

# CRO Performance Metrics History

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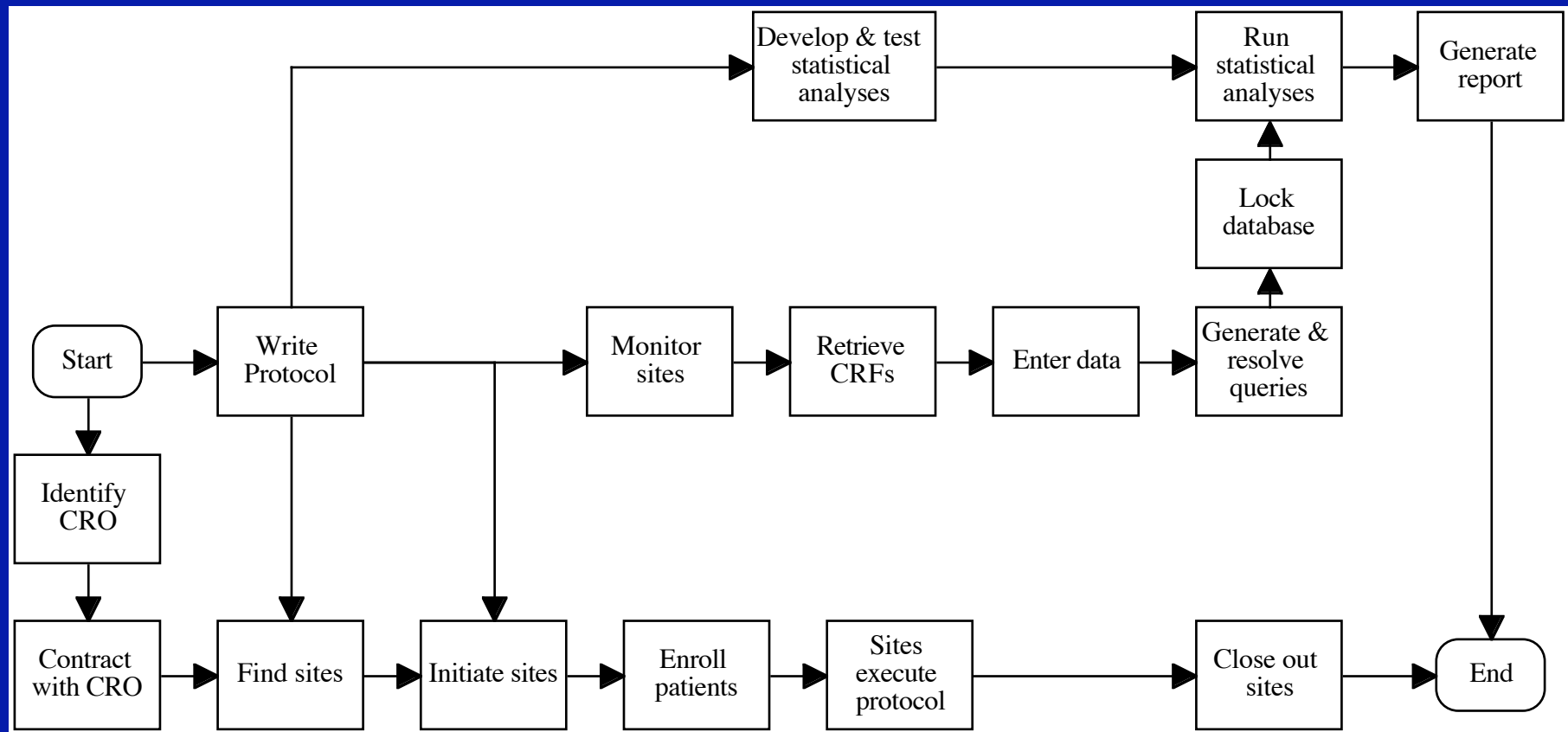
# Why Use Metrics?

- **Increase focus in a complex environment**
  - Focus on what needs to be done to reach goals
- **Move down the “learning curve”**
- **Work smarter, not faster**
- **Reduce “ineffective” work**

# “Effective” and “Ineffective” Work

- Effective Work
  - Work that materially contributes to delivering the product or achieving the goal
- Ineffective work
  - Work that does not materially contribute to delivering the product or achieving the goal
  - Types of ineffective work:
- 95-99% of all work is ineffective

# Typical Trial-Level Process



**What percentage of each of these tasks constitutes effective work?**

# Metric Systems vs. Individual Metrics

- Individual metrics
  - Provide data on specific aspects of a process, organization, or endeavor
- Metric systems
  - Integrate groups of metrics into a coordinated tracking and reporting tool
  - Help align the organization around specific goals and strategies

# Types of Measurement Systems

- Tracking Systems
- Performance Improvement Systems
- Balanced Scorecard Systems

# Measurement System I: Tracking Metrics

- Tracks performance in a given project
- Focuses exclusively on:
  - Near-term metrics
  - Project performance
- Attempts to provide early warning of problems
- Advantages:
  - Helps prevent problems on the current project
- Disadvantages:
  - Doesn't help with future projects
  - Doesn't catch systemic problems

