_experience the commitment

CGI

IM/IT Governance and Portfolio Management

Presented to: Open Group EA Conference Brussels
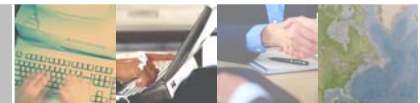
Date: 21st of April, 2004
Prepared by:
Robert (Bob) Weisman, Partner and Executive Consultant, EA Leader, CGI
Contact: robert.weisman@cgi.com or (613)566-4689

Issues at Hand

- **Why IT Governance ?**

- **What is IT Governance ?**

- **Linkage IT Governance and Portfolio Management**

- **Linkage Portfolio Management/Governance and EA**

- **Project Generation Paradigm**
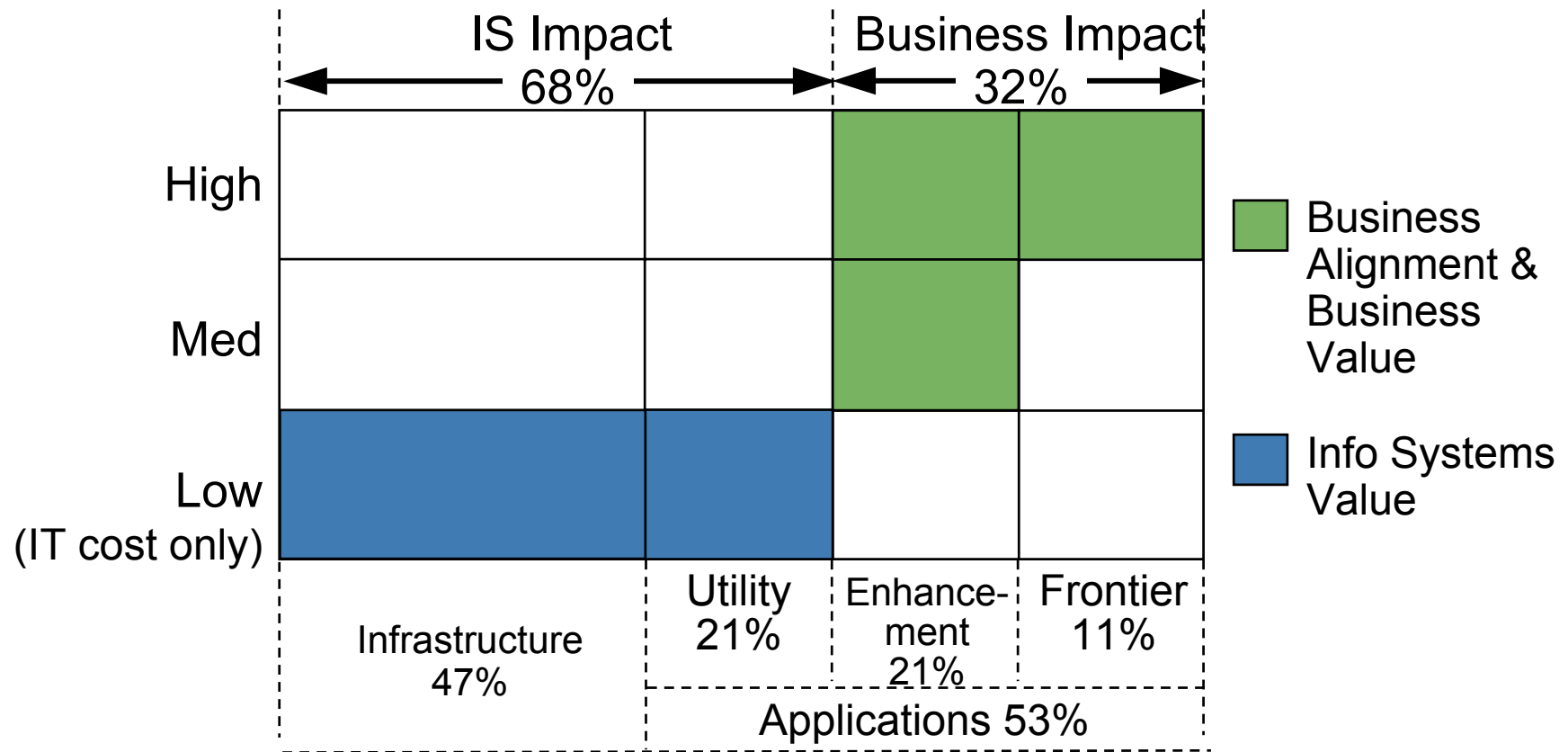
- **Concluding Comments**

Why IT Governance ?

- **High IT Project Failure Rate**

- **ROI on IT**

- **Auditors**

- **Analyst Premium**

- **IT is key government and corporate enabler**

- **Sarbanes Oxley**

- **Demographics**

- **Technology chasing perception**
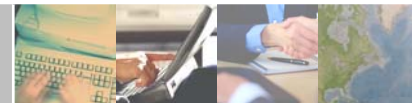
About One-Third of IT Spending Improves Business Performance (Gartner)

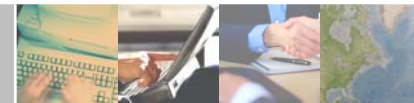## Contribution to Improved Enterprise Performance

	IS Impact 68%		Business Impact 32%	
High			■ (green)	■ (green)
Med			■ (green)	
Low (IT cost only)	■ (blue)	■ (blue)		
	Infrastructure 47%	Utility 21%	Enhance-ment 21%	Frontier 11%
			Applications 53%	

■ Business Alignment & Business Value (green)

■ Info Systems Value (blue)

