

8th Annual PMI OVOC Project Management Symposium

“Reducing the Failure Rate of IT Projects by Integrating PMBoK and ITIL”

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Abstract

- Implementing IT projects the same risks and challenges that are common to all types of projects. As a PMP and ITIL V3 Expert (and V2 Service Manager), I will identify how to integrate IT projects using PMBoK and ITIL. This will include:
 - Brief overview of the PMBoK knowledge areas that must be integrated with the ITSM
 - Very brief overview of ITIL V2 and V3 Concepts pertaining to Project Management
 - Some differences between the two frameworks
 - Risks and challenges that these differences impose on IT projects and how they can negatively impact the desired business outcomes
 - Propose some recommendations for integrating the PMO and ITSM organization to achieve the business outcomes and deliver successful IT projects.

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Inspiration for Change

- "Change is the law of life and those who look only to the past or present are certain to miss the future." -- John F. Kennedy
- "For any student of history, change is the law of life. Any attempt to contain it guarantees an explosion down the road; the more rigid the adherence to the status quo, the more violent the ultimate outcome will be." -- Henry Kissinger, *Years of Renewal*



Survey: 40% IT Project Failure Rate [2004-6]

- 66% cited that poor system specification was the largest cause of problems
- 51% blamed the failure on a lack of understanding between IT and business departments
- 49% blamed technology selection as a factor
- 28% of companies said they measure the success of their IT projects after implementation
- Businesses clearly understands the value of IT as they are willing to spend money on developing and updating their IT systems
- Businesses are failing to receive the benefits (ROI) that the investment promised
- Post implementation reviews will enable companies to achieve optimum levels of performance, so they can see a real return on their investments

Source: Avanade, interviewed IT and operations managers from 102 companies, each supporting over 10,000 users, from 2004-2006

PMBok Overview

- Project Management Institute (PMI)
- Version 3: 2004
- Project Management Body of Knowledge
 - Process Groups(5)
 - Knowledge Areas(9)
 - Processes (44)
 - Tools & Techniques (186)
 - Input & Outputs (lots)
- Not a Lifecycle
- No reference to PRINCE2

Knowledge Area Processes	Project Management Process Groups				
	Initiating Process Group	Planning Process Group	Executing Process Group	Monitoring & Controlling Process Group	Closing Process Group
4. Project Management Integration	Develop Project Charter 3.2.1.1 (4.1) Develop Preliminary Project Scope Statement 3.2.1.2 (4.2)	Develop Project Management Plan 3.2.1.1 (4.1) (4.3)	Direct and Manage Project Execution 3.2.1.1 (4.4)	Monitor and Control Project Work 3.2.4.1 (4.6) Integrated Change Control 3.2.4.2 (4.6)	Close Project 3.2.5.1 (4.7)
5. Project Scope Management		Scope Planning 3.2.2.1 (5.1) Scope Definition 3.2.2.3 (5.2) Create WBS 3.2.2.4 (5.3)		Scope Verification (5.4) Scope Control 3.2.4.4 (5.5)	
6. Project Time Management		Activity Definition 3.2.2.5 (5.1) Activity Sequencing 3.2.2.6 (5.2) Activity Resource Estimating 3.2.2.7 (5.3) Activity Duration Estimating 3.2.2.8 (5.4) Schedule Development 3.2.2.9 (5.5)		Schedule Control 3.2.4.5 (5.6)	
7. Project Cost Management		Cost Estimating 3.2.2.10 (7.1) Cost Budgeting 3.2.2.11 (7.2)		Cost Control 3.2.4.6 (7.3)	
8. Project Quality Management		Quality Planning 3.2.2.12 (8.1)	Perform Quality Assurance 3.2.2.12 (8.2)	Perform Quality Control 3.2.4.7 (8.3)	
9. Project Human Resource Management		Human Resource Planning 3.2.2.13 (9.1)	Acquire Project Team 3.2.2.13 (9.2) Develop Project Team 3.2.2.14 (9.3)	Manage Project Team 3.2.4.8 (9.4)	
10. Project Communications Management		Communications Planning 3.2.2.14 (10.1)	Information Distribution 3.2.2.15 (10.2)	Performance Reporting 3.2.4.9 (10.3) Manage Stakeholders 3.2.4.10 (10.4)	
11. Project Risk Management		Risk Management Planning 3.2.2.16 (11.1) Risk Identification 3.2.2.16 (11.2) Qualitative Risk Analysis 3.2.2.17 (11.3) Quantitative Risk Analysis 3.2.2.18 (11.4) Risk Response Planning 3.2.2.19 (11.5)		Risk Monitoring and Control 3.2.4.11 (11.6)	
12. Project Procurement Management		Plan Purchases and Acquisitions 3.2.2.20 (12.1) Plan Contracting 3.2.2.21 (12.2)	Request Seller Responses 3.2.2.6 (12.3) Select Sellers 3.2.2.7 (12.4)	Contract Administration 3.2.4.12 (12.5)	Contract Closure 3.2.5.2 (12.6)

