CMMI for Services: An Approach to Improve Your Program Management Office

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Topics

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  - Problems/Questions
- Scoping
  - Challenges
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  - Scoping Decisions and Decisions
- Some Steps Toward the Improvement
- Benefits
- Lessons Learned

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Situation Discussion

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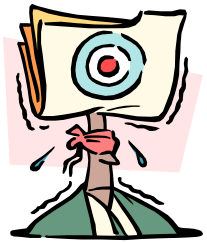
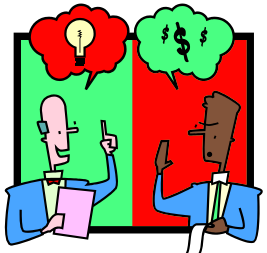
Current Situation – What Business Are We In?

Government Contracts for a variety of Strategic Support Services

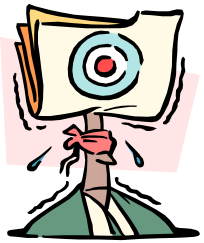
- IDIQ – Indefinite Delivery, Indefinite Quantity
- Program Support & Leadership
- Technical Support – Engineering, Communications, IT, etc.
- Resource sourcing for a wide variety of services



Improve Customer Satisfaction



Increase quality of product and service delivery and support while reducing costs



Improve profitability ≡ Increase Direct Labor

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Current Situation – 2: What is the "PMO"?

Program Management Office Entities – Functional Groups, as typically* defined…in this/these scenario's

Typical Make-up of PMO

Function	Main Responsibilities
Program Management	Oversight of the contract vehicle and the specific Deliveries or Taskings; Main customer interface for satisfaction and ongoing business development
Project Management	Management of specific Delivery Orders / Task Orders and the resources that perform the technical and management requests of the customer
Contracts	Expert in government contracts establishment and change management or maintenance
Pricing	Pricing for all direct charges to the original contract and any change orders
Subcontracts	Fulfillment of resource requests from partner companies for expertise in support of Deliveries/Taskings
Finance	Establishment and change management of budget; Regular ongoing performance reporting to Program/Project Management and Customer(s)

*Your company may define these entities differently, or combine them; they are here to assist in the depiction of this CMMI-SVC implementation approach / example

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Current Situation - 2: What is the “PMO”?

Program Management Office Functional Groups – continued

Function	Main Responsibilities
Acquisition/Procurement	Materials procurement (and management) in support of Delivery/Task Orders
Facilities	Ensuring contract resources (onsite and govt site) have office space and equipment; Oversight of current company (onsite) facility and any issues or requests
Security	Handles security clearance and security logistics and access for all resources both here and abroad
Recruiting	Procurement of new hires to fulfill corporate positions and new requests for contract support
Human Resources	Onboarding and training for resources
Quality Assurance	Ensuring quality in each Functional Group and Project processes/deliverables
IT	Computer (Hardware & Software) procurement, configuration, and support for onsite resources

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Current Situation - 3

Focus on “customer service” without defining “who is the customer”

PMO Operations

Functional Groups

Lacking communication & coordination with one another

Accepting Requests for services from any source in any way

Lacking understanding of current performance

Ignoring linkage to business goals

Lacking understanding of a “Project” and how they relate to it

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Current Situation – 4: Typical Problems

People ⟷ Process ⟷ Technology

- Feel like everyone comes to them with a business or customer “priority”
- Frustrated at their jobs
- Not fully trained
- Work as firefighters, not as a team
- Not coached or mentored
- Lack open communications, respect
- Do not understand where they belong – under an organization and structure
- Are constantly overburdened

- Are not using a well documented and repeatable standard process
- Processes that exist are not deployed/trained in a timely fashion or to the appropriate groups
- Little or no SLA’s and measures are in place
- Continuous improvement is not a widely understood
- QA process rarely occurs and perception is “policing” and negative
- Best practices are rarely developed, and not typically shared, and refined