**Typical Portfolio of IT Investments
Share of Total IT Spending**
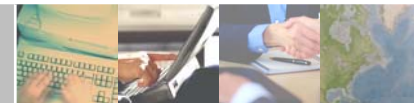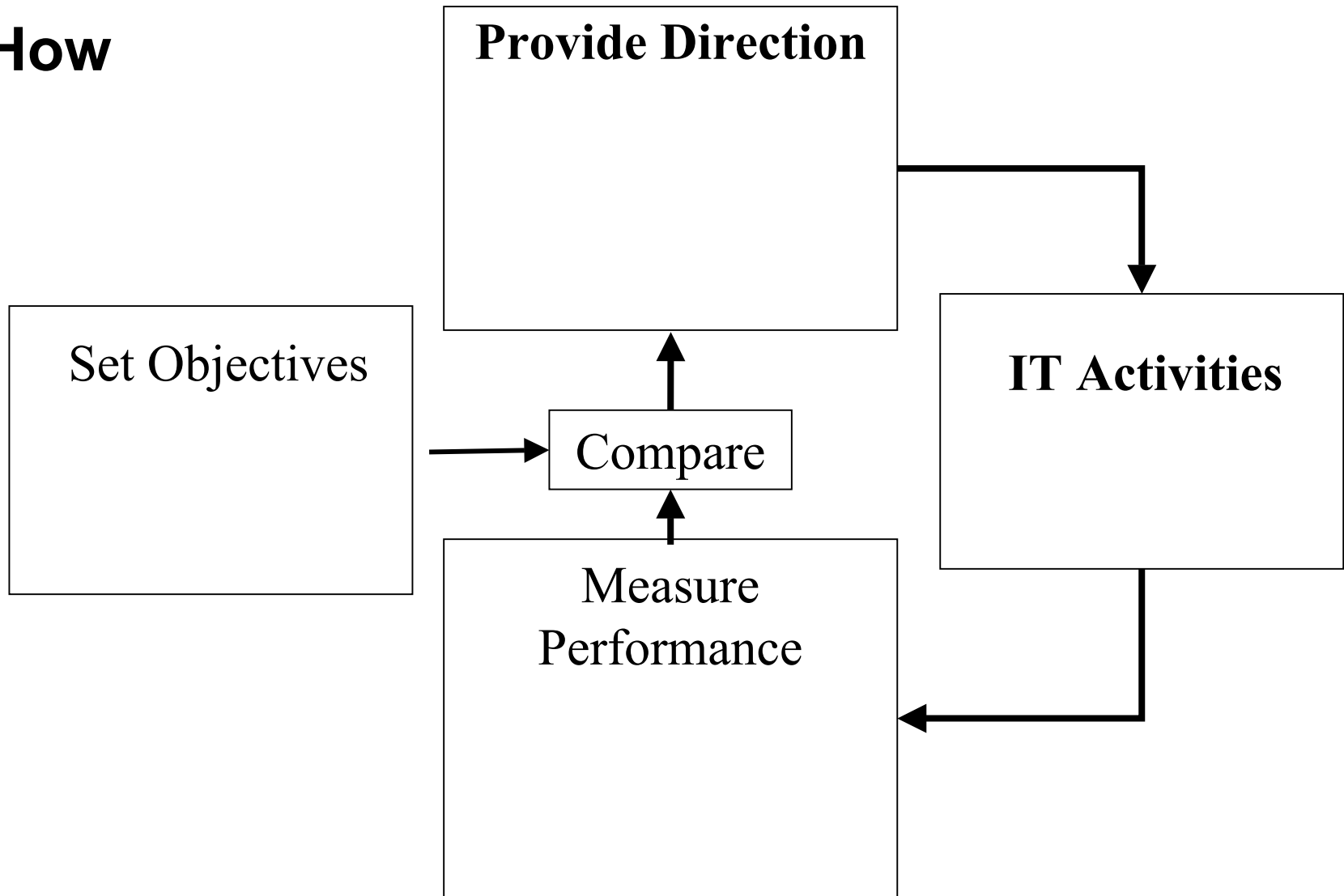
(Courtesy Gartner Group Dec 2003)
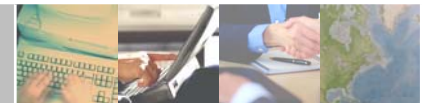
What is IT Governance ?

