

# CGEIT Exam Prep: Week 10

## Final Review



Webinar URL: <http://tinyurl.com/cgeitPrep>  
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Dec 10, 2009

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## Resource Reminders

- **Share questions \ comments with class**
  - Use: [cgeit@tunitas.com](mailto:cgeit@tunitas.com) or wiki
- **Lectures and links**
  - <http://www.tunitas.com/cgeit>
- **Class Wiki for notes and candidate contributions**
  - <http://cgeitexamprep.wikispaces.com/>
- **Weekly sample questions generally found at:**
  - <http://Tinyurl.com/cgeit-wk#> where # is the week number
- **CISA CPE (IT Governance Domain)**
  - 1 CPE hr for each class hr
  - Will send out documentation week of Dec 15

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## Schedule

- **Dec 12: CGEIT Exam**
  - Make sure to confirm location; allow for plenty of time to park, etc
  - Bring a supply of #2 pencils
  - If you are handicapped by poor eyesight.
    - Consider bringing magnifying glass as 'bubble sheet' is faint where it comes to entry of candidate & test number
    - Consider bringing some sort of pen light as lighting may be suboptimal
- **Dec 17: Exam Debrief**
  - Will send out a surveygizmo link this weekend. Please respond as the feedback will allow us to do better by candidates next time around

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## Agenda

- **Exam strategy**
- **Big Picture bullets by domain**
- **More on Value Delivery**
- **Your questions**

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## Exam Strategy | Governance Perspective

- Questions are subtle but not tricky
  - have a *CGEIT* rationale for selecting the option that you have.
    - Select a response option for reason related to IT governance
      - E.g. oversight vs. operations
- Try to identify the domain from which question was drawn
  - Then, apply general principles of that domain

## Exam Strategy | Incomplete Information

- Question may not provide as much information as seems necessary to unambiguously determine correct option
  - Be willing to apply your understanding of the most likely context for the question
    - Item writers are affected by their own bias about what is 'generally true' of IT and organizations and may not feel the need to include such information in the question
    - Demonstration of candidates maturity



## Exam Strategy | Guessing

- Best of 4 multiple choice test
  - No penalty for guessing / incorrect answers
    - Answer every question
      - Worst case: eliminate those answers that are clearly wrong and then guess 'intelligently'; e.g. pick the option that seems to have most general applicability
    - If have 'no idea'
      - Select the longest response option
      - Or, 'C'



## Exam Strategy | Attitude

- Take the test serious
  - Exercise caution with items that seem overly easy, subjective or 'irrelevant'
    - Give those items a second read,
    - ask 'what might I be missing',
    - know what governance principle is applied in your answer.
- With this test, *time is your friend* ... use it!



## 'Big Picture' Principles / Themes

- Small number of ideas are pervasive in the CGEIT book.
  - Choose question options that are consistent with the relevant principles.
  - If choosing answer, that is inconsistent with the principles, have a good (*governance*) reason why not!



## General Governance

- Need for governance derives from Board responsibility to grow and protect enterprise assets
  - Top down directives
    - Alignment & value creation [build upon strategy]
  - Bottom up reporting
    - Performance & risk reporting
- IT governance is special case of corporate governance



## Frameworks

- Frameworks represent enterprise commitment to a particular discipline of 'what needs to be accomplished' in addressing a particular set of problems
  - 'best practice'; customization; internally development
- Frameworks cascade from the top down
  - IT frameworks should elaborate corporate level governance framework (COSO)
  - Partial ordering of frameworks
    - 'domain' or 'task' frameworks, may provide detail where others are lacking (e.g. COBIT PO10 and PMPBOK)
    - Hierarchical relations need not be strict



## Frameworks (cont)

- Frameworks vary in breath (application) and specificity (detail)
  - More detail => higher level of standardization => higher maturity
- Governance frameworks organize activities related to governance
  - Value delivery, risk management, performance improvement

## Alignment

1. IT strategy must support strategy defined by business:
  - IT imitative results in the achievement of specific strategic business objectives, and / or
  - IT initiative enables achievement of specific strategic business objectives
    - 'enables' = increases likelihood of success

Top down: business strategy defines business objectives => IT strategy

If IT does not explicitly support objectives as above, then IT is not strategic. IT need not be strategic for all objectives.

