

# Benchmarking

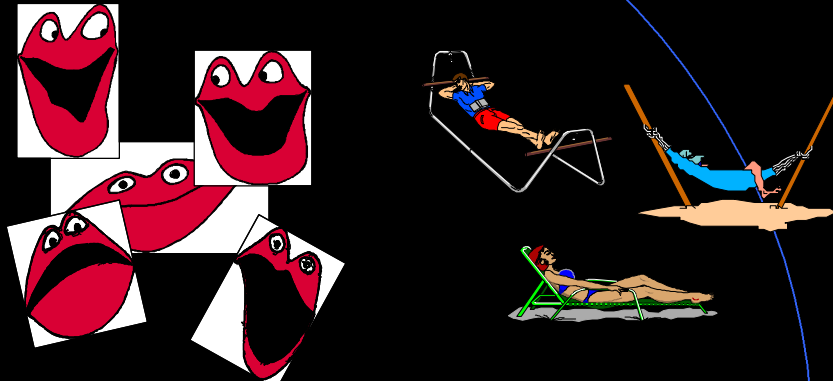
## Do You Have What It Takes?

Charles L. Gold  
International Function Point Users Group  
July 21, 1998

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# Benchmarking

More Talk . . . . . Than Action



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## Why?

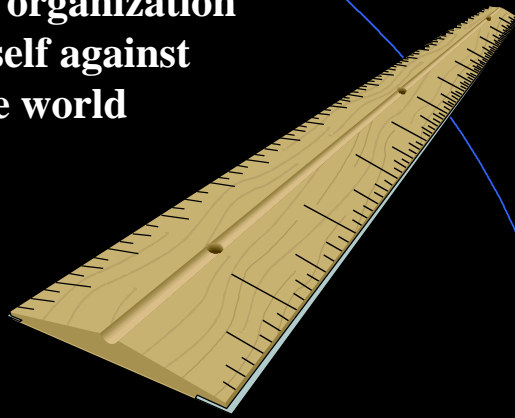
- **Don't know what benchmarking is.**
- **Can't find comparison data.**
- **Afraid of the result.**
- **.....?**

## Agenda

- **Some Benchmarking Flavors**
- **Some of the "Must Haves"**
  - **Your Data**
  - **Comparative Data**
  - **A Willingness to Think**
- **Some Results**
- **Possible Next Steps**

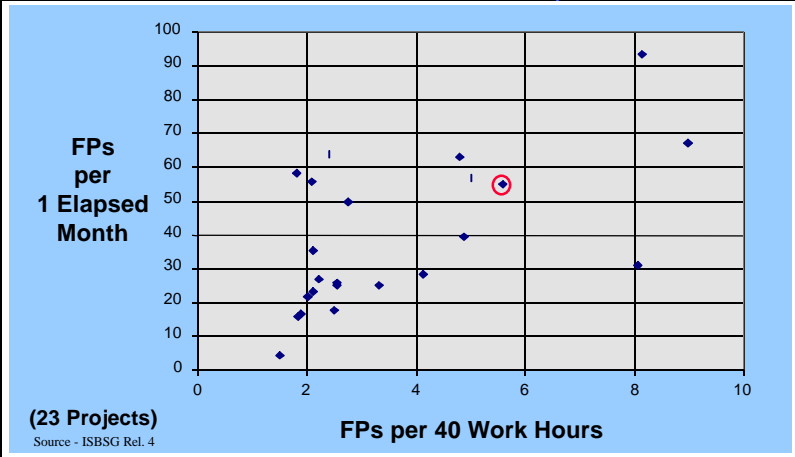
# Benchmarking

A way for an organization to position itself against the rest of the world (and itself).