Outputs to ITSM

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5. Project Scope Management		Scope Planning (3.2.2.2) Scope Definition (3.2.2.3) Create WBS (3.2.2.4 (6.1))	Control Scope (3.2.4.4 (6.5))	Validate Scope (3.2.4.5 (6.6))	
6. Project Time Management		Activity Definition (3.2.2.5 (6.1)) Activity Sequencing (3.2.2.6 (6.2)) Activity Resource Estimating (3.2.2.7 (6.3)) Activity Duration Estimating (3.2.2.8 (6.4)) Schedule Development (3.2.2.9 (6.5))		Schedule Control (3.2.4.5 (6.6))	
7. Project Cost Management		Cost Estimating (3.2.2.10 (6.1))	Control Costs (3.2.4.6 (6.7))		
8. Project Quality Management		Plan Quality (3.2.2.11 (6.1))	Perform Quality Control (3.2.4.7 (6.8))	Perform Quality Assurance (3.2.4.8 (6.9))	
9. Project Human Resource Management		Human Resource Planning (3.2.2.13 (6.1))	Acquire Resources (3.2.2.14 (6.2))	Develop Team (3.2.2.15 (6.3))	
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12. Project Procurement Management		Plan Procurement (3.2.2.20 (12.1))	Conduct Procurement (3.2.4.12 (12.2))	Close Procurement (3.2.5.2 (12.6))	

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PMBOK Project/Product Lifecycle

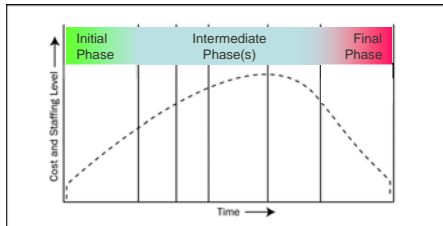


Figure 2-1. Typical Project Cost and Staffing Level Across the Project Life Cycle

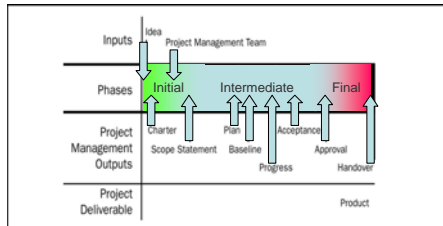


Figure 2-3. Typical Sequence of Phases in a Project Life Cycle

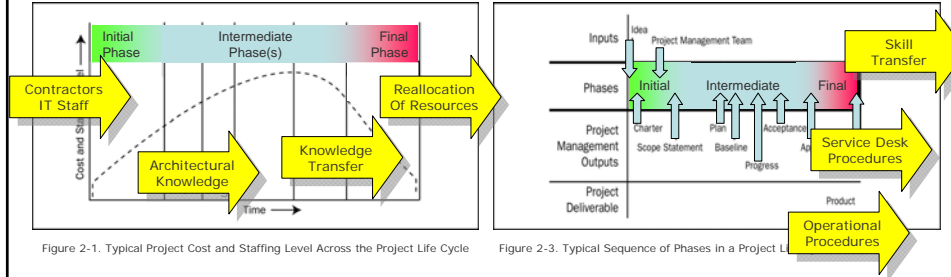
- Project Management is very broad in scope
 - Construction (Engineering firms)
 - Transportation (Concrete Contractors)
 - Software Development (Business Analysts, Programmers)
 - Information Technology (Network & Server administrators)
 - Etc.
- The principles of Project Management apply to all industries

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Outputs to ITSM



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Relationship Between Product & Project Lifecycle

