

Project Management Office Summit

Measures and Metrics for PMO Success

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Attempting to navigate the waters of project and portfolio management without metrics is like sailing a ship without a compass!

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Why PMOs need measurement and metrics

You already know ...

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- 63% of projects have schedule delays
- 49% of projects exceed budget or do not meet business objectives
- 45% of projects face cost overruns
- 23% of all projects FAIL

Data published by Standish Group International, Inc., as reported in **Computer World**, February 17, 2003

<http://www.computerworld.com/printthis/2003/0,4814,78517,00.html>

Most organizations have problems with their measures and metrics

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- Too much data
- Measures aren't useful
- Too much time to collect and report data
- Data quality is poor
- No baseline
- No time to analyze data
- Reports aren't used for decisions or action
- Metrics don't document the PMO's accomplishments
- Executives don't pay attention



Measures and Metrics for PMO Success

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RELAX!

My approach helps you solve PMO measurement and metrics problems in manageable steps.

Jim Kendrick, PMP, CMC

About the Presenter



40 YEARS OF PROGRAMS, PROJECTS, MEASUREMENT

Portfolio, Program, and Project Management
Federal OCIOs and CFOs

Acquisition

Executive Office of the President

ATF

FAA

Federal Contractors and Grantees

COO of Small Federal Contractor

Corporate Portfolio of 20+ Projects/Contracts

Program Evaluation & Survey Research

Focus on Measurement & Analysis

Management Consultant to Programs/Projects/Grantees

Program/Project Planning & Execution

Market and Advertising Research

#1 Know what your PMO needs to accomplish

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Cookbooks and software tools for measurement need to be tailored to each PMO

Each PMO is a different animal.

Who Are You?

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TYPE OF PMO

- Enterprise PMO?
- Program or LoB-Specific PMO?
- One of Multiple PMOs?

PROJECT MANAGERS

- Work for PMO?
- External?

FOCUS

- Enterprise
- Program
- Collection of Projects
- SPONSOR
- CHARTER
- STAKEHOLDERS
- # of PORTFOLIOS
- FUNCTIONS

Tailor Metrics to Your PMO

Your PMO Is Unique: So Are Your Metrics

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“PMOs do not exist in a vacuum, rather they imbue the culture and context of their respective organizations. Accordingly no two PMOs are truly identical as each organization, itself, is unique. This is an important recognition since any future guidance regarding the implementation and maintenance of successful PMOs must always consider the organizational context in which each PMO resides.”*

Edwin J. Andrews, VMD, PhD, PMP
PMI Manager, Research

Measurement and Metrics Must Be Tailored to Your PMO

*From Foreword, *The Multi-Project PMO: A Global Analysis of the Current State of Practice*

Survey of PMO Functions

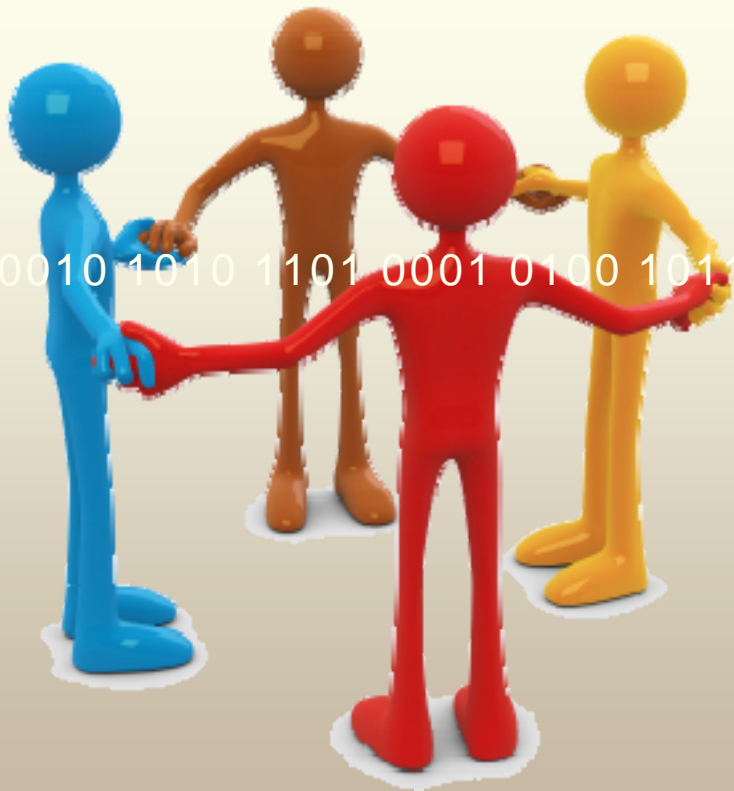
Report project status to upper management	83%	Manage archives of project documentation	48%
Develop and implement a standard methodology	76%	Manage one or more programs	48%
Monitor and control project performance	65%	Conduct project audits	45%
Develop competency of personnel, including training	65%	Manage customer interfaces	45%
Implement and operate a project information system	60%	Provide a set of tools without an effort to standardize	45%
Provide advice to upper management	60%	Execute specialized tasks for project managers	42%
Coordinate between projects	59%	Allocate resources between projects	40%
Develop and maintain a project scoreboard	58%	Conduct post-project reviews	38%
Promote project management within organization	55%	Implement and manage database of lessons learned	34%
Monitor and control performance of PMO	50%	Implement and manage risk data base	29%
Participate in strategic planning	49%	Manage benefits	28%
Provide mentoring for project managers	49%	Conduct networking and environmental scanning	25%
Manage one or more portfolios	49%	Recruit, select, evaluate and determine salaries for project managers	22%
Identify, select and prioritize new projects	48%		

Dr. Brian Hobbs, *The Multi-Project PMO: A Global Analysis of the Current State of Practice*, whitepaper prepared for Project Management Institute, 2007; page 22.

#2 Get buy-in from stakeholders


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These stakeholders are on the same page as the PMO about how to measure success!

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Wow, the metrics show that the PMO is meeting our expectations!

Why stakeholders are important

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- Everyone needs to share the same expectations
- PMOs must make tough decisions about investments and priorities
- Your PMO can be viewed as an asset or barrier to enterprise solutions

Prove the Value of Your PMO

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...[T]he value of PMOs and the justification of the expenses they generate are often brought under scrutiny and questioned. Many PMOs are under pressure to justify their existence and show value for money.

p. 23, The Multi-Project PMO: A Global Analysis of the current State of Practice. Dr. Brian Hobbs, University of Quebec at Montreal, prepared for the Project Management Institute.