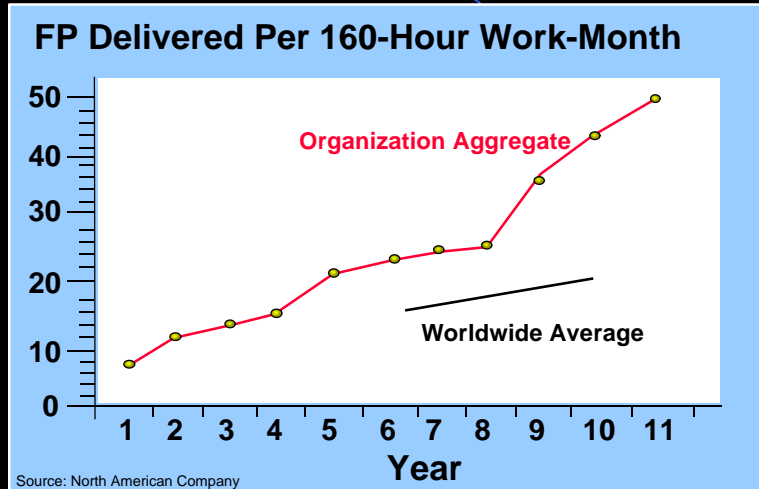
# At a Project Level

(Selection: North America/Mainframe/COBOL)



(23 Projects)  
Source - ISBSG Rel. 4

## At an Organizational Level



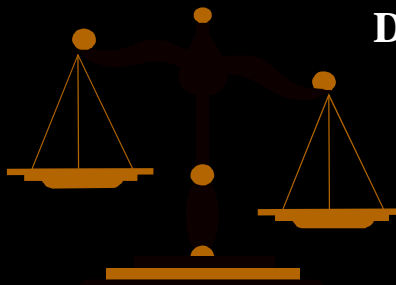
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## The “Must Haves”

Your Own  
Data

Comparative  
Data



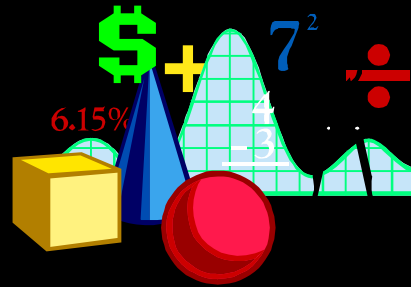
A Willingness to Learn

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# Getting the “Must Haves”

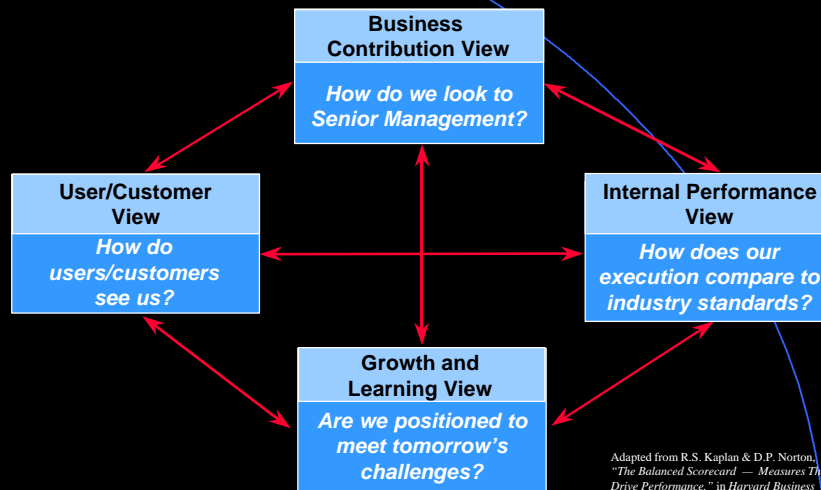
**1. Your Own Data** - It should be the easiest, but often proves to be the hardest!



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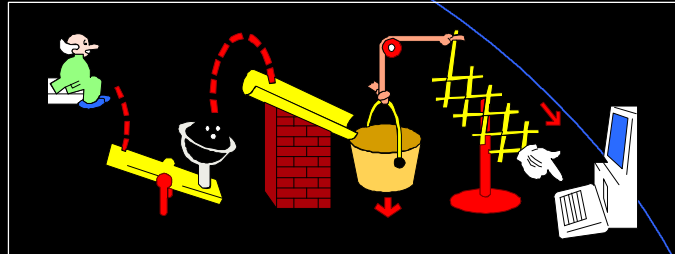
# Start a Metrics Program



