

PRICE Symposium 98



MEASURING AND BENCHMARKING IT PERFORMANCE

The David Consulting Group
Achieving Software Excellence

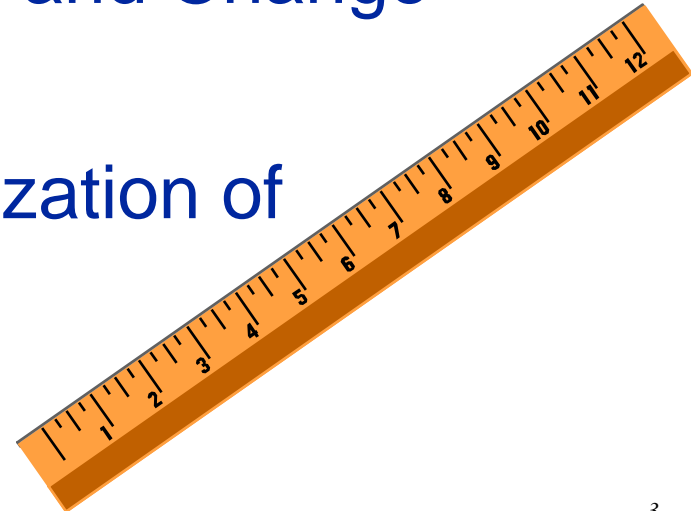
Presented by
David Herron

BENCHMARKING FUNDAMENTALS

- ❑ Purpose of Benchmarking
- ❑ Types of Benchmarking
- ❑ Utilizing Benchmark Data
- ❑ Sources of Benchmark Data

PURPOSE OF BENCHMARKING

- ❑ A Continuous, Methodical Process for Comparing Companies, Divisions and Projects
- ❑ Monitoring Improvements and Change
- ❑ Representation and Realization of Best Practices



TYPES OF BENCHMARKING

❑ **Internal Benchmarking:**

Align With Business Strategies

Access to Internal “Proprietary” Data

Baseline "Stake in the ground"

❑ **External Benchmarking:**

Direct Competitors/Consortiums

Targeted Markets/Focus Groups

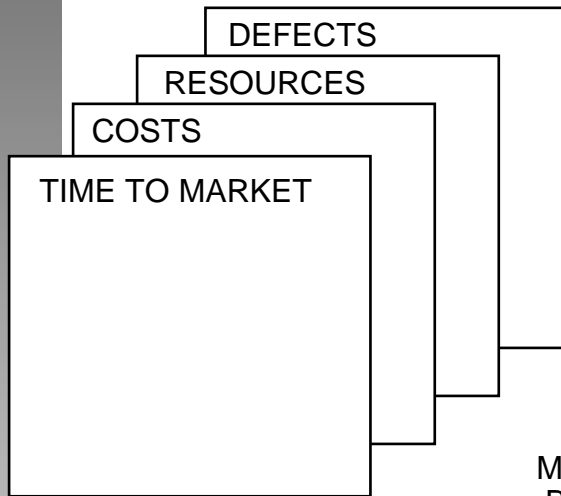
International

❑ **Best Practices Benchmarking**

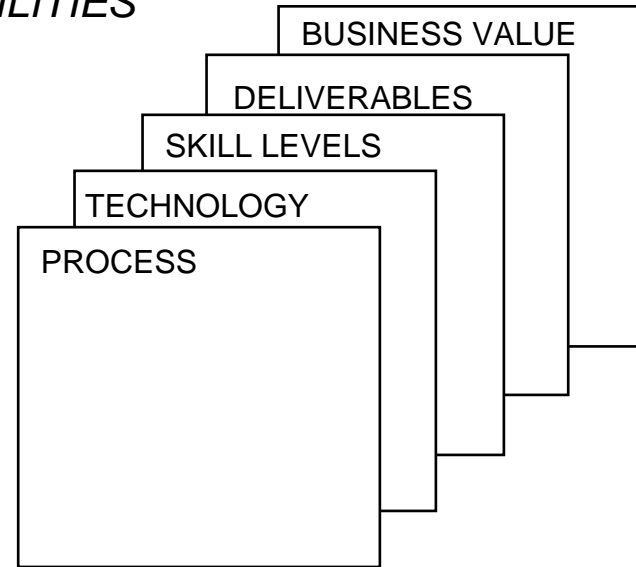
Comparisons of products, services and work processes with those of top performing organizations regardless of industry type

