ISBSG data in Industry

Present and Future

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Do you like to live dangerously?

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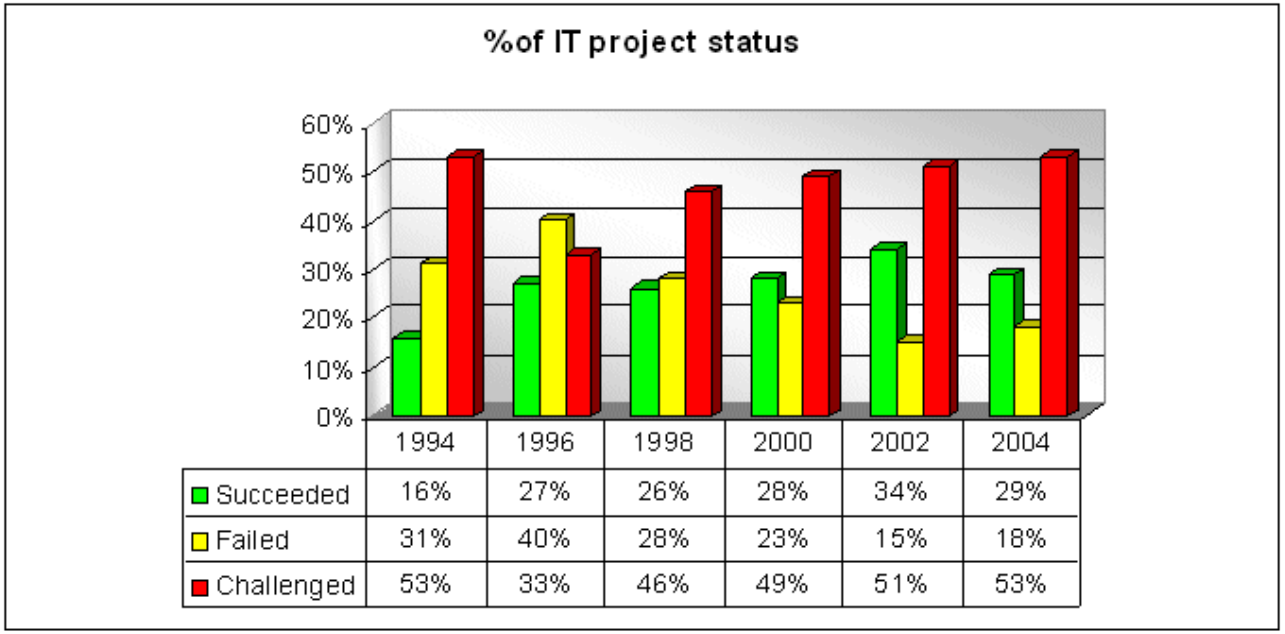
The good news

Only 29% of IT-projects 2004 within time and budget (Chaos Report)

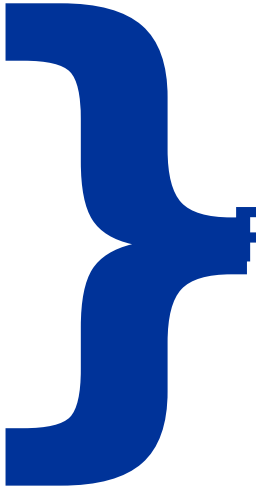


	1994	1996	1998	2000	2002	2004
Succeeded	16%	27%	26%	28%	34%	29%
Failed	31%	40%	28%	23%	15%	18%
Challenged	53%	33%	46%	49%	51%	53%

Source: Standish Group – Chaos Report

Six most common causes

- Lack of user involvement
- Incomplete requirements
- Changing requirements
- Lack of executive support
- Developer incompetence
- Unrealistic expectations



POOR ESTIMATES

Impact of poor estimates

- Missed delivery dates
  Loss of business / position
- Failing projects
  Resources wasted
- Cancelled projects
  Money spent, resources wasted - no business value
- Business case
  [for IT investment] Invalidated

