COBIT 5 Process Assessment Method (PAM)

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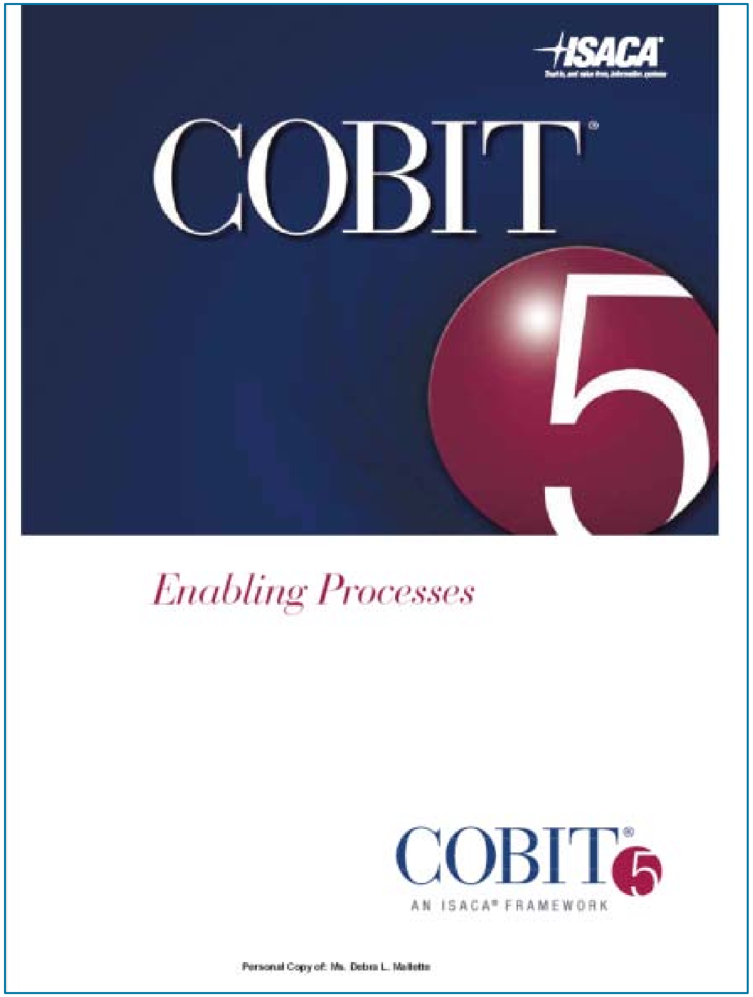
Governance Risk and Compliance -G22

Session Objectives

- Why Assess Process Capability
- COBIT 5 Process Assessment Model
- Relationship to ISO/IEC 15504
- An assessment walk through of: *Define and manage service levels*

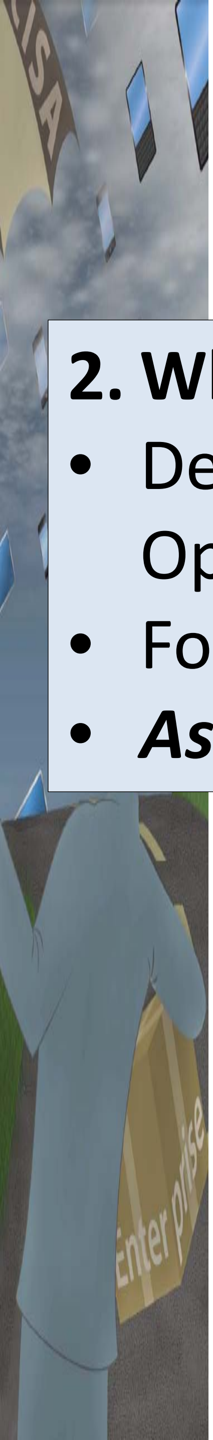


Why Assess Process Capability?

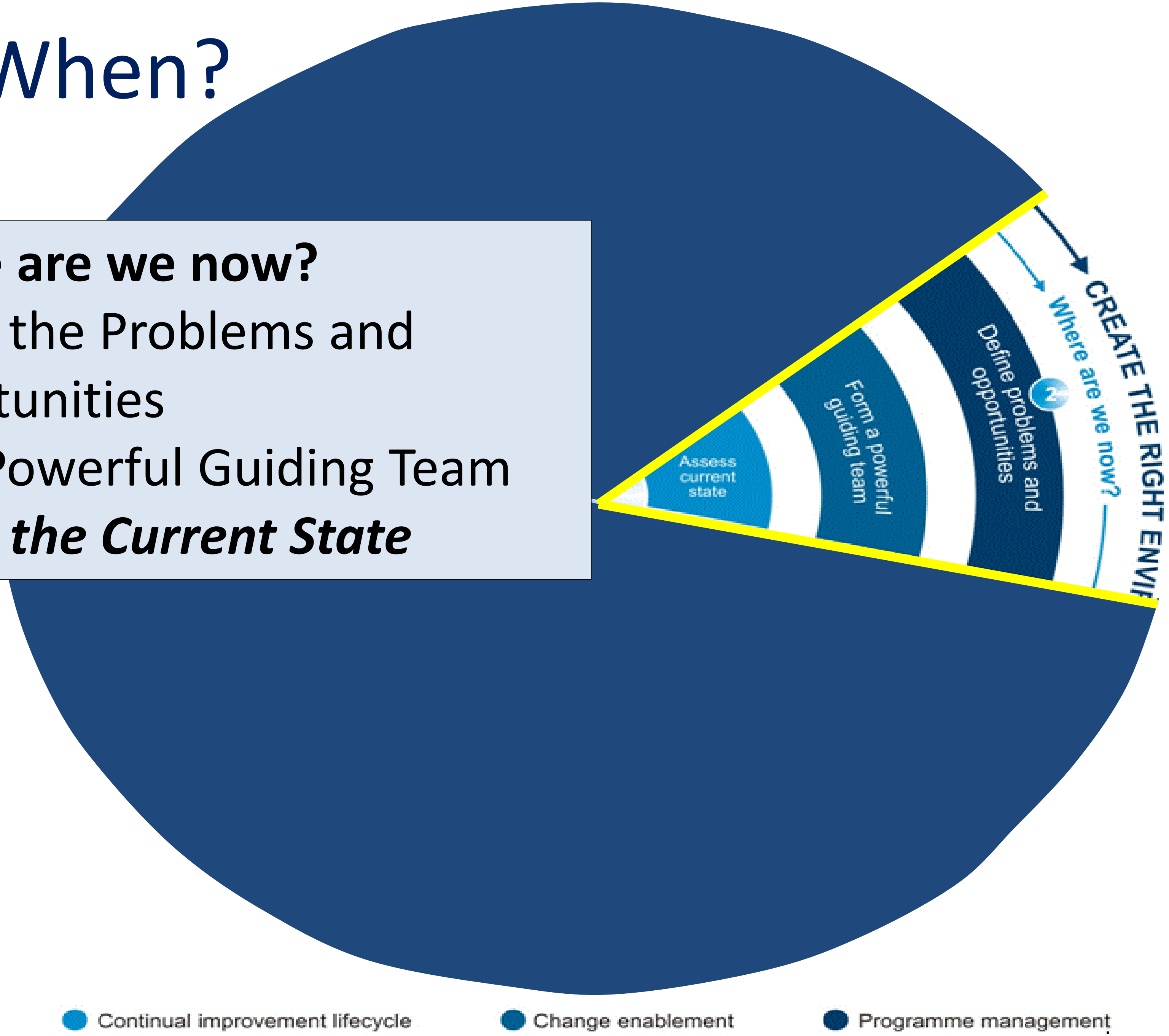
Informs executive management, board of directors and management stakeholders of:

- the capability of its IT processes
- targets for improvement based on business requirements

Enables fact-based decisions of where and how to apply resources in order to mitigate risks or assure value is delivered



When?



2. Where are we now?

- Define the Problems and Opportunities
- Form Powerful Guiding Team
- ***Assess the Current State***

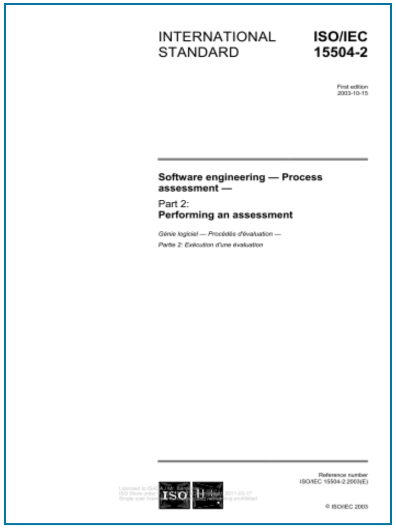
COBIT Process Assessment Model

- 1st Described in *COBIT® Process Assessment Model (PAM): Using COBIT® 4.1.*
- PAM brings together ISO and ISACA.
- COBIT 4.1 was adapted into ISO 15504 compliant Process Reference Model for COBIT 4.1 PAM
- COBIT 5 Enabling Processes designed for ISO 15504 compliance

IT GOVERNANCE INSTITUTE®

COBIT®
4.1

Framework
Control Objectives
Management Guidelines
Maturity Models



INTERNATIONAL STANDARD

ISO/IEC 15504-2

First edition
2003-10-15

Software engineering — Process assessment —

Part 2:
Performing an assessment

Génie logiciel — Procédés d'évaluation —
Partie 2: Exécution d'une évaluation

Reference number
ISO/IEC 15504-2:2003(E)

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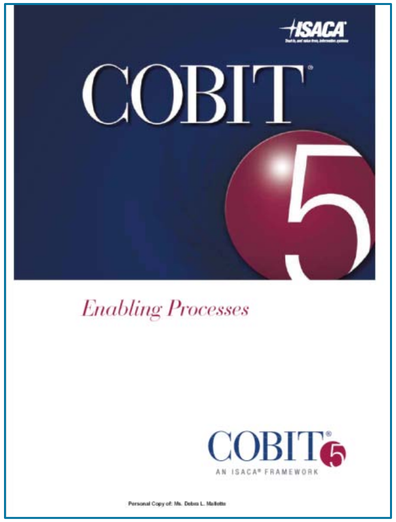

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Enabling Processes

COBIT® 5
AN ISACA® FRAMEWORK

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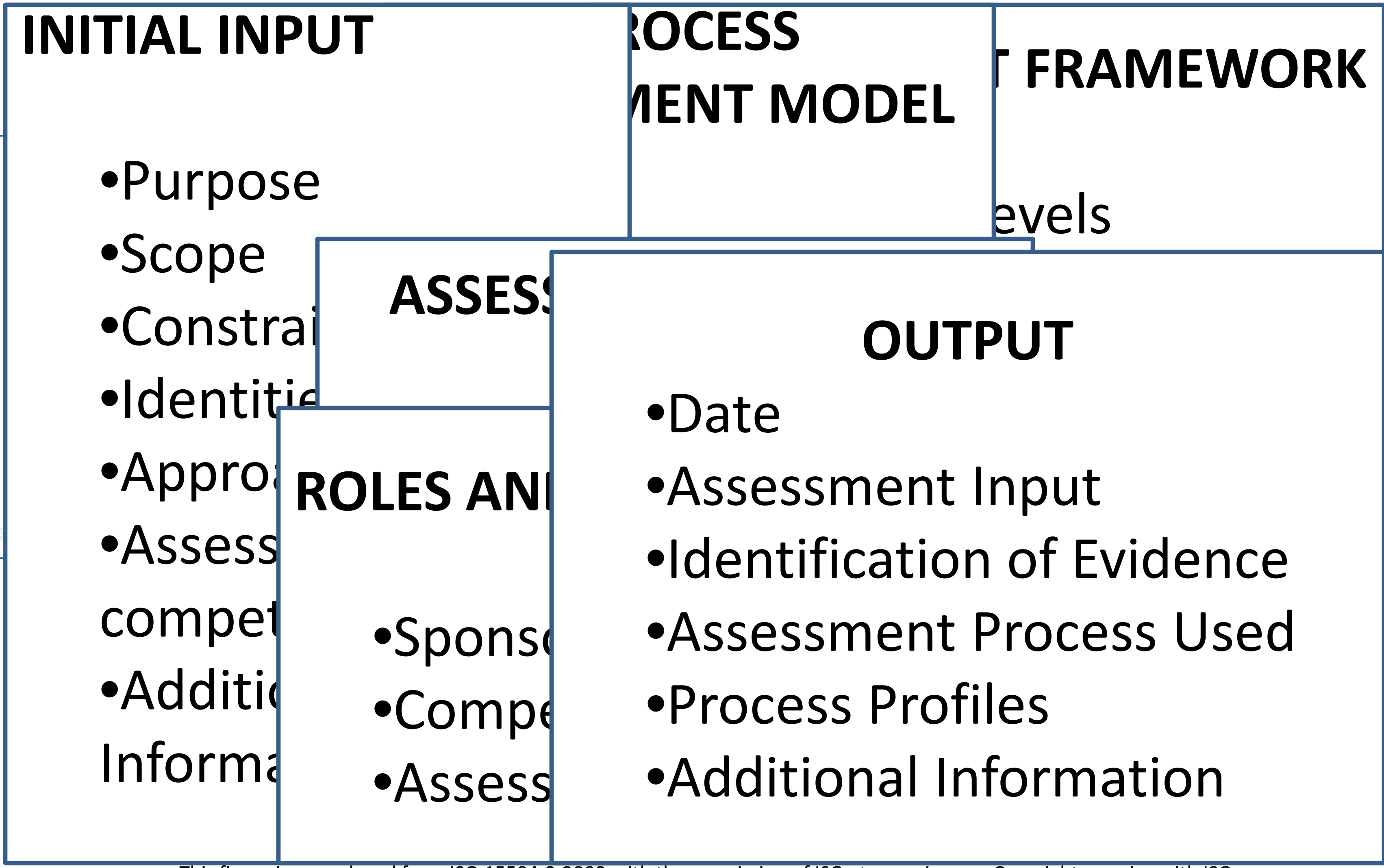
What’s different?

