

# How Apdex Helps Performance Management Benchmarks

Apdex Symposium 2008  
December 9, 2008



*Voice, Video and Data  
Application Performance Experts*

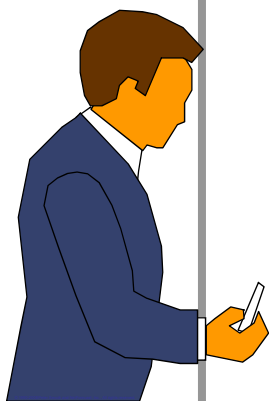
**Apdex Symposium, Las Vegas  
CMG Session 308**

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## Outline



- **Performance Management Model**
- **Benchmarks Verify Model**
- **How Apdex Improves Benchmarks**
- **Best Practices: State of the Art**

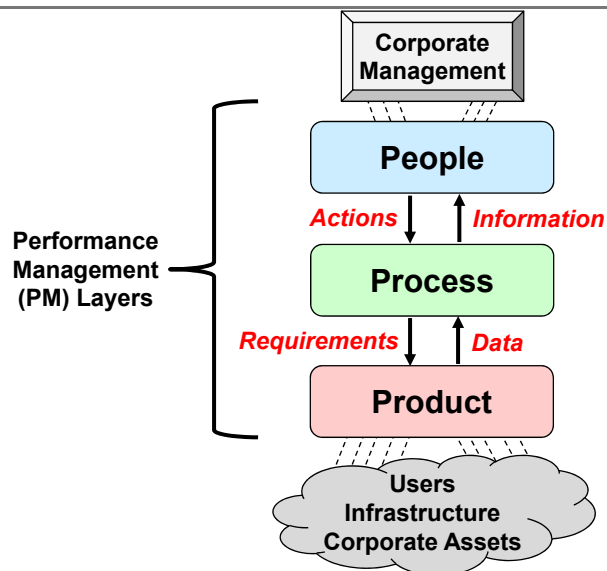
## Performance Management Defined



### Performance Management (PM):

*A holistic approach to managing application performance that integrates all of your organizational resources with one overarching goal — to deliver application performance levels that meet the needs of your business*

## PM Layers



## Filling in the Layers



People Perform  
Best Practices

Best Practices

Actions ↓ ↑ Information

Essential Processes  
Support the People

Processes

Requirements ↓ ↑ Data

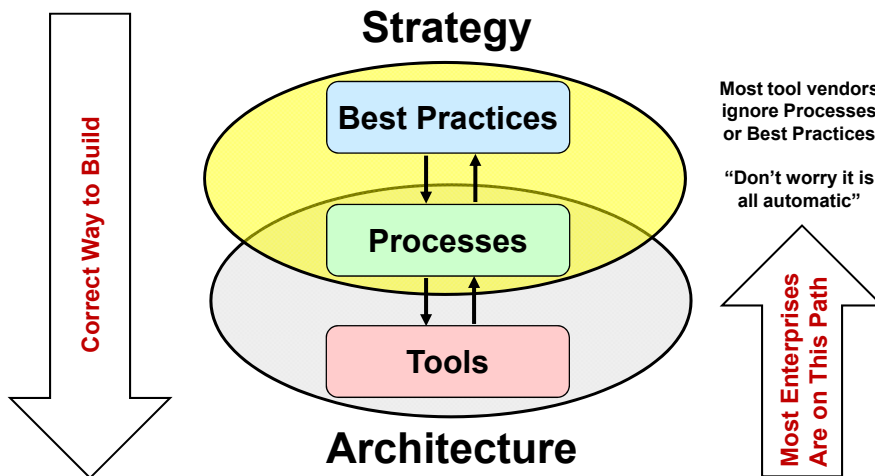
Optimal Tools Support  
Processes and People