#3 Map measures to your business environment

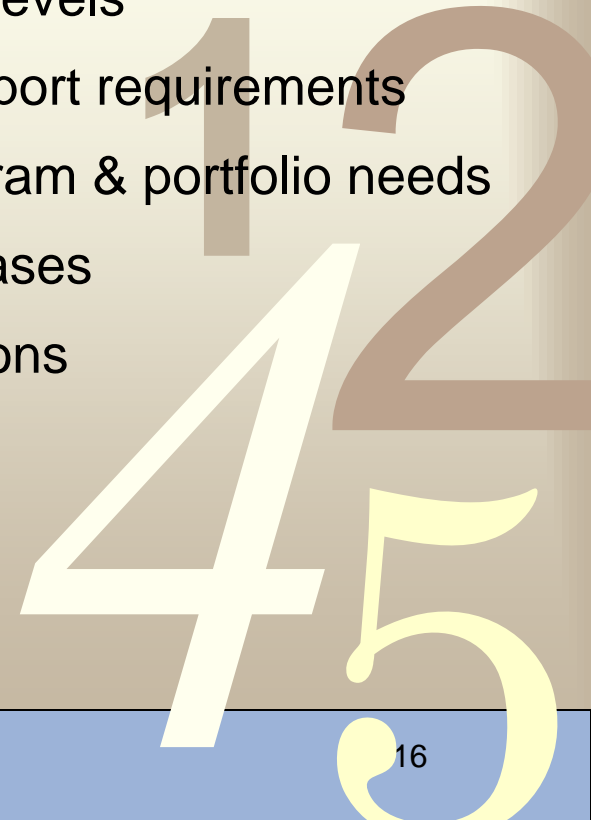
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Map measures to ...

- Governance levels
- Decision support requirements
- Project, program & portfolio needs
- Life cycle phases
- PMO operations



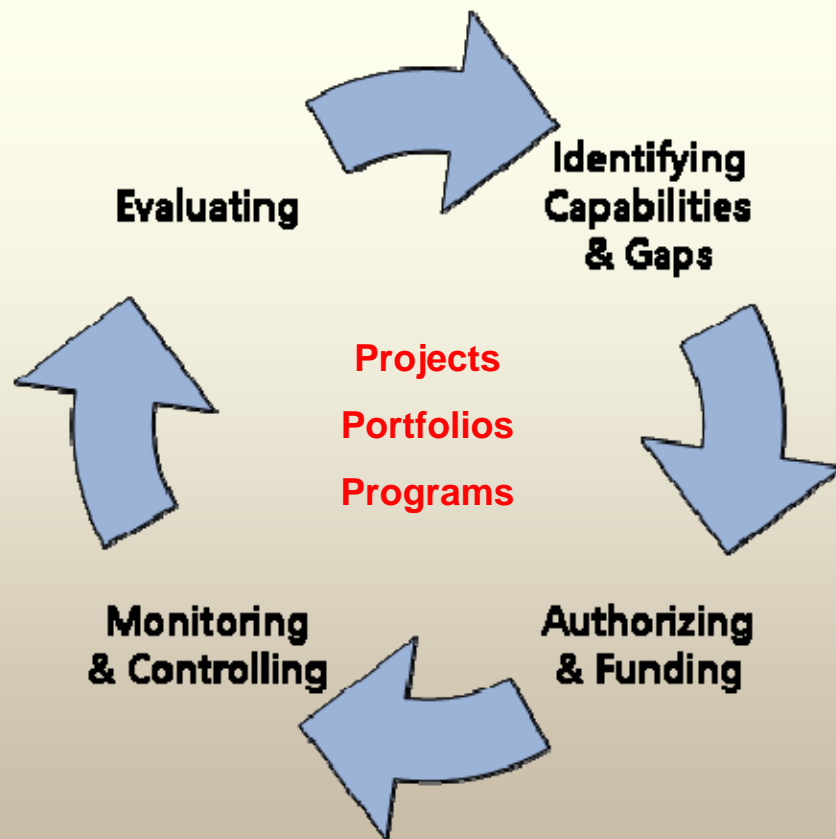
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There's an ocean of data, but you have to fish for measures that support your business processes.



Governance & metrics

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#3 Map measures to your governance process

Levels that may be important to your PMO

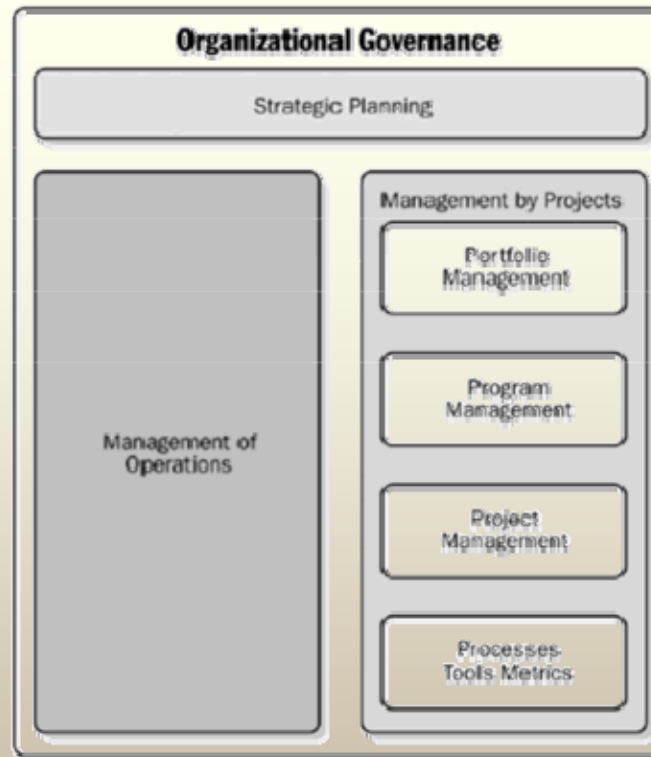
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Measurement Level	Focus
Strategic Goals	Where does the enterprise want to go?
Strategy Map	What objectives get you there?
Balanced Scorecard and/or Strategic Indicators	How do you keep the enterprise on track?
Program Management Office	How does the PMO move the enterprise forward on a cost-effective basis?
Portfolios & Programs	Are portfolios and programs achieving intended results?
Projects	How well are projects performing?
Operations & Maintenance	Are your ongoing programs meeting expectations and enterprise needs?

