

# Value



To Realize the Value of

one year: Ask a student who has failed a final exam.

one month: Ask a mother who has just had a premature baby.

one week: Ask an editor of a weekly newspaper.

one day: Ask a daily laborer who has 10 kids to feed.

one hour: Ask the lovers who are waiting to meet.

one minute: Ask a person who has missed a plane, train or bus.

one second: Ask a person who has survived an accident.

one hundredth second: Ask an Olympic silver medal winner.

# Proving Value of IT



To realize the value of the Billions spent in IT,

To realize **Economic Survival:**

Ask the expert to Measure it and Prove it!

What has Value to you and how do you prove it?

**You Can't Manage What You Can't Measure!**

# Measurements to prove IT Bottom Line Value

**What is the product of IT for a Business?**

- a) Mainframes?
- b) Servers?
- c) Web?
- d) Internet?
- e) **Software Functionality for Business Users  
to do their jobs with more efficiency and  
effectiveness?**

**What do you measure?**

# So Why Are We Here?

## History

On Time, Within Budget, Satisfied Customer

OT, +20%, SC

Did I get 70% or 100% of expectations?

Did I get 1000 points or 5000 points?

## Outsourcing Threat

Offshore advertises \$30/hr.

ISO Standard: Already doing ISO?

**DEVELOPMENT SUPPORT CENTER, INC.**  
**People Leveraging Technology**  
**14250 oakdale drive suite 150**  
**elm grove, wisconsin 53122**  
**(262) 789-9190**  
**www.functionpoints.com**  
**e-mail Bill.Hufschmidt@functionpoints.com**



***Survivor USA:***  
***Prove Your Value or Else...!***

**Bill Hufschmidt CSMS, CFPS, CSQA**  
**Professional Metrics Consultant**  
**President, Founder**

# 5 Reasons Business Decisions



**Increase Sales or Market Share**

**Increase Efficiency (Cash Flow, Cost, Cycle Time)**

**Mandatory: Legal, Regulatory, Corporate, Political**

**Increase Customer Satisfaction**

**Future Investment**

# 3 Universal Measures



**Time,  
Money,  
Software Functionality!**

# Benefits of Measures

- Offer Fixed Prices to worried Executives
- Additional new Service and Revenue to keep accounts and win new business
- Improve Estimates
- Reduce Future Risk
- Prove Value
- Utilize an ISO Standard
- Generate an IT Balanced Scorecard-ROI



# Partial Client List



**AT&T/Ameritech/SBC/PacBell/BellSouth  
Wisconsin Gas, Eckerd Drug, Best Buy,  
GE, Dell, NCR, Allied Signal, Guidant,  
British Airways, Fed Ex, US Army,  
Montgomery County Public Schools,  
M&I, LaSalle-ABN AMRO, WI, CA, USA  
20 Years, 250+ clients**