- **But don’t we already have maturity models for COBIT 4.1 processes?**
- The new COBIT assessment programme is:
  - A robust assessment process based on ISO 15504
  - An alignment of COBIT’s maturity model scale with the international standard
  - A *capability*-based assessment model
- More rigor results in a more robust, objective and repeatable assessment
- *Caution: Assessment results will likely vary from existing COBIT maturity models* ***(or any other capability and/or maturity model!)***

ISO 15504 Assessment Overview



INITIAL INPUT

- •Purpose
- •Scope
- •Constrai
- •Identitie
- •Appro
- •Assess compet
- •Additi Informa

ROCESS MENT MODEL

T FRAMEWORK

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ASSESS

ROLES AN

- •Spons
- •Compe
- •Assess

OUTPUT

- •Date
- •Assessment Input
- •Identification of Evidence
- •Assessment Process Used
- •Process Profiles
- •Additional Information

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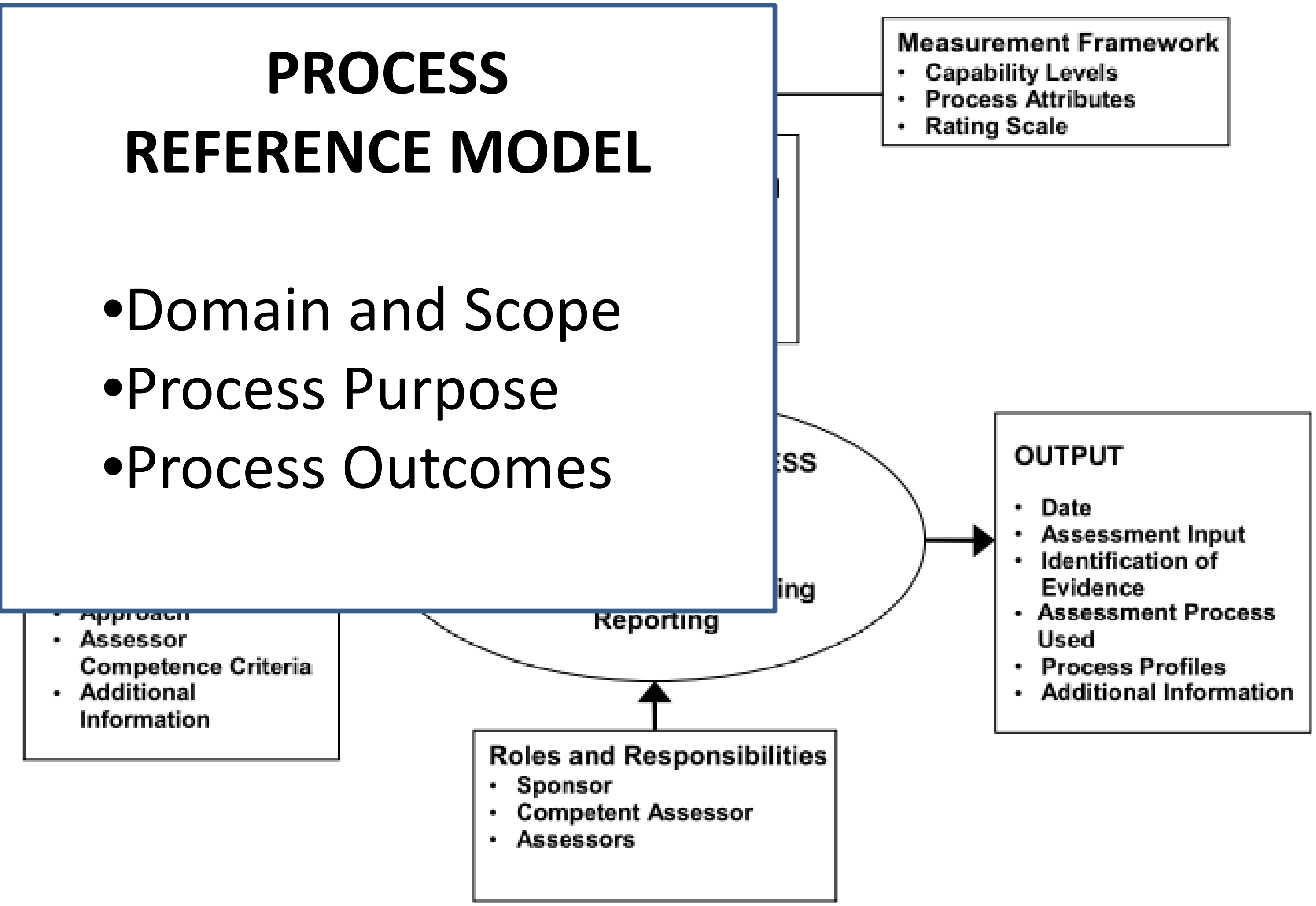
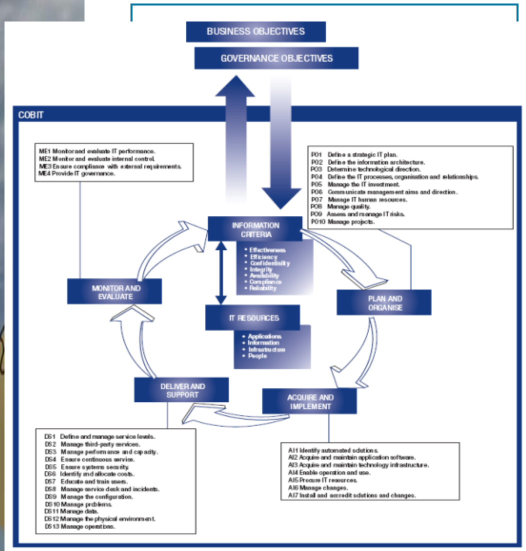
Assessment Model: Process Reference Model



PROCESS REFERENCE MODEL

- Domain and Scope
- Process Purpose
- Process Outcomes

COBIT as Process Reference Model



BUSINESS OBJECTIVES

GOVERNANCE OBJECTIVES

COBIT

ME1 Monitor and evaluate IT performance.
ME2 Monitor and evaluate internal control.
ME3 Ensure compliance with external requirements.
ME4 Provide IT governance.

PO1 Define a strategic IT plan.
PO2 Define the information architecture.
PO3 Determine technological direction.
PO4 Define the IT processes, organisation and relationships.
PO5 Manage the IT investment.
PO6 Communicate management aims and direction.
PO7 Manage IT human resources.
PO8 Manage quality.
PO9 Assess and manage IT risks.
PO10 Manage projects.

INFORMATION CRITERIA

- Effectiveness
- Efficiency
- Confidentiality
- Integrity
- Availability
- Compliance
- Reliability

MONITOR AND EVALUATE

PLAN AND ORGANISE

IT RESOURCES

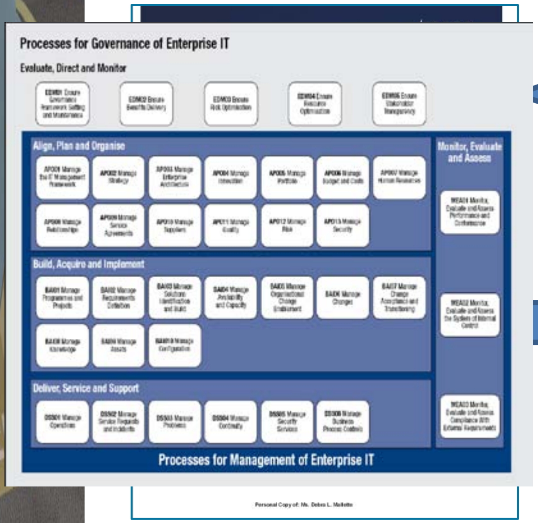
- Applications
- Information
- Infrastructure
- People

DELIVER AND SUPPORT

ACQUIRE AND IMPLEMENT

DS1 Define and manage service levels.
DS2 Manage third-party services.
DS3 Manage performance and capacity.
DS4 Ensure continuous service.
DS5 Ensure systems security.
DS6 Identify and allocate costs.
DS7 Educate and train users.
DS8 Manage service desk and incidents.
DS9 Manage the configuration.
DS10 Manage problems.
DS11 Manage data.
DS12 Manage the physical environment.
DS13 Manage operations.

AI1 Identify automated solutions.
AI2 Acquire and maintain application software.
AI3 Acquire and maintain technology infrastructure.
AI4 Enable operation and use.
AI5 Procure IT resources.
AI6 Manage changes.
AI7 Install and accredit solutions and changes.



Processes for Governance of Enterprise IT

Evaluate, Direct and Monitor

EDM01 Ensure Governance Framework Setting and Maintenance
EDM02 Ensure Benefits Delivery
EDM03 Ensure Risk Optimisation
EDM04 Ensure Resource Optimisation
EDM05 Ensure Stakeholder Transparency

Align, Plan and Organise

APO01 Manage the IT Management Framework
APO02 Manage Strategy
APO03 Manage Enterprise Architecture
APO04 Manage Innovation
APO05 Manage Portfolio
APO06 Manage Budget and Costs
APO07 Manage Human Resources
APO08 Manage Relationships
APO09 Manage Service Agreements
APO10 Manage Suppliers
APO11 Manage Quality
APO12 Manage Risk
APO13 Manage Security

Monitor, Evaluate and Assess

MEA01 Monitor, Evaluate and Assess Performance and Conformance
MEA02 Monitor, Evaluate and Assess the System of Internal Control
MEA03 Monitor, Evaluate and Assess Compliance With External Requirements

Build, Acquire and Implement

BAI01 Manage Programmes and Projects
BAI02 Manage Requirements Definition
BAI03 Manage Solutions Identification and Build
BAI04 Manage Availability and Capacity
BAI05 Manage Organisational Change Enablement
BAI06 Manage Changes
BAI07 Manage Change Acceptance and Transitioning
BAI08 Manage Knowledge
BAI09 Manage Assets
BAI10 Manage Configuration

Deliver, Service and Support

DSS01 Manage Operations
DSS02 Manage Service Requests and Incidents
DSS03 Manage Problems
DSS04 Manage Continuity
DSS05 Manage Security Services
DSS06 Manage Business Process Controls

Processes for Management of Enterprise IT

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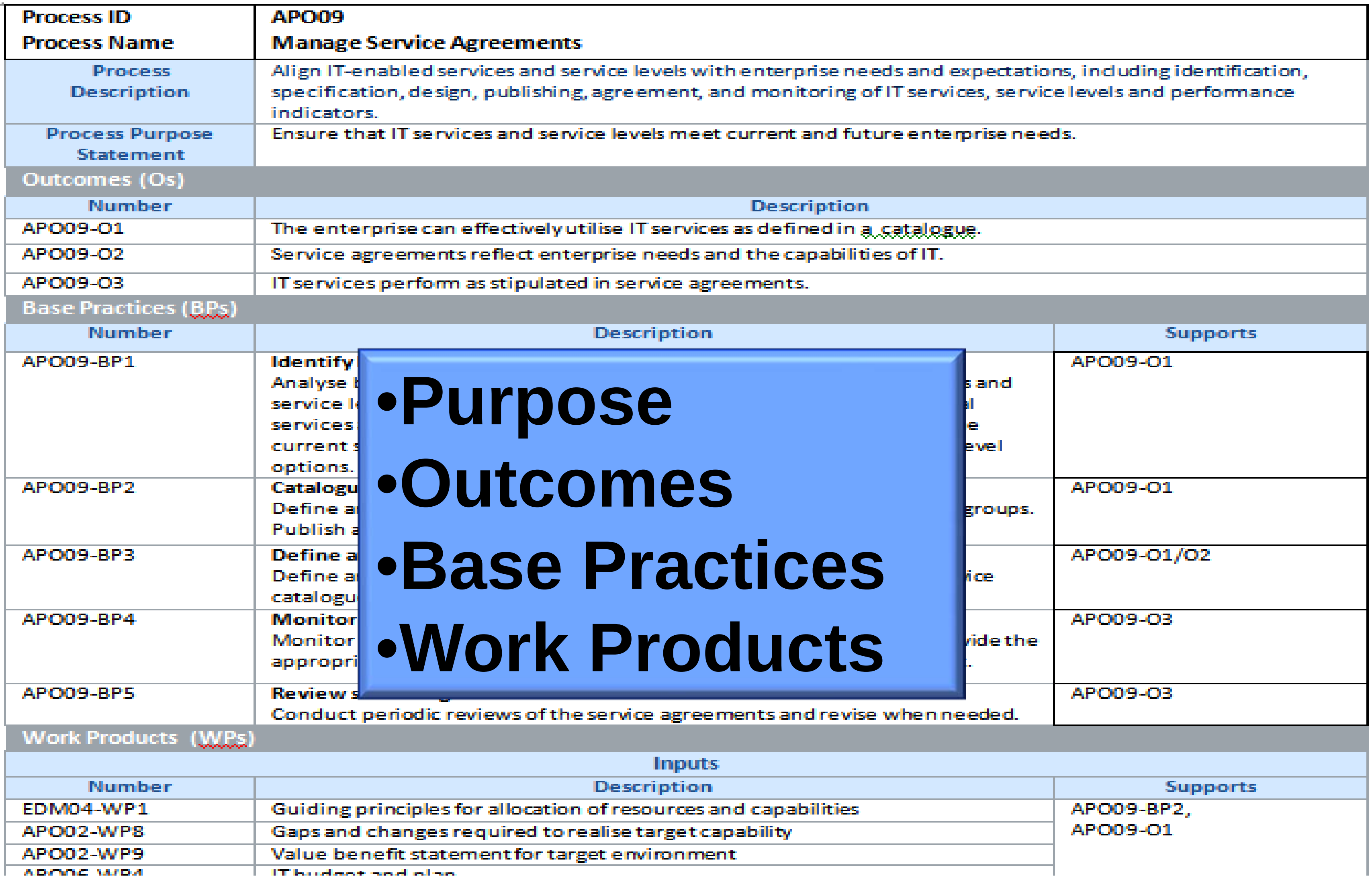
4.1 or 5.0?

PROCESS REFERENCE MODEL

- Domain and Scope
- Process Purpose
- Process Outcomes

- **Purpose**
- **Outcomes**
- **Base Practices**
- **Work Products**

COBIT 5 Process Reference Model in PAM (excerpt from Draft)



Process ID Process Name	APO09 Manage Service Agreements	
Process Description	Align IT-enabled services and service levels with enterprise needs and expectations, including identification, specification, design, publishing, agreement, and monitoring of IT services, service levels and performance indicators.	
Process Purpose Statement	Ensure that IT services and service levels meet current and future enterprise needs.	
Outcomes (Os)		
Number	Description	
APO09-O1	The enterprise can effectively utilise IT services as defined in a catalogue.	
APO09-O2	Service agreements reflect enterprise needs and the capabilities of IT.	
APO09-O3	IT services perform as stipulated in service agreements.	
Base Practices (BPs)		
Number	Description	Supports
APO09-BP1	**Identify** … Analyse b … s and service l … l services … e current s … evel options.	APO09-O1
APO09-BP2	**Catalogu** … Define a … groups. Publish a …	APO09-O1
APO09-BP3	**Define a** … Define a … ice catalogu …	APO09-O1/O2
APO09-BP4	**Monitor** … Monitor … ide the appropri … .	APO09-O3
APO09-BP5	**Review s** … Conduct periodic reviews of the service agreements and revise when needed.	APO09-O3
Work Products (WPs)		
	Inputs	
Number	Description	Supports
EDM04-WP1	Guiding principles for allocation of resources and capabilities	APO09-BP2, APO09-O1
APO02-WP8	Gaps and changes required to realise target capability	
APO02-WP9	Value benefit statement for target environment	
APO06-WP4	IT budget and plan	

- **Purpose**
- **Outcomes**
- **Base Practices**
- **Work Products**

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Process Purpose Statement	Ensure that IT services and service levels meet current and future enterprise requirements.