Oops! Where does measuring statutory compliance fit in?

PMI's Concept of Portfolio Management & Organizational Governance

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**PMI Focus
is on
Projects,
Not
Operations**

Figure 1-2. Relationships among Organizational Governance, Operations, and Portfolio Management

© 2008 Project Management Institute, Exposure Draft, Standard for Portfolio Management

Not So Fast!

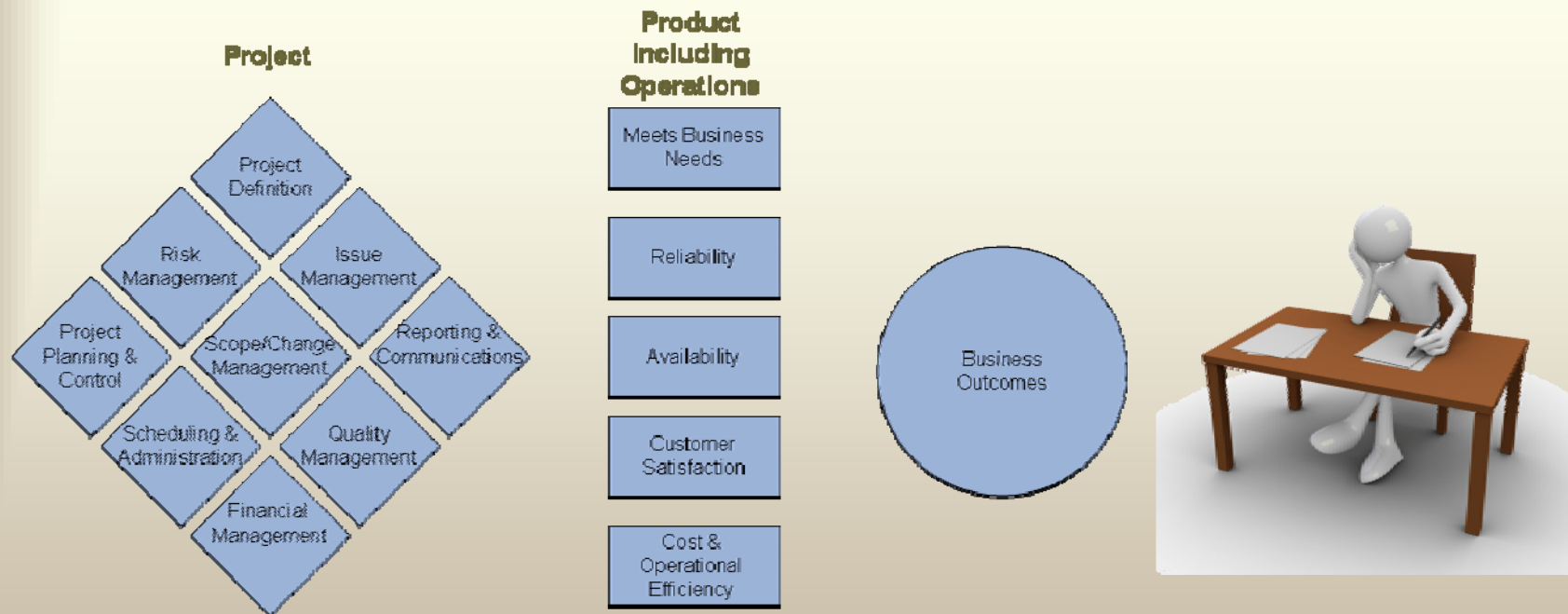
What about Metrics for Operations?

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- Over 70% of expenditures in capital investments may be for Operations & Maintenance (O&M)
- Many PMOs are responsible for the investment's entire lifecycle ... not just the "project" phases
- Measurement and metrics for operational analysis reviews can pay off for the enterprise and the PMO
- Your initial functional requirements and lifecycle cost estimates provide the baseline

PMO basic operations: Projects, portfolios, programs

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Project example: PMO can also apply process to programs, portfolios

PROJECTS

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- **Establish a Consistent, Complete Baseline!**
- **Include Project Profiles**
- **Monitor Project Time**
 - Time Management Performance
 - Actual vs. Planned Duration
 - Total Time to Complete (by phase or task)
- **Compare Costs**
 - Actual vs. Planned Costs
 - Original Estimates
 - Baseline changes
- **Product/Service Quality**
 - Availability
 - Customer Satisfaction
 - Error Rates
- **Risk Management**
 - Risk Indicators
 - Incidents
 - Impact on Budget, Schedule or Quality
- **Corrective Action Plans**
 - Project Initiative to Fix?
 - Effectiveness of Corrective Action
- **Build Knowledge Base**

PORTFOLIOS

Portfolio: A collection of investments subject to governance & oversight

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1. Define baseline (“As-is”)

- Programs & projects
- Characteristics
- Costs/resources
- Strengths/weaknesses/risks

2. Set target (goal or “to-be”)

3. Transition strategy

4. Identify performance improvement metrics

5. Measure performance

- **Programs & projects**
 - Cost and schedule performance
 - Quality
 - Risk
 - Outputs and outcomes
- **Portfolio as a whole**
 - Alignment, improvements, consolidation
 - Cost and schedule performance
 - risk
 - Business outcomes

6. Take corrective action

Map Measures & Metrics

PROGRAMS

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Program: New, improved or continuing capabilities that meet a defined business need, often through multiple projects and/or operations

- Similar to Portfolio Method
- Focus and monitor all subordinate projects and expenditures
- Evaluate performance of program and projects
- Optimize projects to move program outcomes forward
- **Take corrective action**

Using measurement & metrics: Earned Value Management

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EVM integrates:

- Scope
- Schedule
- Cost
- Resources
- Technical milestones

Measures project performance

Compares planned to actual costs and schedule

Estimates final project costs

EVM performance measurement

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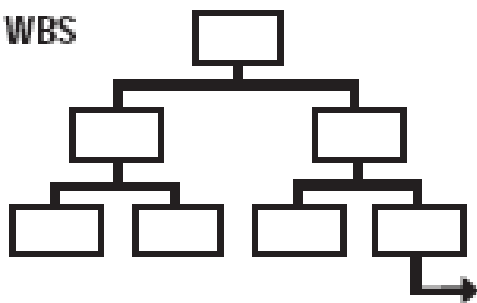
COST AND SCHEDULE PERFORMANCE MEASUREMENT