- **Integral part of enterprise governance**

- **Directors and executive management**

- **Leadership, organizational structures and processes**

- **Accountability, Responsibilities and Authority**

- **Ensure IT alignment**

IT Governance Processes

How

```
                    ┌─────────────────────┐
                    │  Provide Direction  │
                    │                     │─────────┐
                    │                     │         │
                    │                     │         ▼
┌──────────────┐    └─────────▲───────────┘   ┌──────────────┐
│              │              │               │              │
│Set Objectives│       ┌───────────┐          │ IT Activities│
│              │──────▶│  Compare  │          │              │
│              │       └─────▲─────┘          │              │
└──────────────┘             │                └──────┬───────┘
                    ┌────────┴────────┐              │
                    │     Measure     │◀─────────────┘
                    │   Performance   │
                    │                 │
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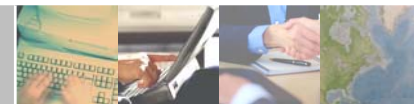
- **1 - Adopt a <u>Project Portfolio Approach</u> to IT Governance**

- **2 - Develop a Tracking System**

- **3 - Review Projects**

- **4 - Establish Review Levels**

- **5 - Culture of Ownership**

- **6 – Clear IT Governance "process" is established**

  - Clear accountability, responsibility and authority
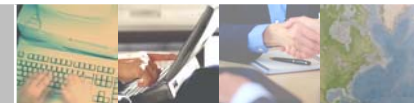
- **7 - Adherence to Process**
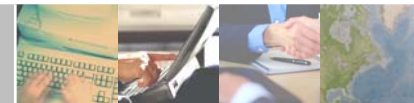
Enterprise Architecture (EA) and Portfolio Management

- **Process of Management sterile in absence of context**

- **Need for Context**
  - Skyscraper has an overall plan
  - Not designed and built one room at a time no matter how well managed

- **Actually skyscrapers are partially built one room at a time**
  - EA provides the basic floor plan and utilities lay-out
  - Provides basis for "out of context" design and planning

- **In IT Enterprise Architecture provides context**
  - Different levels of abstraction

The Zachman Framework – An EA Model

	What Data	*How* Process	*Where* Network	*Who* People	*When* Time	*Why* Motivation
Scope/Objectives (Board)	Business Architecture					
Model of Business (CxO)						
Description of IS (Designer)	Business and Technical Architecture Transition					
Technology Model (Architect)	Technology Architecture					