- Tools exist, but are not documented
- People have not been trained and are not using them consistently
- Requests, Problems, Changes, and Issues are not captured, tracked and managed
- Not easily accessible by people when out of the office - at home or on the customer site
- Version updates are pushed out without notification

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Questions that Needed Answers

- We use CMMI-SVC Process Areas to answer the following questions?
  - What are the requirements for the PMO and all functional groups within it?
  - How do we estimate and allocate resources for a project?
  - How do we measure improvement?
  - What is a Service Request – how do we handle each one?
  - What can we promise within a Service Level Agreement to the end customer?
  - What is our current capacity and availability and how do we estimate and forecast - for “project” work and new proposals?

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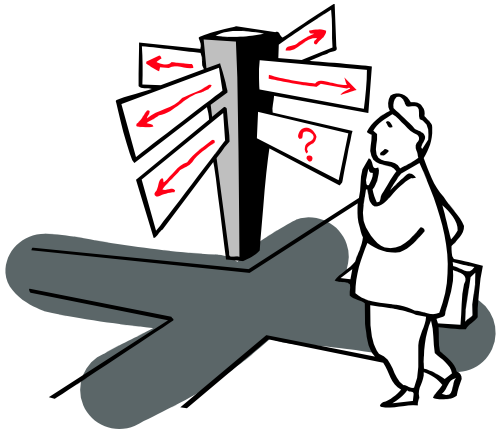
Scoping



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Scoping Challenges

Typical scenario – everyone is maxed out so….

- Where do we begin?
  - It's a big model, what are our most important issues or business objectives?
  - It's a big company, where are we going to focus our initial efforts?
  - How much improvement is too much?
  - How can we achieve (and show) smaller and/or shorter term success?
- How should we organize the improvement infrastructure?
- Who should be involved in the improvement strategy, plan, creation and implementation?
- How do we get started?

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Getting Started – 1: Define Basic Terminology

We could not begin until we made sure we had agreement on some basic common terminology:

Program* – a collection of related projects and the infrastructure that supports them, including objectives, methods, activities, plans and success measures. In our language – "The Award" – The **Contract Vehicles** that were proposed outlining management objectives and techniques for the customer

- Contract level (very high level) requirements and management activities
- Success criteria/measures – but no actual funding, but a bucket of $$

Project* – a managed set of interrelated resources that delivers one or more products or services to a customer or end user. In our language – the awarded **Delivery/Task Orders** within a Program/Contract Vehicle that outlines specific work, resources and deliverables and is "funded"

- Task Order level requirements for resources and services
- PMO related schedule of status and performance

* CMMI-SVC Glossary

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Getting Started – 2: Define Basic Terminology

Requirements* – a condition or capability needed by and end user to solve a problem or achieve an objective; a condition or capability that must be met or possessed by a product, service to satisfy a supplier agreement, standard, specification, or other formally imposed documents.

Represented by contractual agreements such as:

- Technical Execution Plan (TEP or RTEP)
- Program/Project Work Statement (PWS)
- Statement Of Work (SOW)

* CMMI-SVC Glossary

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Getting Started – 3: Define Basic Terminology

Service Request* – a communication from a customer or end user that one or more specific instances of service delivery are desired. In our language, they are:

- Task Order Requirements
  - Requests for resources (a "body" to fill a Labor Category)
  - Requests for management services for the contract (e.g., regularly scheduled meetings and management reports)
- Contract Modification Requests
- Internally generated requests / changes
- Request for proposal

Note: A request typically requires many, if not all functional groups (Pricing, contracts, finance, subcontracts, recruiting, etc.) to play a role in providing the Program/Project managers with the information and deliverables they need to answer the customer request

* CMMI-SVC Glossary

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Scoping Decisions - Where Do We Begin?

Divide and Conquer!!!