1. Define the work
2. Schedule the work
3. Allocate budgets

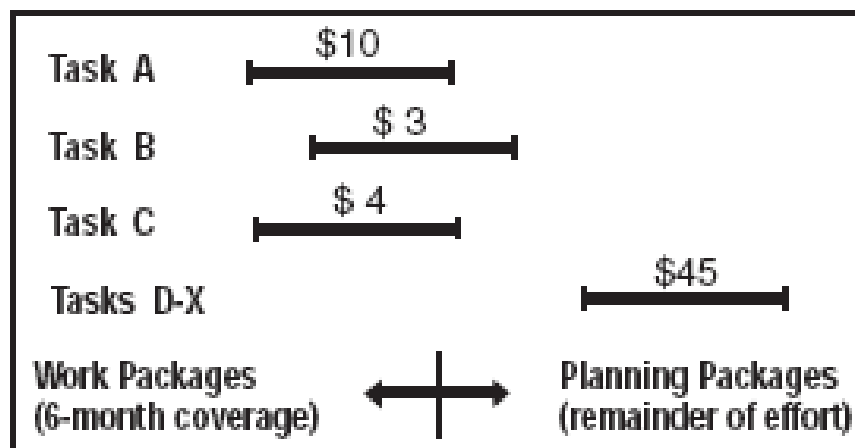
} Cost Account

4. Defining, Planning and Budgeting:

WBS



ELEMENT/COST ACCOUNT—300

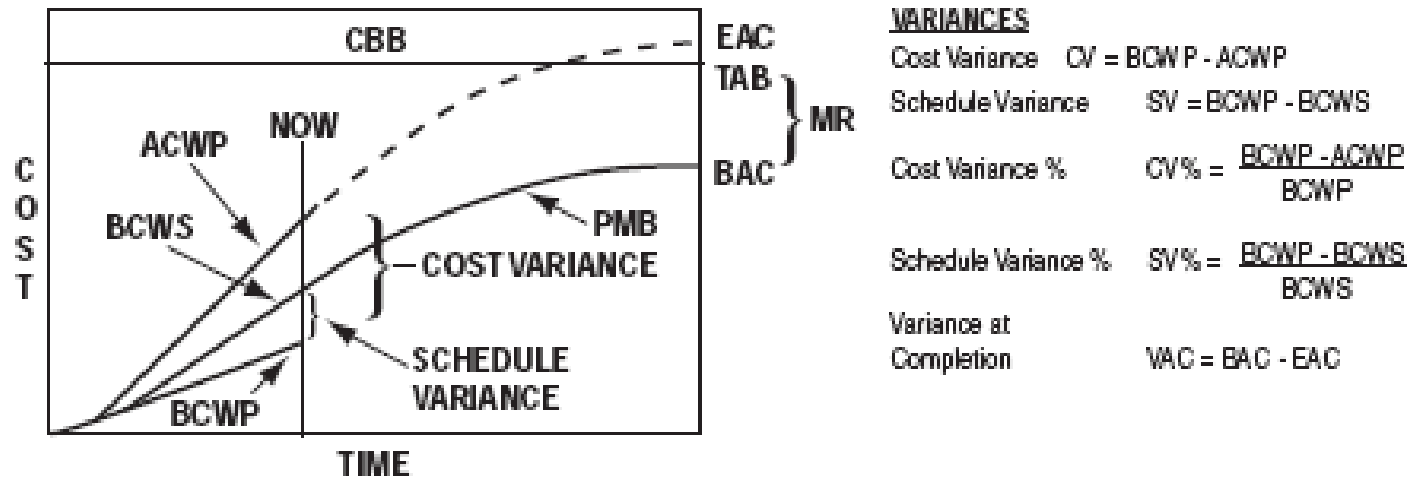


DAU Program Managers Tool Kit, April 2008, p. 32

Using EVM

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5. Prepare and monitor performance profiles:



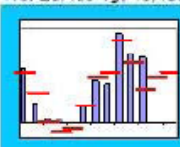
- PM Monitors at Least Monthly, Plans Corrective Action when Off Track
- PMO and Executive Owner to Provide Oversight
- Project Results Can Be Rolled Up and Compared at Program and Portfolio Levels
- Various Chart Views Can Provide Visual Status

Visualizing balanced scorecard metrics

Financial

Free Cash Flow

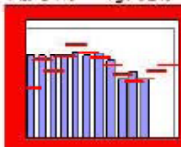
Act 20,400 Tgt 10,400



Thousands \$

Gross Margins

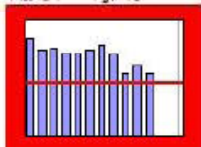
Act 54% Tgt 52%



Percentage

Age of Receivables

Act 54 Tgt 45



Days

Revenue by Product

Act 5,820 Tgt 2,552

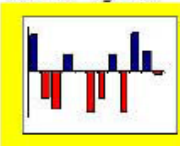


Thousands \$

Learning & Growth

Headcount

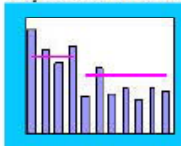
Act 266 Tgt 268



Percent

Days to Hire

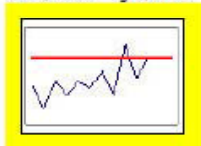
Days to Hire SEE 67.5



Days

Net Rev per Strat EE

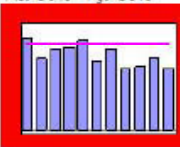
Act \$384K Tgt \$386K



Dollars K

Training Key Projects

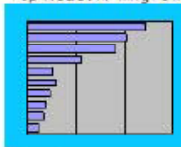
Act 69% Tgt 80%



Percentage

Attrtn Reasons (ytd)