Tools

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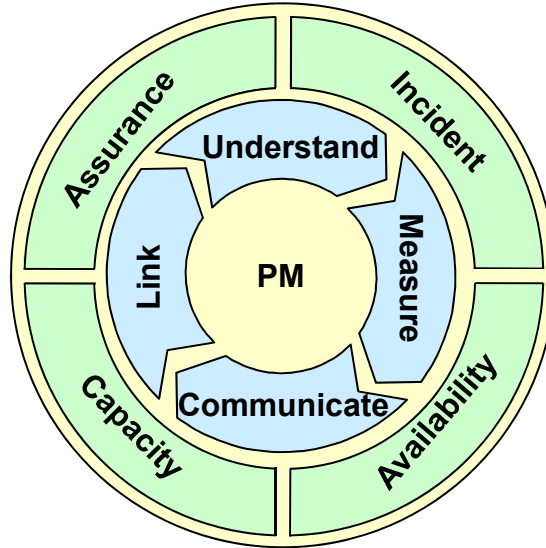
## Define the Strategy First and Architecture Second



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## Performance Management Model



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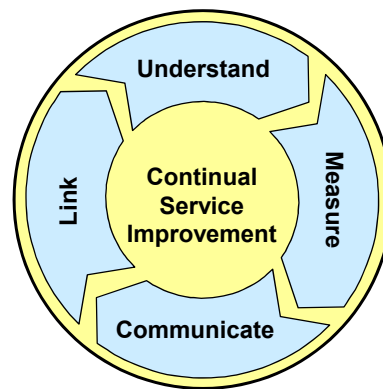
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## Best Practices



*People – Is your staff focused on the correct goals?*

- **Understand**
  - Know your applications, users, and requirements
- **Measure**
  - Properly measure key aspects of application performance
- **Communicate**
  - Provide relevant performance reports to management
- **Link**
  - Show specific business-performance links



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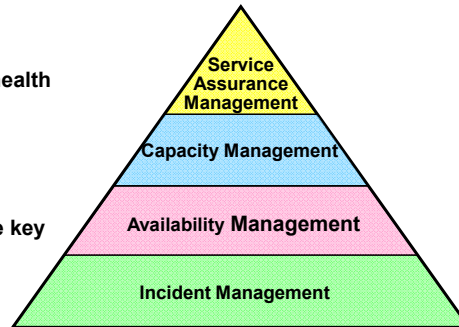
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# Processes



*Process – Do you have proper procedures in place?*

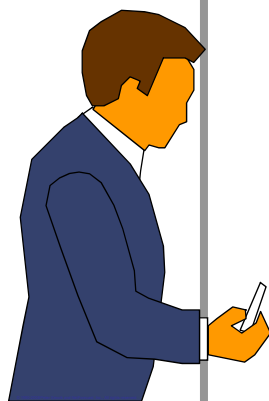
- Incident
  - Turn events into actionable alarms with good diagnostic capability
  - Goal is to restore normal service operations as quickly as possible
- Availability
  - Fundamental reporting of system health
  - Historic data determines trends
- Capacity
  - Match costs to business needs by adding or removing resources
  - “What if” analysis and planning are key
- Service Assurance
  - Service levels are tailored to meet business needs
  - Continually monitor and coordinate corrective action



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## NetForecast PM Benchmarks

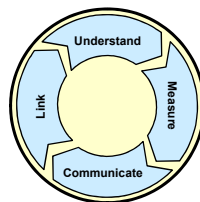
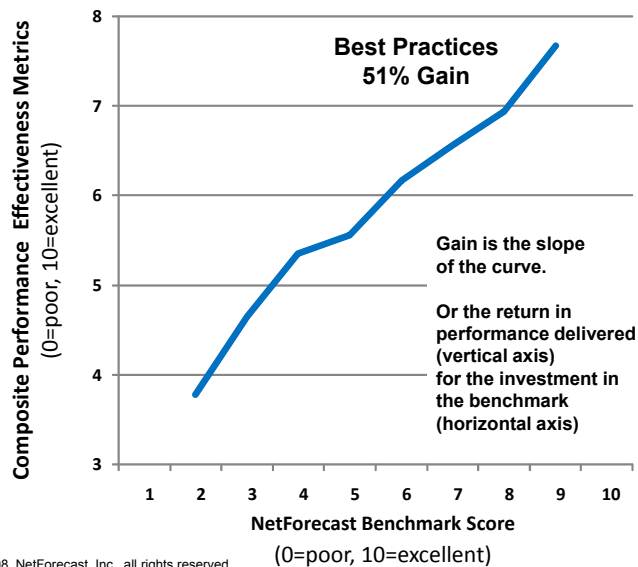