# Biggest and Best Questions

**Biggest System vs. 2<sup>nd</sup> Biggest?**

**Big Raise vs. \$20,000 Raise?**

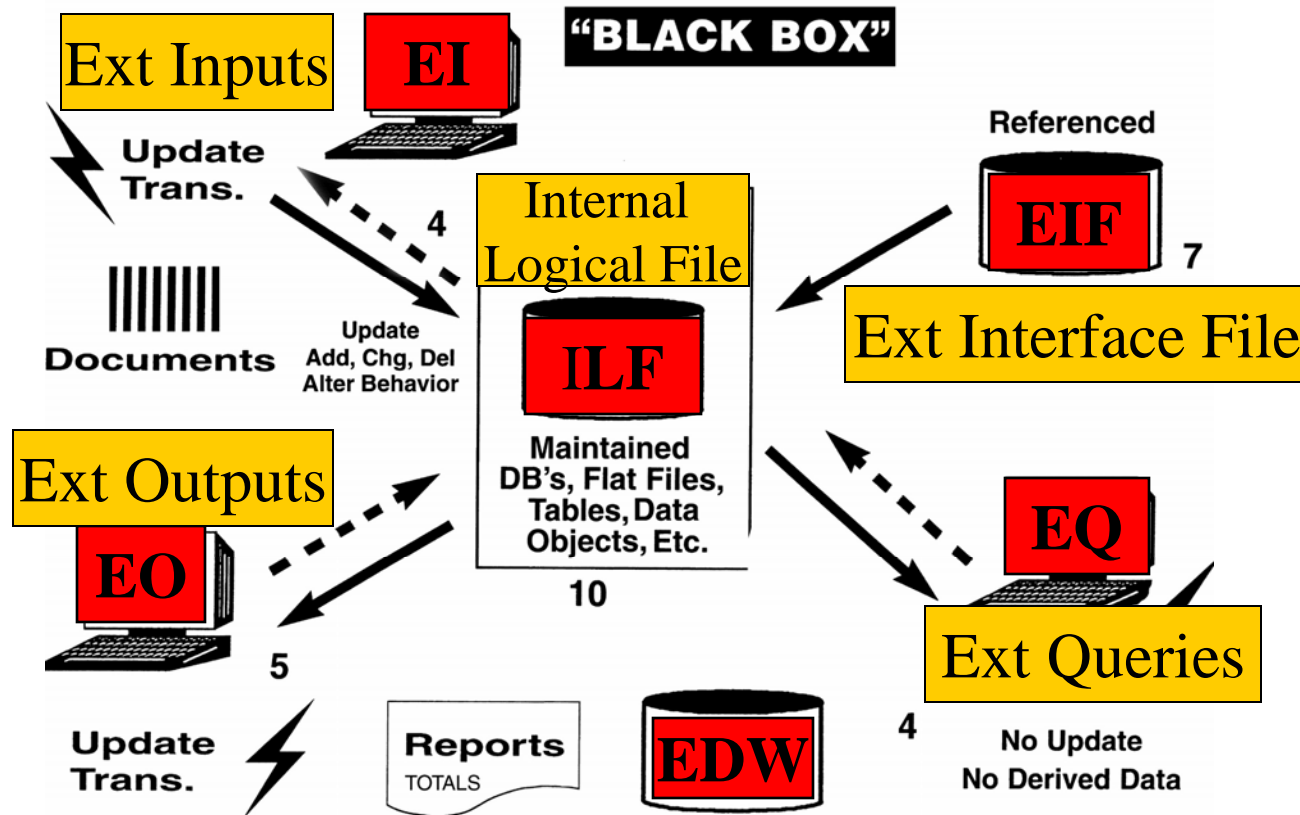
**Productivity, Quality, Staffing, Value...?**

Can you answer these?

Do you need to answer these?

Would like to answer these?

# Function Points: An Independent, Objective, Quantified, Consistent, Auditable, ISO measure of the size and complexity, of an application, based upon the User's view.



Independent of  
Application  
Technology  
Design

0 - 1000 Small  
- 2500 Med  
+ Major

Function Point- A measure which represents the functional size of application software. (Glossary)

# Function Point Benefits



**ISO Standard.**

**Measure Software Functionality.**

**Foundation of IT Metrics.**

**25 Years, IFPUG 4.2.**

# Function Points-Advantages

Normalizes IT Product

Business Insights re: 10 Dim Model

**Productivity, Quality, Cost, Revenue,  
Risk, ROI, Staffing, Process Maturity,  
Leverage, Customer Satisfaction,  
Strategic Importance, Value,  
Business and Maturity,  
Sarbanes-Oxley, Compliance**

*Without Function Points, You're Just Another Opinion!*

# Function Points – What They're Not:



Not Panacea,

Not Reduce Cost,

Not Increase Productivity,

Not Increase Quality ...

Not Every Project,

**Not a Measure of Individuals.**

***What Gets Measured Gets Done!***

**Disclaimer:**

Business Decisions  
for Business Reasons.

Still Need Managerial Judgment.

***What Gets Measured Gets Done!***

# Objections to Measures

“They take too long.” **They Don’t!**

“I don’t use them in my work.” **You Should!**

“They don’t apply to what I do.” **Want’a Bet?**

...