Purpose: high-level measurable objectives of performing the process and the likely outcomes of effective implementation of the process

COBIT 5 Process Reference Model in PAM (excerpt from Draft)

Outcomes (O)	
Number	Description
APO09-O1	The enterprise can effectively utilize IT services as defined in a catalogue.
APO09-O2	Service Agreements reflect enterprise needs and the capabilities of IT.
APO09-O3	IT Services perform as stipulated in service agreements.
Outcomes: observable results of a process—an artefact, a significant change of state or the meeting of specified constraints	

Base Practices (BPs)

Number	Description	Supports
APO09-BP1	**Identify IT services.**	APO09-O1
APO09-BP2	**Catalogue IT-enabled services.**	APO09-O1
APO09-BP3	**Define and prepare service agreements.**	APO09-O1/O2
APO09-BP4	**Monitor and report service levels.**	APO09-O3
APO09-BP5	**Review service agreements and contracts.**	APO09-O3

Base Practices: activities that, when consistently performed, contribute to achieving the process purpose

Work Products (WPs)

	Inputs	
Number	Description	Supports
EDMO4-WP1	Guiding principles for allocation of resources and capabilities	APO09-BP2 APO09-O1
APO02-WP8	Gaps and changes required to realize target capability	
APO02-WP9	Value Benefit statement for target environment	
APO06-WP4	IT Budget and plan	

Work Products: artefacts associated with the execution of a process—‘inputs’ and “outputs”

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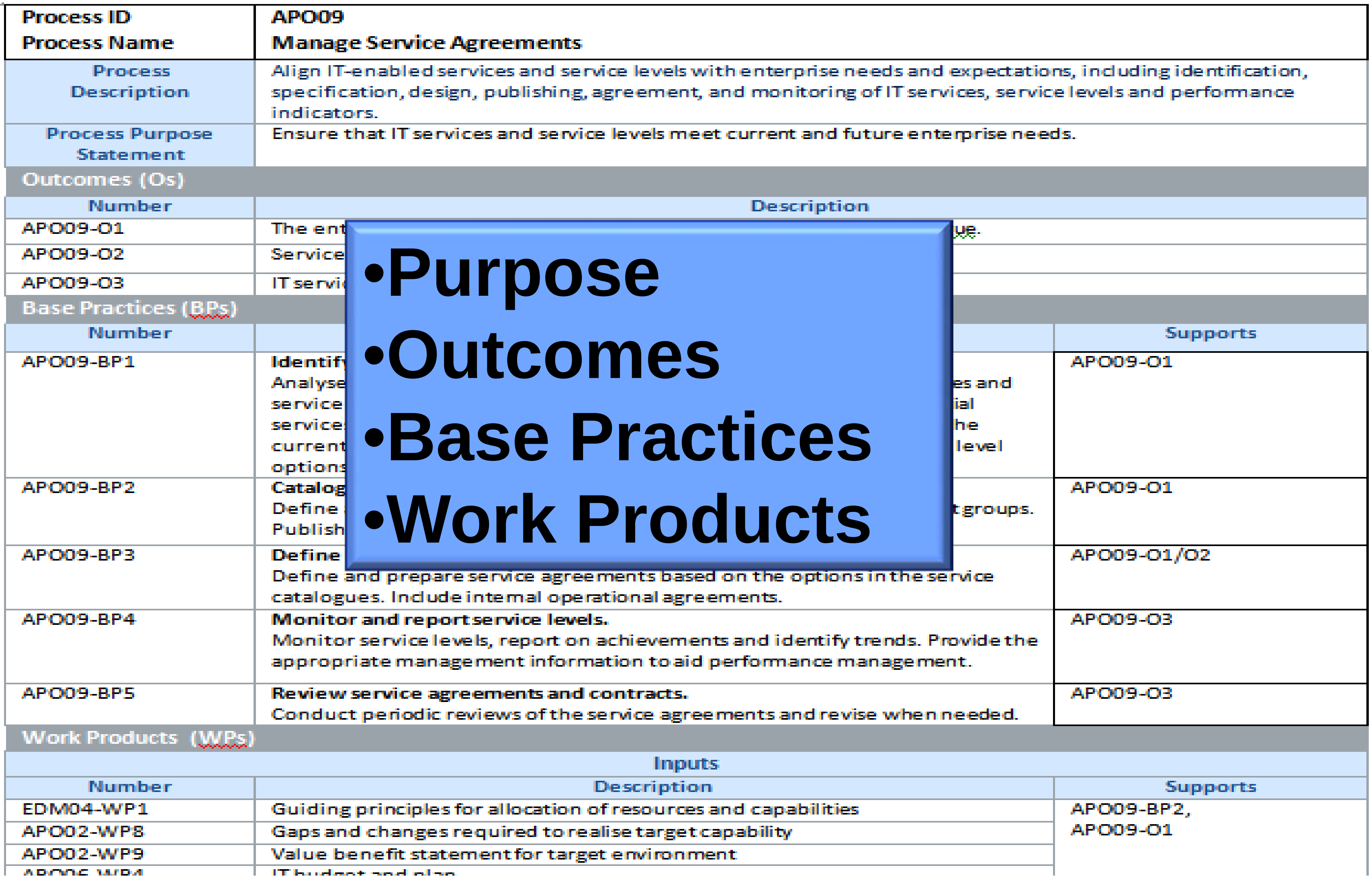

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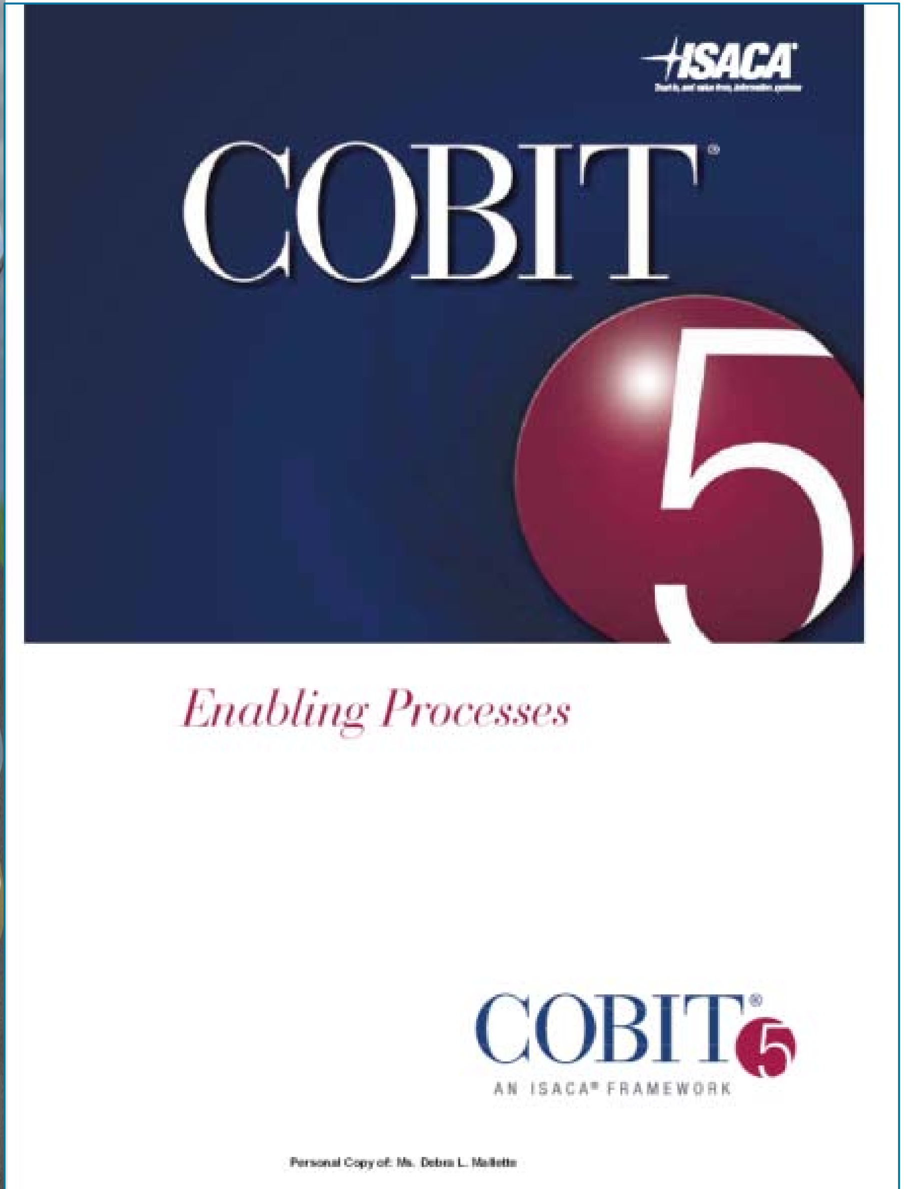
APO09-O2	Service	
APO09-O3	IT servi	
Base Practices (BPs)		
Number		Supports
APO09-BP1	Identify Analyse … es and service … ial service … he current … level options	APO09-O1
APO09-BP2	Catalog Define … t groups. Publish	APO09-O1
APO09-BP3	Define Define and prepare service agreements based on the options in the service catalogues. Include internal operational agreements.	APO09-O1/O2
APO09-BP4	**Monitor and report service levels.** Monitor service levels, report on achievements and identify trends. Provide the appropriate management information to aid performance management.	APO09-O3
APO09-BP5	**Review service agreements and contracts.** Conduct periodic reviews of the service agreements and revise when needed.	APO09-O3
Work Products (WPs)		
	Inputs	
Number	Description	Supports
EDM04-WP1	Guiding principles for allocation of resources and capabilities	APO09-BP2, APO09-O1
APO02-WP8	Gaps and changes required to realise target capability	
APO02-WP9	Value benefit statement for target environment	
APO06-WP4	IT budget and plan	

- **Purpose**
- **Outcomes**
- **Base Practices**
- **Work Products**

COBIT 5 Enabling Processes as Process Reference Model



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Enabling Processes

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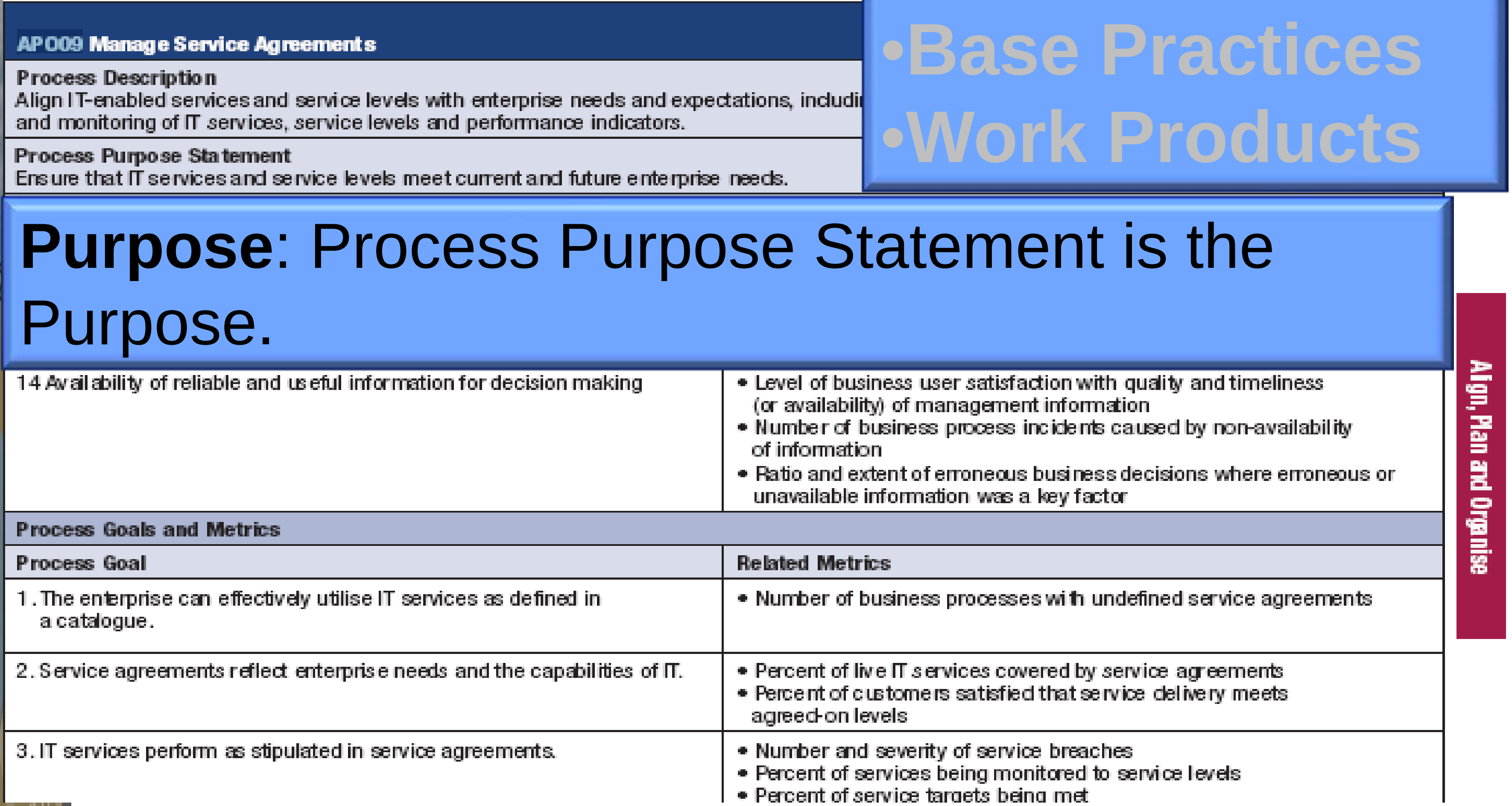
You don't need the COBIT 5 PAM to get started. COBIT 5 Enabling Processes already documented as a ISO 15504 PRM

- **Purpose**
- **Outcomes**
- **Base Practices**
- **Work Products**

COBIT 5 Enabling Processes

APO09 Manage Ser

- **Purpose**
- **Outcomes**
- **Base Practices**
- **Work Products**



APO09 Manage Service Agreements

Process Description
Align IT-enabled services and service levels with enterprise needs and expectations, includi
and monitoring of IT services, service levels and performance indicators.

Process Purpose Statement
Ensure that IT services and service levels meet current and future enterprise needs.

14 Availability of reliable and useful information for decision making	• Level of business user satisfaction with quality and timeliness (or availability) of management information • Number of business process incidents caused by non-availability of information • Ratio and extent of erroneous business decisions where erroneous or unavailable information was a key factor

Process Goals and Metrics

Process Goal	Related Metrics
1. The enterprise can effectively utilise IT services as defined in a catalogue.	• Number of business processes with undefined service agreements
2. Service agreements reflect enterprise needs and the capabilities of IT.	• Percent of live IT services covered by service agreements • Percent of customers satisfied that service delivery meets agreed-on levels
3. IT services perform as stipulated in service agreements.	• Number and severity of service breaches • Percent of services being monitored to service levels • Percent of service targets being met

Align, Plan and Organise

Purpose: Process Purpose Statement is the Purpose.