Trends in IT Services – Customer View

- IT should be beneficial to business
- The organisation should focus on core business
  - IT Risk to supplier / IT Risk shared with supplier
  - (Out)Sourcing
- Cost reduction
  - Value for money
  - Transparent proposal
- Standardisation
  - Packages
  - Process
- Customer Satisfaction
  - On time, on budget with the agreed functionality AND quality

Trends in IT Services – Supplier View

- IT services should be profitable
- The organisation should be compelling
  - Prepared to take / to share the customer risks
  - Profiling as an (Out)Sourcing partner / party
- Cost effective
  - Value for money
  - Competitive proposal
- Standardisation
  - Process & Procedures (Factory)
  - Risk Management
- Customer Satisfaction
  - On time, on budget with the agreed functionality AND quality

The solution !!!

The customer should ask for a contract based on a price per unit.

The supplier should offer contracts based on a price per unit.

This requires

- Functional “excellence”.
- Good estimates / right expectations.
- International accepted units.
- Historical data.
- Benchmark standards.

Functional Excellence

Provide the necessary processes, standards and tools such that the IT Function can deliver projects on time, within budget and to business expectations consistently and in a sustainable manner in a multi-source environment.

Create an organisational capability which will be deemed (top quartile) in Project Delivery by external benchmarks.

Need for an Estimation Process

- Consistency
  - Controllability
  - Common language
- Transparency
  - Understanding the impact of cost drivers
- Objectivity
  - Fact based, not ‘intuition’ based
  - Models, methods
  - Historical database, benchmark