Detailed Description (Builder)						
Implementation (Maintainer)						

Business Architecture

Business Transformation Plan And IM/IT Portfolio

Business Architecture (Future)

IM/IT Architecture (Existing)

IM/IT Architecture (Target)
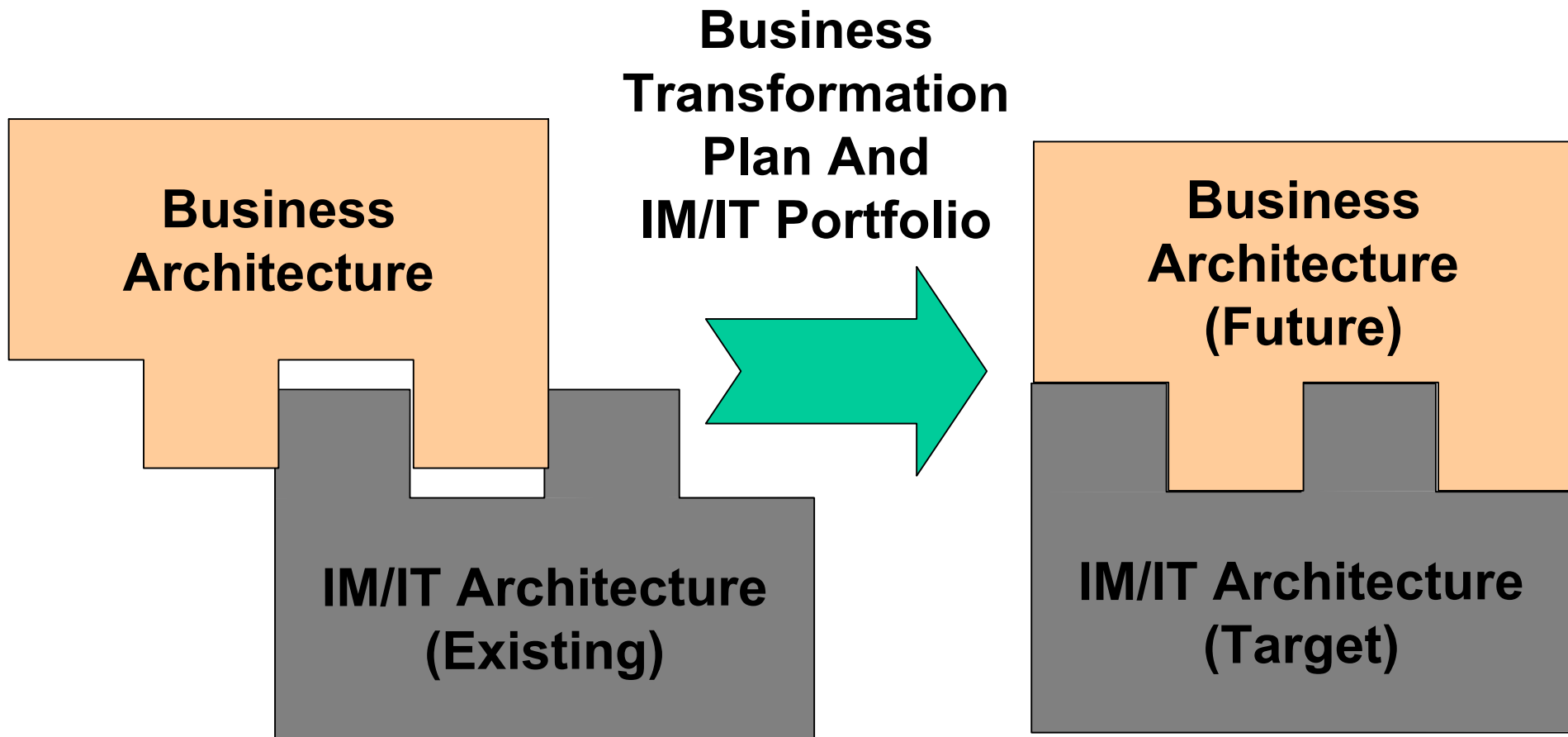
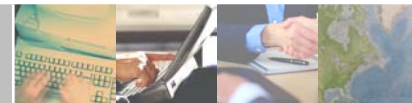# EA Enables Strategic Project Generation

EA enables proactive Strategic Project Generation

Tactical Project Generation

Strategic Business Needs

Strategic Enterprise Tech Arch

Strategic IT Project

Tactical IT Project

Tactical IT Need

Tactical Business Need

Tactical IT Project

Tactical IT Need

Tactical Business Need
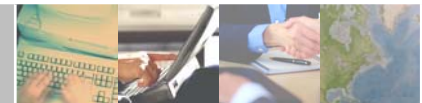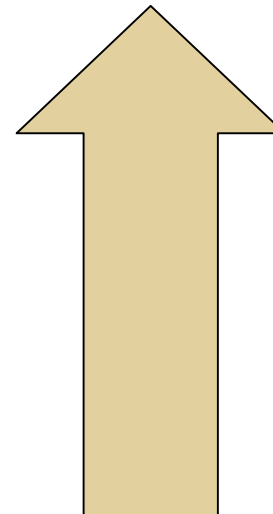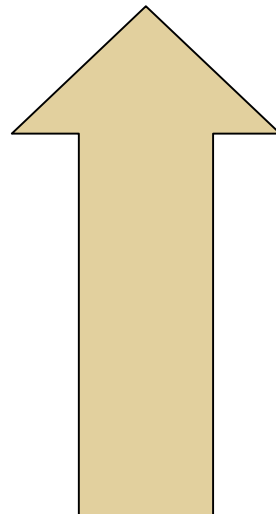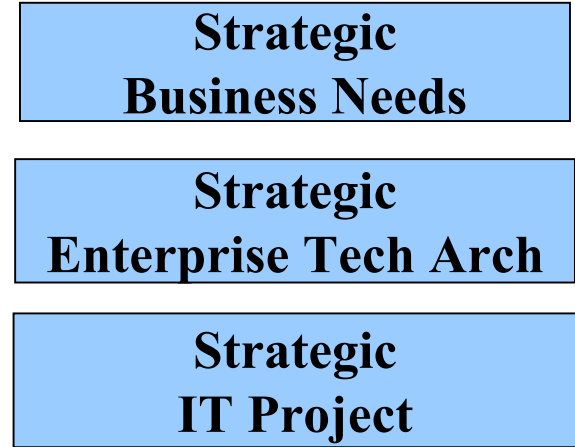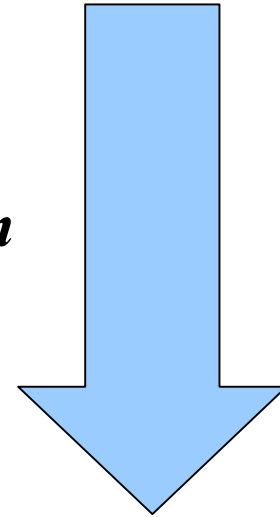
EA in Governance Ensures Strategic Fit

IT Governance Who

- **Board**
  - Board of Directors
  - IM/IT Strategy Committee

    IM/IT Strategy Committee

- **Executive Management – CEO**
  - Project Portfolio Management Board for all projects
  - Chaired by CEO
  - Heads of the lines of business including CIO

    Corporate Portfolio Management Board
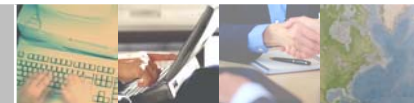
- **Committees – CIO**
  - IT Steering Committee – Chaired by CIO – All IT Projects
  - Technology Council - Impact
  - IT Arch Review Board – Standards/Conformance

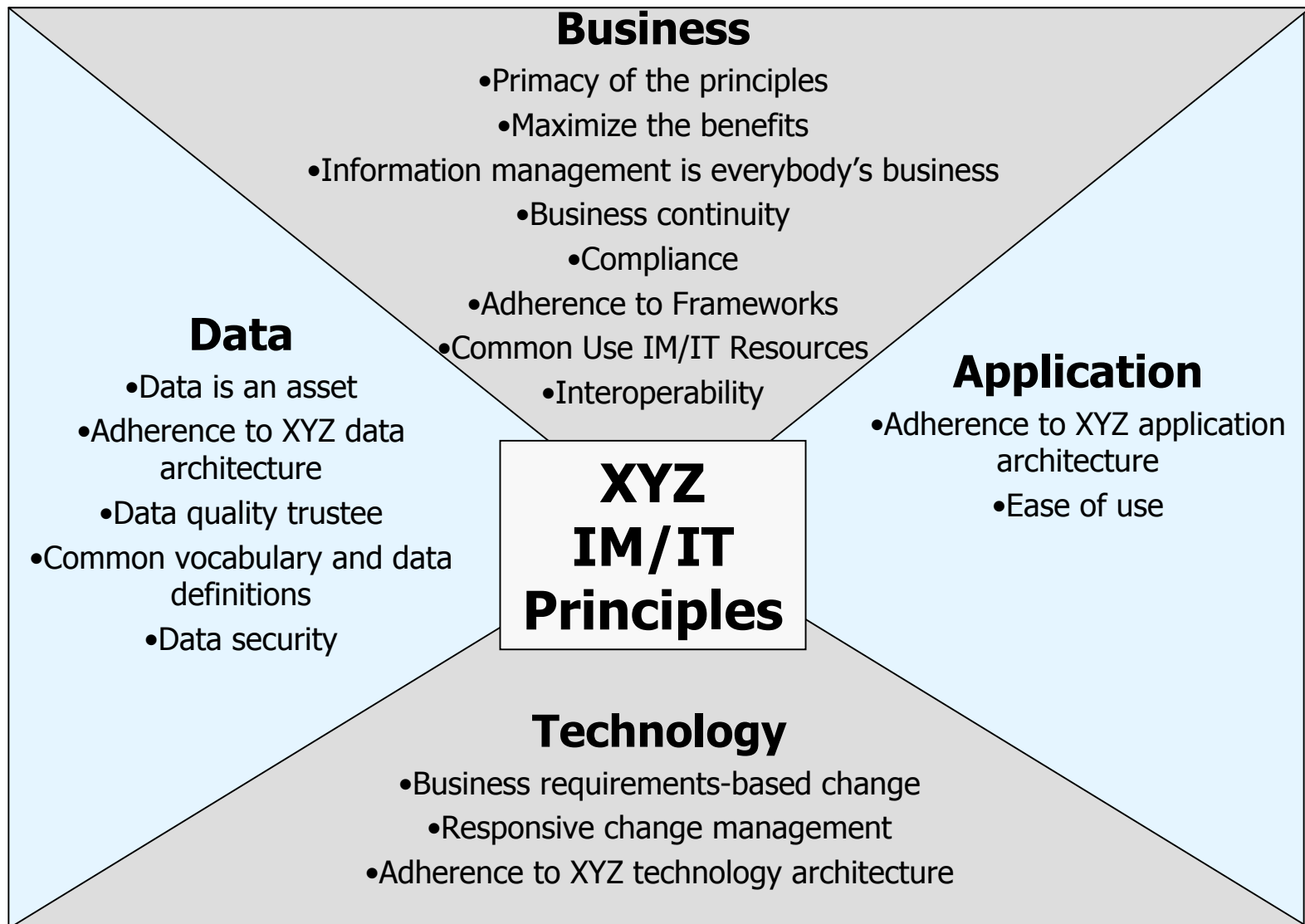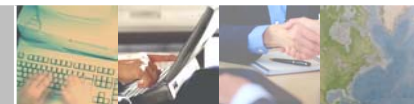   Information Management Advisory Committee (IMAC)
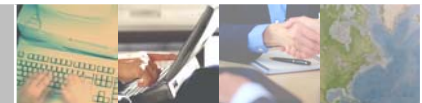
Assessing the Projects - Metrics

- **Principles**

- **CIO IM/IT Metrics**

- **CEO Strategic Metrics**

- **Applying the Metrics**

Principles – The Initial Hurdle
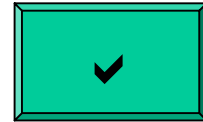## (A Real World Example using TOGAF)

Business
- Primacy of the principles
- Maximize the benefits
- Information management is everybody's business
- Business continuity
- Compliance
- Adherence to Frameworks
- Common Use IM/IT Resources
- Interoperability

Data
- Data is an asset
- Adherence to XYZ data architecture
- Data quality trustee
- Common vocabulary and data definitions
- Data security

XYZ IM/IT Principles

Application
- Adherence to XYZ application architecture
- Ease of use

Technology
- Business requirements-based change
- Responsive change management
- Adherence to XYZ technology architecture

Principles
The Project Charter's First Hurdle

- •Data Is an Asset