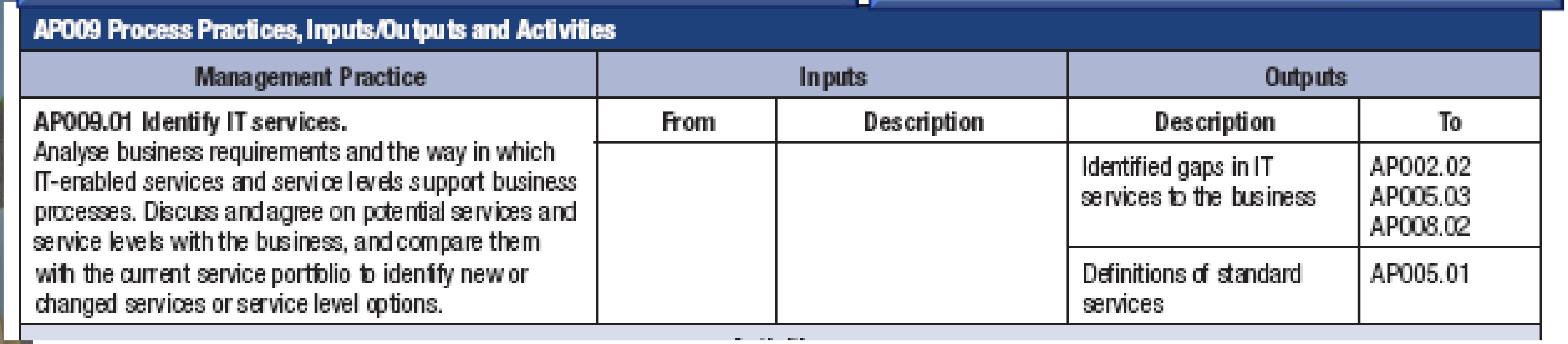
Outcomes: Under Process Goals and Metrics, the Process Goals are the observable outcomes.

COBIT 5 Enabling Processes

APO09 Manage Service Agreements

- Purpose
- Outcomes
- **Base Practices**
- **Work Products**

Base Practices: The Management Practices are the Base Practices.

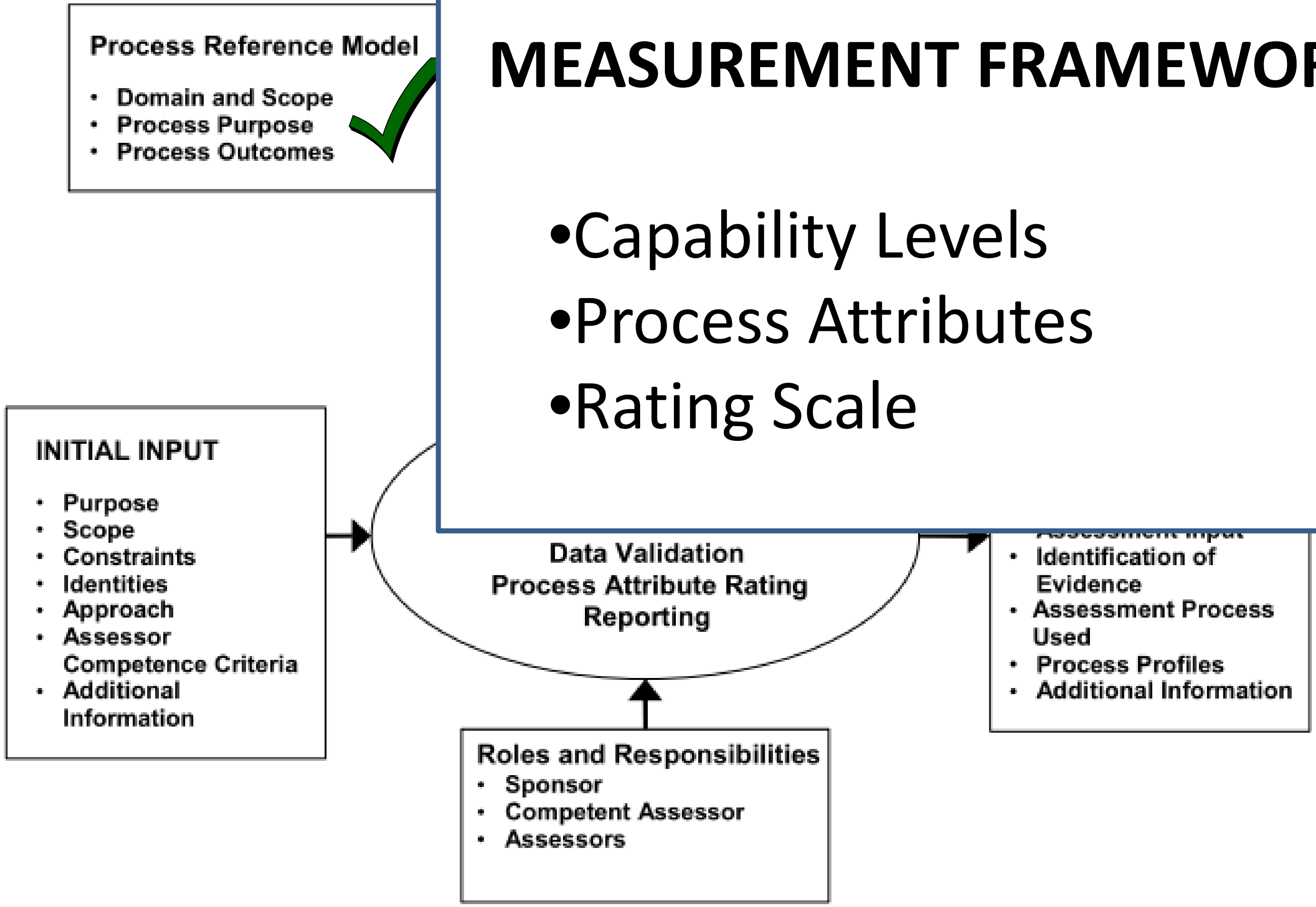


APO09 Process Practices, Inputs/Outputs and Activities

Management Practice	Inputs		Outputs	
	From	Description	Description	To
APO09.01 Identify IT services. Analyse business requirements and the way in which IT-enabled services and service levels support business processes. Discuss and agree on potential services and service levels with the business, and compare them with the current service portfolio to identify new or changed services or service level options.			Identified gaps in IT services to the business	APO02.02 APO05.03 APO08.02
			Definitions of standard services	APO05.01

Work Products: The Inputs and Outputs are the Work Products and/or Evidence.

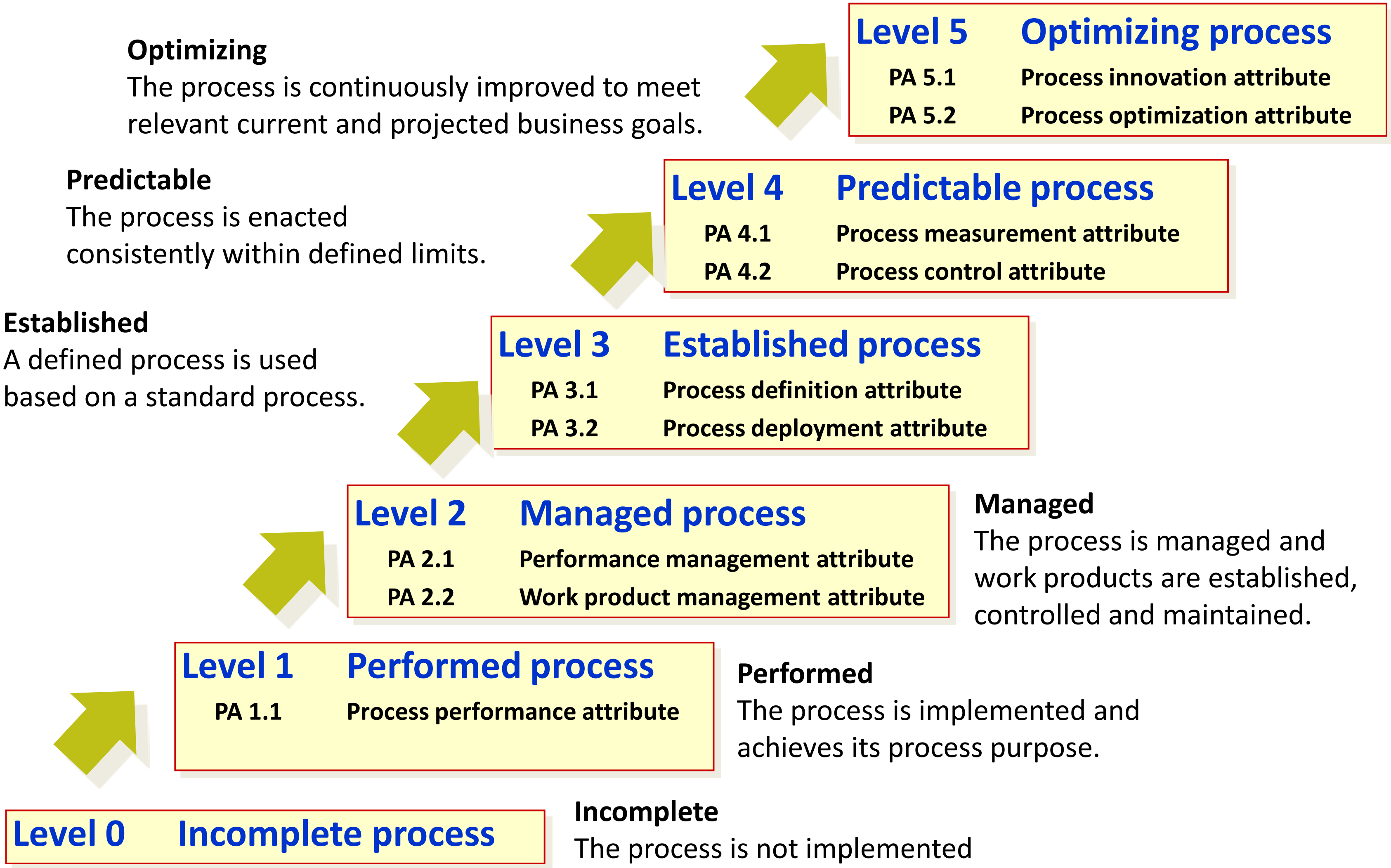
Assessment Model: Measurement Framework



MEASUREMENT FRAMEWORK

- Capability Levels
- Process Attributes
- Rating Scale

Process Capability Levels & Attributes



Level 5 Optimizing process
- PA 5.1 Process innovation attribute
- PA 5.2 Process optimization attribute

Optimizing
The process is continuously improved to meet relevant current and projected business goals.

Level 4 Predictable process
- PA 4.1 Process measurement attribute
- PA 4.2 Process control attribute

Predictable
The process is enacted consistently within defined limits.

Level 3 Established process
- PA 3.1 Process definition attribute
- PA 3.2 Process deployment attribute

Established
A defined process is used based on a standard process.

Level 2 Managed process
- PA 2.1 Performance management attribute
- PA 2.2 Work product management attribute

Managed
The process is managed and work products are established, controlled and maintained.

Level 1 Performed process
- PA 1.1 Process performance attribute

Performed
The process is implemented and achieves its process purpose.

Level 0 Incomplete process

Incomplete
The process is not implemented or fails to achieve its purpose.

Process Capability Levels & Attributes

Level 0
Incomplete process

Incomplete
The process is not implemented or fails to achieve its purpose.

Process Capability Levels & Attributes

Level 1
Performed process

PA 1.1 Process performance attribute

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Process Capability Level & Attributes

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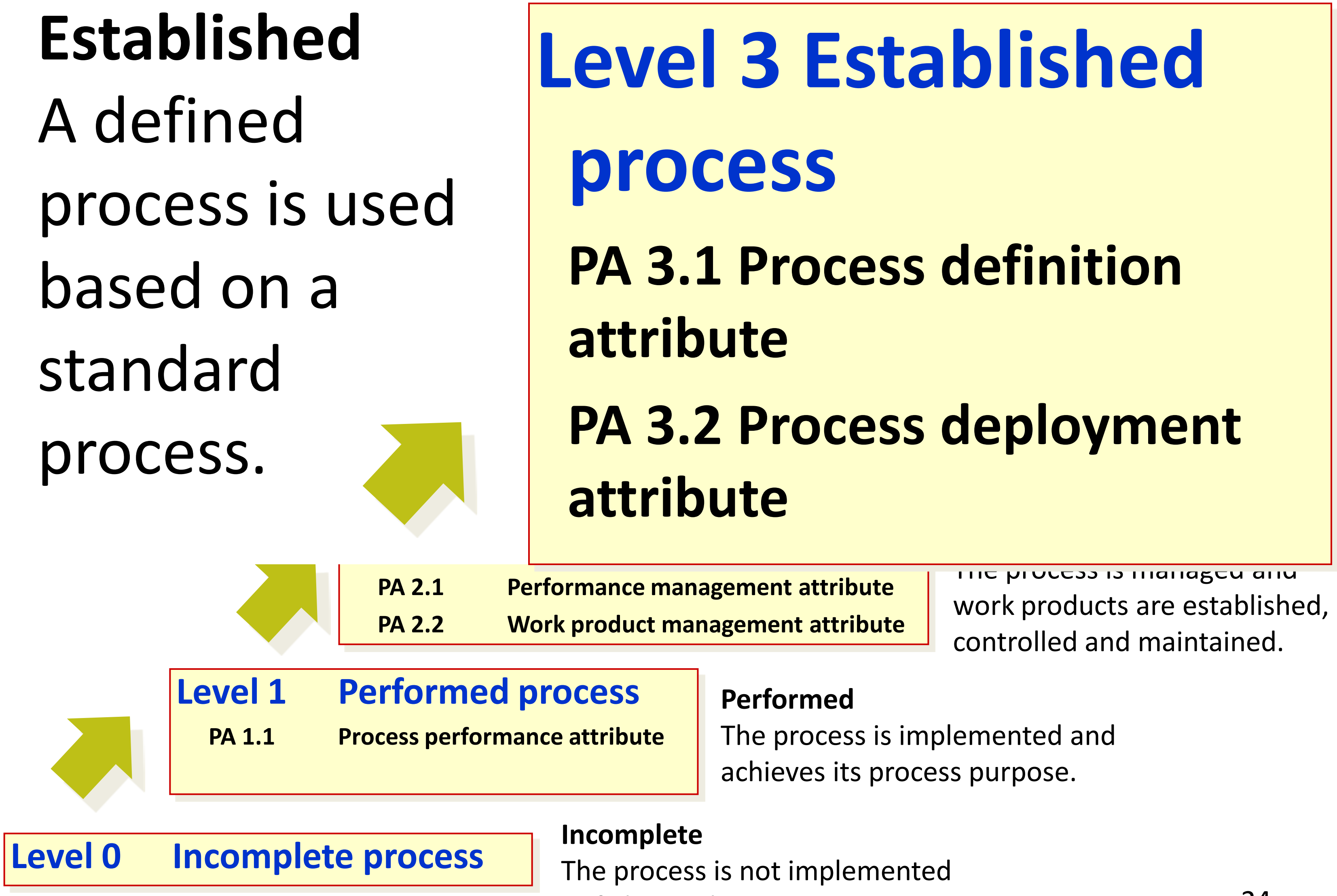

Level 3 Established process

PA 3.1 Process definition attribute

PA 3.2 Process deployment attribute

PA 2.1 **Performance management attribute**
PA 2.2 **Work product management attribute**

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PA 1.1 **Process performance attribute**

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Process Capability Levels & Attributes

Predictable
The process is enacted consistently within defined limits.