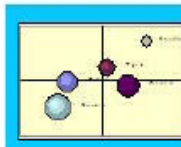
Top Reason: Mngt Skills



Percentage

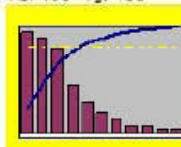
Customer & Marketplace

Competitive Position



Customer Complaints

Act 160 Tgt 150



Incidents

Business Partners

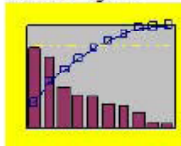
Act 78 Tgt 120



Partners

Top Ten Customers

Act 64.3 Tgt 68

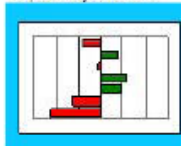


Billed Dollars

Internal Processes

Crit Project Status

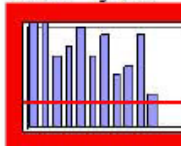
Top 3 Proj: 18 Late



Days

Cost of Quality

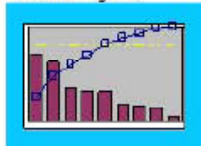
Act \$8K Tgt \$8K



Dollars K

Reduce Mfg Problems

Act 58.9 Tgt 58



Dollars K

On-Time Shipments

Act 96% Tgt 93%



Percentage

Financial

Free Cash Flow
Gross Margins
Age of Receivables
Revenue by Product

Learning & Growth

Headcount
Days to Hire
Net Rev per Unit
Training – Key Projects
Attrition Reasons

Customer & Marketplace

Competitive Position
Customer Complaints
Business Partners
Top 10 Customers

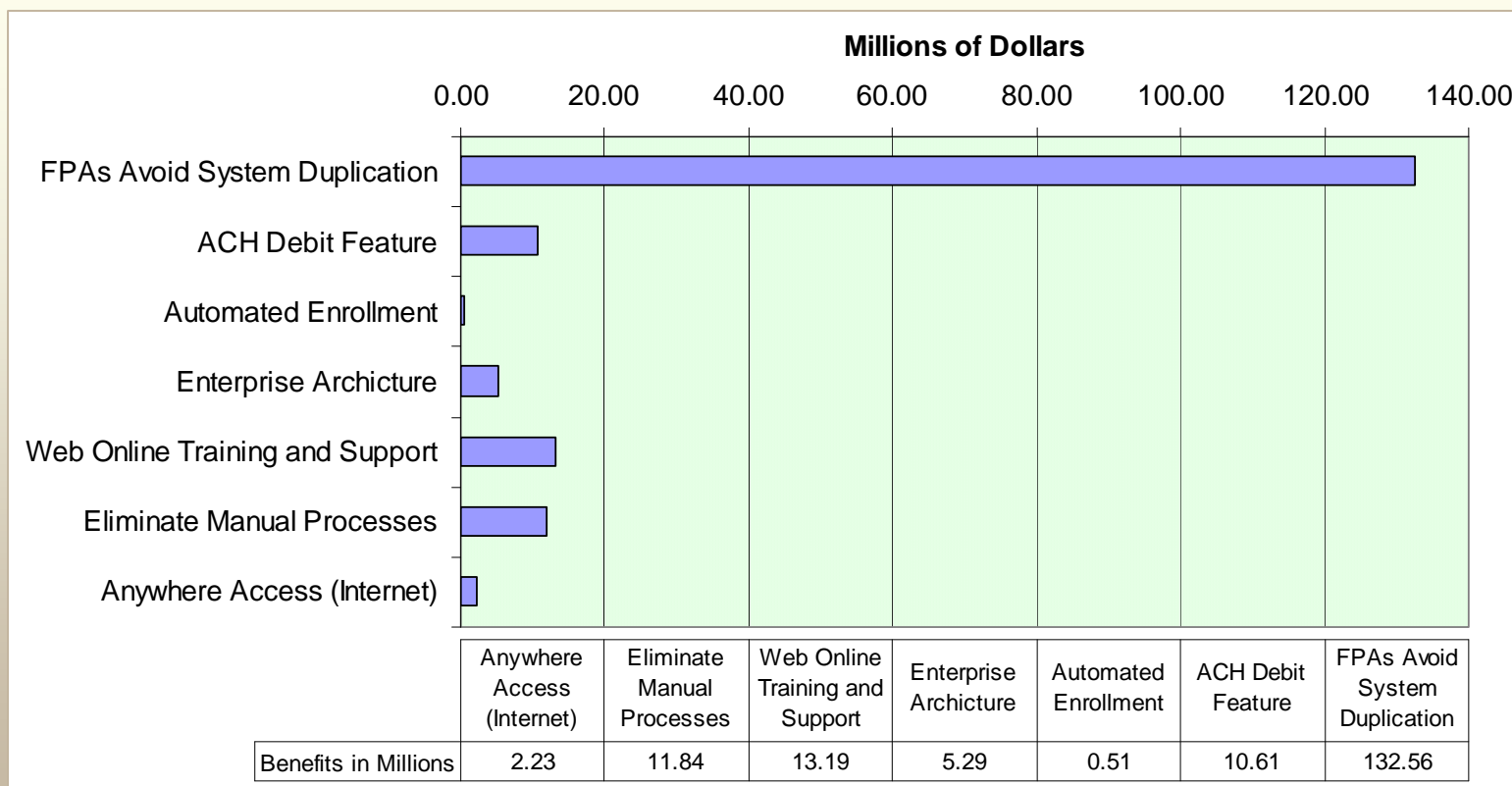
Internal Processes

Critical Project Status
Cost of Quality
Reduced Problems
On-Time Delivery

Source: Ron Person, CMC
www.torconsulting.com

Project & program benefits

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Customer satisfaction

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143. The Uniformed Services Employment and Reemployment Rights Act (USERRA) protects members of the National Guard/Reserve during military service. How many times have you been briefed about USERRA?

- Never
- Once
- Twice
- Three times or more

144. Do you wish you had more information concerning any of the following USERRA topics? Mark "Yes" or "No" for each item.

	Yes	No
A. Discrimination against employees with military obligations	<input type="radio"/>	<input type="radio"/>
B. Reemployment rights with my employer	<input type="radio"/>	<input type="radio"/>
C. Seniority	<input type="radio"/>	<input type="radio"/>
D. Vacation	<input type="radio"/>	<input type="radio"/>
E. Pension	<input type="radio"/>	<input type="radio"/>
F. Health benefits	<input type="radio"/>	<input type="radio"/>
G. Other	<input type="radio"/>	<input type="radio"/>

Open Ended: Responses to "Other" summarized in Volume 1.