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# Just Do It!\*



- Do what works; keep it simple
- Make data visible
- Develop usage/culture
- Fill in over time

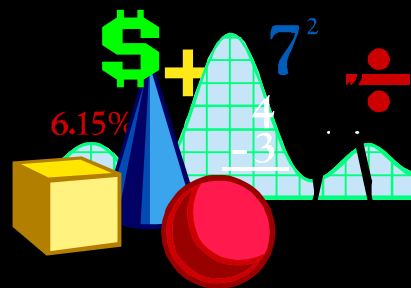
(\*With an apology to Nike)

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## Getting the “Must Haves”

**2. Comparative Data** - This often stopped people; but not anymore!



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# Today, Data is Available!

**From The International  
Function Point Users Group**

**(through its sponsorship of  
The International Software  
Benchmarking Standards  
Group, LTD - aka Icebags)**

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# International Sponsorship

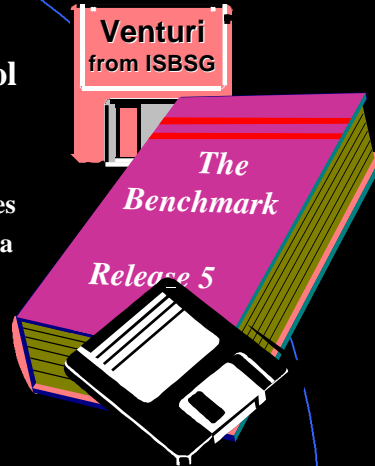
- **Current Sponsoring Countries**
  - Australia
  - Canada
  - Germany
  - Italy
  - Netherlands
  - United Kingdom
  - USA (IFPUG)
- **Potential Sponsors**
  - France
  - India
  - Japan
  - New Zealand

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# ISBSG Materials

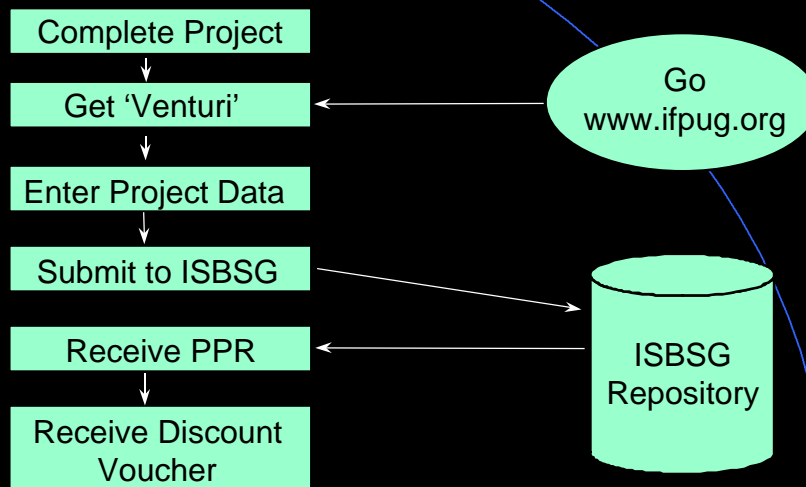
- **Venturi - A Data Collection Tool**
- **The Benchmark: Release 5**
  - Issued March 1998, 176 pages long
  - Covers 451 projects from 14 Countries
  - Includes Demographic/Statistical Data
  - *“Comparing Development Platforms”*
  - *“The Effect of Maximum Team Size”*
- **The Data Diskette**
- **Release 6 - Projected for YE98**



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# Project Positioning Service

