## See ISACA WEBINARS

## COBIT's Value for Small and Medium Enterprises

**SOLUTION Set ISACA** 

**Greet VOLDERS** 

## TODAY'S SPEAKER

Greet Volders, CGEIT, ISACA member since 1996.

Managing Consultant and C.E.O. of Voquals N.V., which she founded in 1995.

Main activity :

- Providing advice for customers
- Giving training and seminars related to enterprise governance of IT, process improvement and IT/business alignment.

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#### **ISACA related**

- Since 2004 : accredited trainer for COBIT course
- Since 2002 : active member in several development teams for COBIT
- Presentation of COBIT models and practical cases at several Conferences
- Greet is regularly asked to serve as an expert reviewer for ISACA publications.
- In 2021 : Greet developed this SME guide, on demand of ISACA.

## AGENDA

- Introduction to enterprise governance of information and technology (EGIT) for Small and Medium Enterprises
- How to start your own governance initiative
- Governance and Management Objectives
  - Link to organizational functions
  - Inputs are used by the related process
  - Outputs produced by the process
- Simple tools
  - to define your organization is considered as an SME
  - to scope your governance program.

## Introduction to enterprise governance of information and technology (EGIT) for Small and Medium Enterprises

- Start with introduction to the SME Guide
- Positioning of this guide in the COBIT Overview and Product Architecture
- Evolution of COBIT over the years



## Does this SME guide applies for your company

Enterprises that may benefit from this guide typically:

- Have limited in-house IT skills and/or capacity
- Do not have a complex IT infrastructure
- Outsource complex tasks
- Aim more to buy (and potentially tailor) tools rather than build them
- Have a relatively high risk tolerance, because of their low risk capacity
- Are very cost-conscious
- Have a simple command structure and limited organizational structures in place
- Have a short span of control

## Does this SME guide applies for your company

#### Official definition of SME :

- enterprises with 50 to 250 full-time employees (FTEs)
- an annual turnover of up to US\$59 million (€ 50 million) or an annual balance sheet total up to US\$51 million (€ 43 million).

But ... more aspects need to be considered

Later, I will explain the "Suitability Test", which helps defining if this SME guidance is applicable for your organization



## **POLLING QUESTION**

Are you following this webinar, because

- 1. You are part of an SME
- 2. You want to learn about COBIT, in general
- 3. You want to learn the differences with the Core Publication





## Introduction to EGIT for Small and Medium Enterprises

EGIT = <u>Enterprise Governance of Information</u> and <u>Technology</u>

- integral part of corporate governance
- exercised by the board
- definition and implementation of organizational processes, structures and relational mechanisms
- enable both business and IT professionals



Source: De Haes, Steven; W. Van Grembergen; Enterprise Governance of Information Technology: Achieving Alignment and Value, Featuring COBIT 5, 2<sup>nd</sup> ed., Springer International Publishing, Switzerland, 2015, https://www.springer.com/us/book/9783319145464

# **NCONCONCON**



COBIT for Small and Medium Enterprises



COBIT. An ISACA" Framework See ISACA.



### Importance of I&T and I&T Governance

- I&T = crucial in the support, sustainability and growth of enterprises.
  - ✓ Responsibility of governing boards (boards of directors) and senior management
  - ✓ No delegation anymore
  - ✓ Extend business governance to I&T

> Top Management needs to understand whether managers of I&T assets are:

- Likely to achieve enterprise objectives
- Resilient enough to learn and adapt
- Thoughtfully managing the I&T risk the enterprise faces
- Appropriately recognizing opportunities and acting upon them

