

#L09 – Without Which None: Key Data Points for IT Governance Metrics

Jennifer Bayuk, CISA, CISM, CGEIT Independent Information Security Consultant www.bayuk.com





Session Content

- 1. How to compartmentalize complex IT infrastructures in order to label them
- 2. Application component labeling
- 3. Index-sharing requirements for commonly used metrics
- 4. Simple and effective ways to efficiently collect data on IT-related initiatives
- 5. How to align risk assessment activities with accountability for IT project and service delivery





IT Architecture Components

- Application components
- Component to software mapping
- Component to hardware mapping
- Virtual machines
- Data Sources





Application components





Component to software mapping





Component to hardware mapping





Virtual machines





Potential Data Sources

- Enterprise Management System
- Configuration Management Database
- Application Inventory





Potential data source on components architecture

- Enterprise Management System
 - IP centric asset inventory
 - OS and Infrastructure focused
 - Requires coordinated data entry or feeds to align with business process





Potential data source on components architecture

- Configuration Management Database
 - Operations focused
 - Provides relationships between configuration items
 - Requires coordinated data entry or feeds to align with asset inventory and/or business process



Typically used to support operations and service desk.







Potential data source on components architecture

- Application Inventory
 - Development focused
 - Provides accountability for maintenance of software
 - Requires coordinated data entry or feeds to align with asset inventory

Acronym	MGR	DEPT	Components
APPACRO	Smith, Deb	Legal & Comp	Web
SALES	Jones, John	Sales Services	Mainframe
FINANC	Mathews, David	Enterpr Finance	SAP
MARKET	Edison, James	Sales and Market	Web
MGMTAPP	Johnson, Kelly	Network Mgmt	Desktop
OTHAPP	Williams, Peter	Corp & Admin	Mini

Typically used to justify IT Spend to Business Customers.





Data Source Consolidation





Metrics How-to:

- Start with known data on environment
- Quantify or otherwise represent unknowns
- Link control-relevant data to known data
- Anticipate decision requirements
- Design presentations





Known Indexes for consolidation

- 1. Application Index or Acronym
- 2. Vendor Software Release Identifier
- 3. Network IP Address
- 4. Equipment Serial Number





Identify Gaps

1. Application Index or Acronyms

- e.g.: without associated equipment
- 2. Vendor Software Release Identifier
 - e.g.: not associated with any application
- 3. Network IP Address
 - e.g.: with no equipment serial numbers
- 4. Equipment Serial Number
 - e.g.: not associated with any vendor





Potential control-related extensions

- 1. Security Software Configuration
- 2. Change Authorization Correlation
- 3. Security Review or Audit Scope
- 4. Information Classification
- 5. Outsourcing Arrangements
- 6. Application Impact
- 7. Business Recovery Objectives
- 8. System Development Projects





Potential accountability extensions

- 1. Line of Business
- 2. Development Team Acronym
- 3. IT Manager Realm of Responsibility
- 4. Support Escalation Chain
- 5. Identity Management System





Link Indexes for Control and Accountability to Management Strategies

- Risk Assessment Reports
- Role and Responsibility Assignments
- Business Recovery Test Plans
- Outsourcing Statements of Work
- Project At-Risk Reports







Example: Strategic Alignment





Example: Risk Management

Percentage of Applications by Recovery Type







Example: Value Delivery



Serving IT Governance Professionals



Example: Resource Management





Example: Performance Measurement

Downtime per Application per Week



* UNK represents down equipment not associated with any application







Manage holistically by incorporating architecture, metrics, and risk into one conceptual framework.

Use metrics to visualize it.





For More Information:

Jennifer Bayuk, CISA, CISM, CGEIT Independent Information Security Consultant www.bayuk.com jennifer@bayuk.com



Jennifer L Bayuk LLC





Thank you!