# Metric System II: Performance Improvement Systems

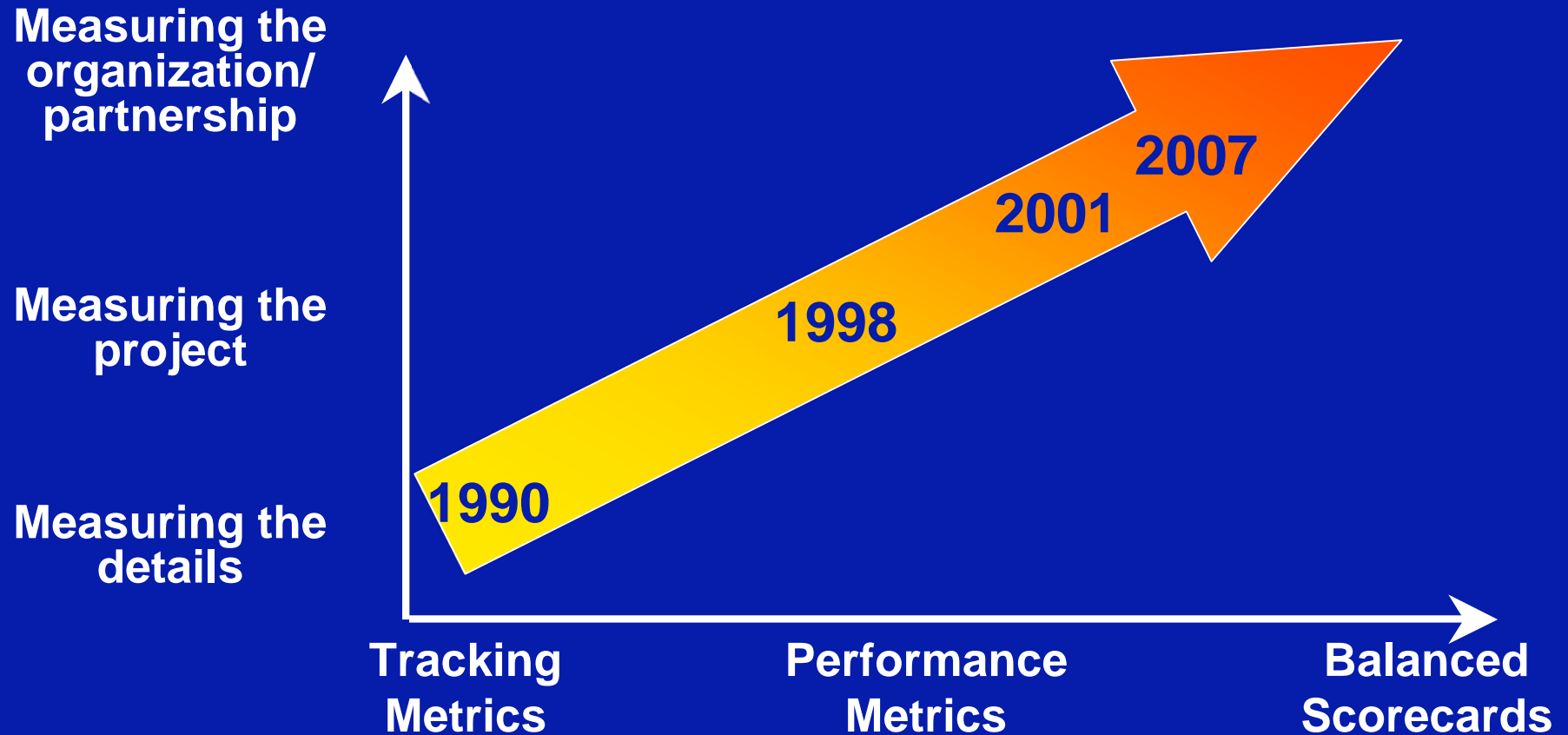
- Tracks performance across projects and even TAs
- Focuses on:
  - Project performance
  - Improving performance over time
- Attempts to eliminate root causes of systemic problems
- Advantages:
  - Increases overall performance of all projects
- Disadvantages:
  - Requires multiple projects to develop trends and track results

# Metric System III:

## Balanced Scorecard Systems

- Tracks performance of the entire organization
- Focuses on:
  - Satisfaction, Financials, Learning & Growth as well as Project Performance
  - Long-term improvement
- Advantages:
  - Promotes overall organizational health & improvement
  - Aligns all depts & employees around a few key goals
- Disadvantages:
  - Requires multiple, cascading measures to be successful
  - Requires disciplined tracking & follow-through

# Pharma R&D Metrics Evolution



# Tracking Metric System Goals

- Increase probability of on-schedule, on-cost project
  - Measure performance at critical points in the process
  - Alert team to potential/pending problems
  - Isolate common causes of errors for elimination
- Prospective vs. retrospective

# Tracking Systems are Driven by a Fundamental Concept

Time = Money

But we have to measure more than just time to  
understand where the impediments are...

Poor Quality Data  
causes rework  
which costs time

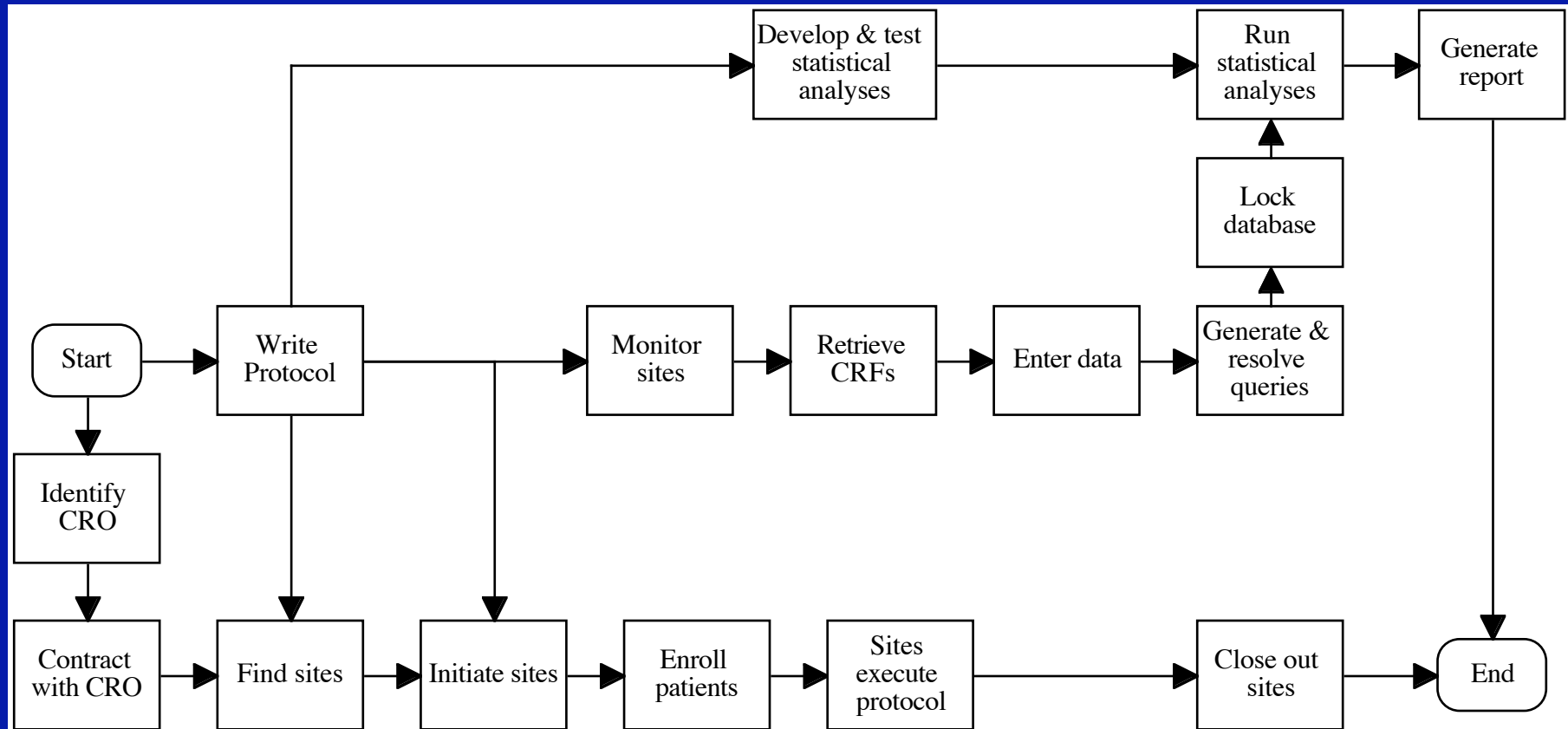
Slow Enrollment  
causes last-minute scrambles  
which cost time