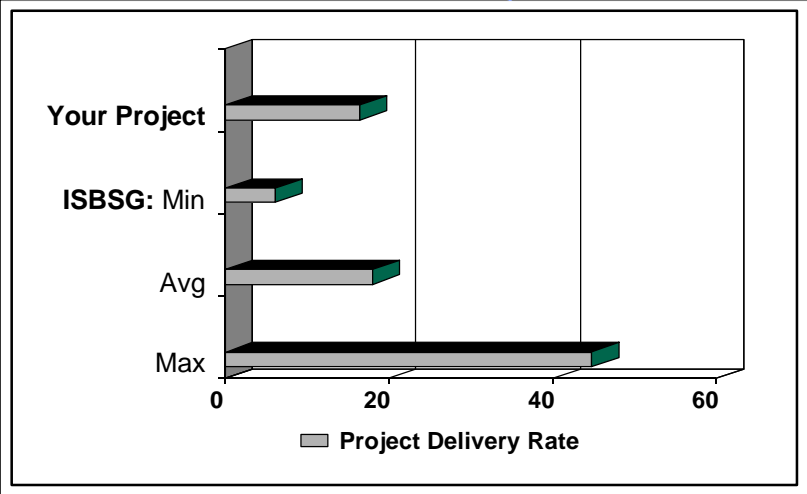


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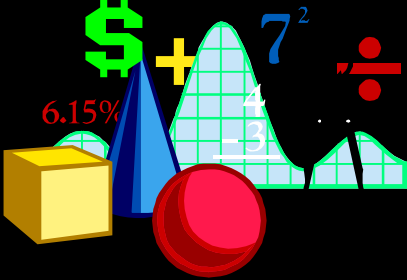


# Project Profile Report



# Getting the “Must Haves”

**3. A Willingness to Learn** - The numbers are just a start; they must be followed by analysis and action!



## Project Size

- **Enhancement Projects**
  - 9 to 4,181 FPs; median: 204 FPs
- **New Development Projects**
  - 10 to 17,520 FPs; median: 379 FPs
- **Distribution of FP Types (New Dev.)**
  - Input FPs - 37%
  - Output FPs - 24%
  - Inquiry FPs - 13%
  - File FPs - 22%
  - Interface FPs - 4%

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## Project Work Effort

- **Hours**
  - 5 to 106,480 hours
  - Median: 2228 hours
- **Distribution of Work Effort by Phase**
  - Plan 10%
  - Specify/Design 22%
  - Build 46%
  - Test 15%
  - Implement/Deploy 7%

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## Platform Productivity

	Main-Frame	Mid-Range	Micro
Size (FP)	291	585	290
Work Effort (hours)	2404	2870	1074
Productivity (FP/160 hr)	19	33	43

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## Performance Frontiers

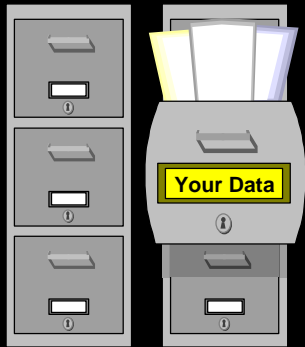
- **COBOL, Mainframe**
  - Best = 1.1 hr/FP; Median = 9.9 hr/FP
- **C/C++, Mid-range**
  - Best = .09 hr/FP; Median = 6.9 hr/FP
- **MS Access, Micro**
  - Best = .19 hr/FP; Median = 2.0 hr/FP

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## Make ISBSG “Your Database”

ISBSG Data



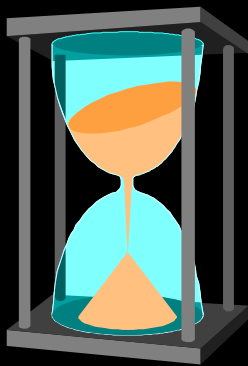
A project data file for:

- **Trend/Positioning data**
  - Your own organization
  - The rest of the world
- **Estimating data**
  - “Historical” project data
  - “What ifs” for new project types
- **Improvement program study data**

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## Ways to Get Started



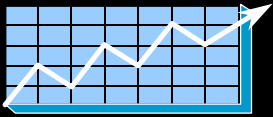
- **Submit a project; a Project Profile Report is returned**
- **Begin your own analyses using The Benchmark - Release 5 report and/or Data Diskette**
- **Visit the IFPUG Website (<http://www.ifpug.org>)**

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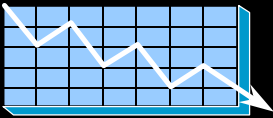
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# The Results Speak to the Value

- Contributions
- Efficiency
- Satisfaction



- Cycle Time
- Defect Levels



- Understanding
- Objectivity/Credibility
- Explicit Leadership
- Above Average Performance