1. Improvement in Phases
   - Phase 1: “Above the line” - PMO Operations (on-site at company x)
     - Will allow us to control two factors:
       - Customer Satisfaction – Many contracts won initially and on re-compete with how we can manage the contract activities to maintain and improve customer satisfaction
       - Deliverable control – we can show shorter-term success by separating “controllable” groups and activities from “uncontrollable” ones – IDIQ-based projects
   - Phase 2: “Below the line” - Project team processes (customer site and typically IDIQ related activities), some covered by CMMI-DEV

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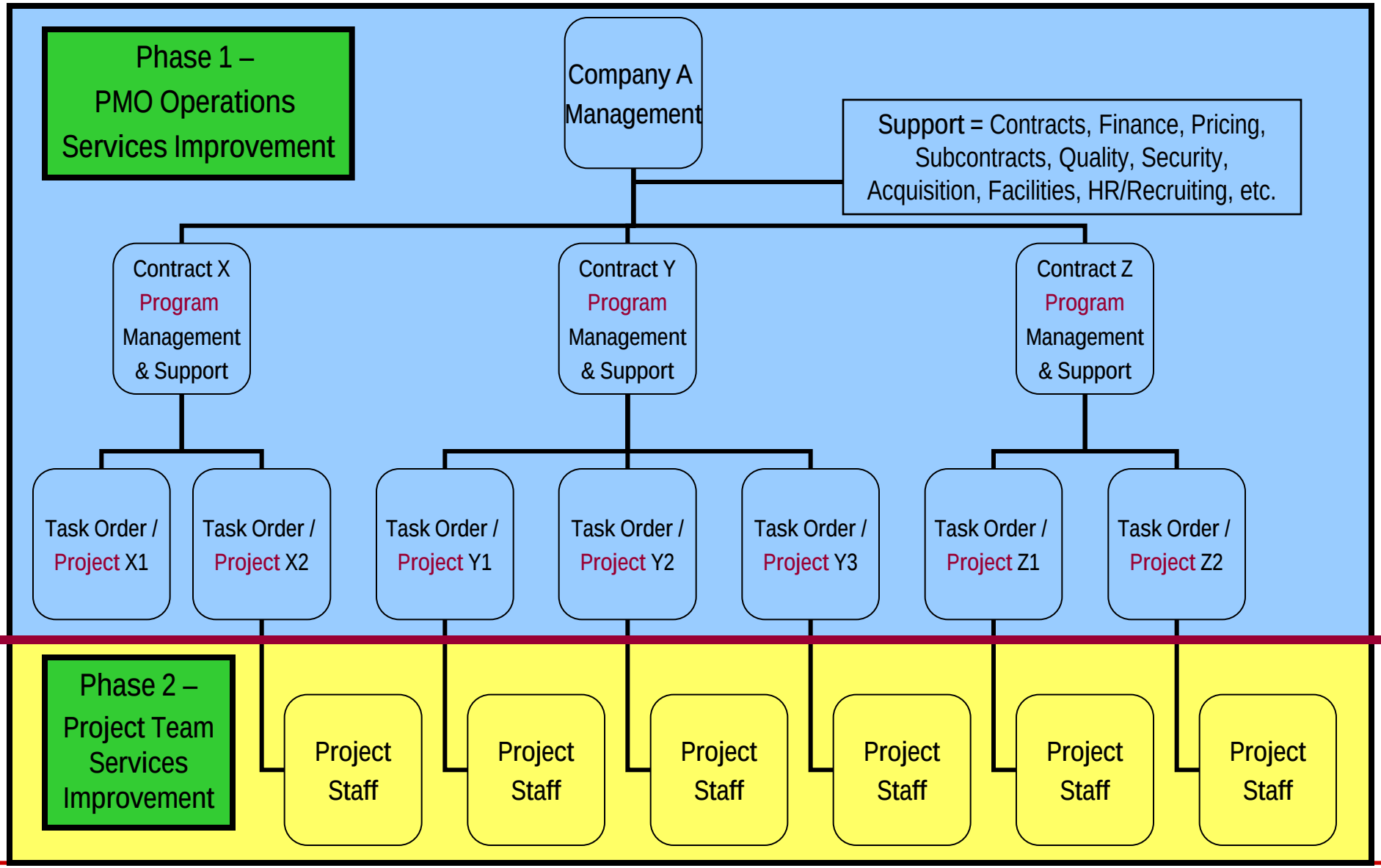
Scoping Decisions : The Organizational Unit



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Scoping Decisions – Who, What, How?