- PMBoK, Figure 2-4

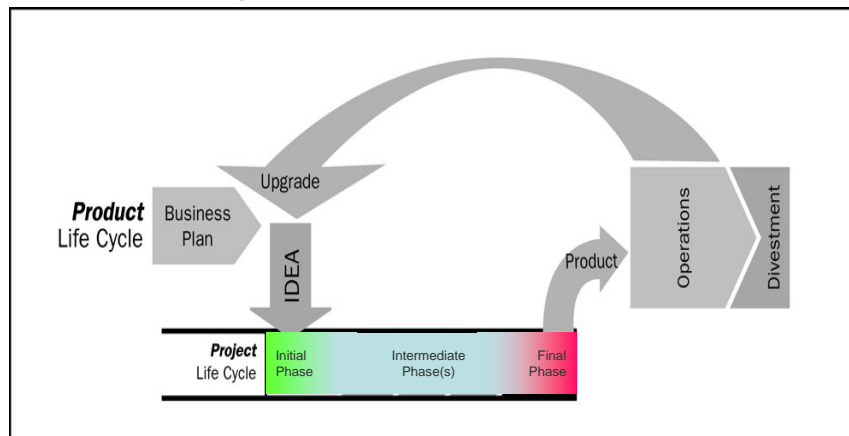


Figure 2-4. Relationship Between the Product and the Project Life Cycles

Was the Product just tossed over the wall to Ops?

- PMBoK, Figure 2-4

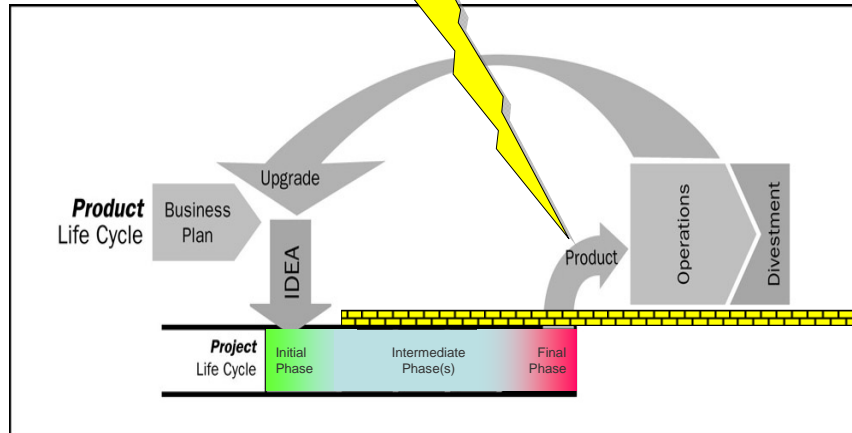


Figure 2-4. Relationship Between the Product and the Project Life Cycles

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PMBoK 4.3.2 : PMIS, CMS and CCS

- Project Management Information System
 - An automated system, used by the project management team to support generation of the project management plan, facilitate feedback as the document is developed, control changes to the project management plan, and release the approved document
- Configuration Management System
 - A subsystem of the overall project management information system
 - The system includes the process for submitting proposed changes, tracking systems for reviewing and approving proposed changes, defining approval levels for authorizing changes, and providing a method to validate approved changes
 - In most application areas, the configuration management system includes the change control system
 - The configuration management system is also a collection of formal documented procedures used to apply technical and administrative direction and surveillance to:
 - Identify and document the functional and physical characteristics of a product or component
 - Control any changes to such characteristics
 - Record and report each change and its implementation status
 - Support the audit of the products or components to verify conformance to requirements.
- Change Control System – 4.3.2.2
 - A collection of formal documented procedures that define how project deliverables and documentation are controlled, changed, and approved.
 - The change control system is a **subsystem** of the configuration management system.
 - For example, for information technology systems, a **change control system can include the specifications (scripts, source code, data definition language, etc.) for each software component.**

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ITIL V2: Relationship Between Project and Change Management (SS8.1)