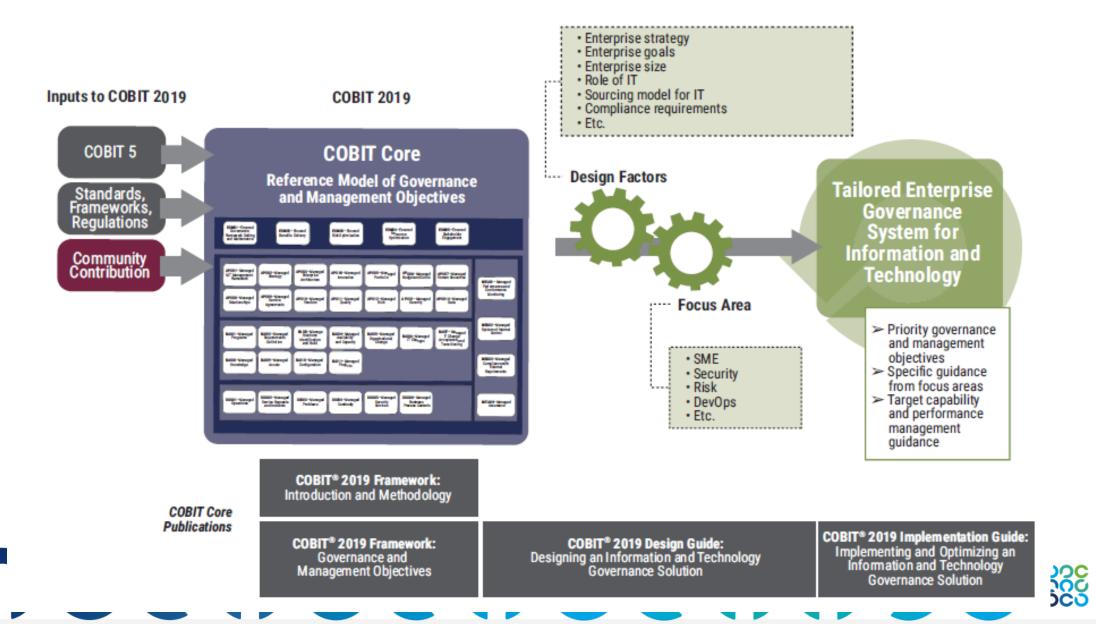
## **COBIT** as an I&T Framework

- Over the years, best-practice frameworks have been developed and promoted to assist in understanding, designing and implementing EGIT.
- COBIT 2019 builds on and integrates more than 25 years of development in this field.
- From its foundation in the IT audit community, COBIT has developed into a broader and more comprehensive I&T governance and management framework.
- COBIT continues to establish itself as a generally accepted framework for I&T governance.

### **COBIT overview and Product Architecture**

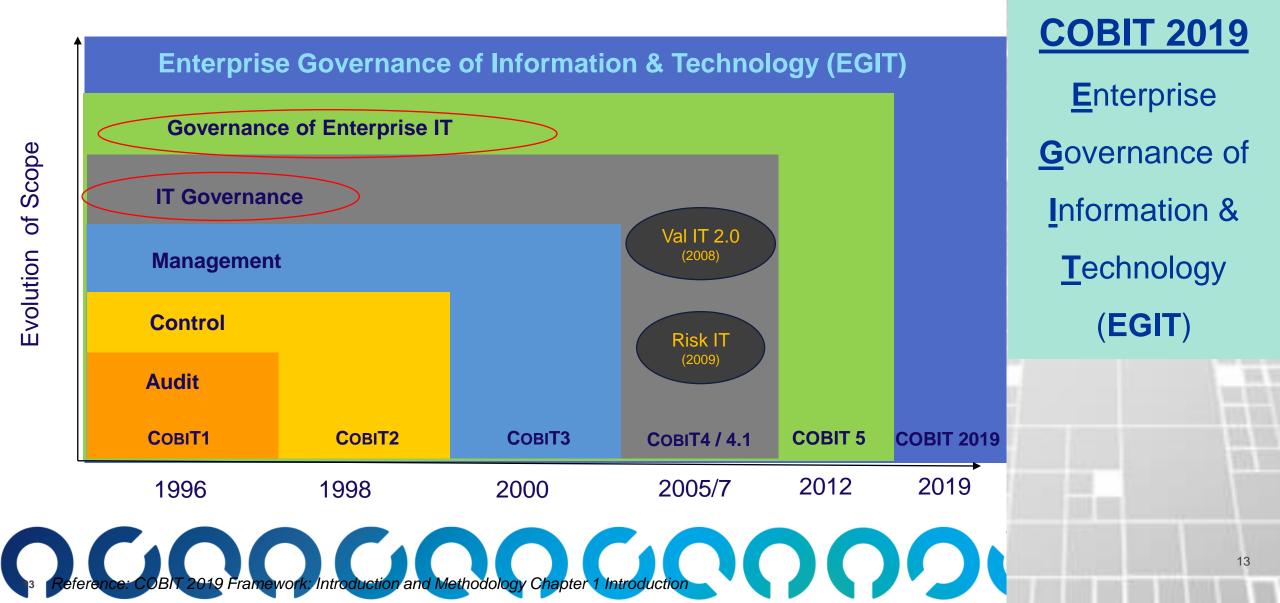
SME Guide is based on COBIT® 2019 Framework: Introduction and Methodology COBIT® 2019 Framework: Governance and Management Objectives COBIT® 2019 Design Guide: Designing an Information and Technology Governance Solution COBIT® 2019 Implementation Guide: Implementing and Optimizing an Information and Technology Governance Solution