Divide and Conquer!!!

2. To utilizes our prior experience with CMMI-DEV, structure (or keep) a similar PI infrastructure
   - Divide the improvement activities into PMO Entities – "Functional Groups" (e.g, Program/Project Management, Finance, Pricing, Subcontracts, etc.);
     - Utilize a familiar improvement infrastructure
     - Utilize the FG leads as EPG members
     - Design PATs around those functional groups
3. Enables Functional Groups (FGs) to be autonomous in many of their own improvement activities while contributing to Organizational Unit level improvement

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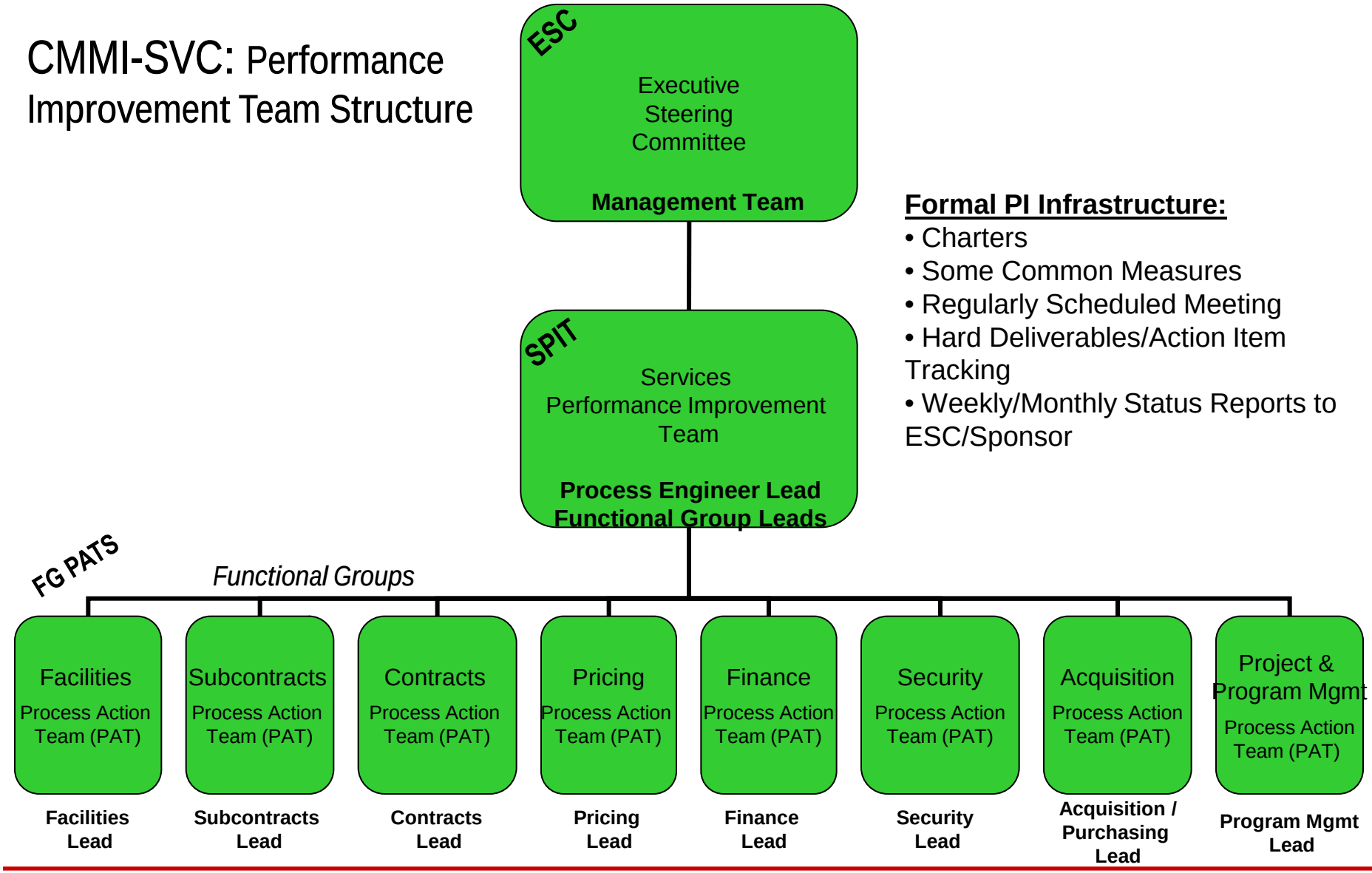
Scoping Decisions – Who, What, How?