Level 4
Predictable process

PA 4.1 Process measurement attribute

PA 4.2 Process control attribute

PA 1.1 Process performance attribute

The process is implemented and achieves its process purpose.

Level 0 Incomplete process

Incomplete
The process is not implemented or fails to achieve its purpose.

Process Capability Levels & Attributes

Optimizing

The process is continuously improved to meet relevant current and projected business goals.

Level 5

Optimizing process

PA 5.1 Process innovation attribute

PA 5.2 Process optimization attribute

PA 1.1 Process performance attribute

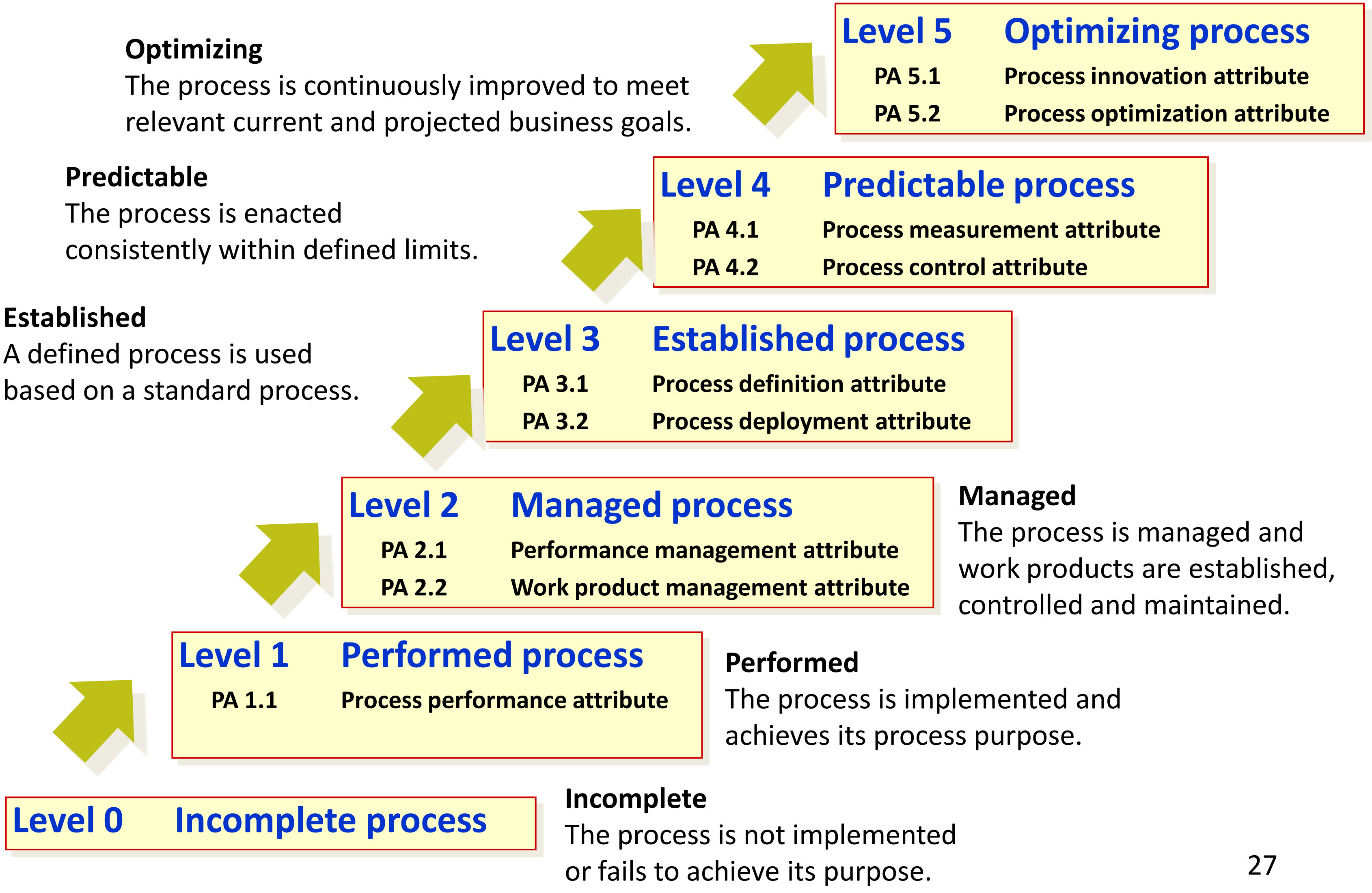
The process is implemented and achieves its process purpose.

Level 0 Incomplete process

Incomplete

The process is not implemented or fails to achieve its purpose.

Process Capability Levels & Attributes



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Process Attributes

- Each of the 9 Process Attributes are specified as:
  - Result of Full Achievement of Attribute
  - Generic Practices (GPs)
  - Generic Work Products (GWPs)

Capability Level 1: Performed
PA1.1 Process Performance

PA1.1-Process Performance		
Result of Full Achievement of the Attribute	Generic Practices (GPs)	Generic Work Products (GWPs)
The process achieves its defined outcomes.	GP1.1.1 Achieve the process outcomes. There is evidence that the intent of base practice is being performed.	Work products are produced that provide evidence of process outcomes.

Capability Level 1: Performed PA1.1 Process Performance

- Capability Level 1 Performed?
- PA1.1 Process Performance?
  - Does the process achieve its defined outcomes?
    - As evidenced by:
      - Production of an object
      - A significant change of state
      - Meeting of specified constraints
        - e.g., requirements, goals

Process Attribute Rating Scale

- COBIT assessment process measures the extent to which a given process achieves the process attributes as:
  - Result of Full Achievement of Attribute
  - Generic Practices (GPs)
  - Generic Work Products (GWPs)

Process Attribute Rating Scale

N **Not achieved—>0 to 15% achievement**

- Little or no evidence of achievement

P **Partially achieved—> 15% to 50% achievement**

- Some evidence of approach
- Some achievement with aspects unpredictable

L **Largely achieved—> 50% to 85% achievement**

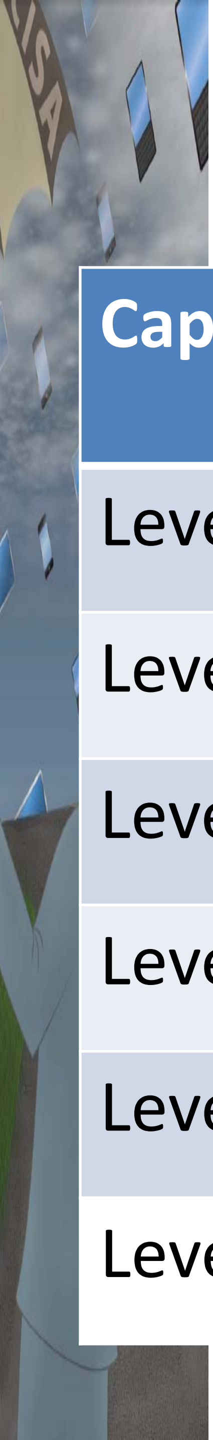
- Evidence of systematic approach
- Significant achievement with some weakness

F **Fully achieved—> 85% to 100% achievement**

- Evidence of a complete & systematic approach
- Full achievement, no significant weaknesses

Process Attribute Rating Heat Map

Process Attribute Achievement		
🟩	85%-100%	Fully achieved
🟩	50%-85%	Largely achieved
🟨	15%-50%	Partially achieved
🟥	0-15%	Not achieved

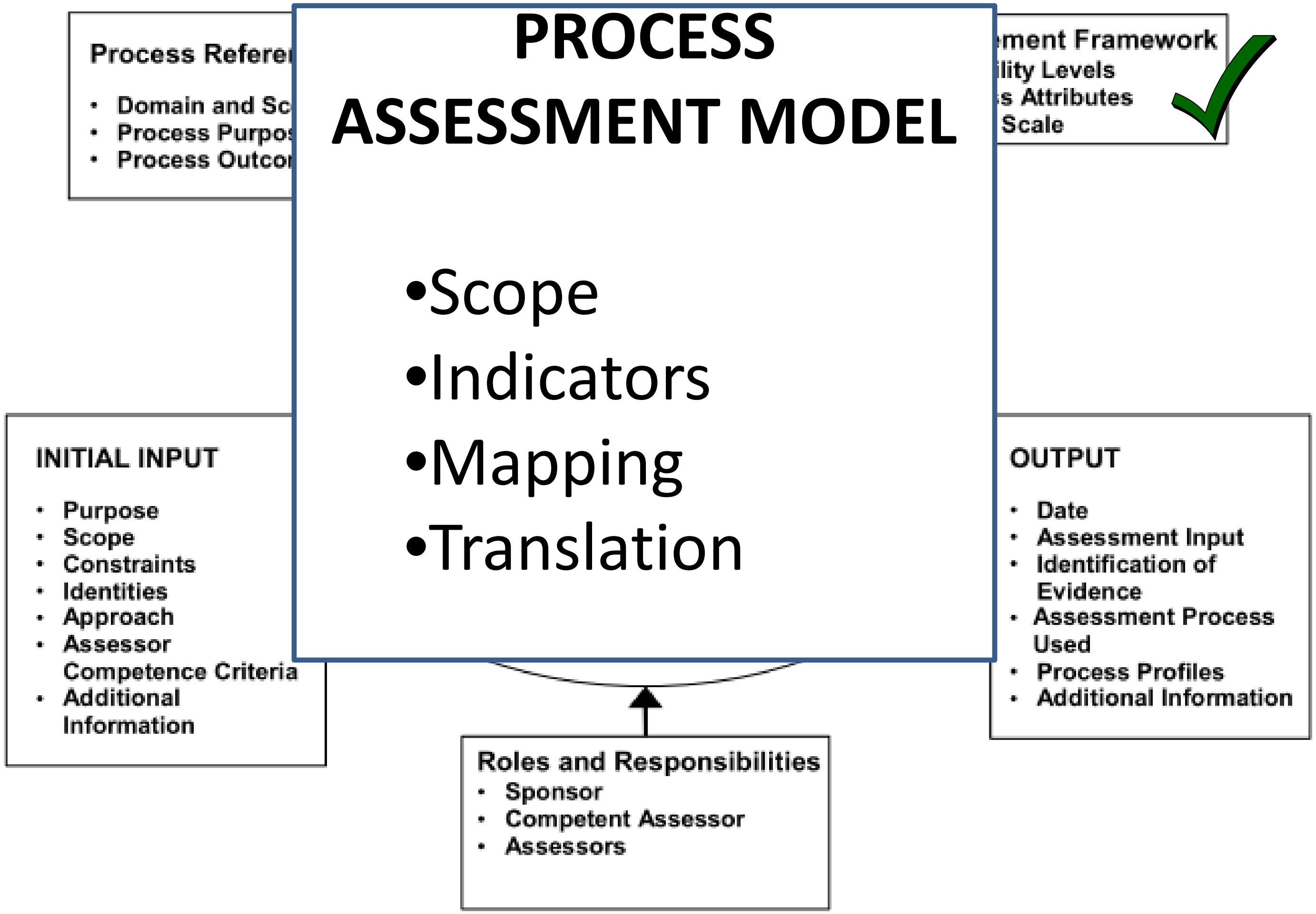


Capability Level & Process Attributes

Capability Level	Process Attribute	1	2	3	4	5
Level 5: Optimizing	PA5.1&5.2					L/F
Level 4: Predictable	PA4.1&4.2				L/F	F
Level 3: Established	PA3.1&3.2			L/F	F	F
Level 2: Managed	PA2.1&2.2		L/F	F	F	F
Level 1: Performed	PA1.1	L/F	F	F	F	F
Level 0: Incomplete						

L/F = Largely or Fully Achieved   F = Fully Achieved

COBIT Assessment Model Overview



Process Refere

- Domain and Sc
- Process Purpos
- Process Outco

ment Framework
lity Levels
s Attributes
Scale

PROCESS ASSESSMENT MODEL

- Scope
- Indicators
- Mapping
- Translation

INITIAL INPUT

- Purpose
- Scope
- Constraints
- Identities
- Approach
- Assessor Competence Criteria
- Additional Information

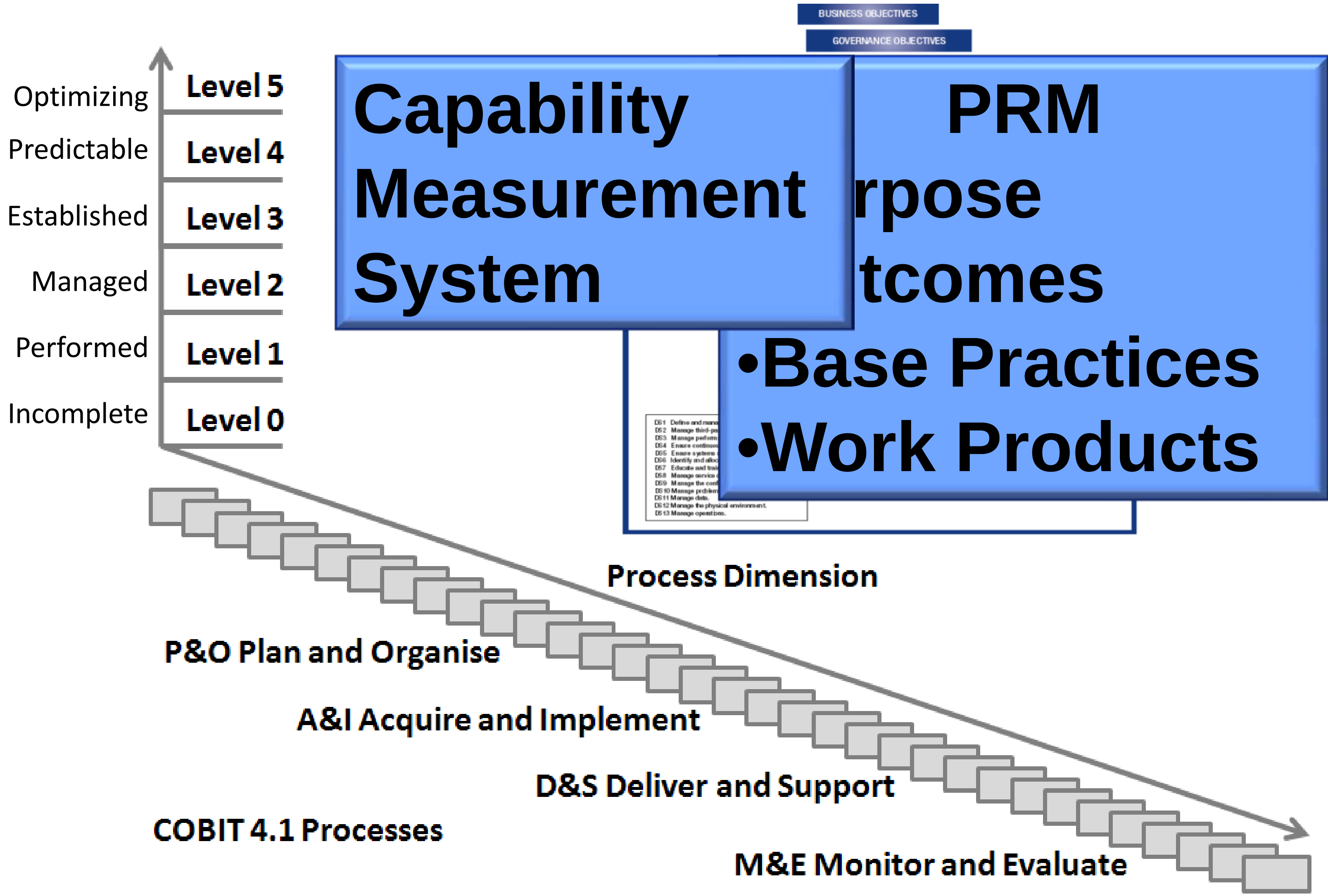
OUTPUT

- Date
- Assessment Input
- Identification of Evidence
- Assessment Process Used
- Process Profiles
- Additional Information