**Time = Money**

Poorly Designed  
Statistical Analysis Plans  
cause database changes  
which cost time

Badly Written Reports  
cause more reviews, rewrites  
which cost time

# Typical Trial-Level Process

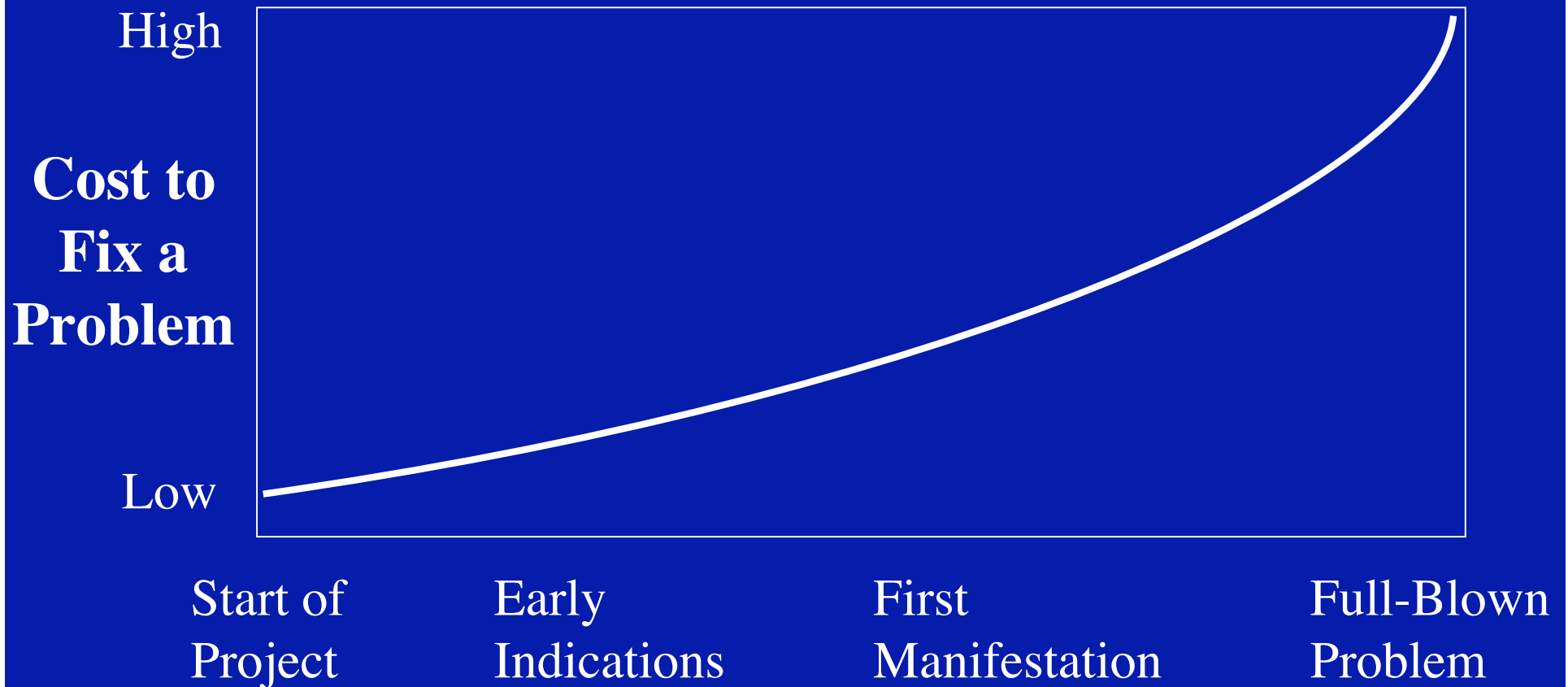


## Critical issues

On-time, correct protocol release  
Min number of CRF errors/queries  
Min errors in statistical analysis

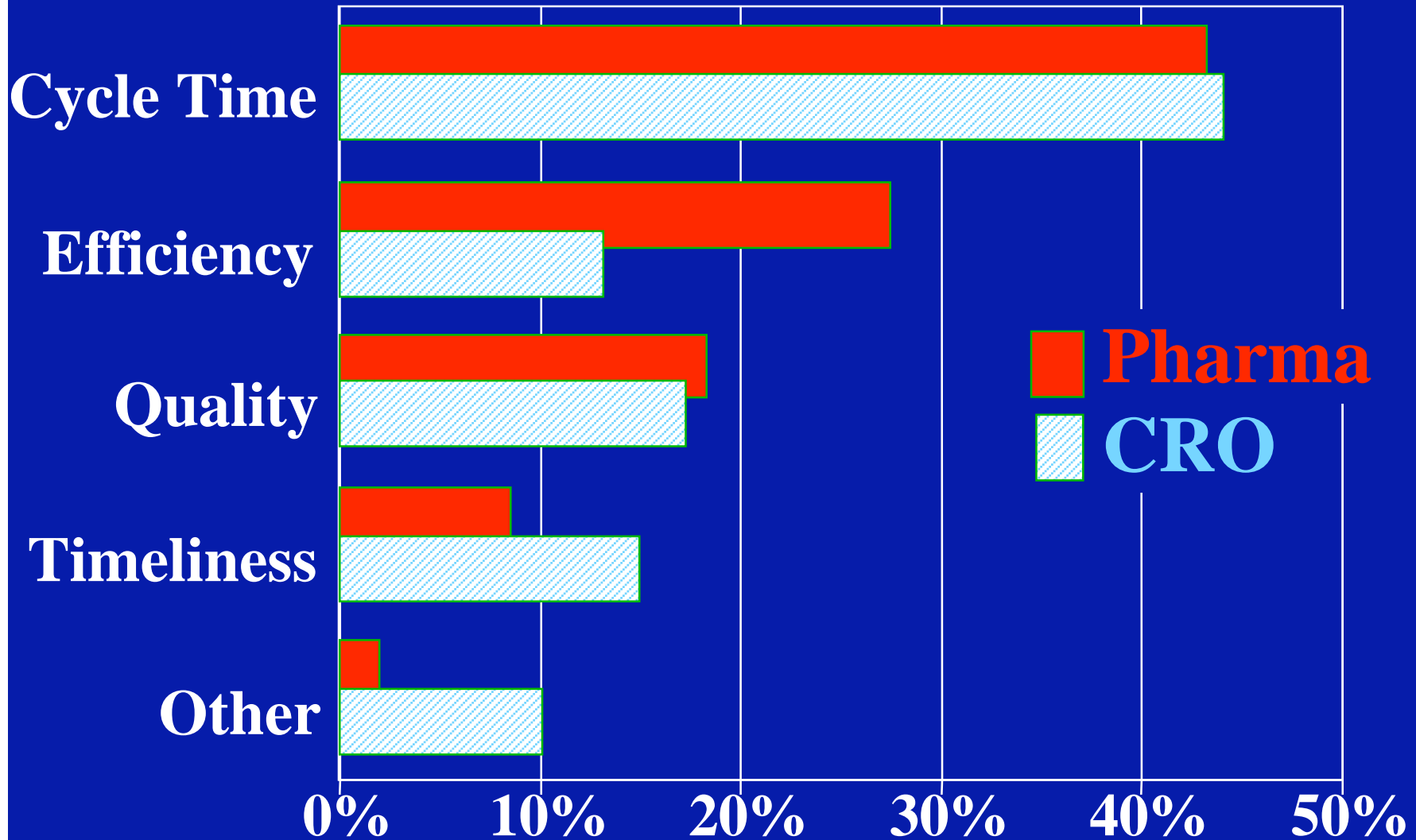
Efficient patient enrollment  
Min time to resolve queries generated  
On-budget performance