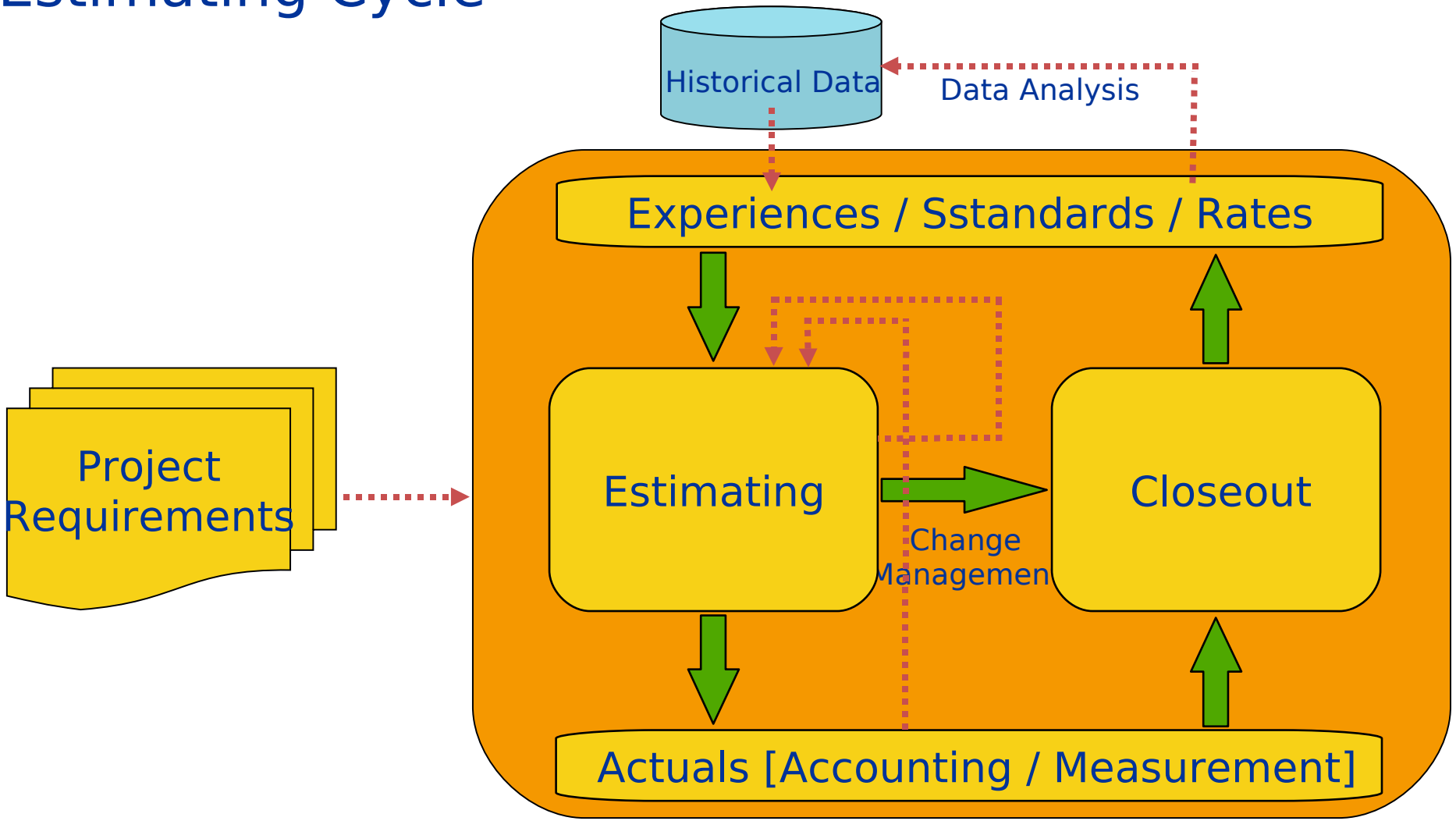
Models

Models are not the “end-game”, no “silver bullet”

but can help create a common language

- They are only a starting point for discussions on various elements of application support cost management
- They should be refreshed for benchmarks, newly available measurement data, and pragmatic considerations
- Models serve as a platform on a healthy exchange of ideas on the impact of cost drivers
- They also serve as a tool to set the cost expectations on the demand side