145. Which of the following are good times to receive information concerning USERRA?;

	Yes	No
A. During Inactive Duty Training (IDT)	<input type="radio"/>	<input type="radio"/>
B. Immediately prior to activation	<input type="radio"/>	<input type="radio"/>
C. About 2 to 3 weeks before demobilization	<input type="radio"/>	<input type="radio"/>
D. During out-processing	<input type="radio"/>	<input type="radio"/>
E. Upon return to civilian life	<input type="radio"/>	<input type="radio"/>
F. No specific time; make information accessible online	<input type="radio"/>	<input type="radio"/>
G. No specific time; make information accessible via telephone hotline	<input type="radio"/>	<input type="radio"/>

146(?). Do you have any further suggestions for improving USERRA briefings?

- Yes
- No

#4 Simplify the data collection, reporting and analysis process

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1 2
4 5

00

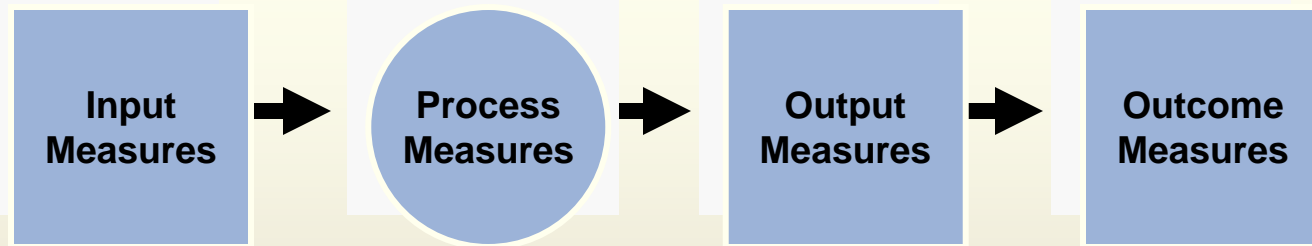


Squeeze your data collection and reporting processes down to the essentials.

Squeeze me, please, and I will give you a quick boost in performance!

Stages of Measurement

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Business				
Other External				
PMO				
Portfolio/Program				
Project				

Avoid Redundant Data Collection

- Streamlining saves money
- Judicious overlap of data elements will help validate findings

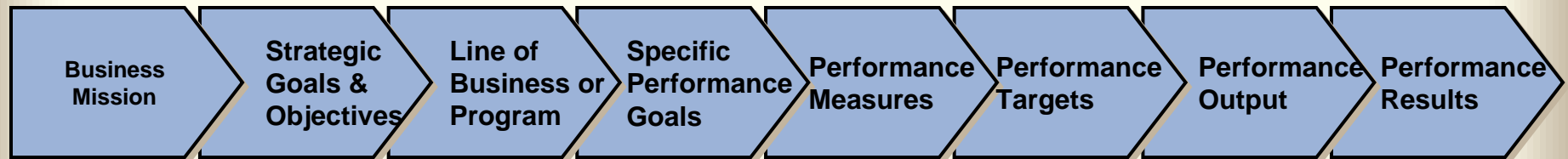
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Measures	Strategic Performance	Enterprise Architecture	PMO Process	Portfolio & Program	Project
Data #1					
Data #2					
Data #3					
Data #4					
Data #5					
Data #6					
Data #7					
Data #8					
Data #9					
Data #10					
Data #11					

PHASES:
 Projects break into initiation, planning, execution/control, closeout

Line-of-sight measurement

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Car Rentals	1. Maximize Revenue 1.1. Reduce "No Shows"	Reservations	Implement automated reminder and customer service system	. Number completed reservations . Number & percent "No Shows" . Dollar value	Reduce "No Shows" from 5% to 3%	Automated reminder and customer service system	Percent of "No Shows" Dollar value of "No Shows"
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- What are the other data items you might want?
- How does the PMO measure its performance?

Analytics: Metrics need comparisons to be useful!

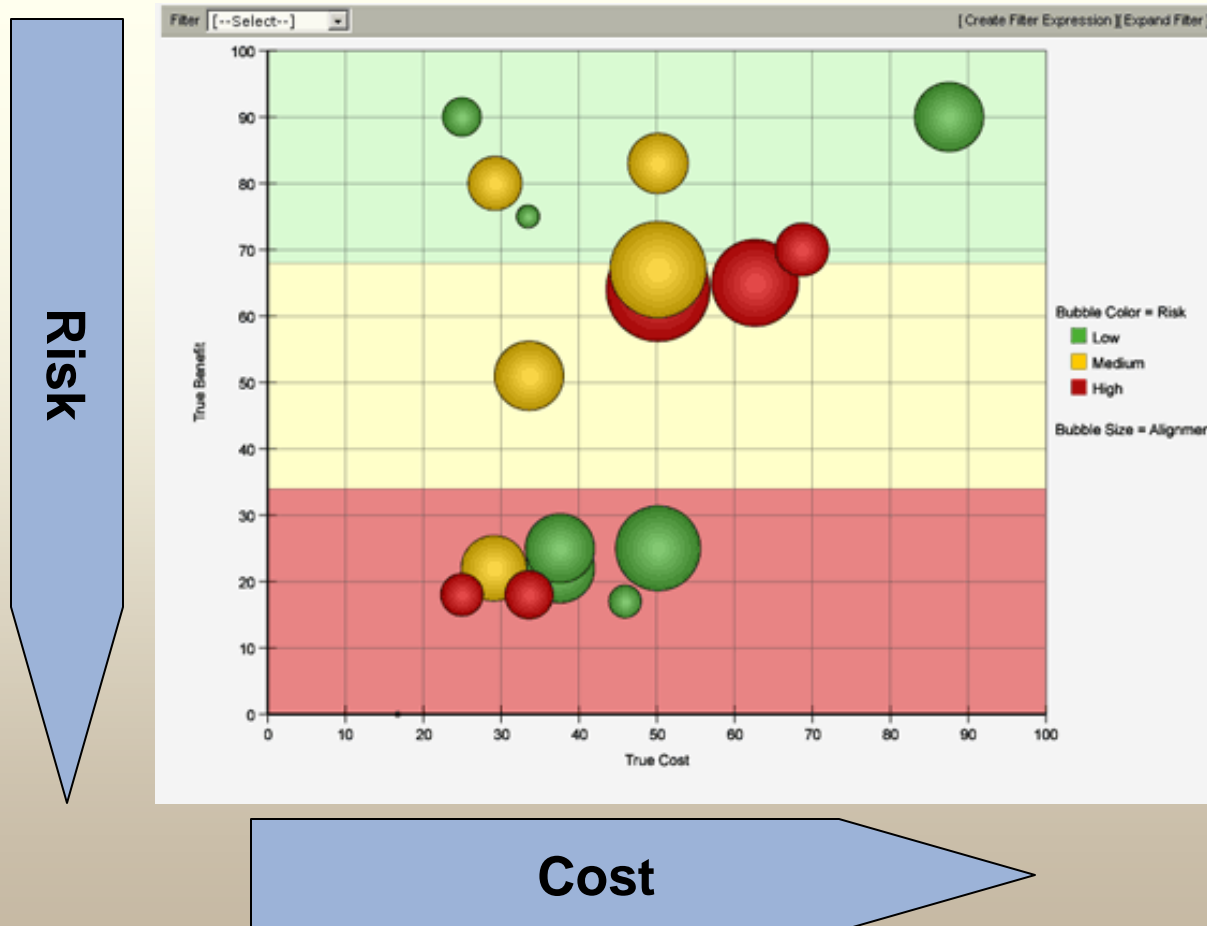
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- Baseline
- Projects within program or portfolio
- Projects within line of business segment
- Historic performance
- Industry benchmarks
- User populations
- Business units