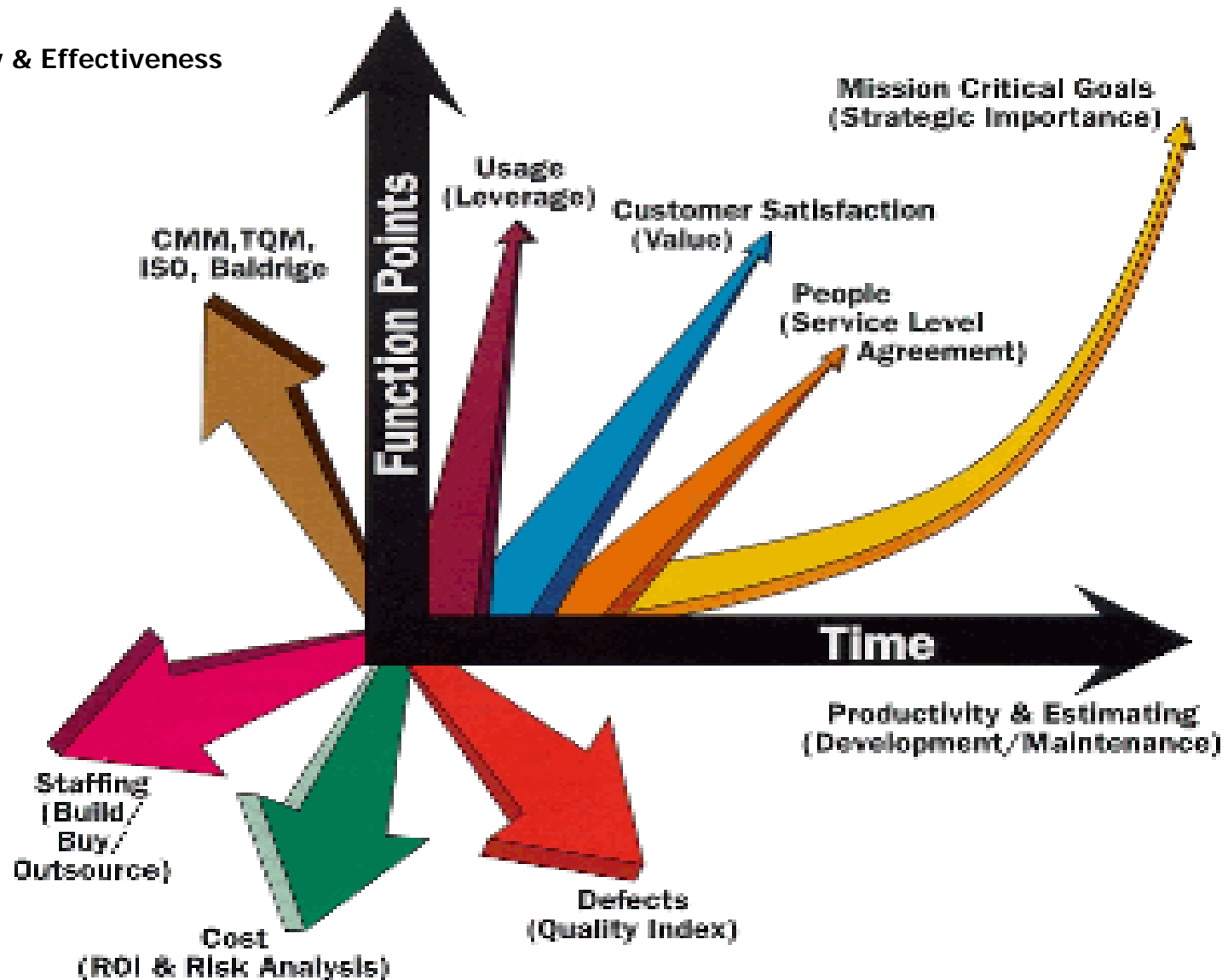
“I’m afraid of measurements.”