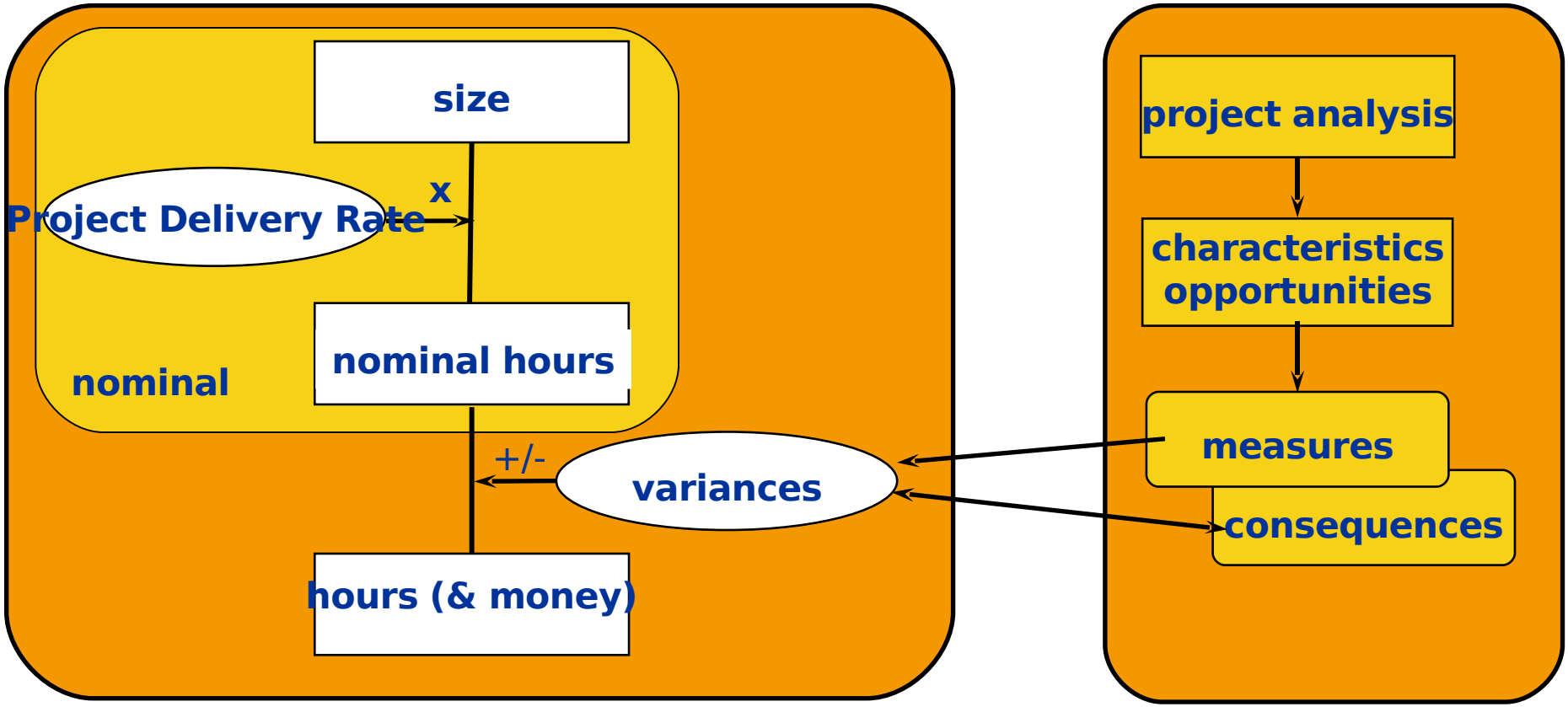
Estimating Cycle



Input - Process - Output

effort cost = productivity x size