# The “Fix It When We See It” Trap



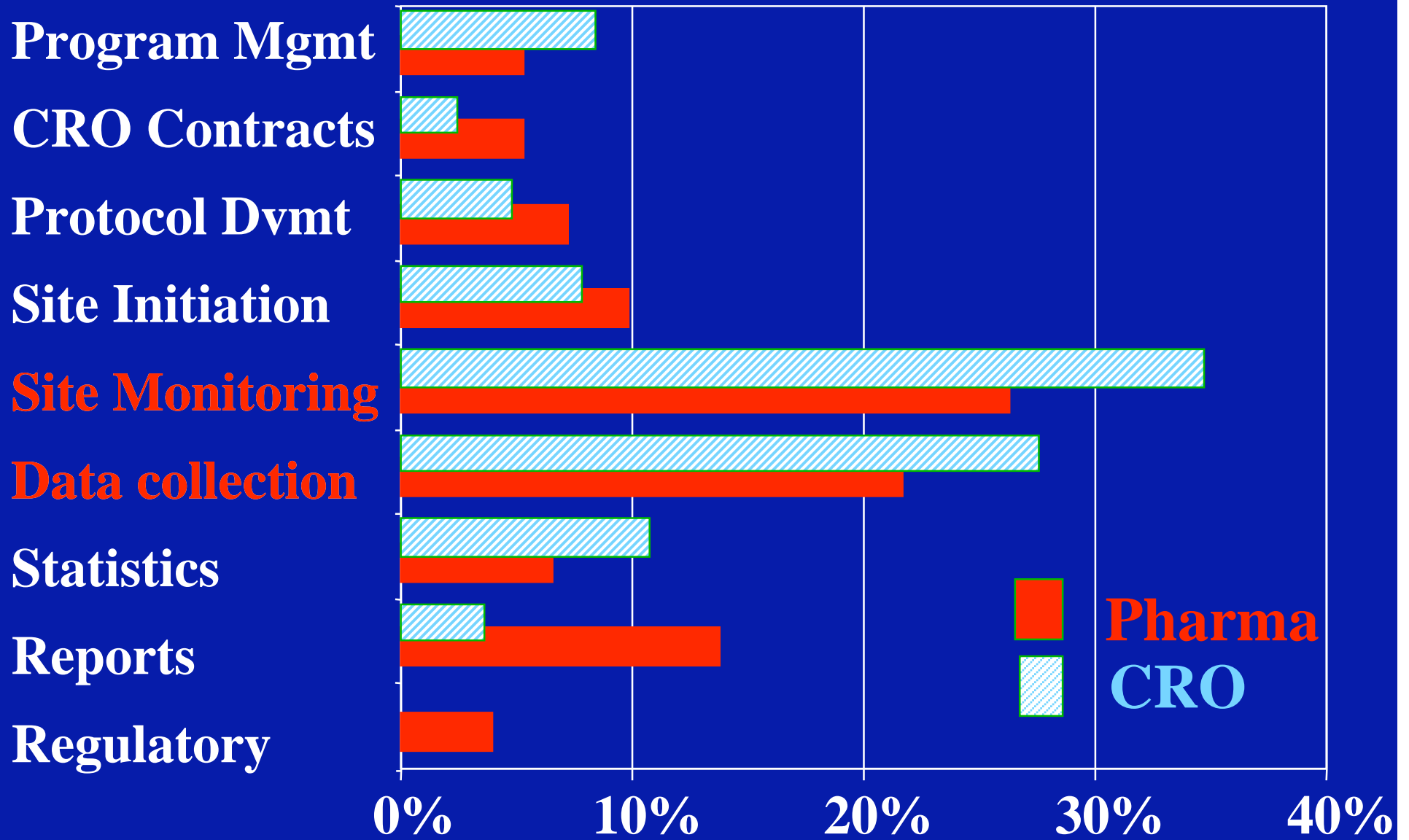
Metrics that anticipate future problems are invaluable