INTERNAL BENCHMARKING ESTABLISH THE BASELINE

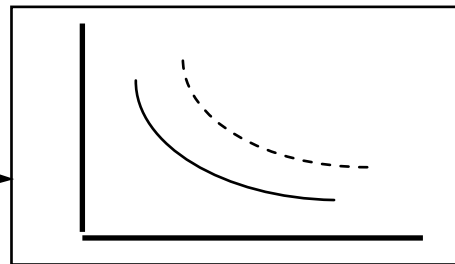
PERFORMANCE
PRODUCTIVITY



CAPABILITIES



MEASURED
BASELINE



PERFORMANCE

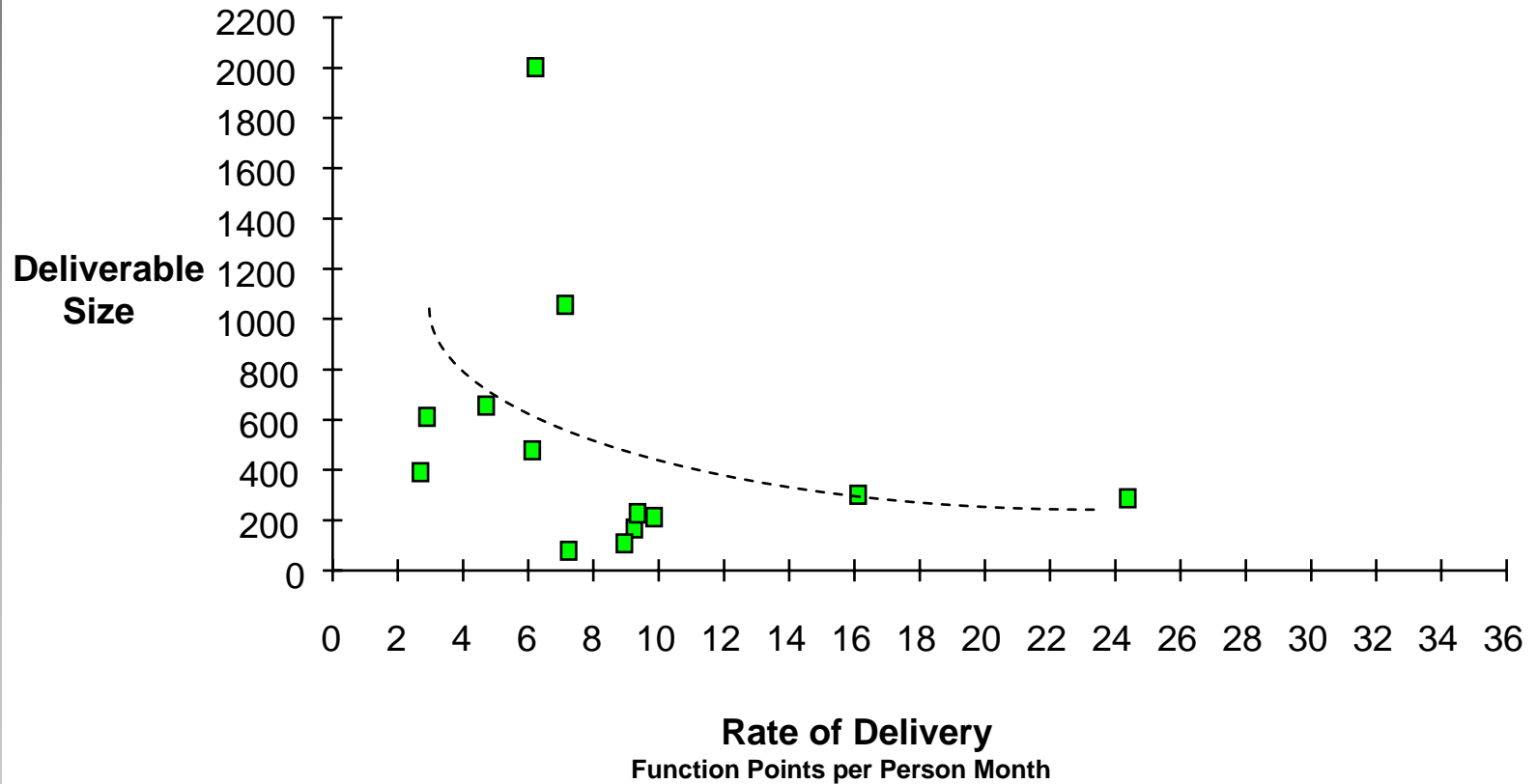
BARRIERS

IMPROVEMENT INITIATIVES

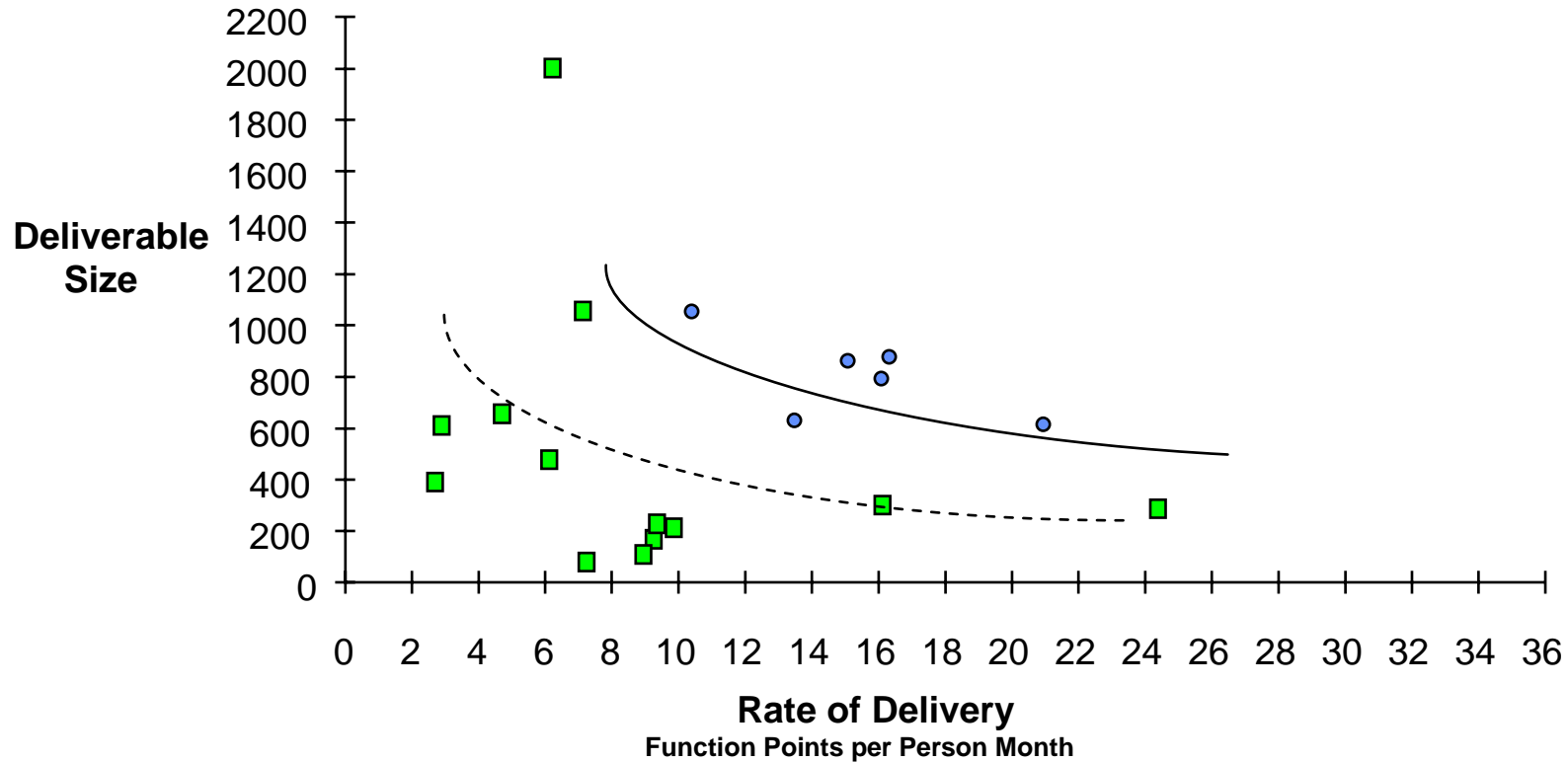


BENCHMARK PERFORMANCE

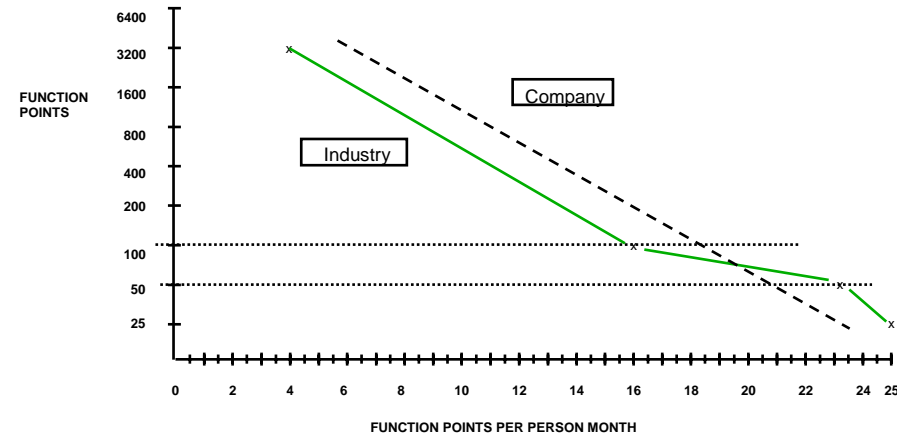