CMMI-SVC: Performance Improvement Team Structure



Formal PI Infrastructure:

- Charters
- Some Common Measures
- Regularly Scheduled Meeting
- Hard Deliverables/Action Item Tracking
- Weekly/Monthly Status Reports to ESC/Sponsor

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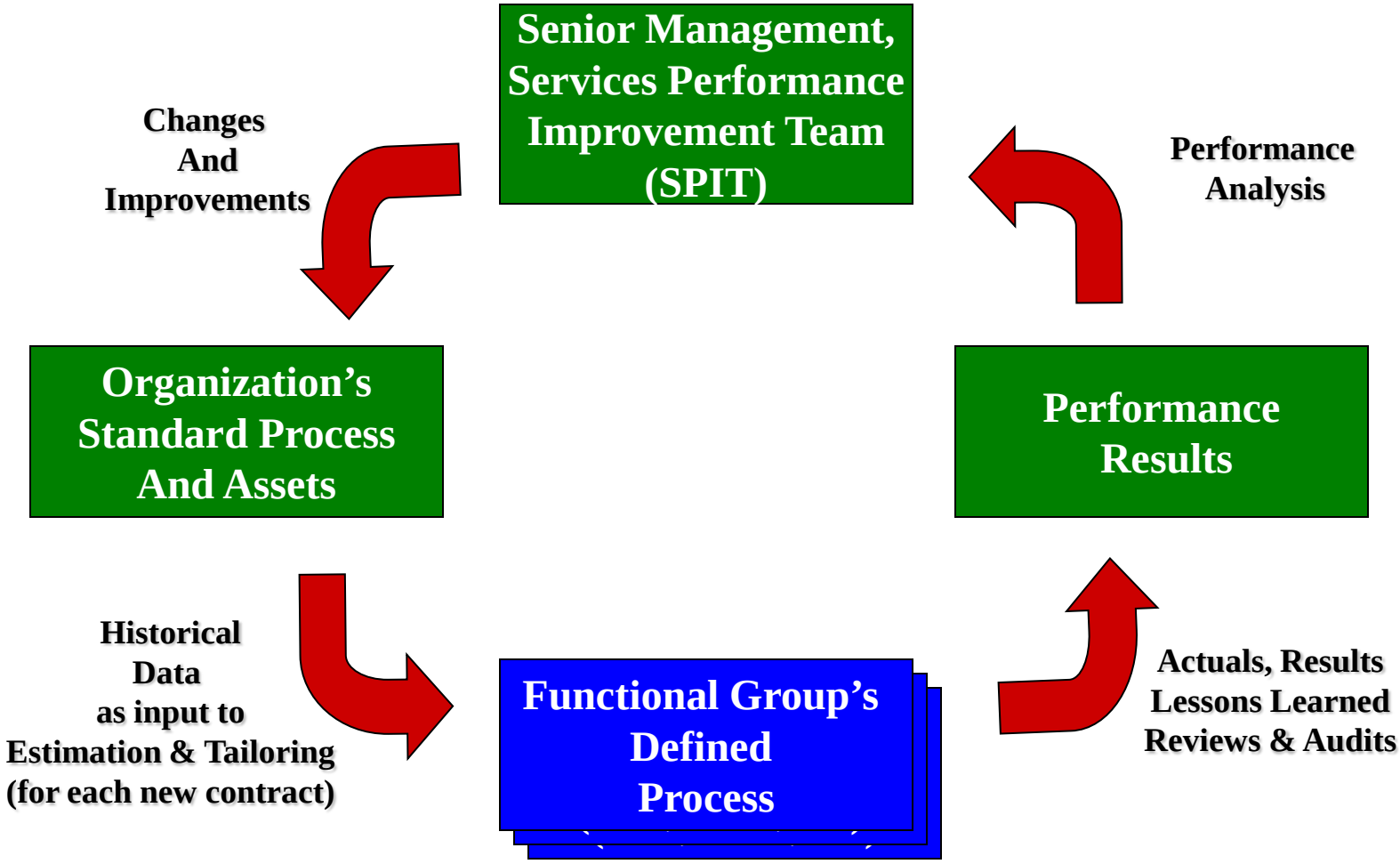
Position for Performance Improvement

