

# IT Frameworks & How to Use Them Effectively

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# Agenda



- Introductions
- How COBIT is aligned to IT Frameworks
  - What is a framework?
  - What is a standard?
  - What is COBIT?
  - High-level overview of frameworks
- How to effectively use COBIT with the common IT Frameworks
  - Discussion of how each framework is mapped with COBIT
  - Alignment with ITGC
- Q&A



# Introductions



- Jennifer Noe is an IT Audit Specialist in Internal Audit at Allstate Insurance Company in Northbrook, Illinois.
- She is currently providing IT and business management assurance services for the Investments division at Allstate and is a member of both the IT and Fraud Centers of Excellence.
- For the five years prior, Jennifer managed audits and provided IT and SOX internal control consulting for Allstate's technology organization.
- Jennifer also has eight years of management and consulting roles within the IT and Human Resources divisions at Allstate.
- Jennifer is a member of both the IIA and ISACA and maintains the CISA and PHR certifications.
- Michael Podemski is a Manager in the Advisory Services practice of Ernst & Young LLP.
- He focuses on assurance engagements, including Financial Audit IT Integration and Service Organization Controls Reporting.
- Prior to Ernst & Young, he has 14 years of experience in IT Internal Audit, IT operations, and IT solutions delivery.
- Michael has provided these services to companies comprising a wide range of industries including: banks and capital markets, financial services, insurance, and pharmaceuticals.
- In addition to his role in the Advisory Services practice, Michael is a board member of the Chicago chapter of ISACA and the Chicago ACL User Group.



# How is COBIT aligned to IT Frameworks



- What are characteristics of a framework?
  - A set of leading or good practices
  - Reusable
  - Flexibility and extensibility
  - Descriptive
  - Pick and choose



# How is COBIT aligned to IT Frameworks



- What is an example of a framework?
  - Microsoft .NET Framework
    - It's a library of reusable components of common programming activities such as exception handling, database access, and network communications
    - Programmers can select which components that they would like to implement
    - Programmers can extend the capabilities of these components if they choose



# How is COBIT aligned to IT Frameworks



- What are characteristics of a standard?
  - A set of leading or good practices
  - Agreed upon
  - Compliance
  - Prescriptive
  - Adherence



# How is COBIT aligned to IT Frameworks



- What is an example of a standard?
  - Payment Card Industry Data Security Standards
    - It's an information security that protects major debit, credit, pre-paid, ATM, POS, etc.
    - There are set of requirements that organizations must comply to in order to protect data
    - There are penalties if you don't meet the requirements



# How is COBIT aligned to IT Frameworks



- What is COBIT?
  - It is an IT governance framework that allows organizations to bridge the gap between control requirements, technical issues and business risks
  - It enables organizations to develop policy and procedures for IT control
  - It emphasizes regulatory compliance and helps organizations to increase the value attained from technology



# How is COBIT aligned to IT Frameworks



- How does COBIT support IT Governance?
  - Ensures that the IT is aligned with the business organization
  - Ensures that IT enables the business and maximizes benefits
  - Ensures that IT uses resources responsibly
  - Ensures that IT risks are managed appropriately



# How is COBIT aligned to IT Frameworks



- What are the components of COBIT 4.1?
  - Four interrelated domains
    - Planning and Organize
    - Acquire and Implement
    - Deliver and Support
    - Monitor and Evaluate
  - Thirty-four IT processes
  - Maturity Model
  - RACI Chart



# How is COBIT aligned to IT Frameworks



- How do you use COBIT for...?
  - IT Investments
  - Risk Management
  - Project Management
  - Enterprise Architecture
  - Software Development
  - IT Service Management



# How is COBIT aligned to IT Frameworks



- How do I manage IT investments?
  - Val IT is a governance framework that addresses IT-enabled business investments through:
    - Value Governance
    - Portfolio Management
    - Investments Management



# How is COBIT aligned to IT Frameworks



- How do I manage IT risks?
  - Risk IT is a framework for organizations to identify, govern and manage IT risk:
    - Risk Governance
    - Risk Evaluation
    - Risk Response