Enhanced Measurement Model



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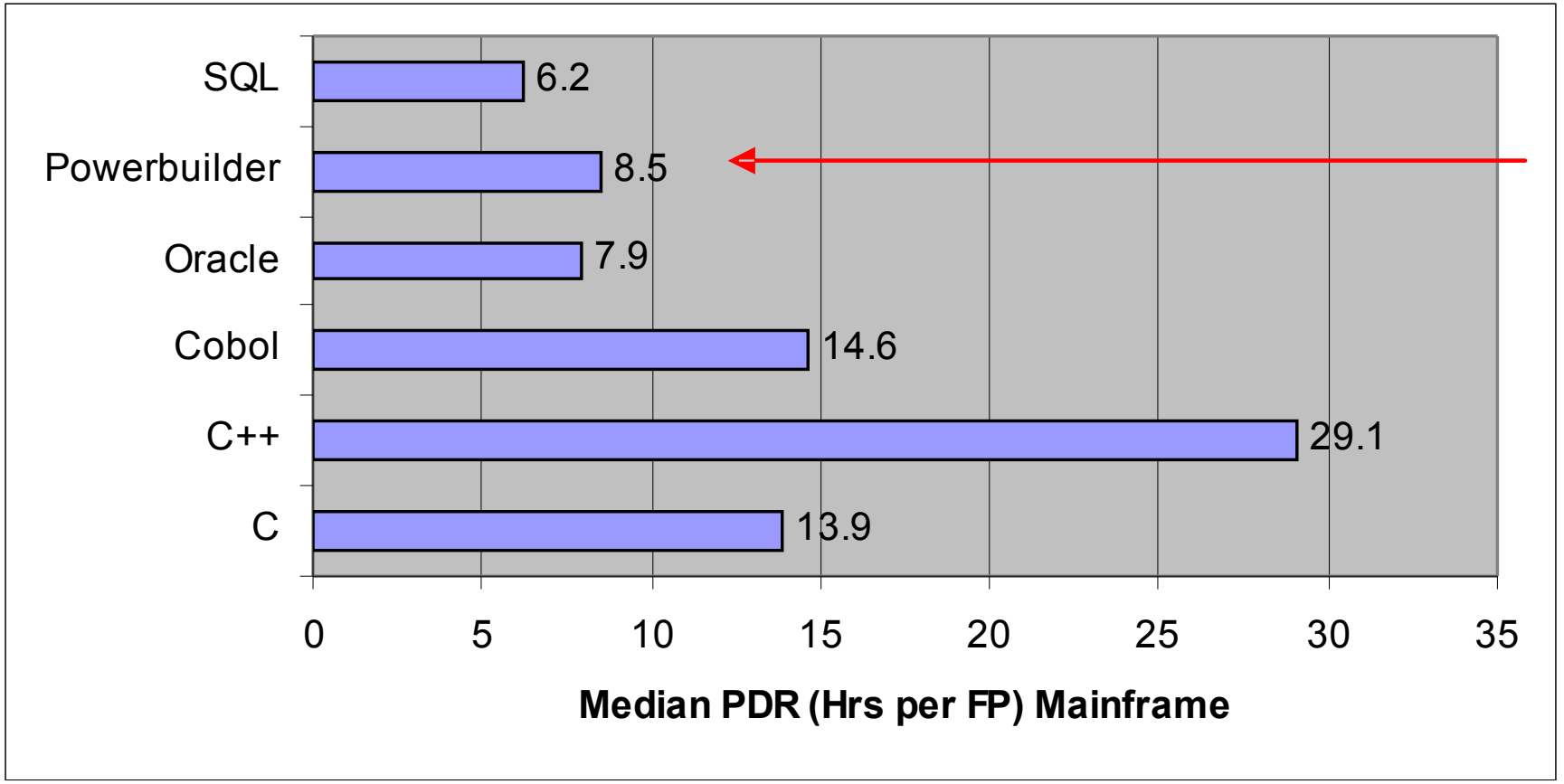
Methods