Roles and Responsibilities

- Sponsor
- Competent Assessor
- Assessors

COBIT 4.1 PAM:
COBIT 4.1 Capability + Attributes & PRM



Capability Measurement System

PRM

rpose

tcomes

- **Base Practices**
- **Work Products**

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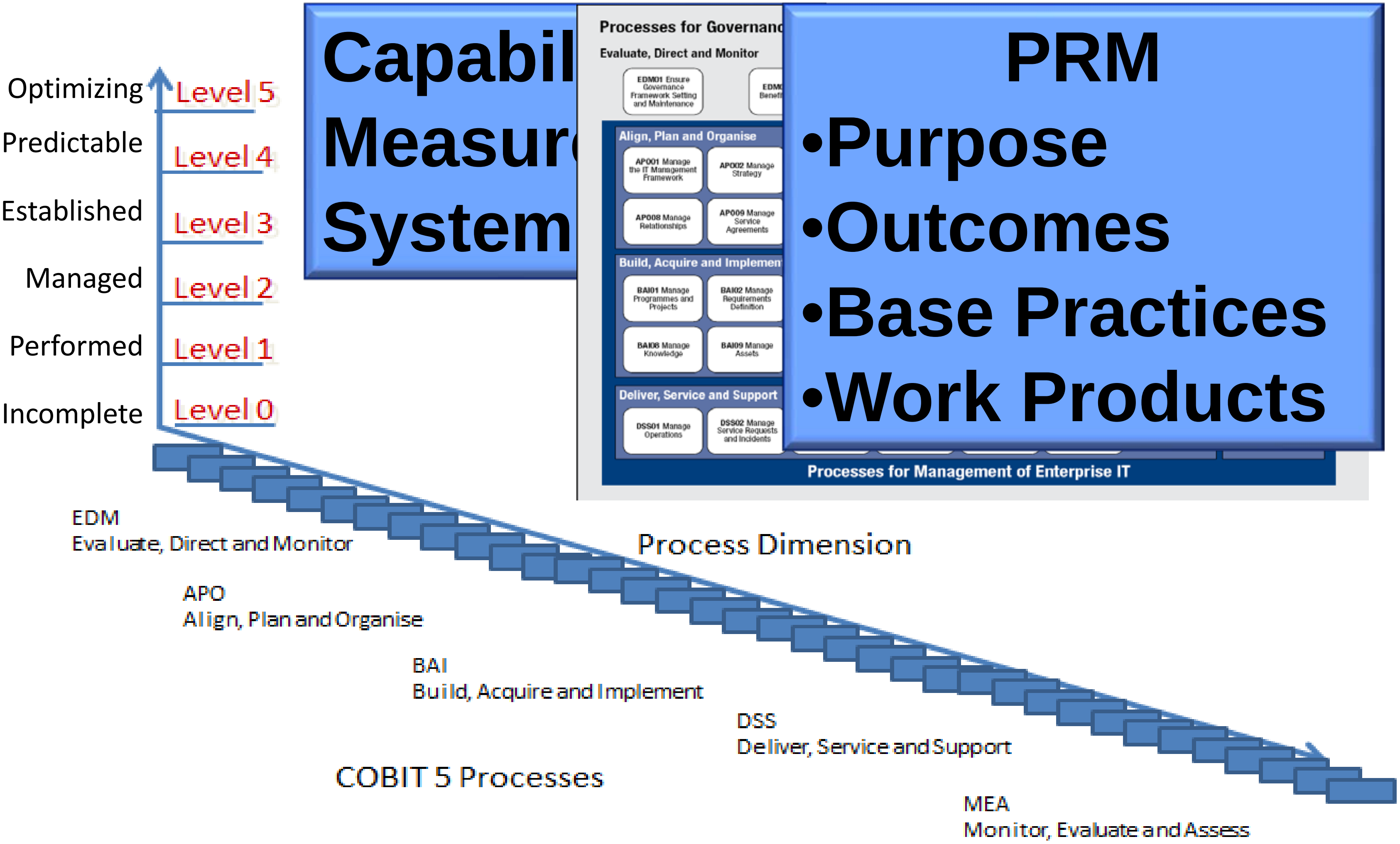
COBIT 5 PAM =>
COBIT 5 Capability + Attributes & PRM



Capabil
Measur
System

Processes for Governanc
Evaluate, Direct and Monitor
EDM01 Ensure Governance Framework Setting and Maintenance
EDM0 Benefi
Align, Plan and Organise
APO01 Manage the IT Management Framework
APO02 Manage Strategy
APO08 Manage Relationships
APO09 Manage Service Agreements
Build, Acquire and Implemen
BAI01 Manage Programmes and Projects
BAI02 Manage Requirements Definition
BAI08 Manage Knowledge
BAI09 Manage Assets
Deliver, Service and Support
DSS01 Manage Operations
DSS02 Manage Service Requests and Incidents
Processes for Management of Enterprise IT

PRM
- •Purpose
- •Outcomes
- •Base Practices
- •Work Products

Primary and Supporting Processes in PRM

Assess Process Capability with PAM:

COBIT 5 PAM Example:

APO09 *Manage Service Agreements*

APO09 Manage Service Agreements

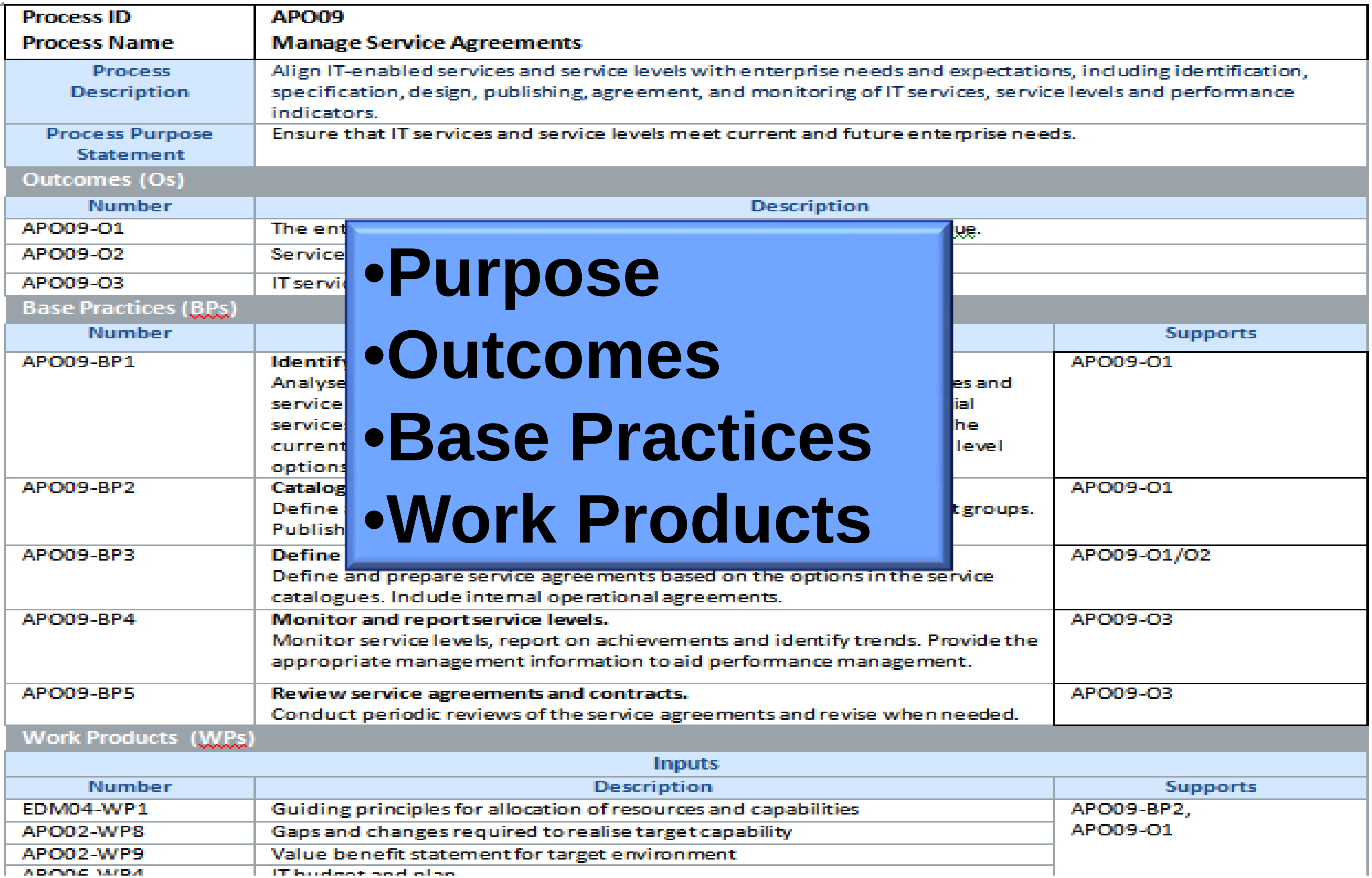
- Capability Level 1 Performed?
- PA1.1 Process Performance?
  - Does the process achieve its defined outcomes?
    - As evidenced by:
      - Production of an object
      - A significant change of state
      - Meeting of specified constraints
        - e.g., requirements, goals

APO09 Manage Service Agreements

- Capability Level 1 Performed?
- PA1.1 Process Performance?

Process Attribute Achievement		
🟩	85%-100%	Fully achieved
🟩	50%-85%	Largely achieved
🟨	15%-50%	Partially achieved
🟥	0-15%	Not achieved

(Draft) COBIT 5 PAM: APO09 Manage Service Agreements



Process ID Process Name	APO09 Manage Service Agreements	
Process Description	Align IT-enabled services and service levels with enterprise needs and expectations, including identification, specification, design, publishing, agreement, and monitoring of IT services, service levels and performance indicators.	
Process Purpose Statement	Ensure that IT services and service levels meet current and future enterprise needs.	
Outcomes (Os)		
Number	Description	
APO09-O1	The ent ue.	
APO09-O2	Service	
APO09-O3	IT servi	
Base Practices (BPs)		
Number		Supports
APO09-BP1	Identify Analyse es and service ial service he current level options	APO09-O1
APO09-BP2	Catalog Define t groups. Publish	APO09-O1
APO09-BP3	Define Define and prepare service agreements based on the options in the service catalogues. Include internal operational agreements.	APO09-O1/O2
APO09-BP4	Monitor and report service levels. Monitor service levels, report on achievements and identify trends. Provide the appropriate management information to aid performance management.	APO09-O3
APO09-BP5	Review service agreements and contracts. Conduct periodic reviews of the service agreements and revise when needed.	APO09-O3
Work Products (WPs)		
	Inputs	
Number	Description	Supports
EDM04-WP1	Guiding principles for allocation of resources and capabilities	APO09-BP2, APO09-O1
APO02-WP8	Gaps and changes required to realise target capability	
APO02-WP9	Value benefit statement for target environment	
APO06-WP4	IT budget and plan	

- •Purpose
- •Outcomes
- •Base Practices
- •Work Products

Capability Level 2 Managed
PA 2.1 Performance Management

a. Objectives for process performance identified?

b. Performance of process planned and monitored?

c. Performance of process adjusted to meet plans?

d. Responsibilities and authorities for performing the process defined, assigned and communicated?

e. Resources and information necessary for performing the process identified, made available, allocated and used?

f. Interfaces between involved parties managed to ensure effective communication and clear assignment of responsibility?

Capability Level 2: Managed
PA2.2 Work Product Management

a. Have requirements for the work products of the process been defined?

b. Have requirements for documentation and control of the work products been defined?

c. Are work products appropriately identified, documented and controlled?

d. Are work products reviewed in accordance with planned arrangements and adjusted as necessary to meet requirements?