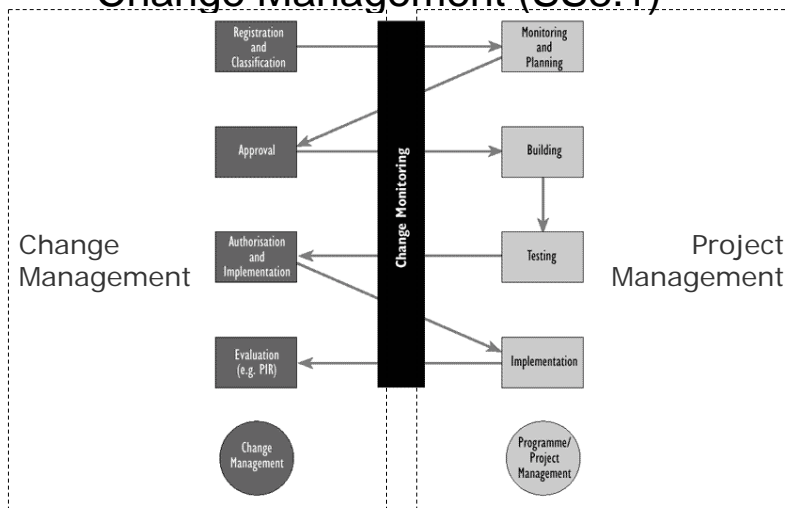


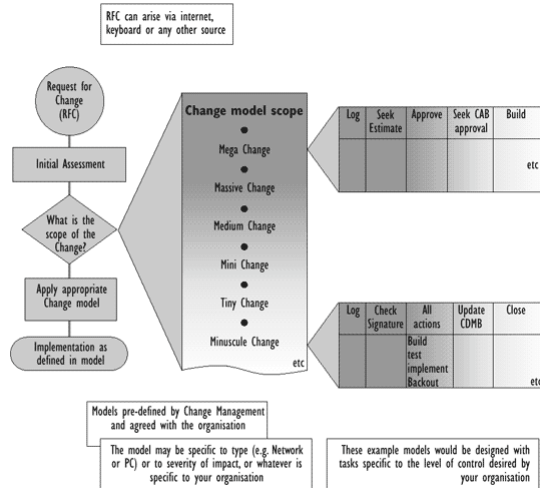
Figure 8.1 - Boundaries between Change Management and program management

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ITIL V2 Change Models (SS8.3)



Models pre-defined by Change Management and agreed with the organisation

The model may be specific to type (e.g. Network or PC) or to severity of impact, or whatever is specific to your organisation

These example models would be designed with tasks specific to the level of control desired by your organisation

Figure 8.4 - An approach for standard Change Management procedures.

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Example of “Mega” Change is a Project

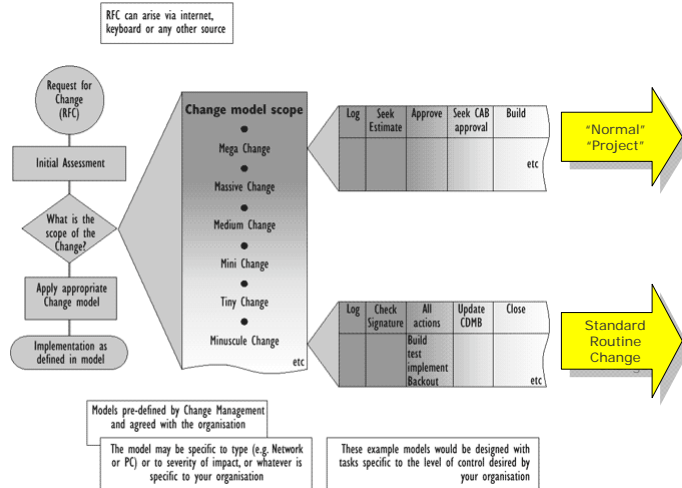


Figure 8.4 - An approach for standard Change Management procedures.

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ITIL Perspective: A Project is a Change

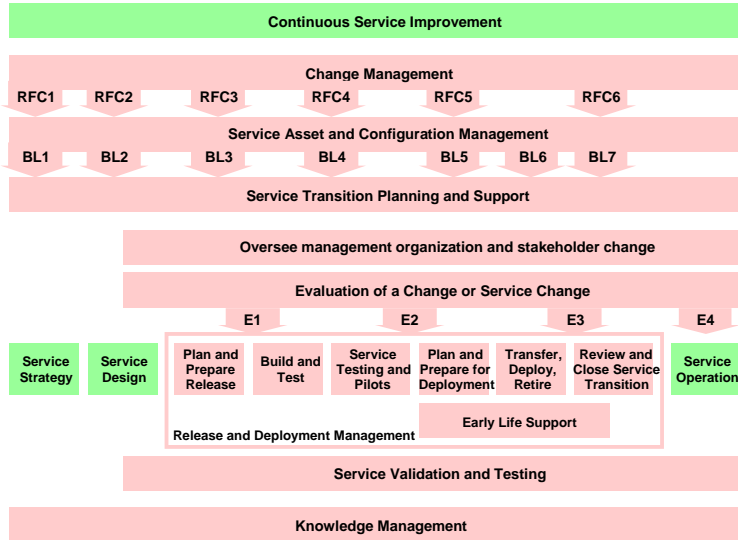
- has a beginning and an end like all Changes
- requires more due diligence, resources, and controls if it has a large capital/operational cost
- has a risk that must be assessed and planned
- must be recorded in Change Management
- **DEFINITION PROJECT:** A temporary organization, with people and other assets required to achieve an objective or other outcome. Each Project has a Lifecycle that typically includes initiation, planning, execution, closure, etc. Projects are usually managed using a formal methodology such as PRINCE2. ITIL V3 Service Transition p. 241.