Ongoing Performance Improvement - Simple Flow



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Some Steps Toward Improvement

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Step 1 – Identify the Target

Collect baseline data

- Perform a baseline appraisal - SCAMPI C (or SCAMPI B) using SPIT and/or PAT team members - this front-end investment will pay off over the long run
  - Increased organization knowledge of what is required and why
  - Assistance in breaking down barriers to improvement activities
- If the appraisal does not include interviews, hold meetings or focus groups or do a survey to understand all the current issues/frustrations/"pain points" – from everyone's perspective
- Collect any measures of current performance –may require some data mining or a Cost of Quality Appraisal/Project Retrospective

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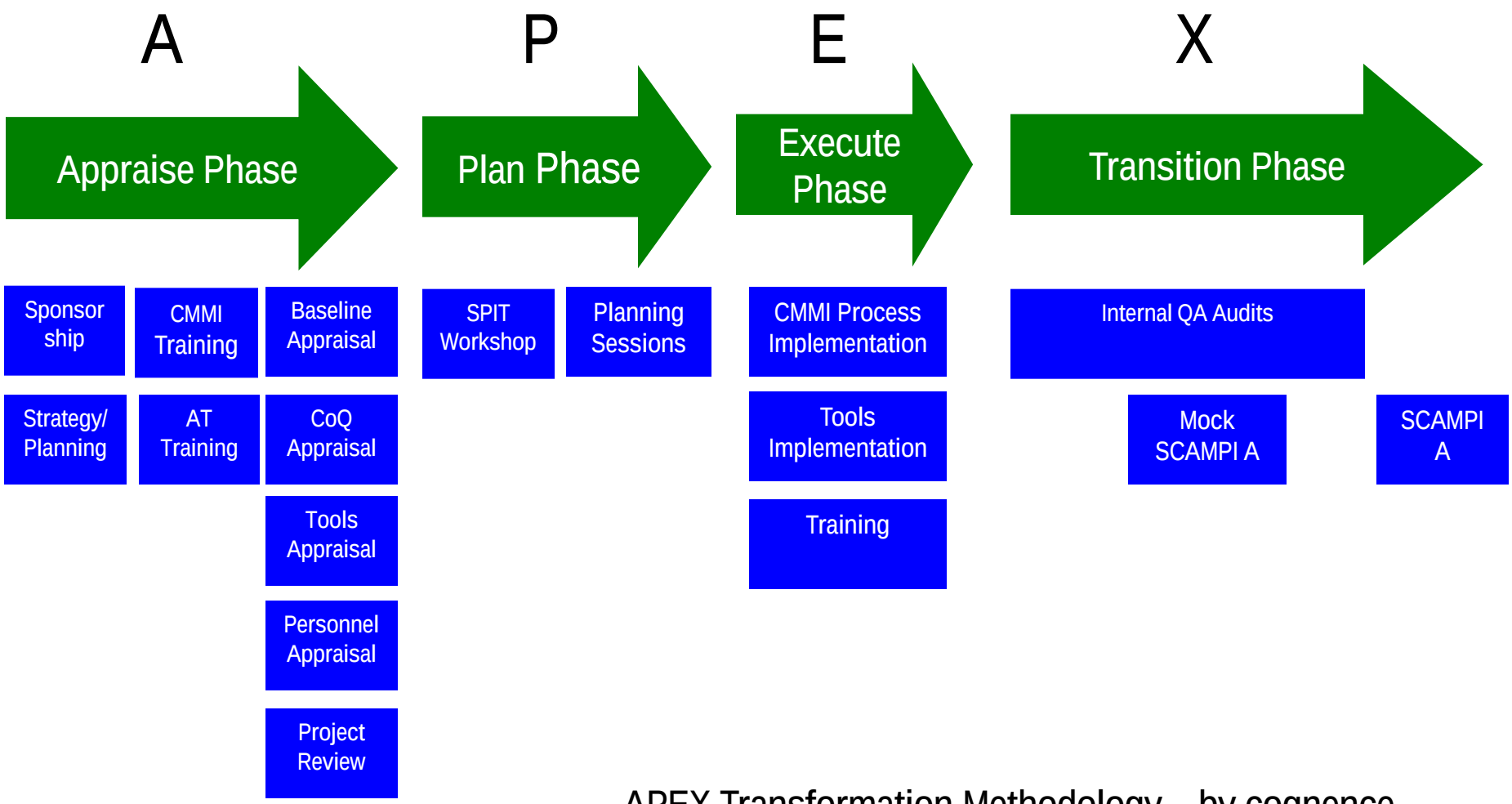
Step 2 – Strategize the Transformation



APEX Transformation Methodology – by cognence

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Step 2 – Strategize the Transformation

Why?

- To rapidly collect appropriate levels of information and identify:
  - Opportunities for improvement
  - Barriers and risks to the improvement effort
- To understand the As-Is – current health and maturity levels
- To determine the To-Be – improvement that can be achieved through application of best practices
- To identify short term wins and long-term direction

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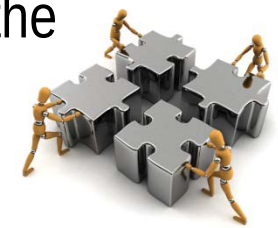
Step 3 – Approach from Top-Down & Bottom-Up

Multi-dimensional nature of implementation includes definition at the EPG/SPIT level as well as each Functional Group level



1. SPIT defines:
   - High level strategic items (driven, with input from the Executive Steering Committee)
     - Needs, capabilities, objectives
     - External Customer(s)
     - Common measures – customer facing SLAs
     - Common tools
     - Overall planning and implementation approach
     - Integrated training materials and plans
2. Each Functional Group defines:
   - Specific items that define Functional Group operational processes
   - Specific training – for Functional Groups members and for interfacing FGs

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Step 3 – Example: Service Delivery

1. SPIT defines:
   - Service Request from the customer or customers to projects
   - General guidelines for identifying and managing service requests
   - High Level Flow for each request type

2. Each Functional Group defines:
   - FG flow for each request type
   - Process and tools for identifying and managing each request type
   - Identification of any additional requests (that may be particular to the FG)

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Step 3 – Example: Measurement & Analysis