# Most Organizations Still Measure Cycle Times



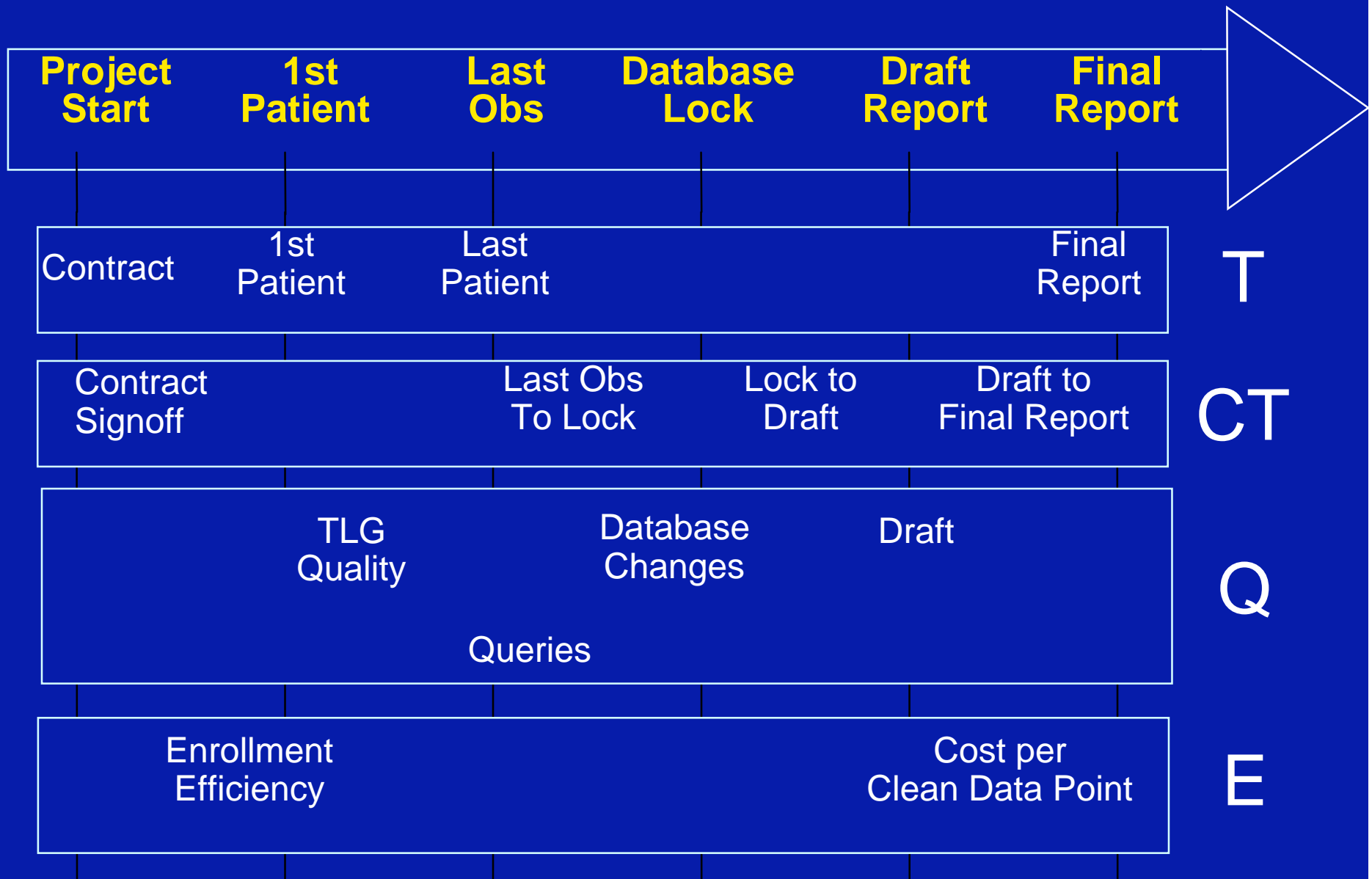
Source: CIS survey of US pharmas and CROs

# Metrics Focus on Sites, Data Collection



Source: CIS survey of US pharmas and CROs

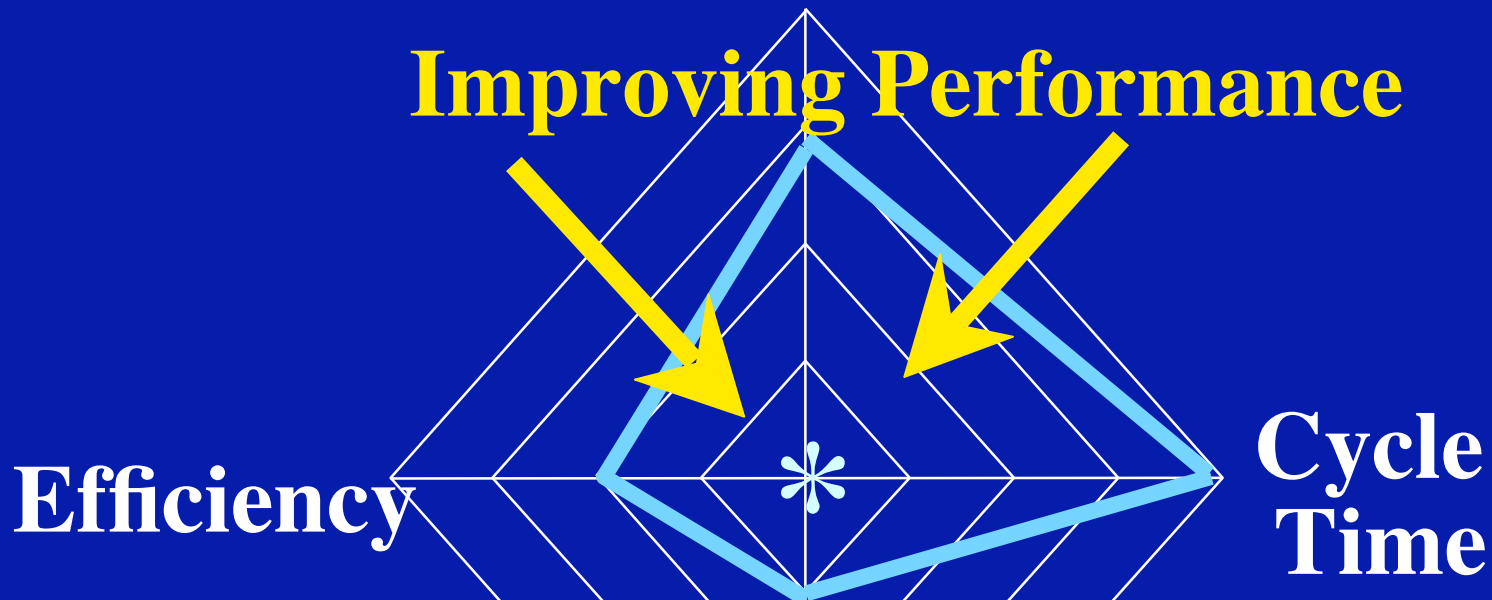
# Example 1: Early Pharma-CRO Metrics System