### **COBIT Overview and Product Architecture**



ISACA.

## **COBIT = One Complete Business Framework**



## **POLLING QUESTION**

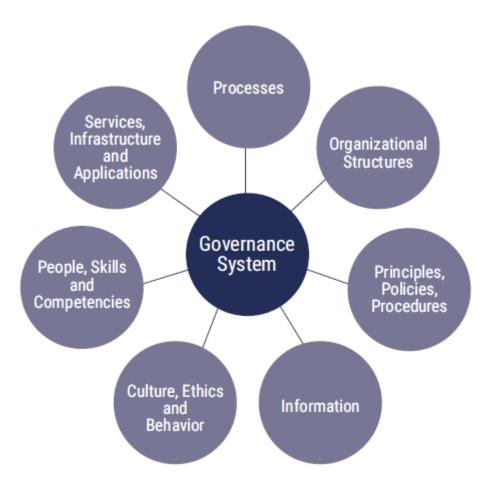
Are you familiar with COBIT2019 Core Publication "Governance & Management Objectives"?

- 1. I don't know anything about COBIT
- 2. I know about COBIT2019, but never worked with it
- 3. I know COBIT2019 and have worked with it



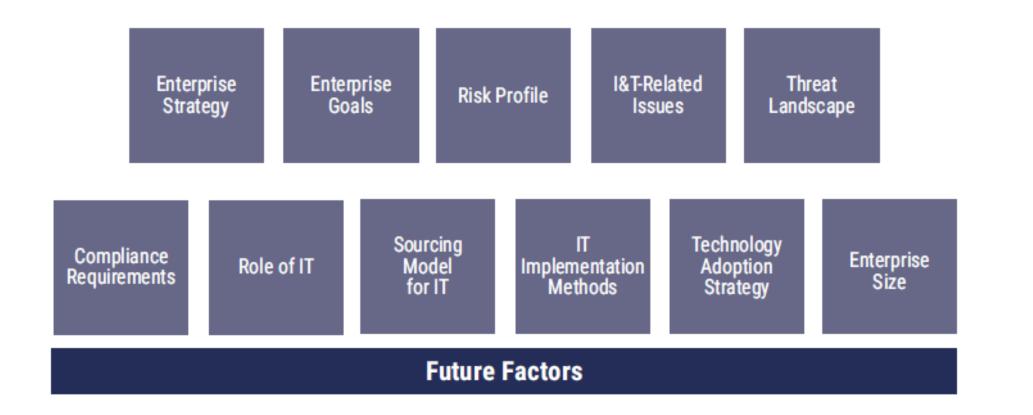
COBIT is a framework for the **Governance** and **Management** of Enterprise Information and Technology