- **Second annual survey of enterprises to characterize their current APM practices and assess results**
  - Surveys completed in February 2007 and July 2008
  - Sample size of approximately 300 enterprises both years
- **Survey had questions on performance management methodology along with effectiveness metrics**
  - How problems are found
  - Time to solve problems
  - Performance meeting business needs
  - Availability
  - Response time
- **Benchmark and effectiveness scores were determined for each enterprise**

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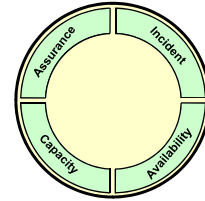
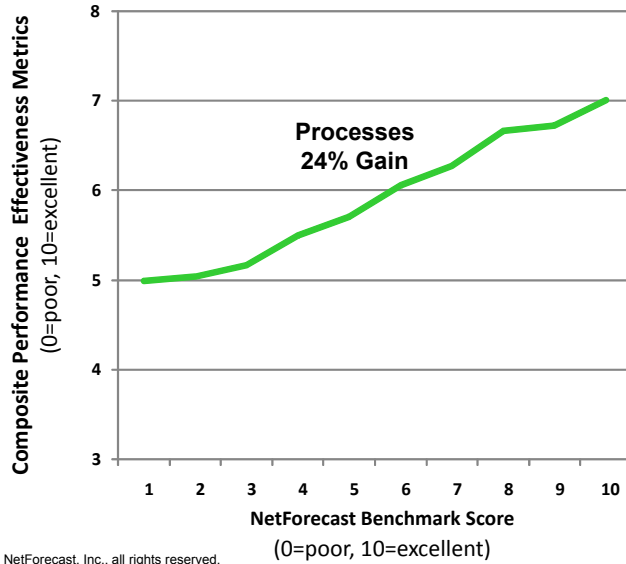
## Best Practices Results



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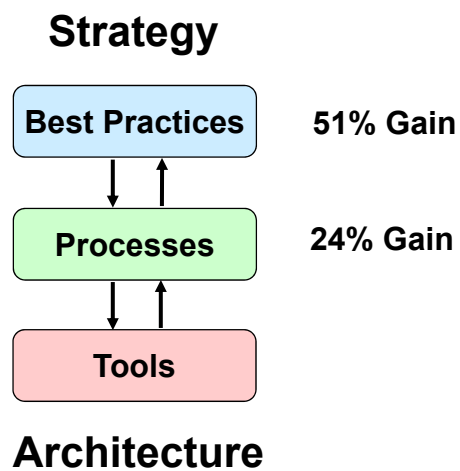
## Processes Results



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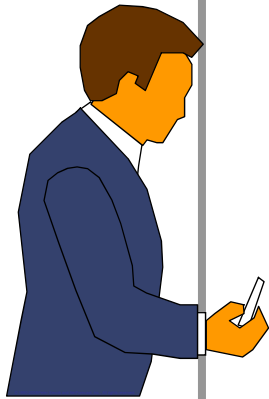
## The PM Model Works



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## Apdex Defined



- Apdex is a numerical measure of user satisfaction with the performance of enterprise applications
- It defines a method that converts many measurements into one number
  - Uniform 0-1 scale
  - 0 = no users satisfied
  - 1 = all users satisfied
- Standardized method that is a comparable metric across
  - Applications,
  - Measurement approaches, and
  - Enterprises

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# Apdex Methodology



- Measure
- Gather baseline data
- Test Apdex Parameters



1) Work with users to set T

**A T**

2) Work with business managers to define the service objective for A



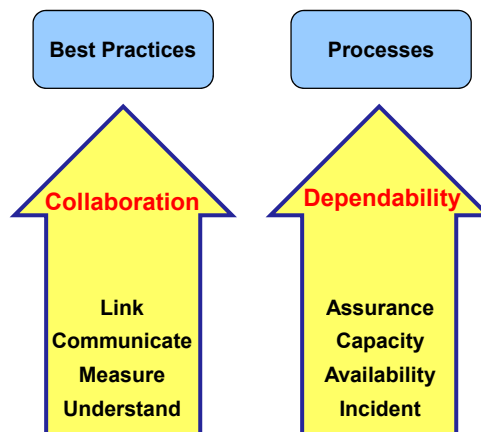
- Apdex reports & trends
- Improve performance where needed
- Continual performance & process improvement