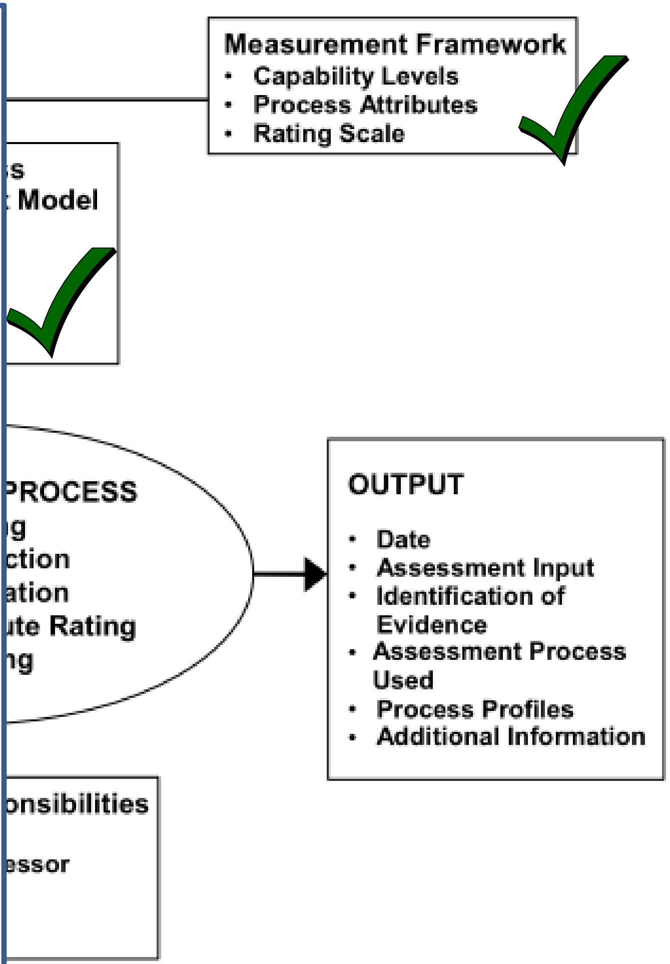
Assessed Process Capability Level

	Capability Level 0: **Incomplete**	Capability Level 1: **Performed**	Capability Level 2: **Managed**	
Process Assessed	False if Capability Level =/> 1	PA 1.1	PA2.1	PA2.2
APO09 Manage Service Agreements	FALSE	45%	0%	0%

Assessment Process: Initial Input

INITIAL INPUT

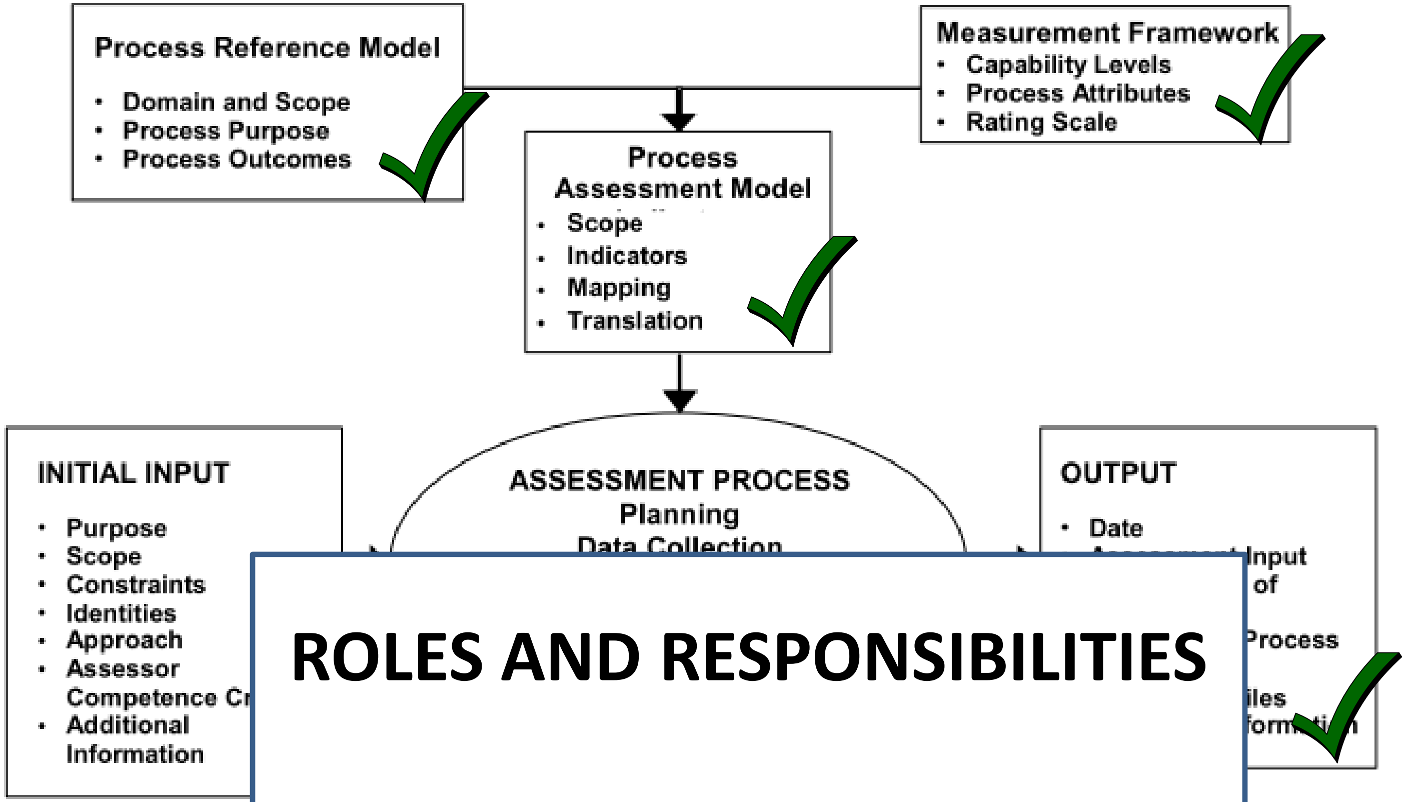
- Purpose
- Scope
- Constraints
- Identities
- Approach
- Assessor competence criteria
- Additional Information



OUTPUT

- Date
- Assessment Input
- Identification of Evidence
- Assessment Process Used
- Process Profiles
- Additional Information

Assessment Process: Roles



Process Reference Model

- Domain and Scope
- Process Purpose
- Process Outcomes

Measurement Framework

- Capability Levels
- Process Attributes
- Rating Scale

Process Assessment Model

- Scope
- Indicators
- Mapping
- Translation

INITIAL INPUT

- Purpose
- Scope
- Constraints
- Identities
- Approach
- Assessor Competence Cr
- Additional Information

ASSESSMENT PROCESS
Planning
Data Collection

OUTPUT

- Date
- Assessment Input
- of
- Process
- iles
- formation

ROLES AND RESPONSIBILITIES

- Sponsor
- Competent Assessor
- Assessors

Assessor Roles:

COBIT process assessment roles:

Lead assessor—‘competent’ assessor responsible for overseeing the assessment activities

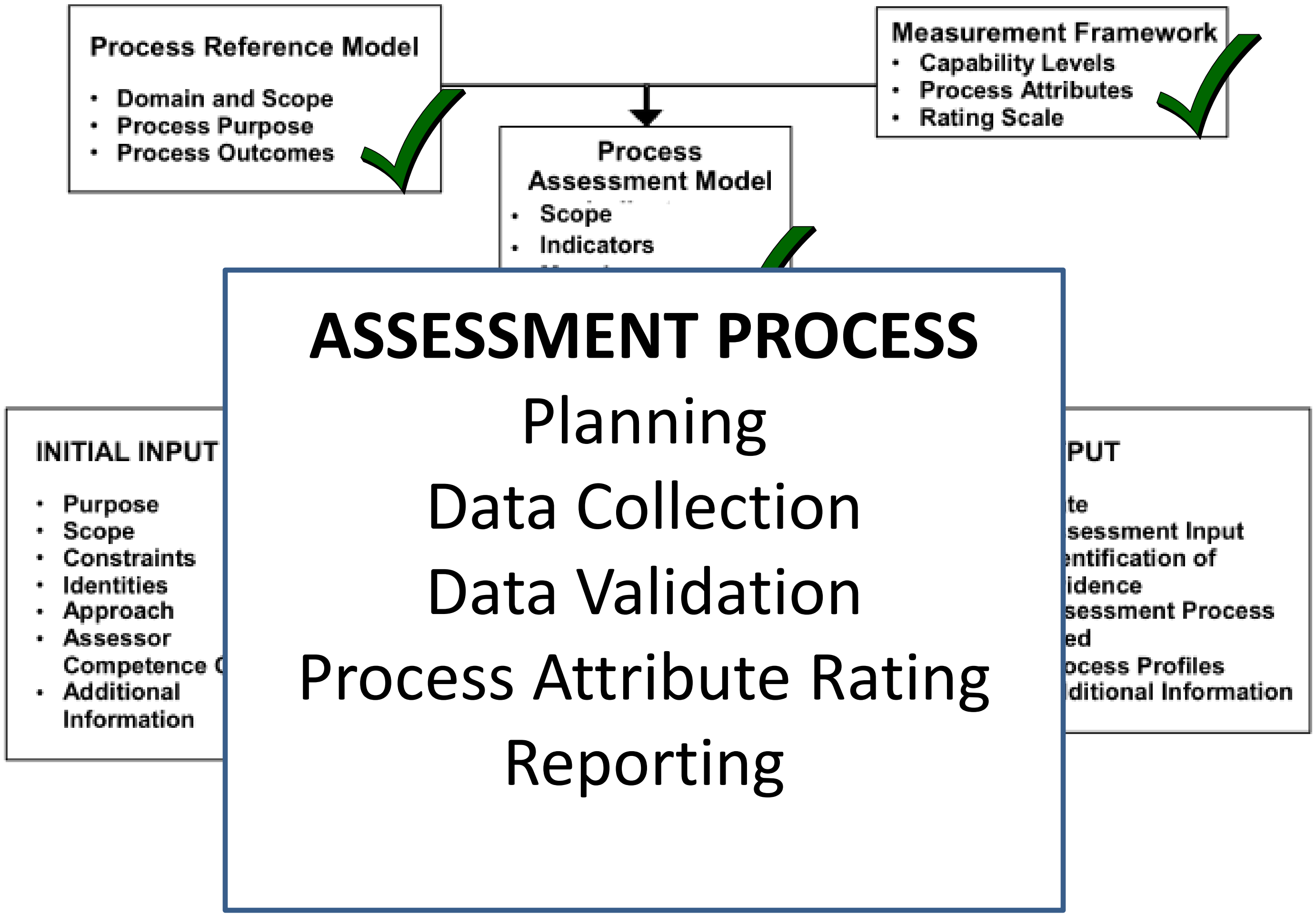
Assessor—developing assessor competencies; performs assessment activities

Competencies-Knowledge, skills and experience:

- •PRM, PAM, Methods & Tools, Rating Processes
- •Processes/Domains being assessed
- •Personal attributes for effective performance

ISACA’s COBIT Assessor training and certification scheme under development

Assessment Process



Process Reference Model

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INITIAL INPUT

- Purpose
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- Additional Information

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ASSESSMENT PROCESS

Planning

Data Collection

Data Validation

Process Attribute Rating

Reporting

Assessment Process - Planning

1. Initiation
2. Planning the assessment
3. Briefing
4. Data collection
5. Data validation
6. Process attributes rating
7. Reporting the results

Assessment Process - Assessing

1. Initiation
2. Planning the assessment
3. Briefing

4. Data collection
5. Data validation
6. Process attributes rating

7. Reporting the results

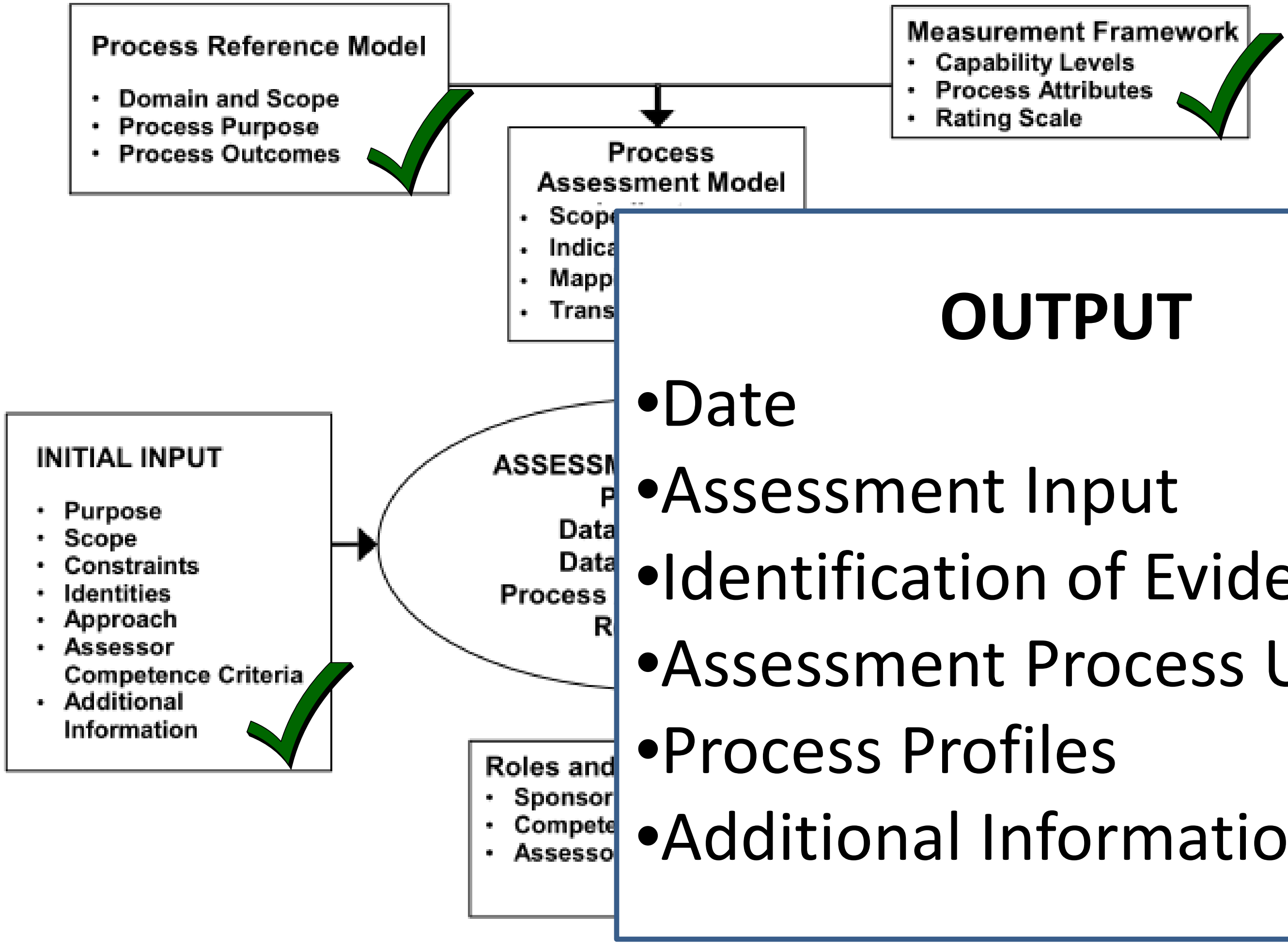
Assessment Process - Reporting

1. Initiation
2. Planning the assessment
3. Briefing

4. Data collection
5. Data validation
6. Process attributes rating

7. Reporting the results

Assessment Process: Output



Process Reference Model

- Domain and Scope
- Process Purpose
- Process Outcomes

✓

Measurement Framework

- Capability Levels
- Process Attributes
- Rating Scale

✓

Process Assessment Model

- Scope
- Indica
- Mapp
- Trans

INITIAL INPUT

- Purpose
- Scope
- Constraints
- Identities
- Approach
- Assessor Competence Criteria
- Additional Information

✓

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- Sponsor
- Compete
- Assesso