  - •*Is Data being managed as a business asset ??*
- •Adherence to XYZ Data Architecture
  - •*Does the project fit into the XYZ Data Arch?*
- •Data Quality Trustee
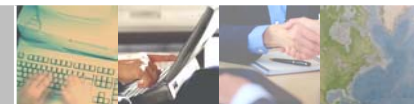 - •*Does the project manage data quality?*
- •Common Vocabulary and Data Definitions
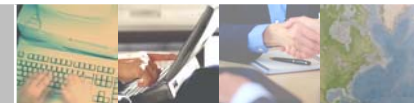 - •*Will the project re-use corporate data standards?*
- •Data Security
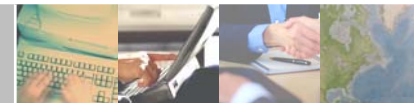 - •*Does the project cater to security concerns/policy?*

Principles – The Underlying Assumptions

- **Existence of a Integrated Business Plan**

- **Business Participation and Ownership**

- **Existence of IM/IT Architectures**
  - Data
  - Application
  - Technology

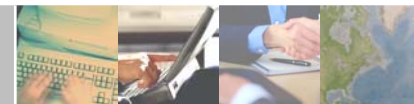- **Existence of Higher Level Governance**

Performance Metrics/Assessment Criteria
A CIO Perspective

- **IM/IT Value**
- **IM/IT Fit**
- **IM/IT Risk**

IM/IT Value Metrics – CIO View

- **Greater Customer Satisfaction**

- **Reduced Costs**

- **Increased Capability: Stability & Reliability**

- **Increased Capability: Compliance**

- **Increased Capability: Security**

IM/IT Fit Metrics – CIO View
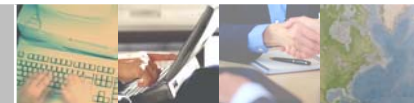
- **Current Business Environment**

  - Business ready ?

- **Current Technical Environment**

  - The ability of the project to enhance the current environment.
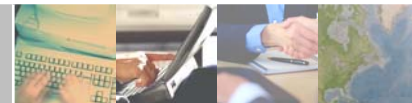
- **Future Technical Environment**

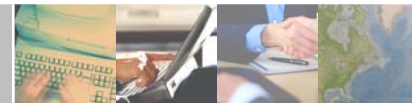 - The contribution of the project to the future (target) environment.

- **Implementation Risk:**

   More expensive than planned

- **Implementation Risk:**

   Longer than planned

- **Operational Risk:**
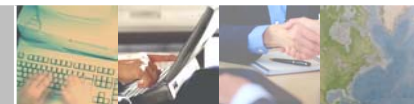
   Project Will Not Complete

Strategic Metrics – A CEO Perspective

- **IM/IT Value**
- **IM/IT Fit**
- **IM/IT Risk**

Strategic Value – CEO Perspective

- **Return on Investment from more 'macro' perspective.**

- **Clearly define the dimension of ROI for the environment.** (e.g. cash, person-days, speed of delivery,…)

- **CEOs assign broad values (low, medium or high)**

  - **Short Term**: Return likely to be low, medium or high?
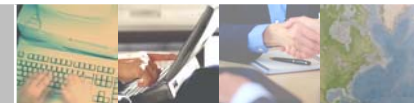
  - **Long Term**: may be no short-term benefit

Strategic Fit – CEO Perspective

- **Strategic fit versus technical fit**

- **CEO seeks fit into the agency's business strategy.**

- **CEO may modify CIO's rating to reflect project's longer-term fit with the corporate strategic direction**