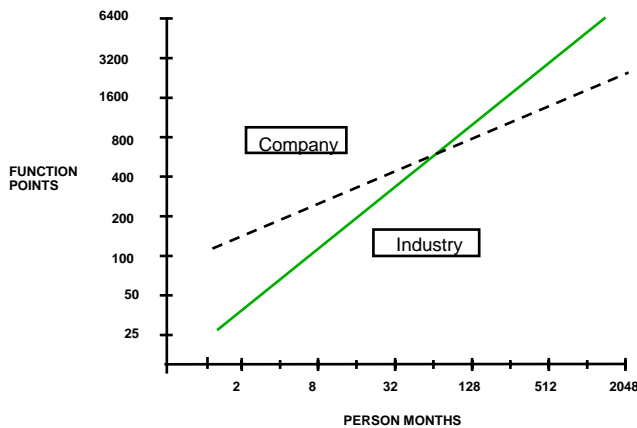
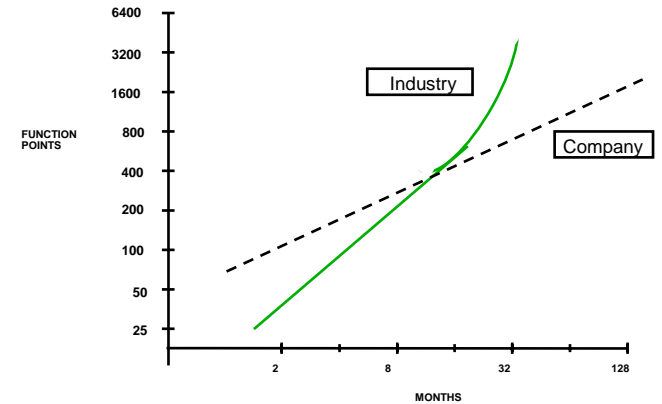
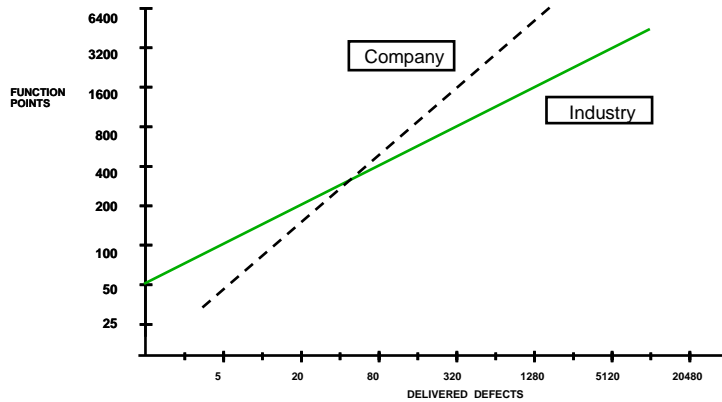
DISTRIBUTED PROJECTS BASELINE