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# Keys to PM Success



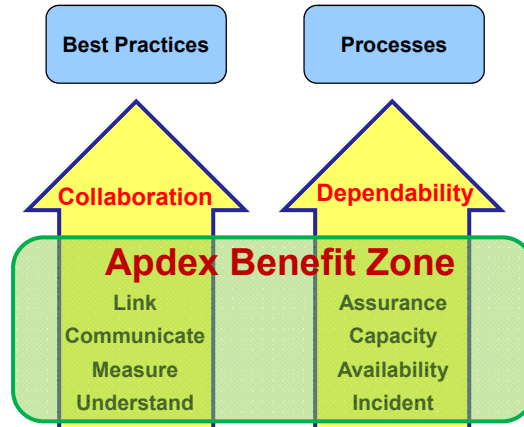
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# Leveraging Apex for Success



The Apex methodology forces organizations to achieve better PM



Apex is a numerical measure of application performance relative to business objectives.  
 The Apex open standard is managed by the Apex Alliance – see apex.org.  
 The Apex Alliance has more than 800 individual and 10 vendor members.

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# How Apex Helps PM



Apex dialog supports collaboration

Open standard Supports dependability

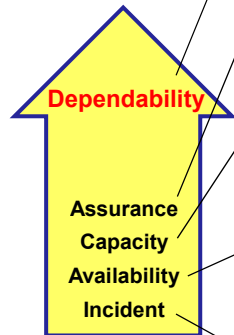
Selection of T and the Apex score is the link to business needs

Best Practices

Processes

Excellent foundation For meaningful SLAs

Facilitates technologists and non-technologists communications



Trend analysis helps find capacity problems

Defines measurement taxonomy

Can be applied to availability analysis

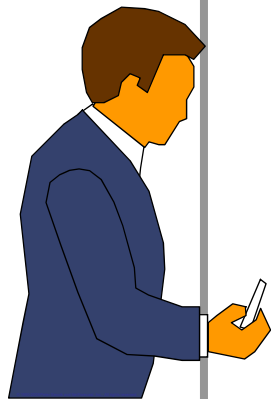
Forces you to understand your applications and users

Discovers hard to find incidents

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## What Are Best Practices?



- **Understand**
  - Have a good definition of which technical parameters are important
  - Good understanding of which applications are mission critical
  - Good understanding of which users are more important
  - How well the above is documented
  - How well these understandings are distributed within the IT organization
- **Measure**
  - How well the important technical parameters are measured
  - How well the measurements are tracked over time
  - Setting critical thresholds for the important parameters
  - Formal processes to ensure that these measurements are carried out
  - Automation for efficient data gathering and correlation

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## What Are Best Practices? (con't)

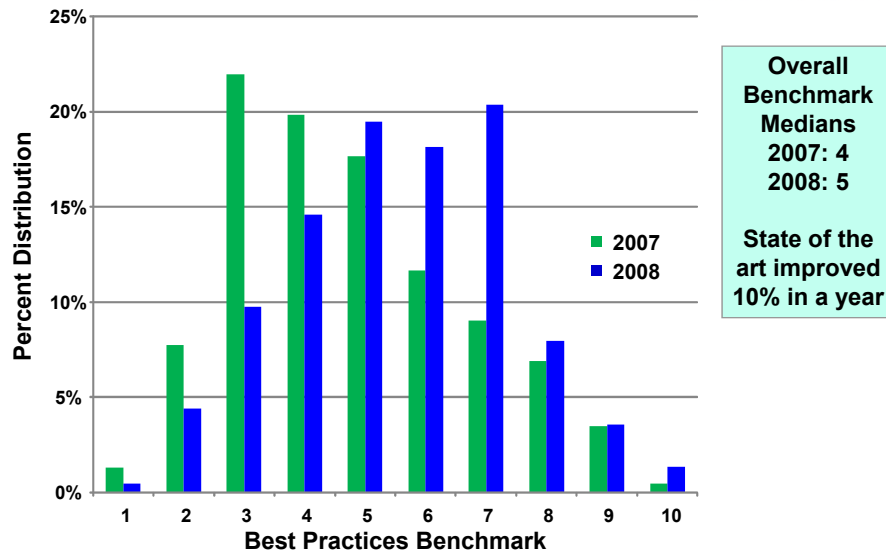


- **Communicate**
  - Provide relevant performance reports to management
  - Ensure that the reports are meaningful to non-IT staff
  - Measurements are communicated throughout the enterprise
  - Distribute information on a regular basis
  - Don't limit information thinking the recipient won't understand it
- **Link**
  - Performance targets are agreed upon with business managers
  - Applications monitored are confirmed to be business critical
  - Performance targets are confirmed to be relevant to the business
  - Application-level SLAs are in place
  - Meet with business managers periodically to review the above