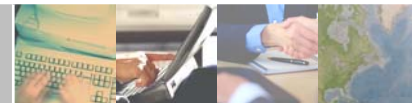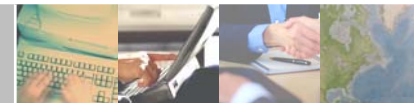
Strategic Risk – CEO Perspective

- **Risk is rated from a 'macro' perspective**
  - Risk is essential to remain competitive, just has to be managed

- **CEO regards risk from two perspectives:**
  - Economic Risk if corporate environment changes
  - Organizational Risk if corporate organizational changes are pending

Applying the Metrics

- **Project Assessment Sheet**
  - CIO Perspective
  - CEO Perspective
- **Value – Risk Quadrant**
- **PPMB Using Value-Risk**
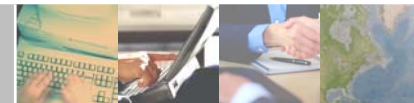 - Generalized cases
  - Considering Project Status

Project Review – CIO Perspective
(Actual Case Study)

Project Name:

Criteria	Description	Value	Score	Weight	Wt Score
IM/IT Value	**Reduced costs**	**10**		**.1**	
	Increased Capability:				
	* Stability/Reliability	**10**		**.1**	
	* Compliance	**10**		**.05**	
	* Security	**10**		**.05**	
	Greater Customer satisfaction	**10**		**.1**	
IM/IT Fit	**Current Technical Environment**	**10**		**.15**	
	Future Technical Environment	**10**		**.05**	
IM/IT Risk	**Implementation Risk:**				
	* More expensive than planned	**10**		**.1**	
	* Longer than planned	**10**		**.1**	
	Operational Risk (will not complete)	**10**		**.2**	
	Total:			**1.0**	
	Project Score (Value + Fit – Risk):				

Project Review – The CEO Perspective

Project Name:

Criteria	Description	Value	Score	Weight	Wt Score
IM/IT Value	Reduced costs	10		.1	
	Increased capability:				
	Stability & Reliability	10		.1	
	Compliance	10			
	Security	10			
	Greater Customer satisfaction	10			
IM/IT Fit	Current Technical Environment	10			
	Future Technical Environment	10		.05	
IM/IT Risk	Implementation Risk:				
	More expensive than planned	10		.1	
	Longer than planned	10		.1	
	Operational Risk (will not complete)	10		.2	
Total:				1.0	
Project Score (Value + Fit – Risk):					

Project Name:

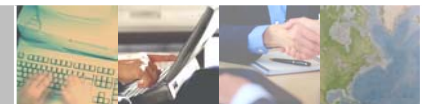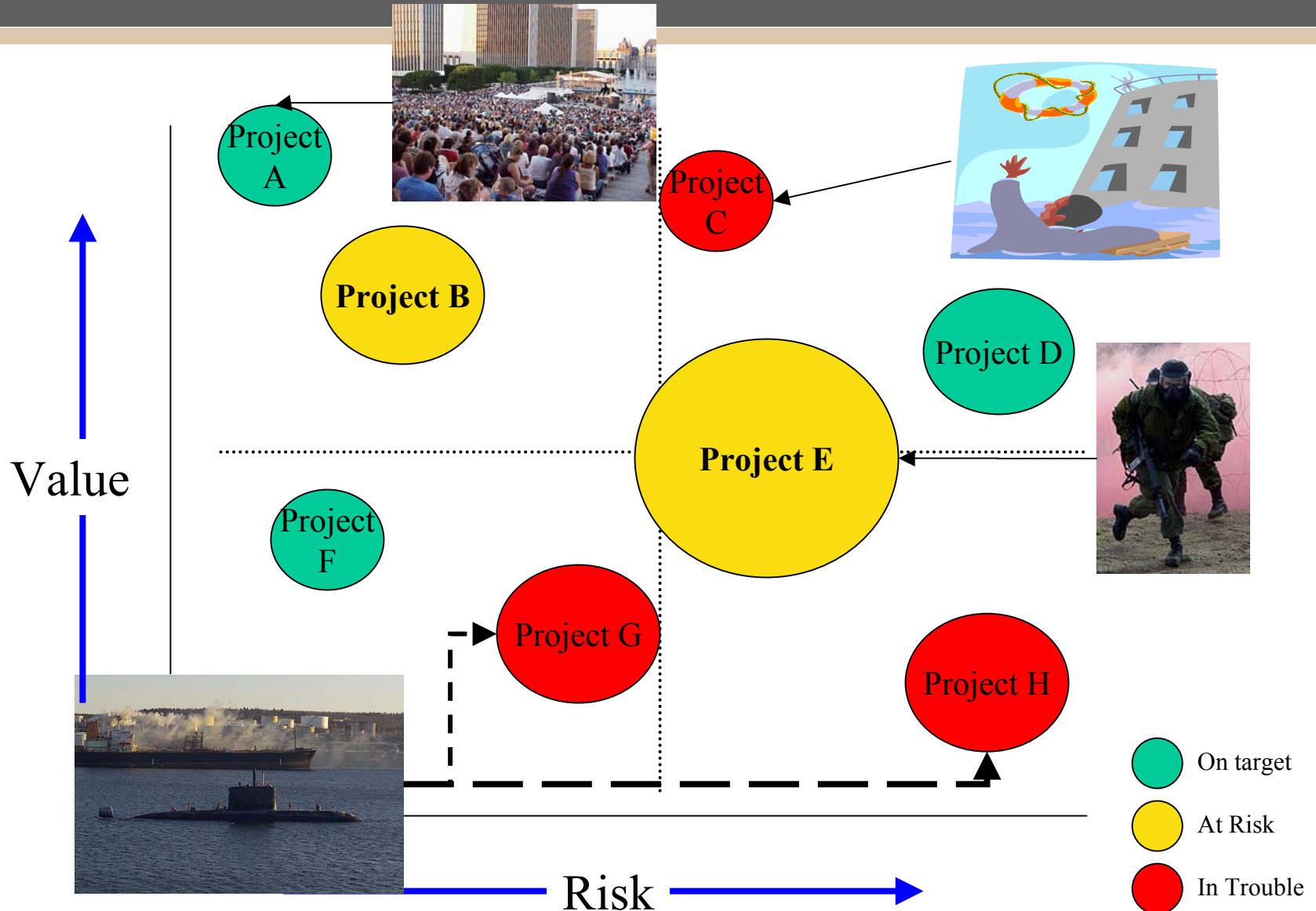| Criteria	Score	Weight	Wt Score
ROI			
FIT			
Prob			
Project Score:			

Add:
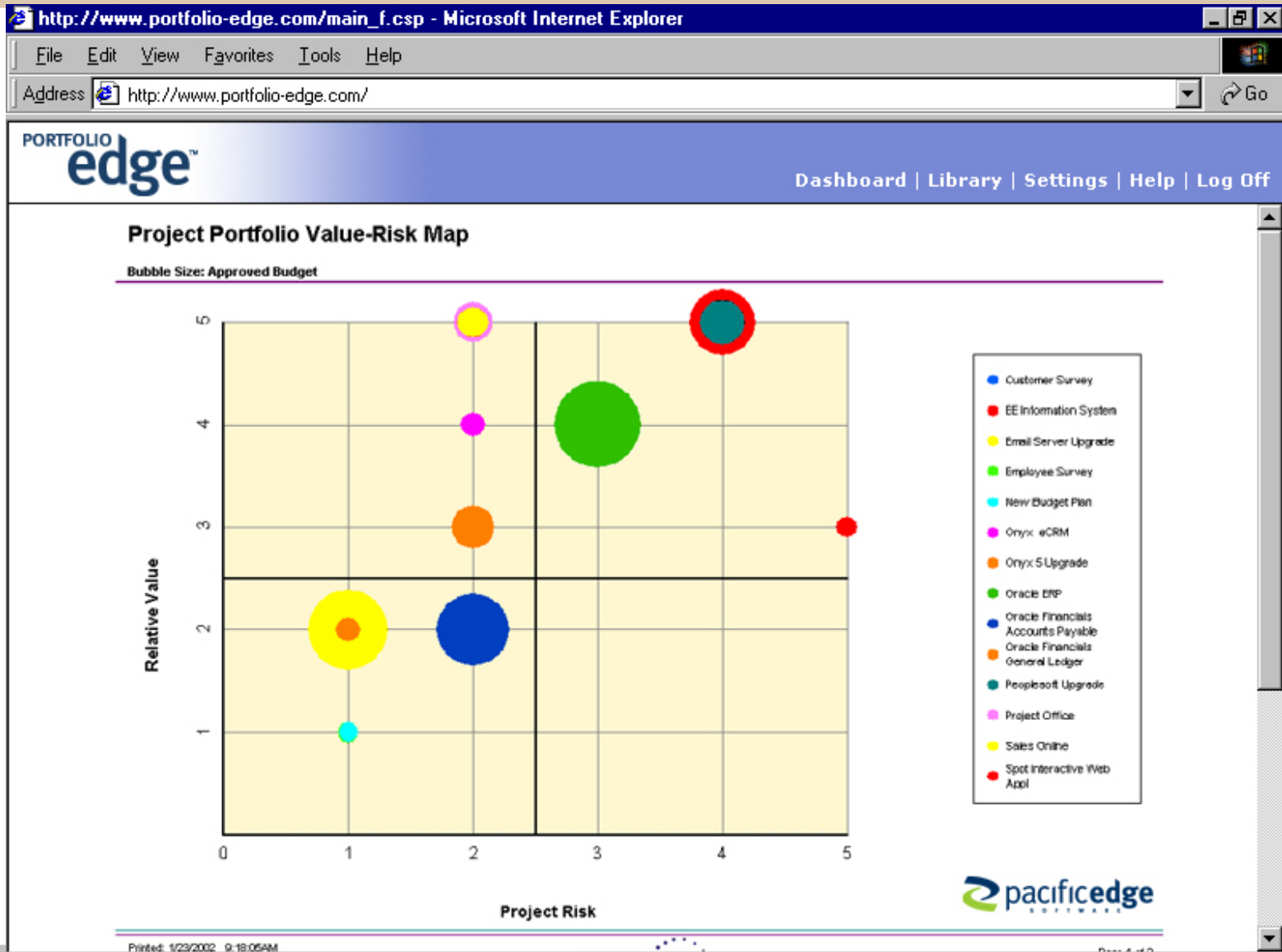Strategic Fit
Economic Value
Organizational Risk
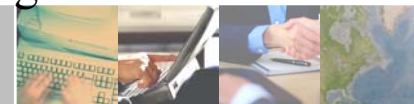
Projects in a Portfolio
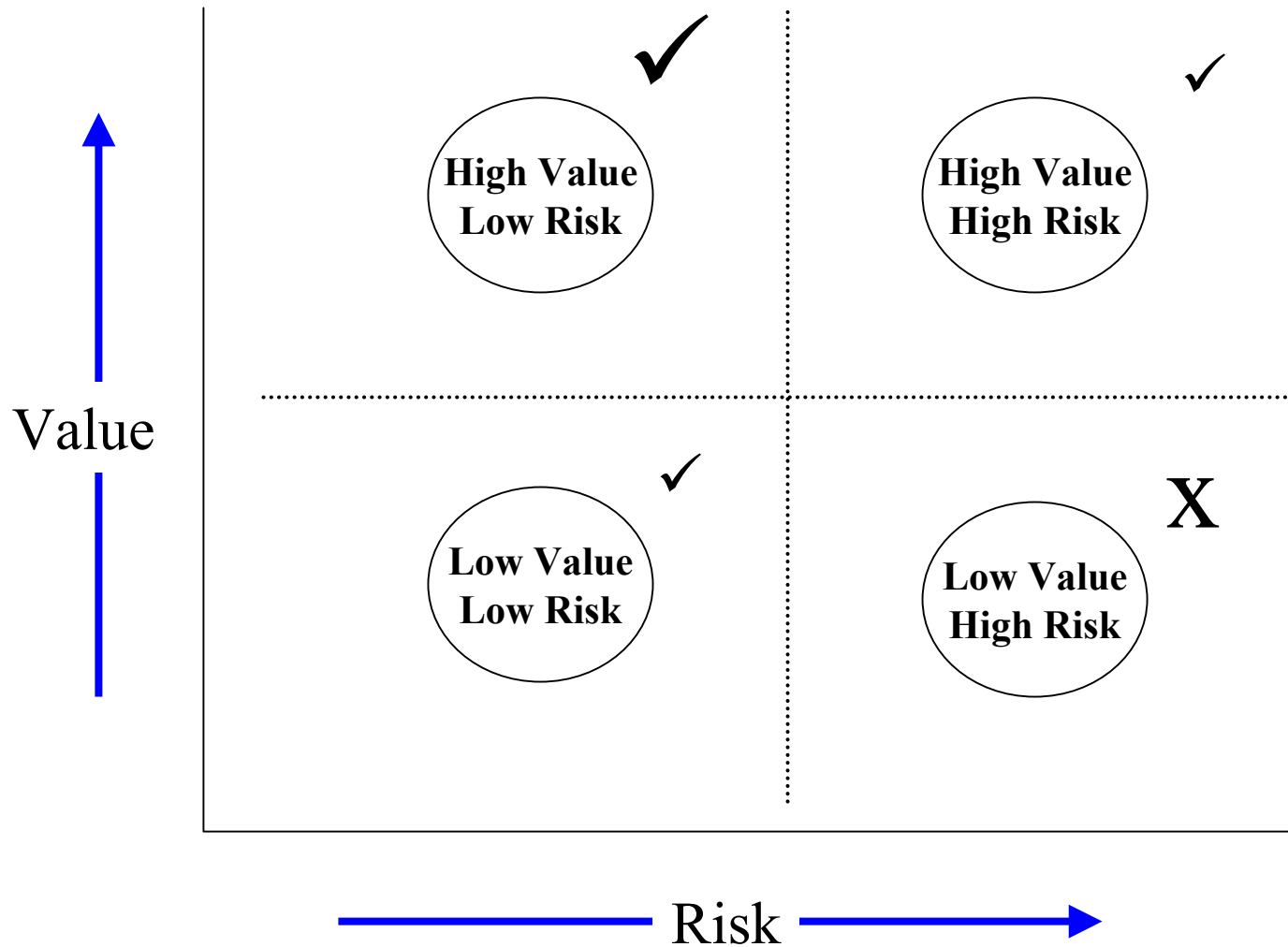
Project Portfolio - Utility

Example of Tools Available
(Courtesy Gartner)

Portfolio Management Tools – 2
(Courtesy Gartner)

Implement an IT Governance Implementation Plan

- **Steps**