OUTPUT

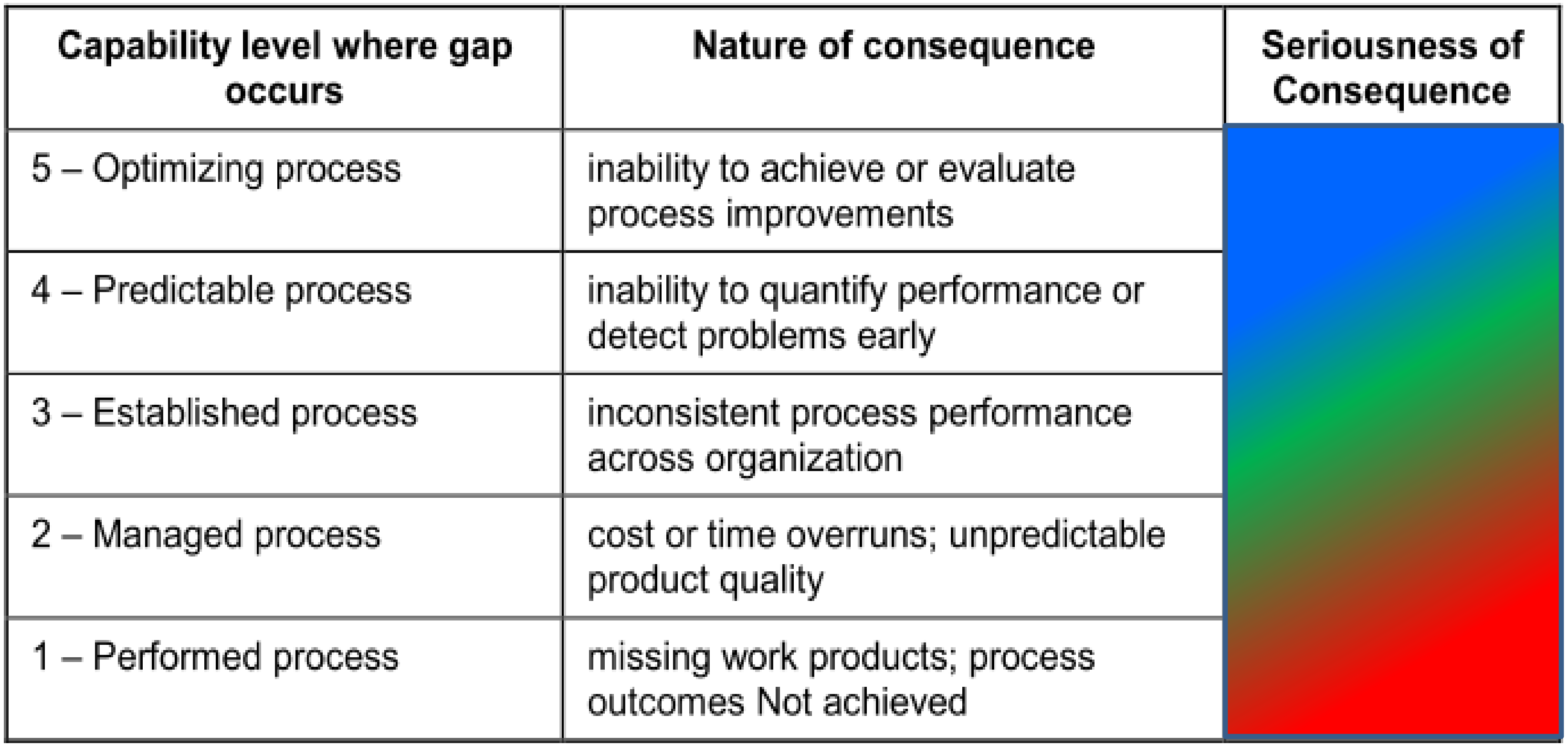
- Date
- Assessment Input
- Identification of Evidence
- Assessment Process Used
- Process Profiles
- Additional Information

A Process Capability Profile

Process Capability Level (based on attributes) =>	Capability Level 0: **Incomplete**	Capability Level 1: **Performed**	Capability Level 2: **Managed**		Capability Level 3: **Established**		Capability Level 4: **Predictable**		Capability Level 5: **Optimizing**	
Processes Assessed	False if Process Capability is Level 1 or Better	Process Performance (PA 1.1)	Performance management (PA2.1)	Work Product Management (PA2.2)	Definition (PA3.1)	Deployment (PA3.2)	Measurement (PA4.1)	Control (PA4.2)	Innovation (PA5.1)	Optimization (PA5.2)
DS1: Define and Manage Service Levels	FALSE	45%	0%	0%	0%	0%	N/A	N/A	N/A	N/A
DS2: Manage Third Party Services	FALSE	30%	0%	0%	0%	0%	N/A	N/A	N/A	N/A
DS4: Ensure Continuous Service	FALSE	35%	0%	0%	0%	0%	N/A	N/A	N/A	N/A
DS6: Ensure Systems Security	FALSE	90%	60%	75%	10%	0%	N/A	N/A	N/A	N/A
DS8: Manage Service Desk and Incidents	FALSE	90%	75%	45%	0%	0%	N/A	N/A	N/A	N/A
DS9: Manage the Configuration	FALSE	60%	0%	0%	0%	0%	N/A	N/A	N/A	N/A
DS11: Manage Data	FALSE	75%	0%	0%	0%	0%	N/A	N/A	N/A	N/A
ME2: Monitor and Evaluate Internal Control	FALSE	90%	25%	20%	0	0%	N/A	N/A	N/A	N/A
ME3: Ensure Compliance with External Requirements	FALSE	90%	60%	70%	45%	0%	N/A	N/A	N/A	N/A

Consequence of Capability Gaps

Figure A.3—Consequence of Gaps at Various Capability Levels



Capability level where gap occurs	Nature of consequence	Seriousness of Consequence
5 – Optimizing process	inability to achieve or evaluate process improvements	
4 – Predictable process	inability to quantify performance or detect problems early	
3 – Established process	inconsistent process performance across organization	
2 – Managed process	cost or time overruns; unpredictable product quality	
1 – Performed process	missing work products; process outcomes Not achieved	

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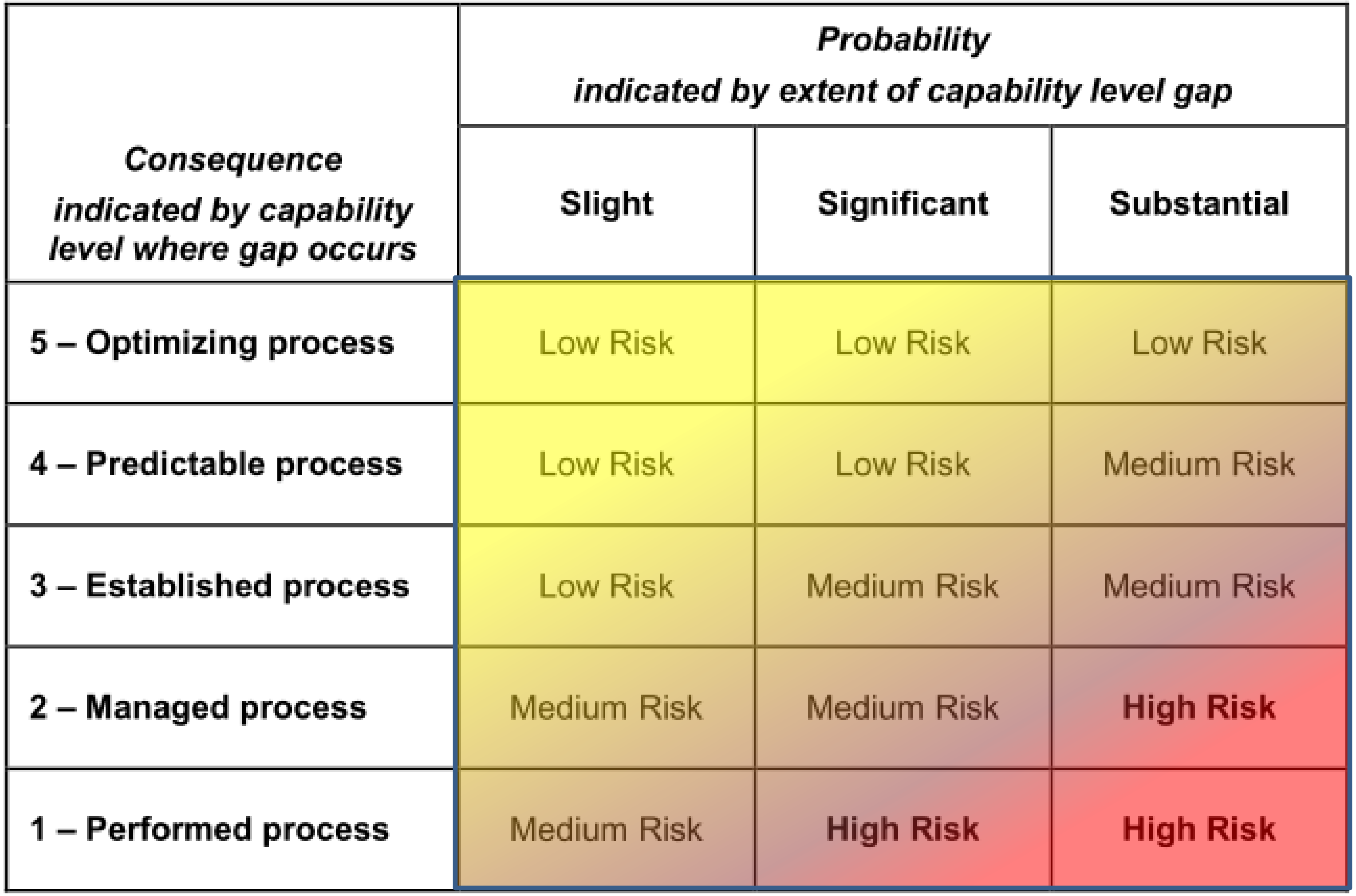
Risk from Capability Gaps

Figure A.4—Risk Associated With Each Capability Level



Consequence ***indicated by capability level where gap occurs***	***Probability*** ***indicated by extent of capability level gap***		
	Slight	**Significant**	**Substantial**
5 – Optimizing process	Low Risk	Low Risk	Low Risk
4 – Predictable process	Low Risk	Low Risk	Medium Risk
3 – Established process	Low Risk	Medium Risk	Medium Risk
2 – Managed process	Medium Risk	Medium Risk	**High Risk**
1 – Performed process	Medium Risk	**High Risk**	**High Risk**

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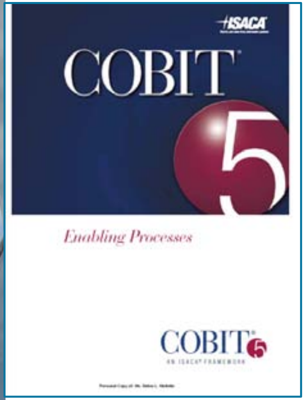
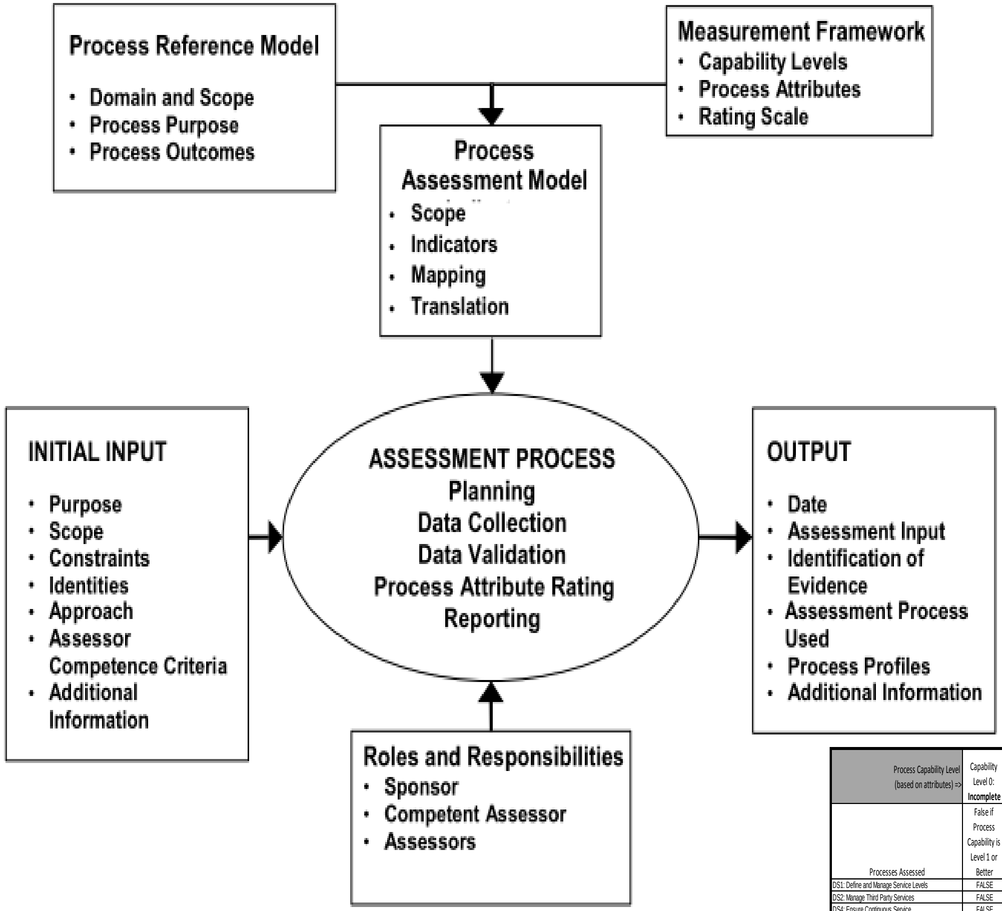
Summary





Process Reference Model
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- Capability Levels
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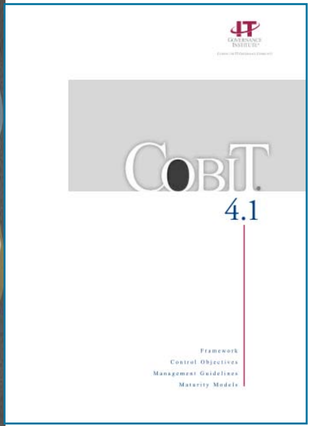
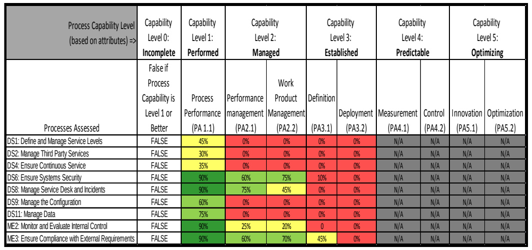
- Additional Information

ASSESSMENT PROCESS
Planning
Data Collection
Data Validation
Process Attribute Rating
Reporting

OUTPUT
- Date
- Assessment Input
- Identification of Evidence
- Assessment Process Used
- Process Profiles
- Additional Information

Roles and Responsibilities
- Sponsor
- Competent Assessor
- Assessors





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DS2: Manage Third Party Services	FALSE	30%	0%	0%	0%	0%	N/A	N/A	N/A	N/A
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DS11: Manage Data	FALSE	75%	0%	0%	0%	0%	N/A	N/A	N/A	N/A
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- PastPresident@sfisaca.org

Questions?