**Management View: “You Can’t Manage  
What You Can’t Measure!” So...**

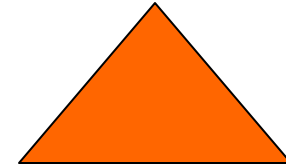


# Doing Things Right and Doing The Right Things!

Tactical  
Efficiency & Effectiveness



# Productivity: Management by Delta



Productivity	= Output/Input
Delivery Rate	= FP/WM, 1WM=130 applied hr
25 → 30	= 20%
5 → 6	= 20%
Maint/Support	= HRs/IFP
	= 1000/1000 = 1.0
	= 1000/1100 = .9
	= 900/1100 = .78 = 22%

Hardware/Software/People/Requirements (H/S/P/R)  
People=Staff, Users, Management

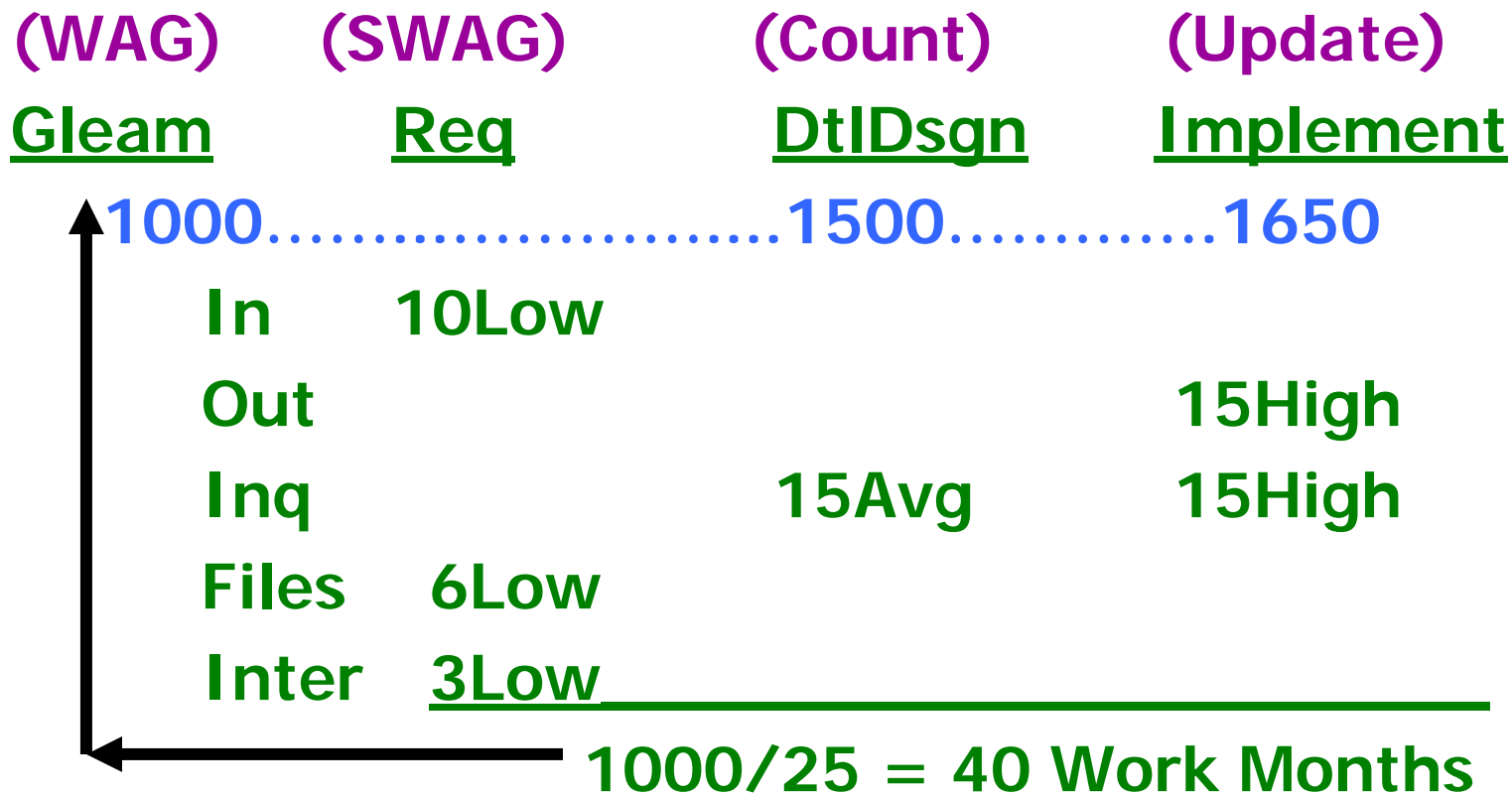
# Estimating



**Historical, Hysterical or Political Estimating?**

**Estimate any project in two minutes,  
sight unseen, with a guarantee,  
as early in the life cycle as  
“gleam in the boss’s eye!”**

# Estimating With Guarantee



# Establishing - Unit Costs



**Development**

**Enhancements**

**Roll Out**

**Help Desk**

**Quality**

**Other**

# Rental Car Model



- **Fixed Price for initial Time & Use  
(3 days, 300 miles)**
- **Additional days (\$100/day)**
- **Additional miles (\$.50/mile)**

# Quality Inspections

**2006 Savings = 151 Deviations**

**\* 6.5 FP/Deviation**

**\* 10 Hr/FP**

**\* \$100/Hr**

**= 151 \* 6.5 \* 10 \* \$100**

**= \$975,000**

**= \$3M (3 years)**

# Leverage, Business Impact

Initial Impact (after one month):

1000 FP x 100 agents (usage factor)  
= 100,000 Leveraged Function Points (LFP)

Penetration: 100 agents/500 agents = 20%

Projected Impact: 1000 FP x 500 agents  
= 500,000 LFP



# Leverage (cont)



## Actual Final Impact

(at 12 months after full implementation):