# The Performance Grid

**Timeliness**

**Improving Performance**



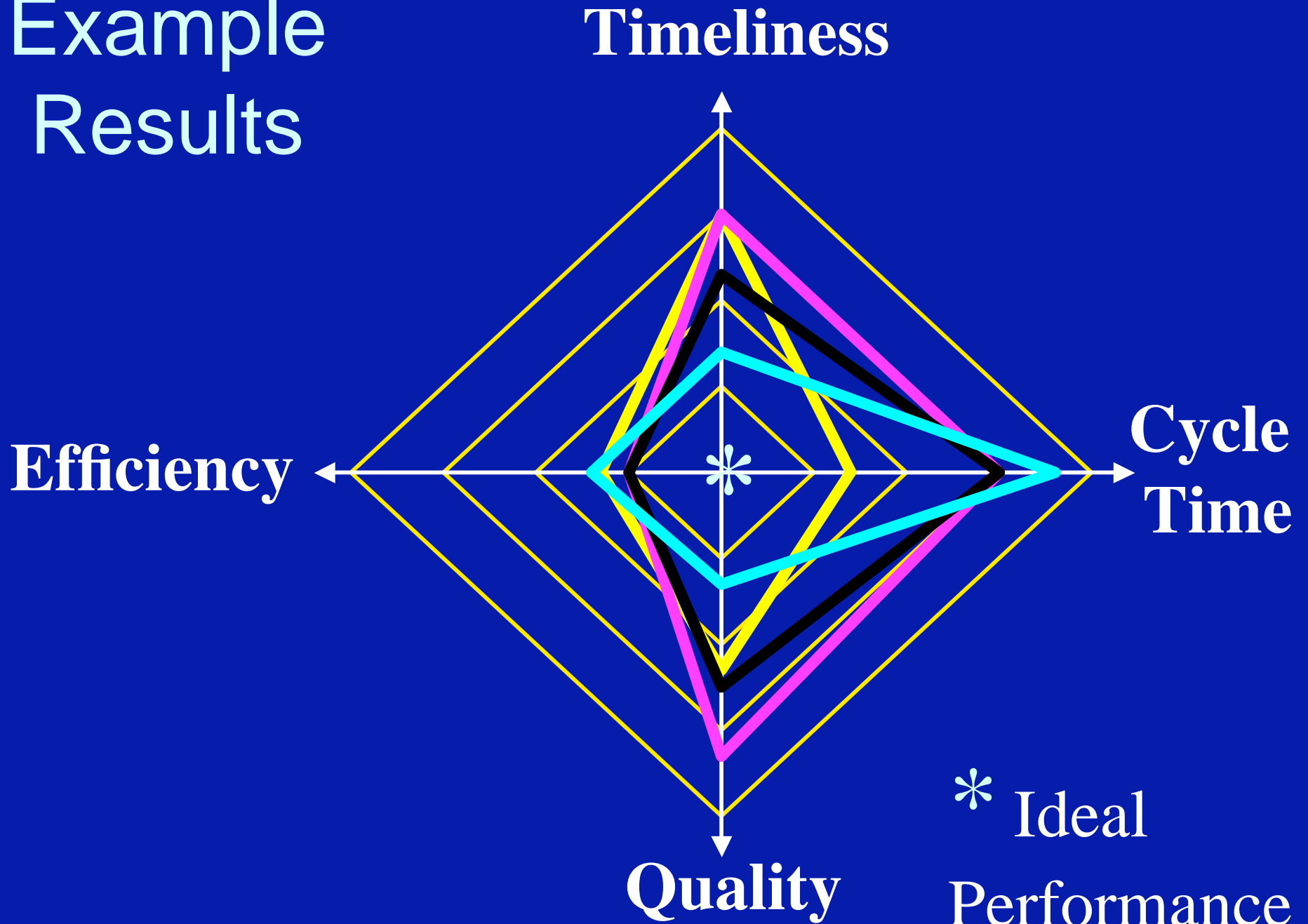
**Cycle  
Time**

\*Ideal Performance

**Quality**

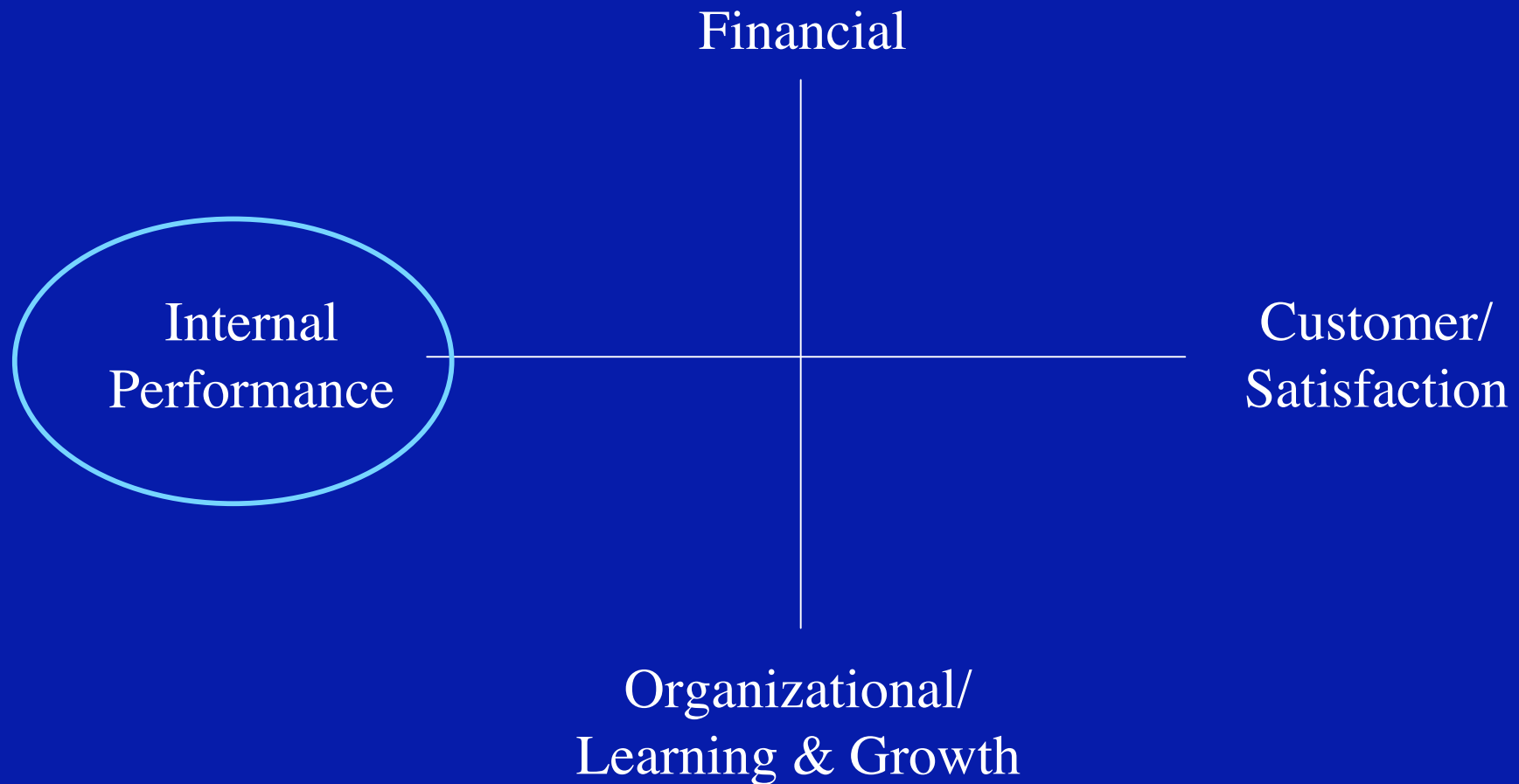
**Efficiency**

# Example Results





# Balanced Scorecards Use Four Axes



# Definitions

## Balanced Scorecard Metrics

- Performance
  - How well are we doing on our projects?
- Financial
  - How well is the business doing?
- Customer/Satisfaction
  - How do our customers (and suppliers) think we're doing and will they work with us again?
- Organizational/Learning & Growth
  - Are we using the best techniques, are employees satisfied, and are we maintaining a leading edge in critical areas?