  - Set up a governance organizational framework;
  - Align IT strategy with business goals,
  - Understand and define risks,
  - Define target areas,
  - Analyze current capability and identify gaps;
  - Define implementation strategies/activities
  - Define implementation projects
  - Measure results and repeat

- **To assist in IT assessment, gap analysis and performance management**
  - Control Objectives for Information and related Technology (CobiT)
  - US FEAF Performance Reference Model
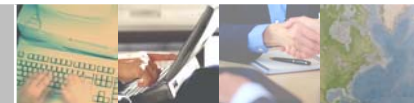
Project Management

- **Great governance and great plans poorly implemented are useless**

- **Great project management and poor plans and poor governance are useless**

- **Project management IT Achilles Heel**

- **Project Management Institute**

  - solid guidelines

  - PMP designation

- **Project Management Centre of Expertise**

  - Corporate asset for all projects

  - Very useful to increase success of projects

IT Governance Who and When

- **IT Governance Maturity Model (IT Governance Institute)**
  - 0 – Nonexistent   - Management processes are not applied at all
  - 1 – Initial   - Process are ad hoc and disorganized
  - 2 – Repeatable   - Processes follow a regular pattern
  - 3 – Defined   - Processes are documented and communicated
  - 4 – Managed   - Processes are monitored and measured
  - 5 – Optimized   - Best practices are followed and automated

Nonexistent	Initial	Repeatable	Defined	Managed	Optimized
0	1	2	3	4	5

Current State   Industry BP
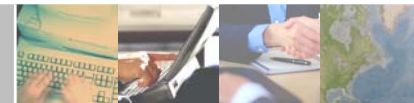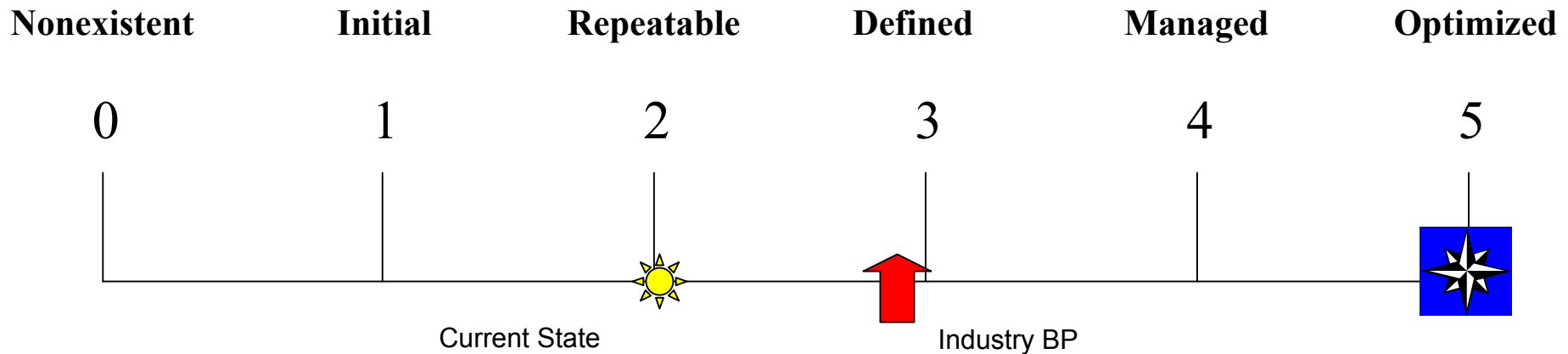
Operational Level Governance
IT Infrastructure Library (ITIL)

- **Emerging Operational Level Management Framework**
- **Based upon "Best Practices" for sustaining IM/IT infrastructures**
- **Strategic Governance has to empower operational level managers**
- **Consists of following services:**

➢**Service Desk**	➢**Service Level Management**
➢**Incident Management**	➢**IT Service Continuity Management**
➢**Problem Management**	➢**Availability Management**
➢**Change Management**	➢**Capacity Management**
➢**Release Management**	➢**Financial Management**
➢**Configuration Management**	
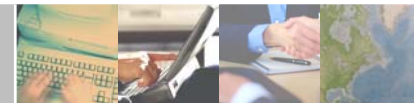
Initiative Synchronization – It All Fits

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                    │      IM/IT Plans/Enterprise Arch             │
                    └─────────────────────────────────────────────┘
```