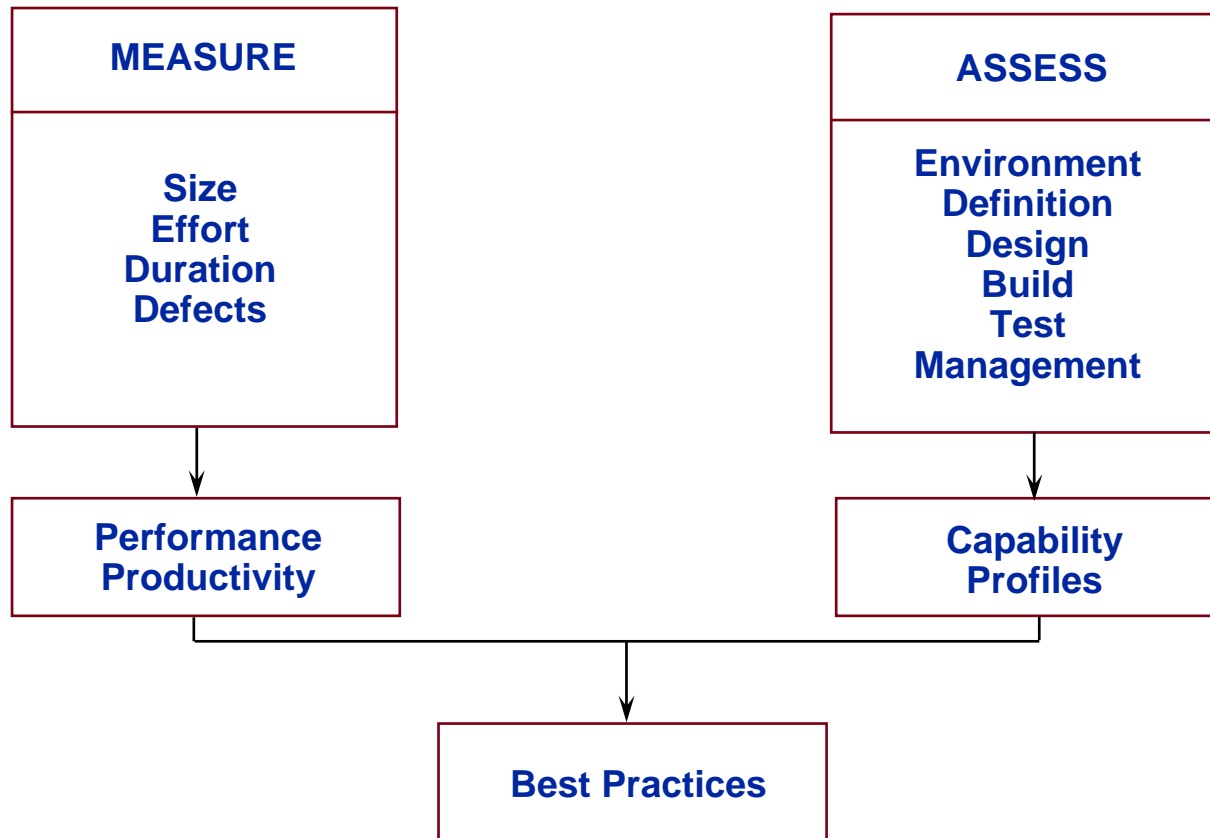
IMPROVING THE BASELINE AN EXAMPLE



EXTERNAL BENCHMARKING PROVIDES "STAKE IN THE GROUND"