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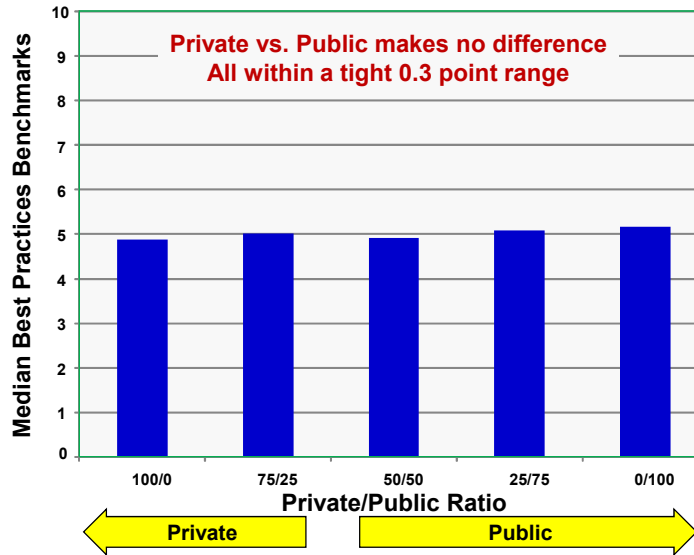
## Best Practices Benchmarks Industry State of the Art



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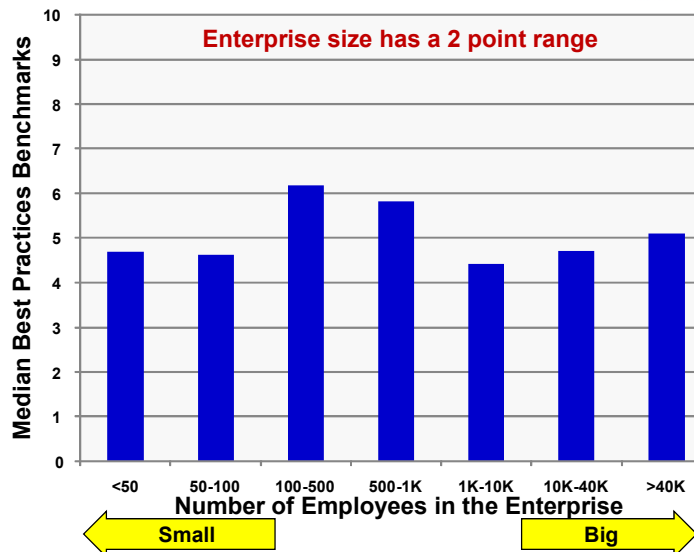
## Private/Public Traffic in 2008



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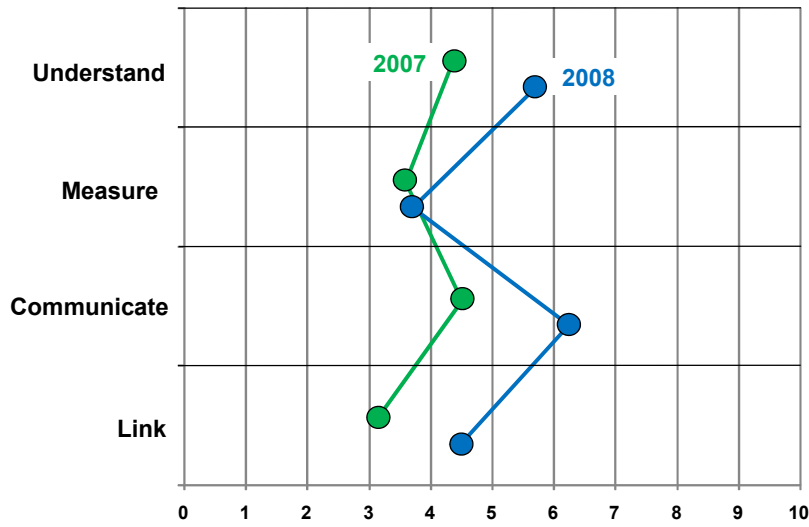
## Impact of Enterprise Size in 2008