Visualizing comparisons Investments in a portfolio

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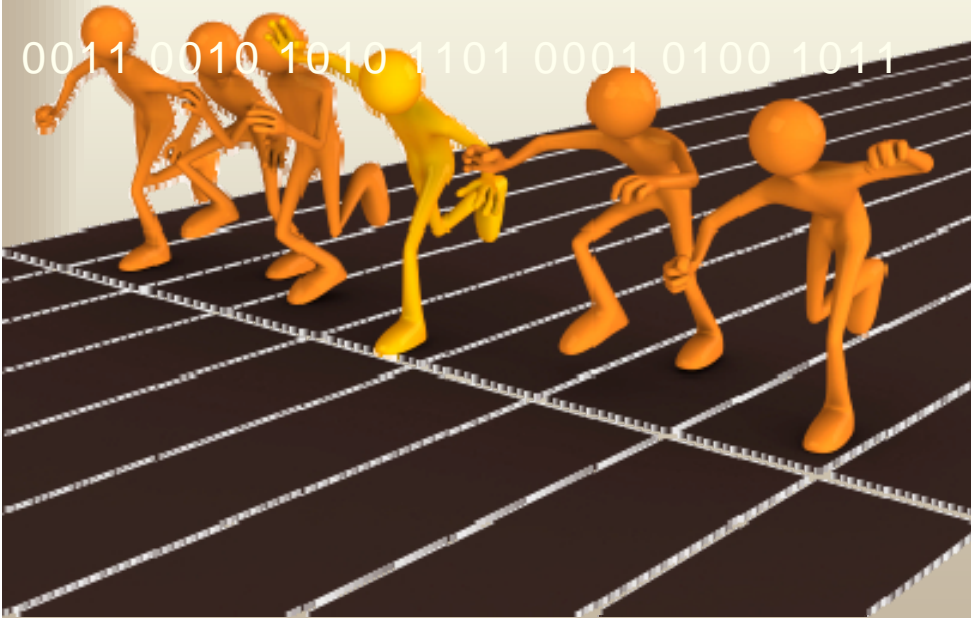
Bubble Chart, Niku (CA)



#5 Use your metrics for action and results

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**You
better
believe
I'm on the
ball!**

0

A photograph of a wet, brown dog leaping out of the water. The dog is captured in mid-air, with its front legs extended forward and its back legs pushing off the water. The water is splashing around the dog's tail and hind legs. The background is a clear blue sky.

**Don't just sit on your
metrics. Use findings for
action and results!**

Corrective action

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- Cut costs, accelerate schedule
- Change implementation plan
- Modify scope, requirements
- Hold contractor accountable
- Change personnel
- Reorganize
- Rebaseline

Change investment mix

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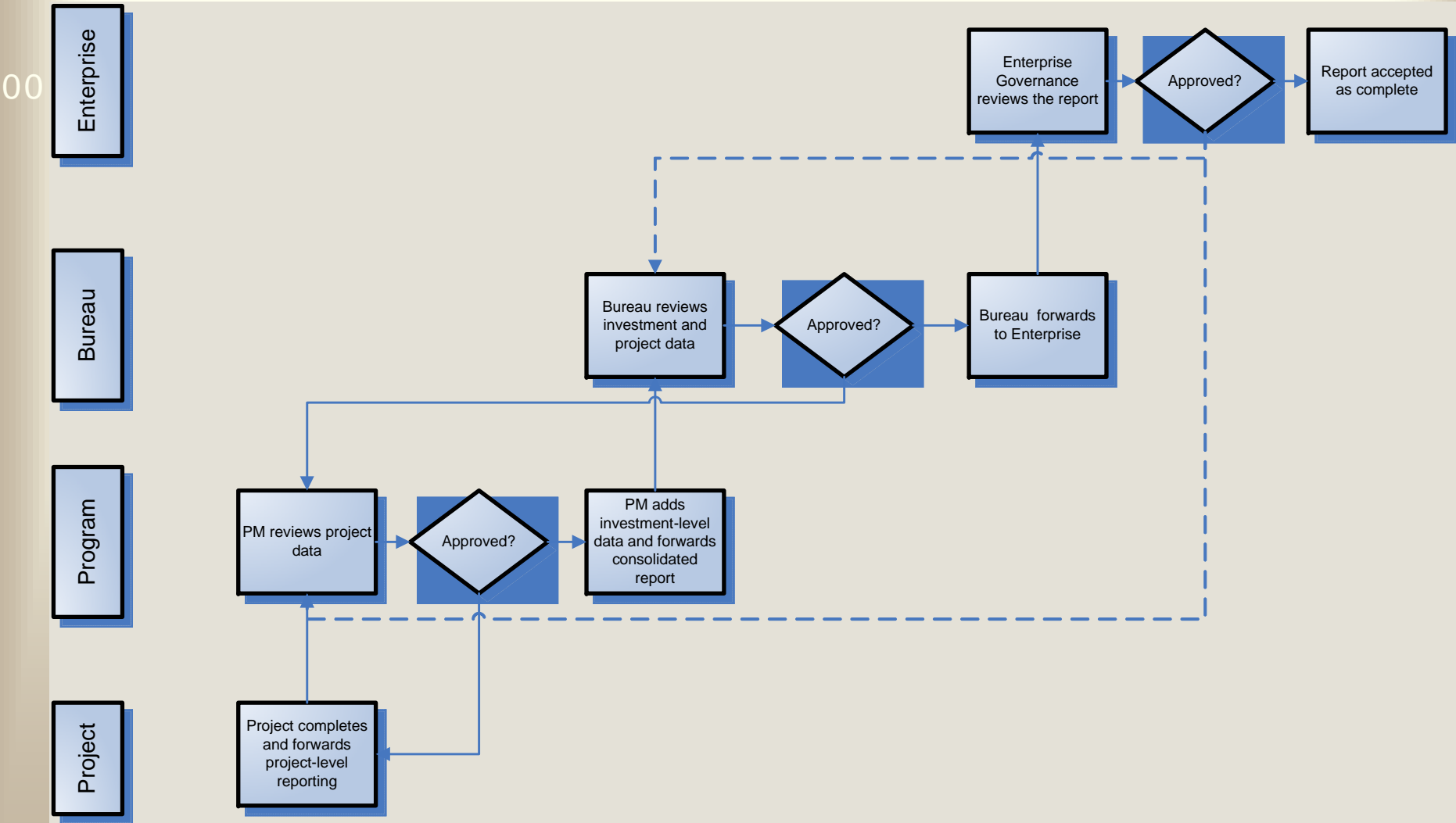
- Rebalance portfolios and programs
- Accelerate or decelerate projects
- Terminate or replace weak investments
- Initiate new investments
- Consolidate projects and programs
- Update portfolio to match strategic priorities
- Fix or avoid problems