# BSC Performance Metrics

## Balanced Scorecard Metrics

Performance

Financial

Customer/Satisfaction

Organizational/Learning &  
Growth

## Performance Metrics

Timeliness

Cycle Time

Quality

Efficiency

# BSC Financial Metrics

## Balanced Scorecard Metrics

Performance

Financial

Customer/Satisfaction

Organizational/Learning &  
Growth

### Financial Metrics

Cost

Profit

ROI

EVA

# BSC Customer/Satisfaction Metrics

## Balanced Scorecard Metrics

Performance

Financial

Customer/Satisfaction

Organizational/Learning & Growth

### Satisfaction Metrics

Customers

Suppliers

Alignment

Responsiveness

# BSC Organizational/Learning & Growth Metrics

## Balanced Scorecard Metrics

Performance

Financial

Customer/Satisfaction

Organizational/Learning & Growth

### L&G Metrics

New product CT

Improvement index

Personnel sat/growth

Technology innovation

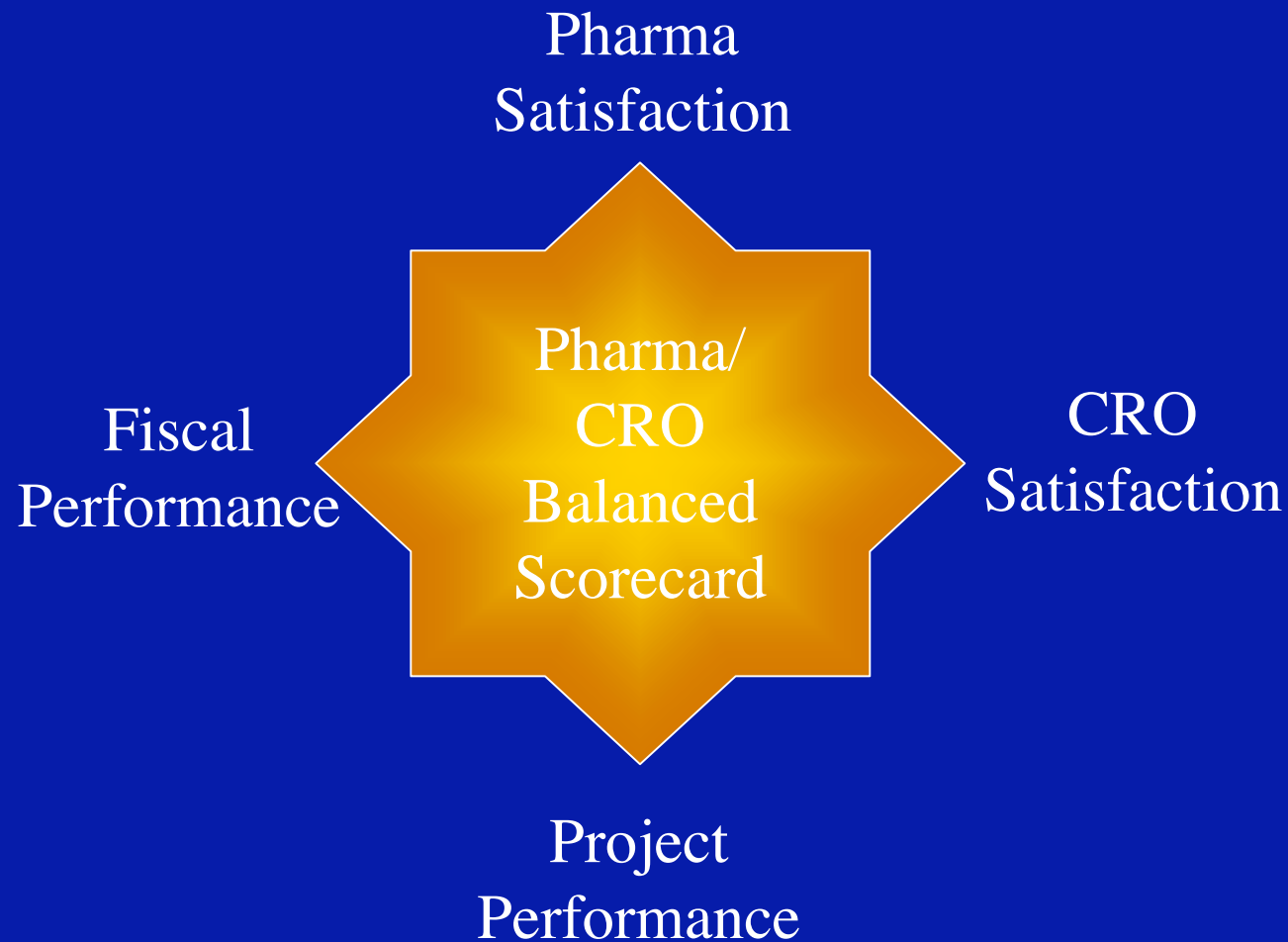