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## Benchmarks Compared



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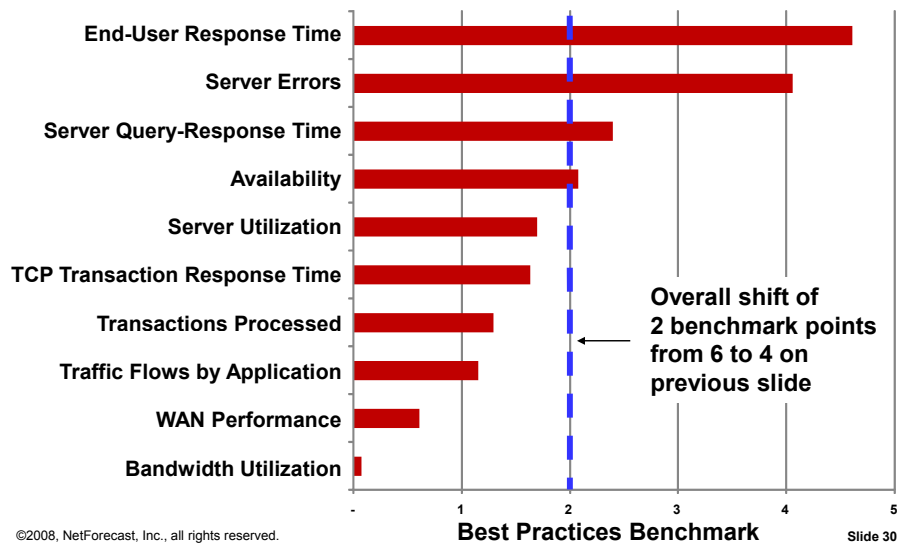
Median Best Practices Benchmark

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## Why Measure is Less Than Understand



*Contribution to the Difference Between Understand and Measure*



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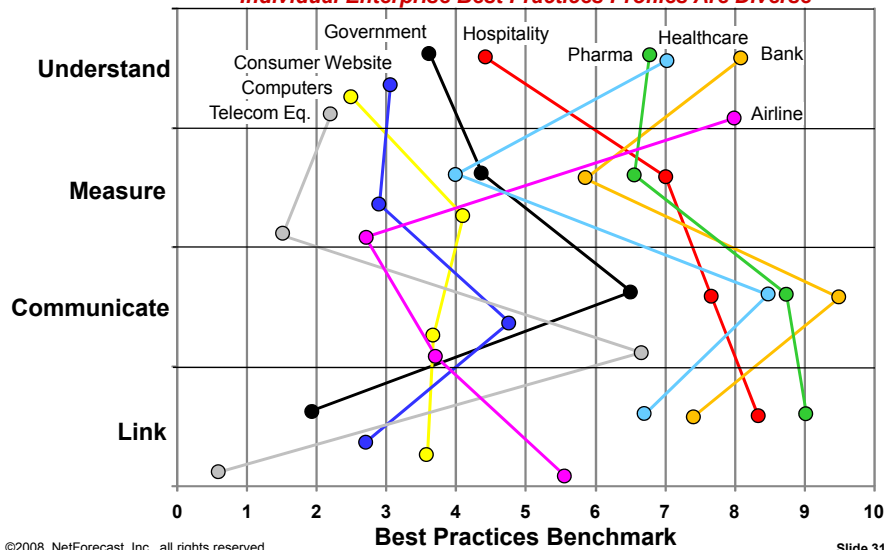
Best Practices Benchmark

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## Real Company Examples



### Individual Enterprise Best Practices Profiles Are Diverse



## NetForecast Benchmark Service



**Benchmark** how well your enterprise is delivering the Best Practices and essential Processes

**Rank** your benchmark scores against industry norms (database of more than 600 enterprises)

**Gap Analysis** shows where you Best Practices and Processes excel or are deficient

**Workshop** meeting that defines your successful performance management *strategy*

# Thank You



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measurement, analysis, and management  
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