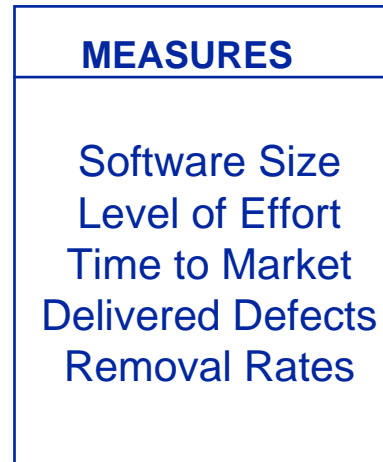


BEST PRACTICES CAN BE IDENTIFIED - DYNAMIC



INDUSTRY DATA REVEALS BEST PRACTICES

Research



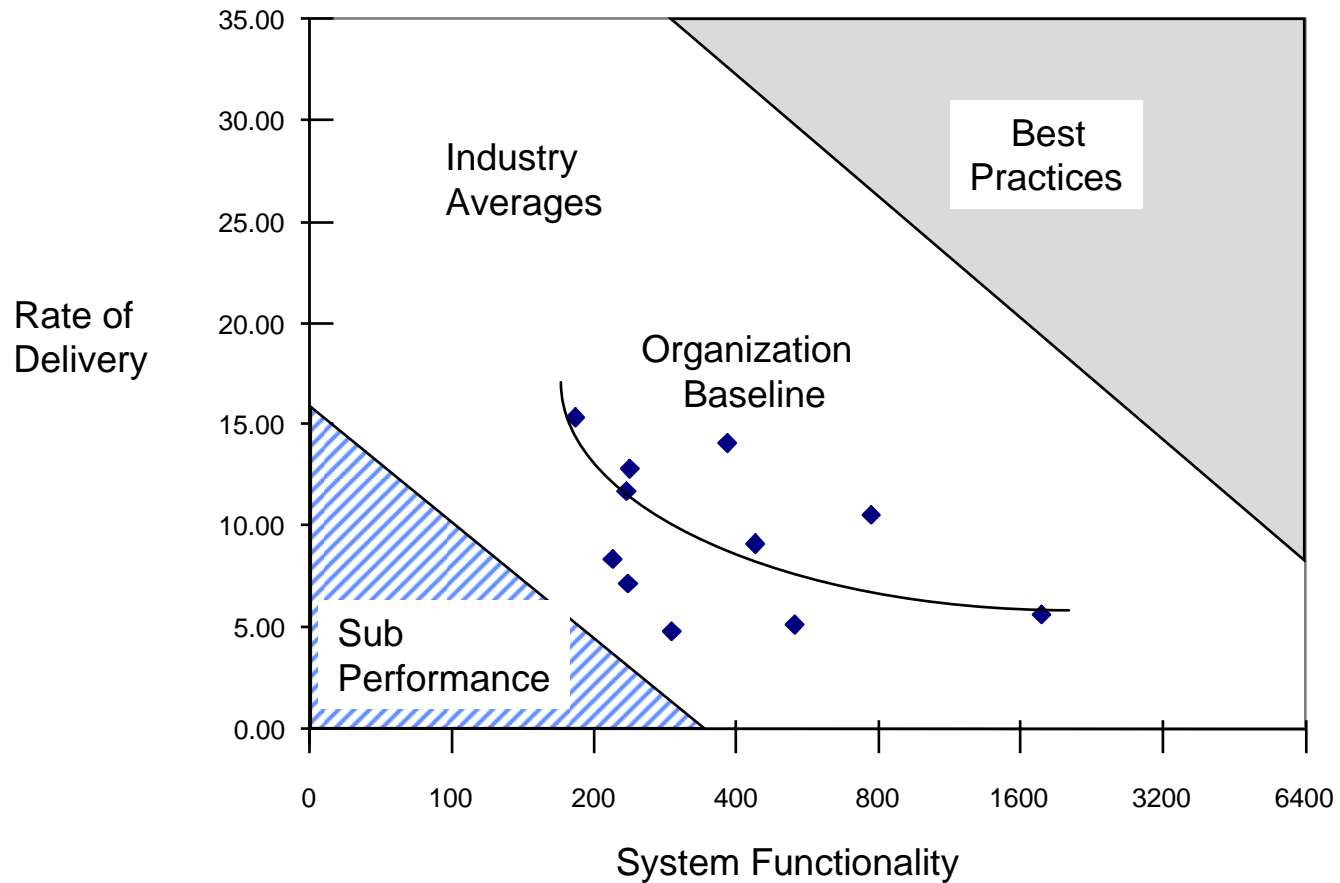
Analysis



Results

- **Correlate Performance Levels to Characteristics**
- **Substantiate Impact of Characteristics**
- **Identify Best Practices**

BEST PRACTICES BENCHMARKING



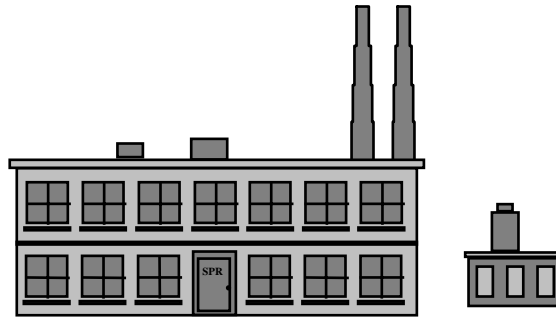
MEASURES ARE REQUIRED TO MANAGE THE OUTSOURCING RELATIONSHIP



EXPECTATIONS
Know what the customer wants

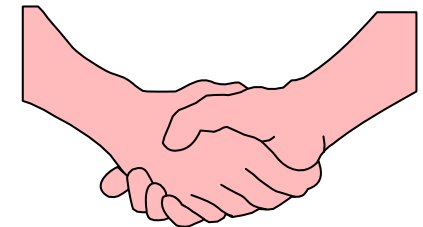
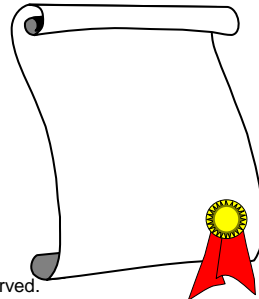


CAPABILITIES
Capacity to deliver



BENCHMARKS
Industry Best Practices

"Software Inc." ↗



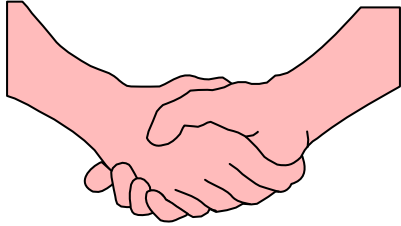
PARTNERSHIP
Service Levels

UTILIZATION OF DATA

The Customer Demands...