- COSMIC Full Functions
  - Measurement Manual V3.0 (September 2007) [ISO]
  - Application Guide V1.0 (December 2005)
  - COSMIC/Sogeti Maintenance Sizing (2004)
- Function Points
  - IFPUG Counting Practices V4.2 (2004) [ISO]
  - NESMA Counting Practices V.2.2 (2005) [ISO]
  - (NESMA)/Sogeti Maintenance Sizing (1996 / 1992)
- Use Case Point
  - IBM / Rational
- …

Median Project Delivery Rates



ISBSG members

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Connections

tools

Software Technology Transfer Finland

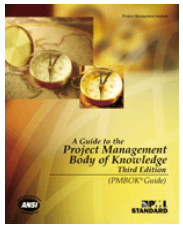
QSM The Intelligence behind Successful Software Projects

SOFTWARE PRODUCTIVITY RESEARCH SPR

GALORATH

standards

ISO International Organization for Standardization



International Software Benchmarking Standards Group

benchmark

COSMIC Consortium Common Software Measurement International

Nesma

measurement

Korea Function Point Users Group

CSSPI

JFPUG

Nesma

ASMA/SQA

NASSCOM

DASMA

UKSMA

GUFPI ISMA

SwiSMA

FiSMA

members

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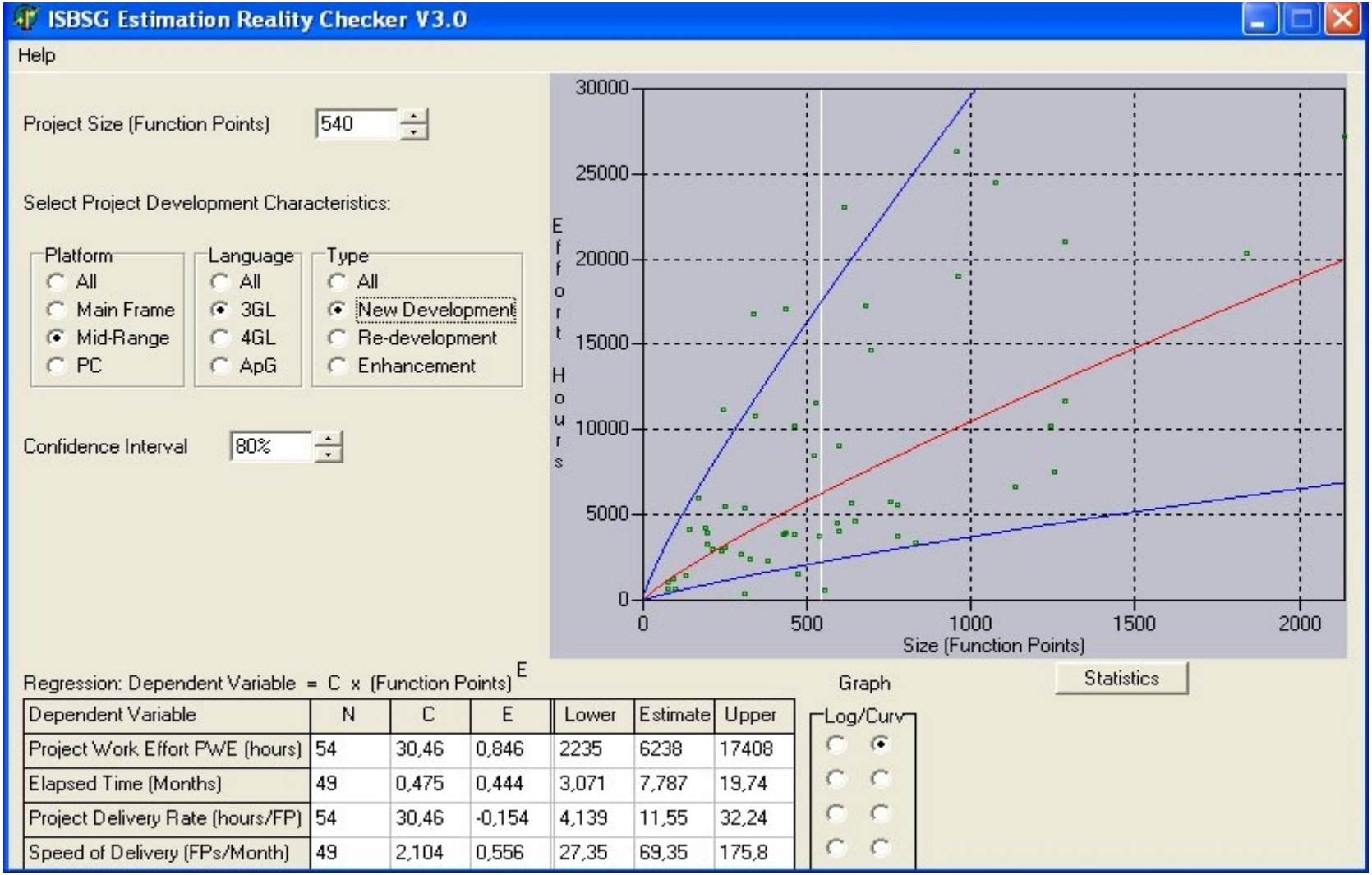
ISBSG Repositories

- New Development & Enhancement
  Data from projects focussing on development of custom build software
  R10 (01-2007), > 4,000 projects
  - single user: CD version, limited detailed data per project
  - corporate version: 1 to 5 users (basis), more data fields, every half-year an update
- Run & Maintain (PILOT)
  Data from application focussing effort and cost to keep the application operational
  R0 (2007), < 140 projects
  - corporate version: 1 to 5 users (basis), more data fields
- Business Application Packages (under construction)
  Data from projects focussing on a acquisition and implementation of packages
- Testing (under construction)
  Data of the test activity as part of the life cycle or as dedicated activity (factory)

Example Project

Variables	Expectations
Size	540 fp
Domain	Business
Language	Cobol (3GL)
Platform	Mainframe
Constraints	€ 1,000,000 10 Months

Reality Checker



Reality Checker

Variables	Expectations	Reality Checker
Size	540 fp	540 fp
Domain	Business	-
Language	Cobol (3GL)	3 GL
Platform	Midrange	Midrange
Constraints	€ 1,000,000 1,741,000 10 Months	€ 624,000 - 7.8 - 19.7 Months

Reality Checker (online)

The reality is that, compared to projects that match yours in the ISBSG Repository

72 % were delivered within your expected **effort**

30,5 % were delivered within your expected elapsed **duration**

what do I do now?

Reality Check results - spread of projects compared to yours is

Effort - total project hours:

	Minimum	25 Percentile	Median	75 Percentile	Maximum
ISBSG 125 comparable projects:		**4806**	**8100**	**12636**	
Your project:					

Duration - elapsed months:

	Minimum	25 Percentile	Median	75 Percentile	Maximum
ISBSG 105 comparable projects:		**8,7**	**14,6**	**25,8**	
Your project:					

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nology

It’s better to be a winner!

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