Write Plan	Strategic IM/IT Vision	Strategic IM/IT Arch	IM/IT Priorities	IM/IT Capability Implementation Schedule	Update Plan

```
┌─────────────────────────────────────────────────────────────────────────┐
│                      IM/IT Governance                                     │
│         (Use Projects to Implement Scheduled Capabilities)                │
└─────────────────────────────────────────────────────────────────────────┘
```

Authority & Resources To Start	Definition & Initial Estimate	Authority & Resources To Plan	Detailed Plan & Costing	Authority & Resources To Execute	Status Reports	Transition Plan	Transition/ Sustainment Resources

```
┌───────────────────────────────────────────────────────────────────────────┐
│  Initiate          Plan              Execute              Closeout          │
│  Project                                                                    │
│                                                                             │
│               Project Management Framework                                  │
└───────────────────────────────────────────────────────────────────────────┘
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IT Governance - Concluding Comments

- **IT Governance part of overall Enterprise Governance**
  - Manage IT like any other corporate asset
  - IT becoming key corporate value delivery enabler
- **Existing body of governance knowledge**
  - E.g. Information Technology Governance Institute, OECD
  - ITIL (UK Office of Government Commerce)
- **Enterprise Architecture for**
  - strategic alignment,
  - efficient resource management and
  - capability delivery
- **Project Management to implement**
- **Incrementally move up Governance Maturity Model**
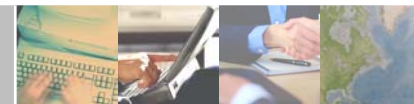
We are Corporate CIO. Resistance is Futile. You will be assimilated.

- Governance is not always well received
- Involve business
- Be Tactful

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Thank-you for your attention

Questions ?

_experience the commitment

CGI

IM/IT Governance and Portfolio Management
Presented to: Open Group EA Conference Brussels

Robert (Bob) Weisman, Partner and Executive Consultant, EA Leader, CGI
Contact: robert.weisman@cgi.com or (613)566-4689