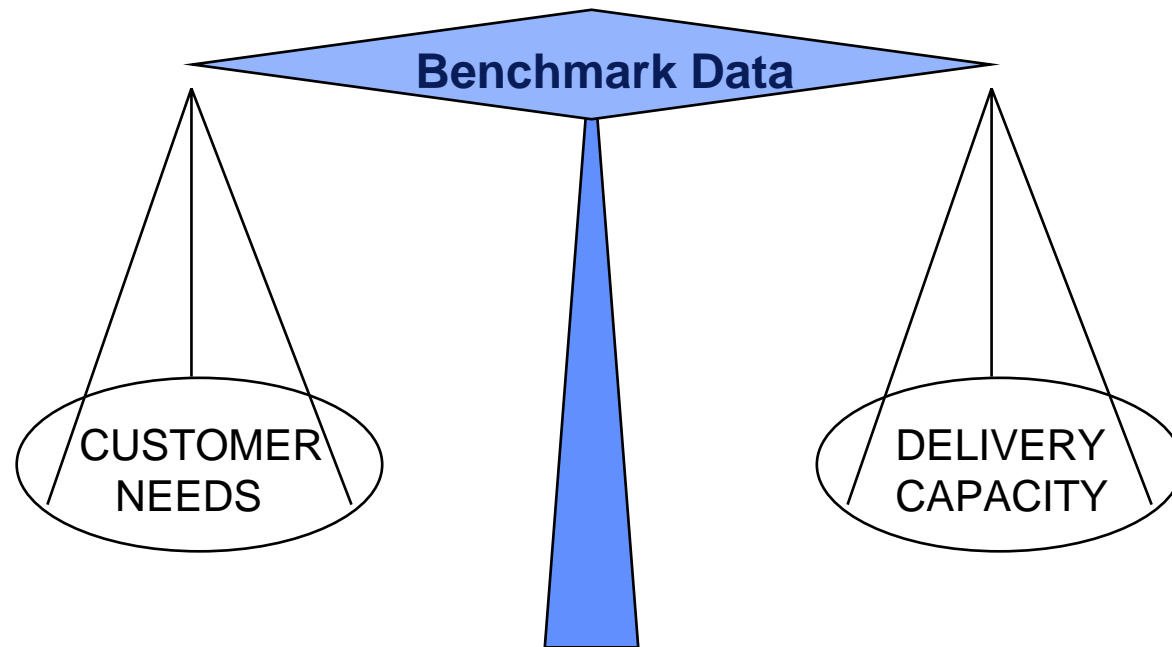
- Least Cost Alternative
- Value Added
- Time to Market
- Product Quality

CONTRACT WITH CUSTOMER



... a set of agreed upon values

BALANCE REASONABLE EXPECTATIONS



SERVICE LEVELS

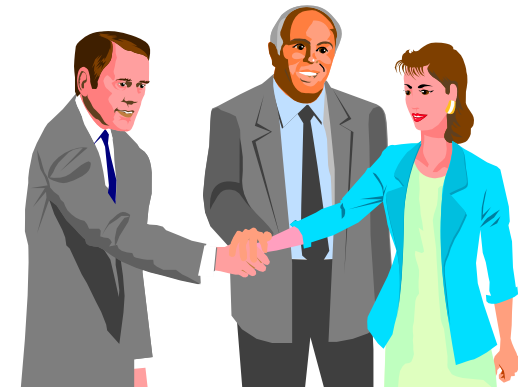
| Scorecard Category and Metric | Weighting | Score | | | |
|-------------------------------|-----------|----------------------|-----------------------|----------------------|-----------------------|
| | | 4 | 3 | 2 | 1 |
| Service Quality | up to 35% | | | | |
| Response Time | | 100% within 15 min. | 100% within 30 min. | 90% within 30 min. | <90% within 30 min. |
| Resolution Time | | 98% within 60 min. | 95% within 60 min. | 85% within 60 min. | <85% within 60 min. |
| Productivity | up to 35% | | | | |
| FPs per person month | | >25 | 17-25 | 10-17 | <10 |
| On Time | | 95% | 90-95% | 85-90% | < 85% |
| Client Satisfaction | up to 30% | | | | |
| Survey Score | | >3.6 on a scale of 4 | > 3.0 on a scale of 4 | >2.0 on a scale of 4 | < 2.0 on a scale of 4 |

SOURCES OF DATA

- ❑ Real Decisions, Gartner Group
- ❑ Meta Group
- ❑ Cutter Information
- ❑ International Software Benchmarking
Standards Group
- ❑ The David Consulting Group
- ❑ Quantitative Software Management