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ITIL V3 Service Transition Processes



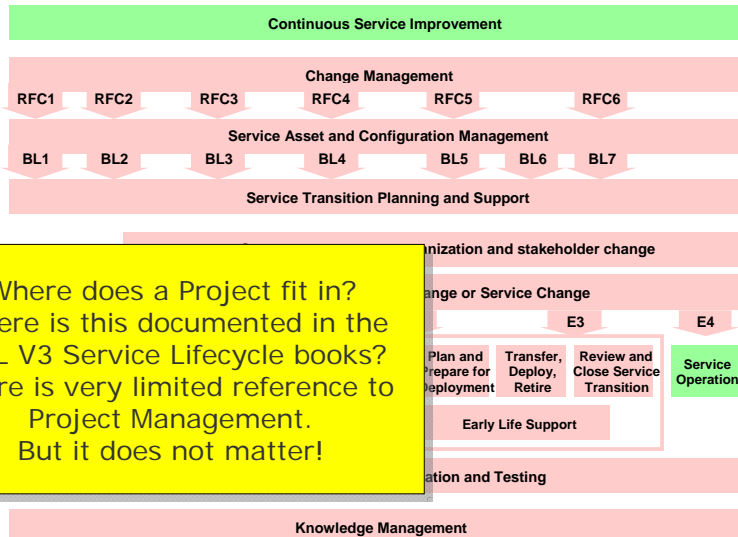
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Source: ITIL V3 Service Transition
 Figure 2.3 The scope of Service Transition

ITIL V3 Service Transition Processes



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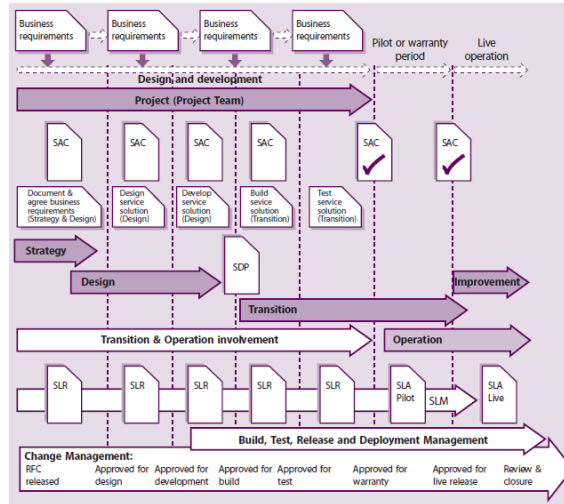
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Source: ITIL V3 Service Transition
 Figure 2.3 The scope of Service Transition

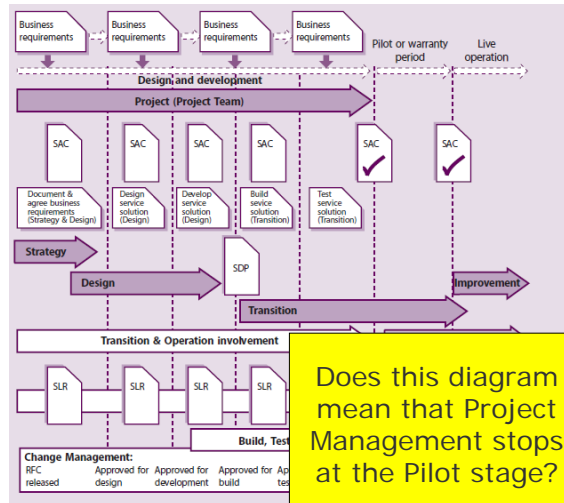
Mentioned in ITIL V3 SD Figure 3.5

- The lifecycle of a service from the initial or changed business requirement through the design, transition and operation stages
- Effective transfer of knowledge is required at all stages between the operational staff and the project staff to ensure smooth progression