## Alignment(cont)

- Business capitalizes on opportunities created by IT
  - Business strategy recognizes capabilities provided by IT ... test for this less clear than converse
- Beyond strategic initiatives, the internal (non aligned) It strategy should be focused on cost effectiveness, (ie value is greater when cost is less)



## Value Delivery

- IT investments should be managed as portfolio, this means that each investment considered in the context of all investments
- IT investments must be valued in terms of effect on business outcome
  - Create or enable business objectives (quantified benefit)
  - Productivity improvement / lower cost => greater value
- Investment returns evaluated on a risk adjusted basis



## Risk Management

- Risk owned by the business
  - Risk acceptance determined by business leader
  - Duty to report risk in business terms
  - Duty to report risk on continuing basis
  - Duty to re-evaluate and report risk on events
- Relevance of risk to any / all information criteria (eeciacr)



## Resource Management

- Standardization & process maturity is a necessary condition of resource maximization.
  - Driven by enterprise architecture
- Maximize resource capability in areas of core competency
  - Otherwise seek most cost effective (out)source



## Performance Measurement

2 category of measures; indicate distinct purposes

- **Contribution to business objective(s)**
  - Cascade from business scorecard
    - Indicates achievement of IT goals
  - Subject to dilution; compensate by collecting multiple measures
  - Diagnostic of issues related to failures in strategy
- **Operational efficiency and effectiveness**
  - Service metrics marking continuous improvement (or not)
  - Diagnostic indicators of defects / failures in process



## Value Delivery Review



## IT Portfolio Management

- **Systematic approach to manage a large number of IT projects**
- **Benefits**
  - the quantification of IT efforts, enabling measurement and objective evaluation of investment scenarios



## Val IT

- **A framework for the governance of IT investments**
- **A formalized statement of principles and processes for IT portfolio management.**



## Val IT Drives Business Value

- **Provides**
  - a set of guiding principles
  - processes supporting these principles defined in terms of management practices



## Val IT Domains

- **Value Governance (VG)**
- **Portfolio Management (PM)**
- **Investment Management (IM)**



## Val IT -- COBIT

- **Val IT focuses on the investment decision**
  - are we doing the right things?
  - are we getting the benefits?
- **COBIT focuses on the execution**
  - are we doing them the right way?
  - are we getting them done well?



## Val IT Principles

- **IT-enabled investments will :**
  - Be managed as a portfolio of investments
  - Include the full scope of activities that are required to achieve business value
  - Be managed through their full economic life cycle
- **Value delivery practices will:**
  - recognize that there are different categories of investments that will be evaluated and managed differently
  - define and monitor key metrics and respond quickly to any changes or deviations
  - engage all stakeholders and assign appropriate accountability for the delivery of capabilities and the realization of business benefits
  - be continually monitored, evaluated and improved



## IT Portfolio Management

- **The Management Team**
- **The Selection Criteria**
  - Value Determination
  - Risk Rating
  - Tangible and Intangible Benefits
- **Inventory**
  - Complete list of all projects and support services
  - With enough descriptive information about each to allow them to be analyzed and compared
- **Business Case**
  - Value metrics
  - Risk metrics
  - Intangibles
- **Corporate Standards**
  - NPV
  - IRR
  - Ratios
- **Performance Measures**
  - After investment decision
  - Actuals vs Expected

## Benefits Classification

Value Driver	Type	Financials	Intangibles
<ul style="list-style-type: none"> <li>• Market share growth</li> <li>• Regulatory or control enhancements</li> <li>• Revenue growth</li> <li>• Productivity</li> <li>• Operational risk reduction</li> <li>• Quality improvement</li> <li>• Cost containment</li> <li>• Capital reduction</li> </ul>	<ul style="list-style-type: none"> <li>• Mandatory Change</li> <li>• Maintenance</li> <li>• Business Growth</li> <li>• Business Transformation</li> </ul>	<ul style="list-style-type: none"> <li>• Bus Drivers</li> <li>• Risk Ratings</li> <li>• Resource Requirements</li> <li>• NPV</li> <li>• ROI</li> <li>• IRR</li> <li>• Cash Flows</li> <li>• Total Benefits</li> <li>• Cost savings'</li> <li>• Implementation duration</li> <li>• Breakeven duration</li> </ul>	<ul style="list-style-type: none"> <li>• Reputation enhancing</li> <li>• User defined metrics</li> <li>• Employee moral</li> </ul>