1300 FP (incl 100 extra Function Points  
during final 4 months)

x 525 agents (100% Penetration but now  
525 agents)

682,500 LFP

# Leverage (cont)



Actual Final Impact

682,500 LFP (actual final impact)

/500,000 LFP (orig projected impact)

= 1.365

Change = 36.5% greater impact than  
ever expected

# Leverage \$25M

**250 FTE**

\* **.1 Productivity (rounded)**

\* **2000 Hr (rounded)**

\* **\$100/Hr (rounded)**

\* **5 Yr**

**\$25M savings.**

# Vendor Comparison

	<u>Vendor A</u>	<u>Vendor B</u>
Cost per Hour	75	50
Hours to Develop	40,000	60,000
Total Cost	3,000,000	3,000,000
Function Points	4,000	2,000
Hrs per FP (Prod)	10	30
Norm Cost per FP	750	1,500

# Results from Real IT Balanced Scorecards

Total Functionality (Food)	= +76%
Productivity (Telecom, 10yr)	= +31%
Quality (Health)	= +43%
Staff (Energy)	= +22%
Cost (Energy)	= +10%
Staff Support Rate (AFP/FTE)	= +60%
Unit Cost (\$53/AFP-\$30/AFP)	= <u>-43%</u>
TOP Index (Telecom)	103%

# Results from Real IT Balanced Scorecards

Maintenance Hours (Fin)	= + 9%
Maintenance Hr/Lev AFP (Fin)	= -19%
Churn (Utility)	= +80%
ROI of IT (Bank)	= +38%
Usage (Retail)	= + 5X
Customer Satisfaction (Ins)	= +23%
Value Index (Gov)	= + 8X
Leveraged Business Impact (Mnfg)	= +42X

# Summary



**Install Measures adopting Fixed Prices/FP**

**“not to exceed X/FP” to provide:**

**Additional Service of Measurements and  
Balanced Scorecard that sets you apart  
to win Business and increase Revenue.**

**Improve Estimates.**

**Reduce Risk of changing requirements.**

**Prove Value using an ISO Standard.**