BENCHMARKING PARTNERS

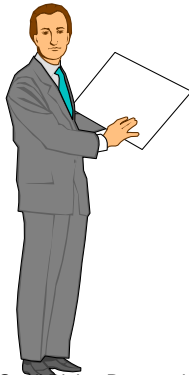
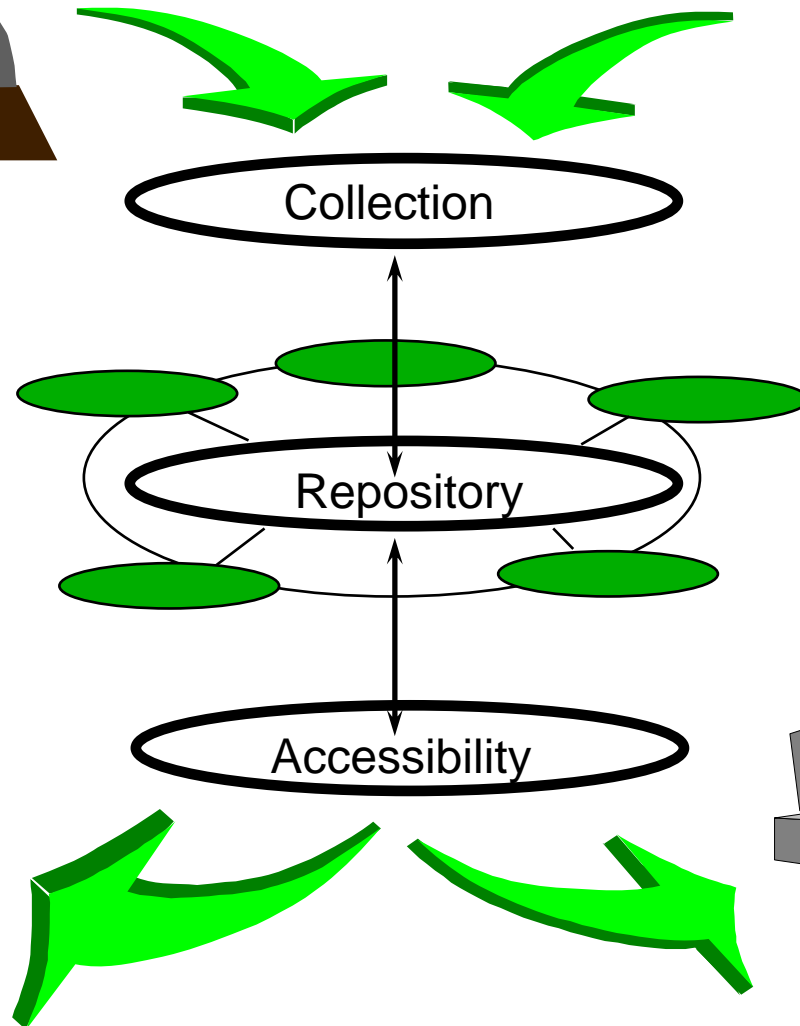
- Open Exchange of Information
- Establish Project Objectives
- Create an Action Plan
- Define Information Exchange



INFORMATION SHARING

- Integrity of Data
- Compliance to Process
- Normalization
- Remove Unique Characteristics

ALL THE DATA, ALL THE TIME



INTERNATIONAL SOFTWARE BENCHMARKING STANDARDS GROUP








ISBSG REPOSITORY

“ Any project team anywhere in
the world may,
for insignificant cost,
benchmark themselves against
world’s best”









INTERNATIONAL ADOPTION

- 👉 Currently supported by 9 countries
- 👉 Australia, Canada, France, Germany, Italy, Netherlands, New Zealand, United Kingdom, USA

DATA COLLECTED

-  Project Attributes
-  Functional Size (function points)
-  Work Effort
-  Project & Process Quality
-  Cost
-  Estimation
-  People Factors

ISBSG STRENGTHS

-  Insignificant cost
-  Real Access to the data
-  Allows networking
-  Broad representation of IT
 -  technologies
 -  organization types
 -  geography
-  Defacto International Standard Based

REPOSITORY CONTENTS

- 👉 396 projects
- 👉 Asia-Pacific (68%), North America (18%), Europe (14%)
- 👉 IFPUG (88%), Mark II (5%)

INTERNATIONAL SOFTWARE BENCHMARKING STANDARDS GROUP

- Demographic Overview
- Nature of Development
- Common Languages
- Product Size
- Delivery Rates

DEFINITION OF TERMS

WHAT DOES THE ABBREVIATION “**PDR**”
MEAN IN ISBSG DOCUMENTS &
REPORTS?

PDR = STANDS FOR
“**PROJECT DELIVERY RATE**” AND IS
EQUIVALENT TO “**UNIT COST**”
CONCEPT EXPRESSED IN “**HOURS
PER FUNCTION POINT**”

IN SUMMARY

- ❑ Benchmark Capacity to Deliver
- ❑ Compare to External Benchmarks
- ❑ Insure the Integrity of External Data Sources
- ❑ Effectively Use the Data to Manage