## Risk Identification

Project Risks	Support Services Risk
<ul style="list-style-type: none"><li>• Project delivery risk</li><li>• Project budget compliance risk</li><li>• Project time frames</li><li>• Level of staffing and other resources</li><li>• Availability of data</li><li>• Architectural complexity</li><li>• Funding stability</li><li>• Changes to scope, requirements, priorities, or external environment</li><li>• Extent of new technology or process deployment</li></ul>	<ul style="list-style-type: none"><li>• Ability to deliver to business needs/degree of business alignment</li><li>• Impact on business performance</li><li>• Time to issue resolution</li><li>• Level of compliance with policy, regulation, and law</li><li>• Security and business continuity readiness</li><li>• Technology performance and availability</li><li>• Architectural complexity</li><li>• Level of staffing and other resources.</li><li>• Vendor viability</li></ul>

Governance process determines the most important risks  
Business cases describes how benefits compare to risks

## Monitoring

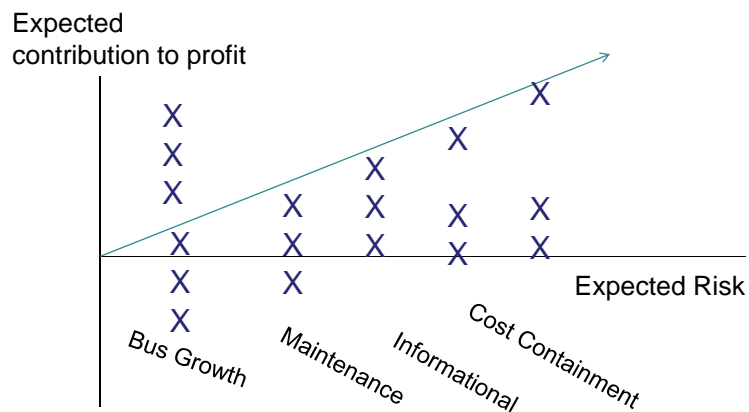
- **Different purposes need different measures**
- **Portfolio Managers**
  - Value measures for the portfolio
  - Impact statements
  - Cost-benefit analysis
  - Risk assessments
- **Program Managers**
  - Project status—milestone completion
  - Project risks
  - Actual spending
  - Critical path analysis

## Sun IT Portfolio Management

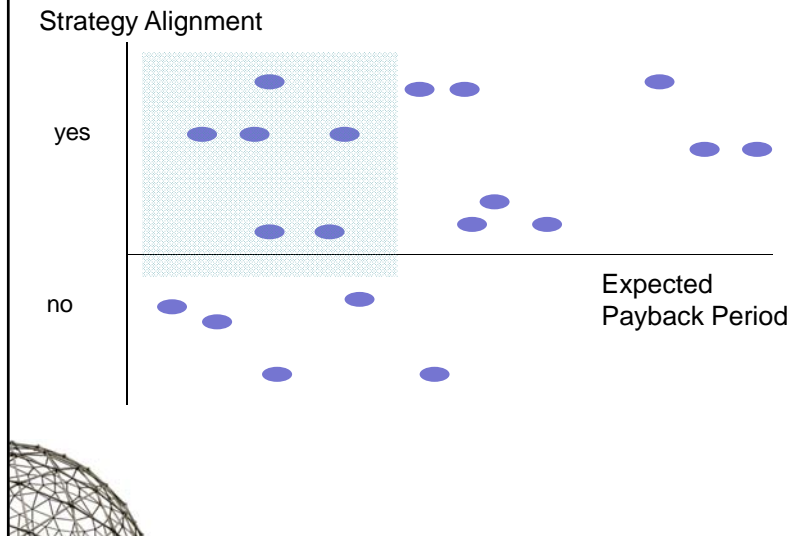
- CIO and PM team
- Meets every 2 weeks
- Reviews all IT projects underway and proposed
- Uses Sun standard Value and Risk metrics
- Determines what changes are necessary across the board
- Never looks at one project in isolation



## Portfolio 1



## Portfolio 2



## Key Questions for Val IT Domain

- **What are we spending our available resources on now?**
  - What are priorities—alignment with objectives
  - How are resources allocated
- **Who are we and what are we trying to accomplish?**
  - Strategic alignment
  - Value drivers
- **What are the investments that will provide the greatest leverage?**
  - Are there corp standards to meet
  - Formal business case models and template
  - Identified financial measures
  - Prioritized intangibles—market dominant, easier friendlier comp, safety is first
- **How many investments can we successfully take on at a given time?**
  - Resource management
- **How will these investments interact?**
  - Duplication of efforts
  - Dependencies/synergies