# How is COBIT aligned to IT Frameworks



- How do I manage projects?
  - Project Management Body of Knowledge (PMBOK) is book that provides standardized terminology and guidelines to manage a project:
    - Consists of five processes: Initiate, Plan, Execute, Control and Close
    - Consists of nine knowledge areas: Integration Management, Scope Management, Time Management, Cost Management, Quality Management, HR Management, Communications Management, Risk Management, and Procurement Management



# How is COBIT aligned to IT Frameworks



- How do I manage software development?
  - The Capability Maturity Model is a process model for software engineering:
    - It's a set of core processes to manage risks, requirements, quality and projects
    - It's a maturity model with five levels



# How is COBIT aligned to IT Frameworks



- How do I manage my enterprise architecture?
  - The Open Group Architecture Framework (TOGAF) is a framework for designing, planning, implementation, and governance of an enterprise architecture:
    - Four Domains – Business, Applications, Data and Technical
    - Architecture Delivery Method
    - Enterprise Continuum



# How is COBIT aligned to IT Frameworks



- How do I manage IT Services?
  - ITIL is a set of practices for IT service management (ITSM) that focuses on aligning IT services with the needs of business:
    - It's a set of five core publications that cover the ITSM lifecycle
      - Service Strategy
      - Service Design
      - Service Transition
      - Service Operation
      - Continual Service Improvement



# How to effectively use COBIT with the common IT Frameworks



- ISACA has defined several mapping documents that align COBIT with the IT Framework including:
  - Mapping of PMBOK to COBIT 4.0
  - Mapping of TOGAF 8.1 to COBIT 4.0
  - Mapping of SEI's CMM for Software Development to COBIT 4.0
  - Mapping of ITILv3 to COBIT 4.0



# How to effectively use COBIT with the common IT Frameworks



- Mapping of PMBOK to COBIT 4.0
  - The primary purpose is to provide guidance to IT process owners by identifying the COBIT processes for which PMBOK provides more detailed guidance and to highlight the areas of PMBOK that should be considered for each process. Therefore, the mapping highlights how the processes in PMBOK can support COBIT.
  - A secondary objective is to provide guidance to those using PMBOK as the basis for project management practices as to the areas of COBIT they should be considering when applying the practices to projects involving IT. The mapping also identifies the COBIT control objectives that should be applied during various PMBOK processes.



# How to effectively use COBIT with the common IT Frameworks



- Mapping of PMBOK to COBIT 4.0
  - Use to establish common program/project management governance across an organization
  - Use to perform a pre- or post- implementation review of a program or project
  - Use to mature your program or project management delivery capabilities
  - Use to reduce risks associated with program or project management



# How to effectively use COBIT with the common IT Frameworks



- Mapping of TOGAF 8.1 to COBIT 4.0
  - TOGAF doesn't seek to duplicate or compete with other frameworks



# How to effectively use COBIT with the common IT Frameworks



- Mapping of TOGAF 8.1 to COBIT 4.0
  - Use to implement enterprise architecture capabilities especially with business, application, data and technology architecture domains
  - Use to benchmark your organization's architectural standards
  - Use to perform a pre- or post- implementation review of an architectural solution



# How to effectively use COBIT with the common IT Frameworks



- Mapping of SEI's CMM for Software Development to COBIT 4.0
  - Compares the Capability Maturity Model for Software maturity model levels and key process area goals with the high-level control objectives of COBIT.



# How to effectively use COBIT with the common IT Frameworks



- Mapping of SEI's CMM for Software Development to COBIT 4.0
  - Use to benchmark to software development management procedures
  - Use to perform a pre- or post- implementation review of a major software implementation or upgrade



# How to effectively use COBIT with the common IT Frameworks



- Mapping of ITILv3 to COBIT 4.0
  - Compares the components of ITIL V3 with the components of COBIT and shows the coverage of IT governance focus areas.
  - When used together, COBIT and ITIL provide a top-to-bottom approach to IT governance leading to service management.



# How to effectively use COBIT with the common IT Frameworks



- Mapping of ITILv3 to COBIT 4.0
  - Use to evaluate your organization's IT Service Management capabilities
  - Use to mature your IT Service Management capabilities
  - Use during a pre- or post- implementation review to evaluate operational readiness



# How to effectively use COBIT with the common IT Frameworks



- Alignment with IT General Controls
  - Systems Development
  - Change Management
  - Security
  - Computer Operations



# Q&A

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