d) queries
- e) files / databases
- f) your toes
- g) SQA verifications
- h) some of the above

**According to Capers Jones projects with function point analysis:**

- a) at the requirements phase, have more scope creep
- b) have about 15% lower cost overruns
- c) have about 25% less schedule slips
- d) save between \$25 and \$75 per function point
- e) more than one of the above



## Function Point Course – **Fact** or **Fiction**?

**You should care about Function Points because:**

- a) it will be on your performance review this year**
- b) they're cool and if you want to be cool you need to know 'em**
- c) yo mama said so**
- d) you can quantify the size of your software (or changes to it) and negotiate (although maybe still lose) the size, complexity, and schedule of your efforts**
- e) more than one of the above**

**According to Capers Jones**

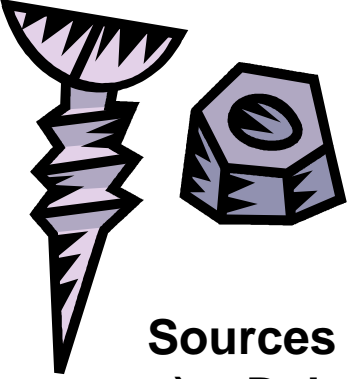
- a) 40% of Fortune 500 companies have process assessments**
- b) 25% of Fortune 500 companies have productivity measures**
- c) 15% of Fortune 500 companies have quality measures**
- d) 60% of Fortune 500 companies are in the Fortune 500**
- e) 150,000 software projects have been measured**
- f) 42,000,000 software projects have not been measured**
- g) more than one of the above**

# Function Point Course – **Fact** or **Fiction**?



According to Capers Jones, Function Point usage reduces the risk of:

- a) project termination
- b) terrorism
- c) litigation for breach of contract
- d) tax litigation
- e) having a visit from SQA
- f) unstable requirements
- g) poor quality
- h) hot flashes
- i) cost and schedule overruns
- j) stock market volatility
- k) more than one of the above



# Function Point Course – **Fact** or **Fiction**?

Sources of EIs are:

- a) Delete of a person
- b) Update of a weapon
- c) Help screen for a property item
- d) Add an inspection point in a security system
- e) A person table
- f) A person table in an HR system
- g) Change the effective date on a project / task

Valid EOs

- a) A payroll calculation screen
- b) A summary report of accrued benefits
- c) Help for creating a report
- d) A report of all the employees in a department
- e) A report of all employees in a department sorted six ways
- f) A screen query with a sum of all an employee's business trips
- g) A query of all the joint test assemblies within a variable period of time
- h) A report of disassemblies that can be download to Excel

# Function Point Course – Fact or Fiction?



**FPs are:**

- a) Not standardized across industry
- b) A standard in the US
- c) A standard across mainframe users
- d) A standard across web applications
- e) An ISO standard
- f) Not as good as using LOCs

**GSCs can**

- a) Increase an unadjusted Function Point count
- b) Decrease an unadjusted Function Point count
- c) Increase or decrease an unadjusted Function Point count
- d) Increase and decrease an unadjusted Function Point count