Performance reporting: Common data elements for a PMO reporting system

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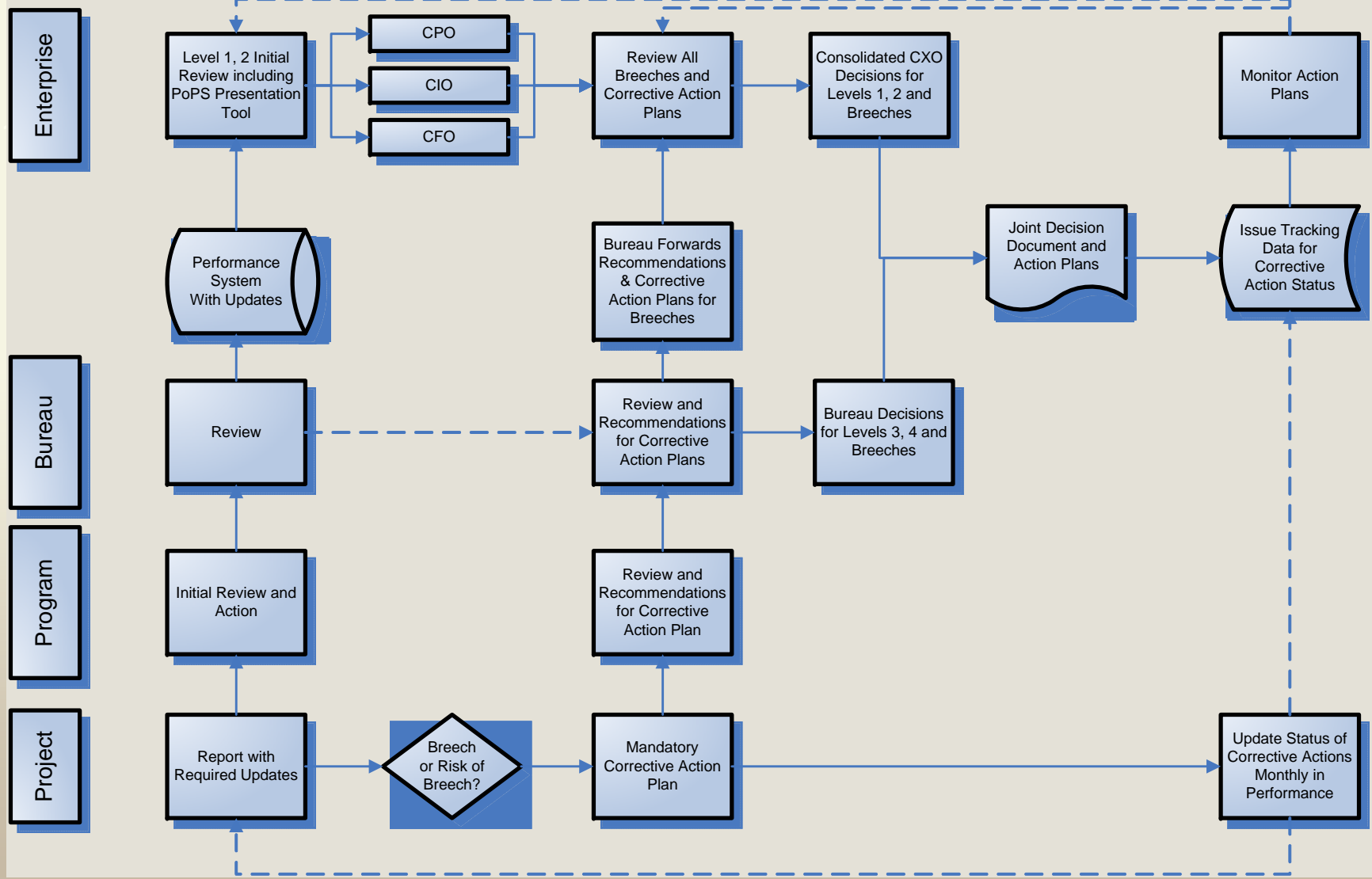
- General Information about Program
- Information about Project
- PM Information
- Baseline Information
 - Schedule
 - Cost
 - Milestones
- Earned Value Performance
 - Schedule
 - Cost
 - Milestones
- Enterprise Architecture Information
- Portfolio Identification
- Contract Information
- PM's Assessment
- Corrective Actions
- Current Status
- Compliance Status
- Review/Approval Status
- Documentation Status

Performance reporting process



Performance review process

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Software tools for portfolios

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Evolve metrics that fit your PMO

Metrics got our
PMO an
Achievement
Award and a
bonus!

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Measurement Architecture

- Organize your measurement methods into a metrics portfolio
- Fit to your business architecture
- Avoid overlap and redundancy
- Streamline your processes
- Document “as is” architecture of measurement, reporting, and use
- Define a “to be” architecture for PMO metrics
- Develop a transition plan for orderly improvement