1. SPIT defines:
   - Business Objectives
   - Common measures to support business objectives
   - Measurements reports provided from the PMO to the Customer(s)
     - Aggregation of Functional Group Measures and other Contract supporting measures
   - Integrates Functional Group measures into Customer reports
2. Each Functional Group defines:
   - Specific measures that will trace FG process to overall business objectives
   - Measurements provided to the organization (internally) e.g.,
     - Request response time
     - Request throughput
   - Details of collection, storage and analysis processes

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Step 3 – Example: Configuration Management

1. SPIT defines:
   - Organization Repository
   - General change control guidelines

2. Each Functional Group defines:
   - Their group CI's – documents, deliverable and internal
   - Specific storage, archival and access

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Step 3 – Example: Strategic Service Management

1. SPIT defines:
   - Business Objectives
   - Business Capabilities, Strategic Needs
   - Customers (External)
   - Services provided from the PMO to the Customer(s) – catalog of services

2. Each Functional Group defines:
   - Customers – which include other Functional Groups (Internal & External)
   - Functional Group Capabilities
   - Functional Group Business Process Flow
   - Specific FG services – cataloged

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Step 3 – Example: Capacity & Availability Management

1. SPIT defines:
   - General guidelines for establishing a strategy for capacity and availability
   - Guidelines for aggregating measures to manage (analyze and report) capacity and availability
2. Each Functional Group defines:
   - Specific strategy to handle FG capacity and availability
   - Estimation methods (used for PP as well) for pricing
   - Specific measures and tools for monitoring and reporting FG capacity and availability

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Step 4 – Show The Benefits

- Sample Performance Improvement Success Story
  1. Development of measures and standard processes for the way they deliver services support within their Functional Group – handling requests
  2. They measured their service request cycle times and have made significant improvement:

     Reductions in cycle times:

     ✓ 31% - Subcontract Processing

     ✓ 69% - Modification processing

     ✓ 85% - Task Order Processing

     Increase in Capacity

     ✓ 350%

	Throughput		TAT (# Days)	
	2008	2009	2008	2009
Subcontracts	69	182	58	39
Modifications	979	3513	16	5
Task Orders	171	624	17	3
Total Capacity	1219	4319		

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Step 4 – Show The Benefits

Other Benefits:

- The use of CMMI-SVC enabled us to do what the CMMI-DEV did not – use (i.e., manage) the “Service Request”
- Top-Down, Bottom-Up Improvement allows folks at various levels of the organization some “say-so” which achieves buy-in
- Once the folks who participate in providing the service know how they relate to the end customer as well as their direct customers, request handling is much more simplified/understood and easier to measure
- Provides functions autonomy as well as participation in the overall business performance improvement – effective service delivery to the end customer

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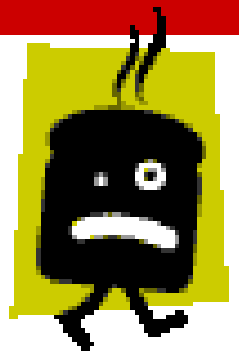
Step 5 – Learn Your Lessons



"First Time "Victim", Second Time "Volunteer"!

- Not defining the basic terminology first
  - And don't forget to identify the "customer" and the "requests".....all of them
- Not keeping to a "KISS" principle
  - Focus on simple processes and put more effort into training and mentoring through deployment
- Taking on too much too soon
  - Put a realistic schedule into place and account for already overtaxed resources
  - Look for small, but meaningful wins (use the FG that the organization complains about the most to show improvement) to get the most "converts"
- Not cataloging resistance factors, risks, issues
  - Keep a centralized, easily accessible repository so Individuals and Functional Group PATs can document items and EPG/SPIT can work to resolve them
- Too much multitasking – attempting to do process in the margins
  - Outline a spend plan, track it, report it and get management to act
- Insufficient membership and skills
  - Ensure process improvement teams have adequate skill sets
  - "Seed" the organization with folks who will carry the "banner"
- Failure to maintain momentum (i.e., visibility)
  - Weekly and Monthly Status

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Questions

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