# Example 2: CRO Performance Scorecard



# Example 2: CRO Performance Scorecard



# Example 3: Pharma-CRO Scorecard



# Example 3: Pharma-CRO Scorecard

Pharma  
Satisfaction

Indicators that help  
CROs deliver  
increasingly  
excellent  
performance

Indicators of  
financial  
performance of  
CRO contracts

Fiscal  
Performance

Pharma/  
CRO  
Balanced  
Scorecard

CRO  
Satisfaction

Indicators that help  
pharmas provide  
needed support to  
CROs

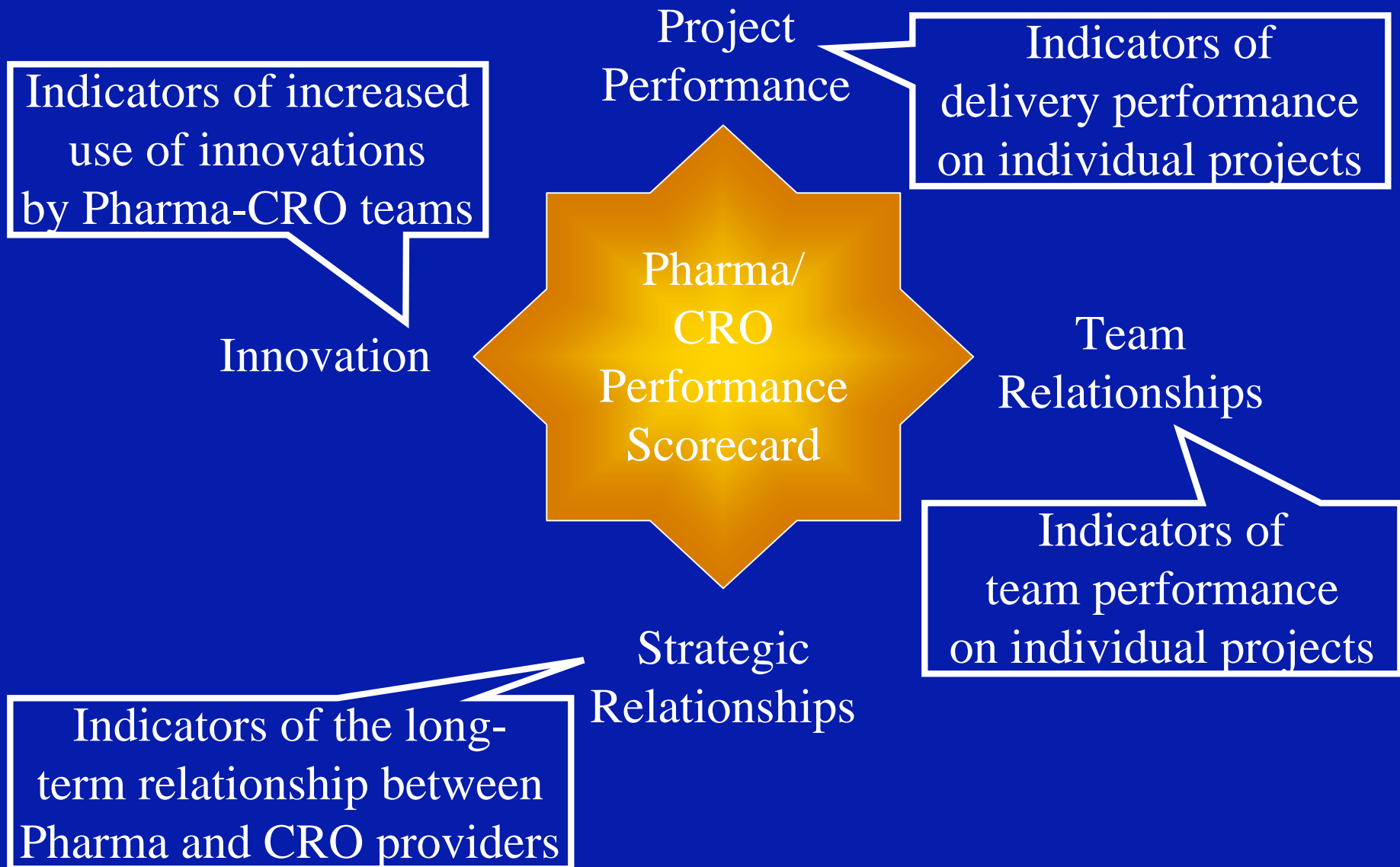
Indicators of  
technical  
performance  
(based on  
performance metrics  
now being collected)

Project  
Performance

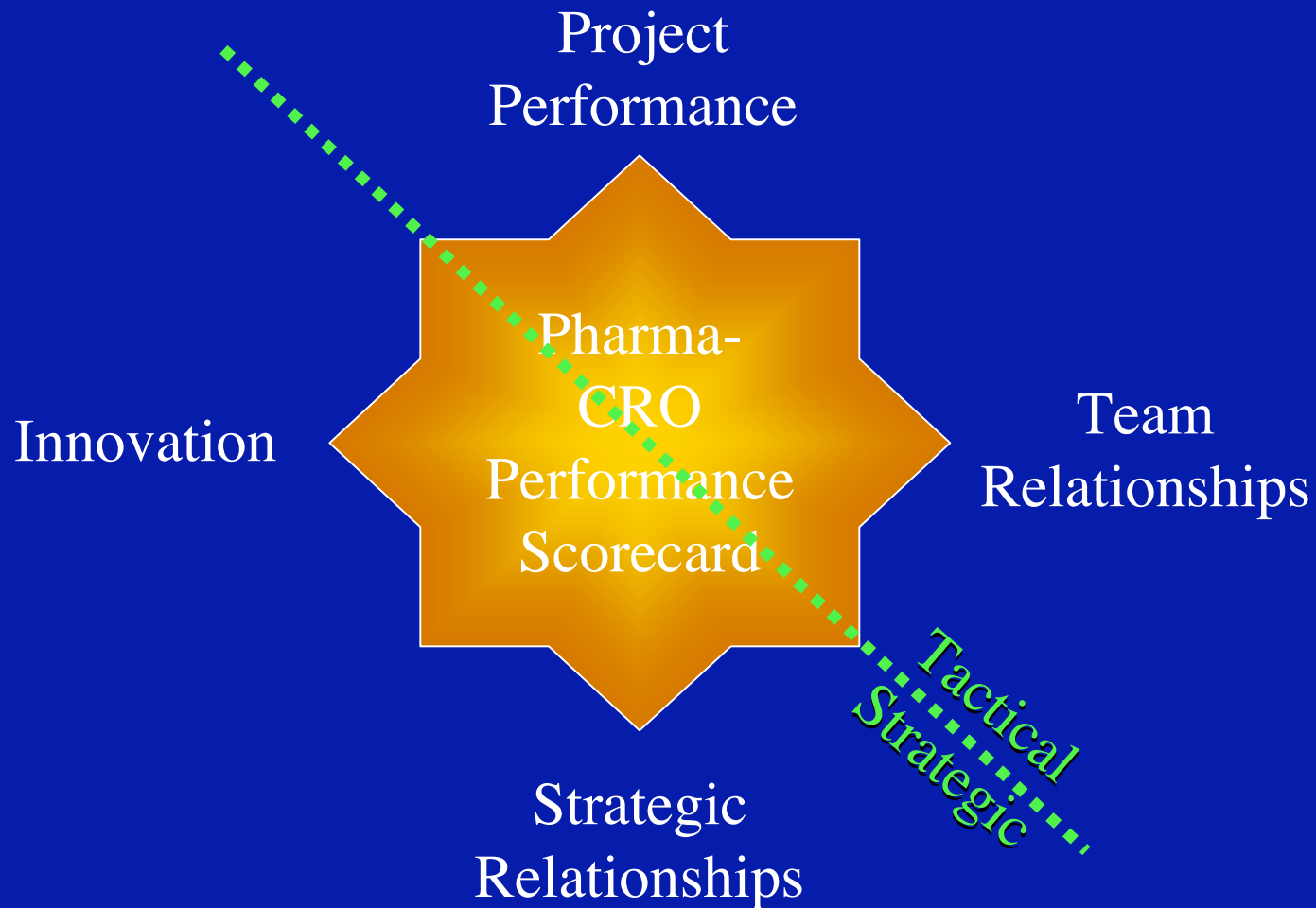
# Example 4: Pharma-CRO Scorecard



# Example 4: Pharma-CRO Scorecard



# Example 4: Pharma-CRO Scorecard



**Improving tactical measures achieves short-term gain.  
Improving strategic measures achieves sustained, long-term growth.**