Mentioned in SD Figure 3.5

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ITIL V3 Change Models

- Standard (Routine) Change
 - Pre-approved
 - Implementation Plan is useable and repeatable
 - Risk is known and within tolerances
 - Back-out/remediation plan is tested
 - “Operational Change Request”
- Normal Change
 - Scope needs to be established
 - Develop a implementation plan, design, test plan, back-out plan
 - Resources need to be defined
 - Approvals needs to gotten – financial, technical, business
 - Risk needs to be determined and planned for
 - Cost, time duration needs to be determined and scheduled
 - Review the Change – check quality
 - etc.
- Emergency Change

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This sounds like all the sections of a Project Management Plan

Any IT Project is a Change

- ITIL Definition of Change: The addition, modification or removal of anything that could have an effect on IT Services
- An IT Project could have an effect of IT Services therefore be under the control Change Management
- An RFC should be created for a IT Project
- Categorized, Prioritized (Impact, Urgency, other)
- An IT Risk Assessment should be performed to establish the impact to Operations

Replace Cartridge – Update – New SR

Change Record: 123

Category	Standard (Routine) Change	▼
Domain	Output Management	▼
Activity	Replace Print Cartridge	▼
CI	Printer-1	▼
Component	Printer Cartridge: 51649A	▼
Inventory	0	Location: L2-B103
	Click to order 	
NOTICE: Ensure the all print cartridges are "Green Approved"		
Status	Closed	▼

Controls Beyond Just the Project Scope

Change Record: 124

Category	Project		▼
Domain	Computer Software Development		▼
Attributes	Details		▼
Approval	Scope Statement	Pending	▼
Approval	Schedule	Pending	▼
Approval	Cost/Budget	Pending	▼
Approval	Quality Plan	Pending	▼
Approval	Risk Plan	Pending	▼
Status	In progress		▼

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Green IT Risk Assessment

- Materials recycling
 - Is the product environmentally friendly?
 - Will we be charged/fined for disposal of (toxic) waste?
- Power management
 - Does power supply meet 80 PLUS industry standard?
 - Does the device have ACPI or under-volting based on workload?
- Virtualization
 - What is the energy consumption?
 - Blade technology instead of the Project's standalone server?
- Telecommuting
 - Will it increase or reduce environmental and facilities energy costs?
 - Is the outsourced project meeting Green Computing standards?
- Regulatory Compliance
 - Does the international manufacturer comply with our regulations?

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Recommendations

- Pick a common language! What exactly is a Change Control System?
- Leverage Project Management methods for IT Release and Deployment Management and Service Transition as a practice – train ITSM Managers on Project Management
- Integrate the PMO and ITSMO
 - Define formal policies
 - Do the PMO templates have Green IT requirements specified?
 - The integration effort will be a Project! Or is it a Change? Both?
- Establish a “Governance Control/Advisory Board” chaired by a senior executive to resolve “framework” related conflicts

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About the presenter

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- Biography
 - Over 25 years public and private sector project managing and consulting in IM/IT
 - Over 15 years implementing ITIL best practices
 - ITIL V2/V3 Accredited Trainer
 - ISO20000 exam review committee
 - ITIL V2/V3 accredited courseware developer
- About Mountainview, Inc. (www.mountainview.ca) – Training and Facilitation
 - Located in Ottawa since 1992
 - ITSM Project Management
 - ITSM Maturity Assessment based on ISO20000
 - IT Security Assessment based on ISO27000
 - Accredited Courseware Provider – rent our courseware, you provide the trainer and classroom
 - Accredited Training Provider – for all available ITILV3 courses
 - IT Certification Training
 - Accredited by APMG EI EXIN and LCS
 - ITILV2 F, IPSR, IPRC, IPPI, IPAD, SM
 - ITILV3 F, FB, SOA, OSA, RCV, ST, SO, MB
 - ISO20000 F, Prof
 - ISO270000 F
 - Other IT Training
 - PMP for IT Professionals
 - Advanced ITSM Process Design and Implementation
 - Executive Awareness and Business Rationalization
 - Hands-on Workshops

Partners



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Questions?



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