COBIT defines the **<u>Components</u>** to build and sustain a governance system

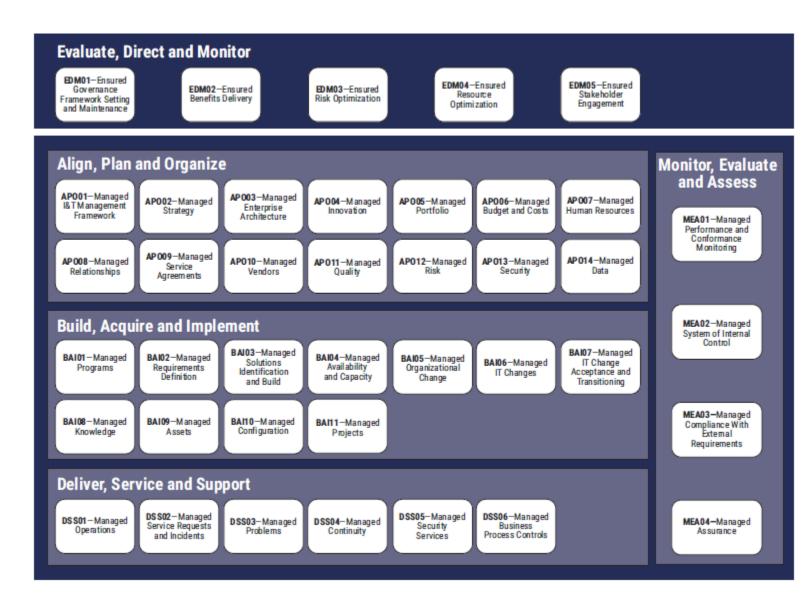




#### COBIT defines the **Design Factors**

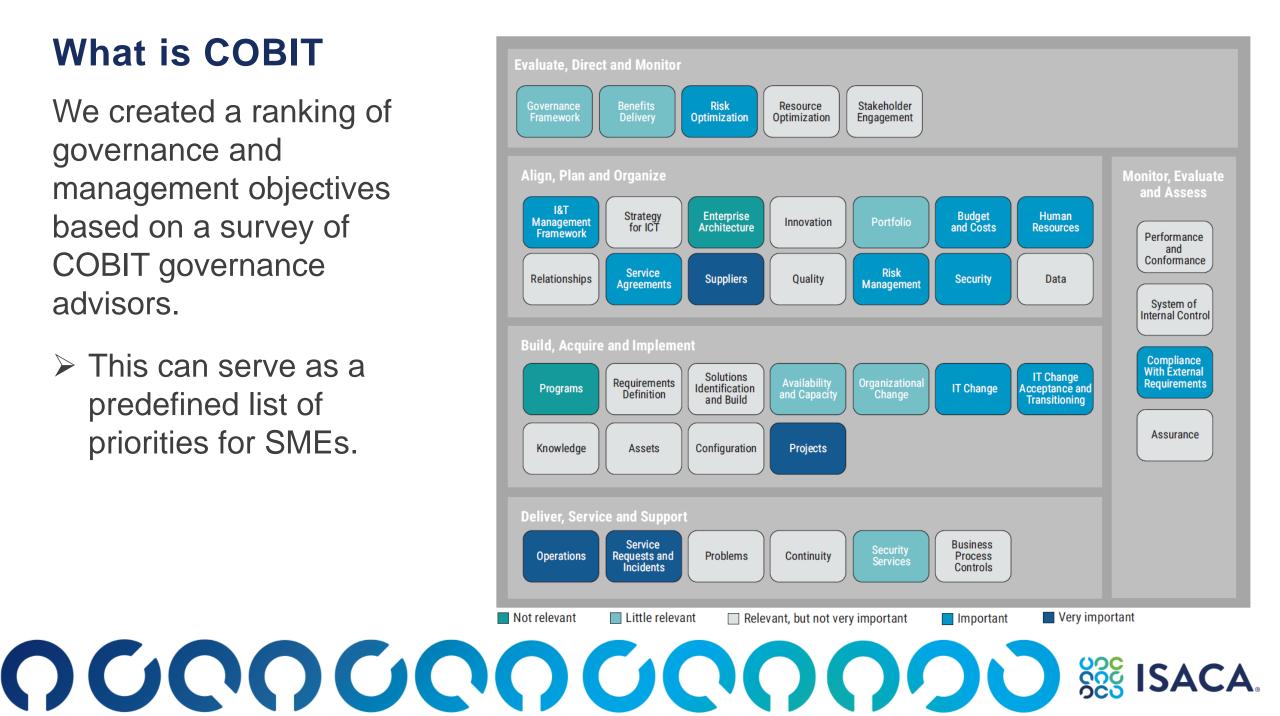


There are 40 <u>Governance</u> and <u>Management</u> objectives in COBIT



We created a ranking of governance and management objectives based on a survey of **COBIT** governance advisors.

This can serve as a predefined list of priorities for SMEs.



## How to start your own governance initiative

#### General Guidance

There is no one-size-fits-all governance system for enterprise I&T.

Every enterprise

- has a distinct character and profile
- will differ from other organizations in several critical respects: size, industry sector, regulatory landscape, threat landscape, role of IT in the enterprise and tactical technology-related decision making, among others.

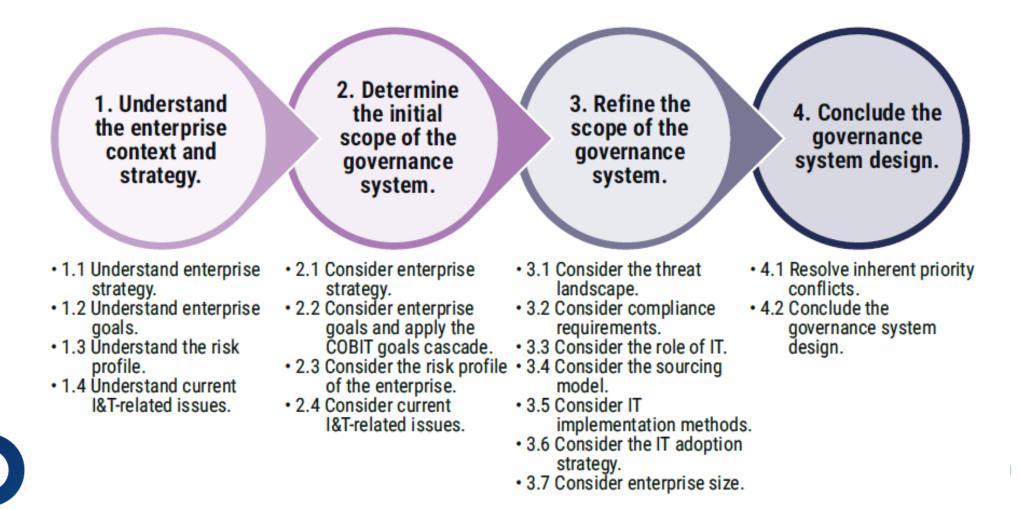
All these aspects—which COBIT references collectively as <u>design factors</u>—require enterprises to tailor their governance systems to realize the most value from their use of I&T.



## How to start your own governance initiative

**Scope** your program well from the start is essential to develop a feasible road map! The Governance System Design Workflow can help you with this.

SACA



## How to start your own governance initiative

#### **Outcome of this workflow**

- It will generate recommendations
  - for prioritizing governance and management objectives or related governance system components to address target capability levels,
  - for adopting specific variants of a governance system component.
- Some steps or substeps may lead to conflicting guidance.
- To resolve conflicts among the elements to the degree possible and conclude.

It's important to <u>evaluate the outcome</u> of the design tool kit with knowledge of the specific situation and context of the enterprise.

2 useful supports :
 ✓ Practical Example Using the Publication (chapter 8)
 ✓ Applying Design Factors - Example in appendix C



## Scope your governance program - Design Toolkit

#### APPENDIX C Applying Design Factors

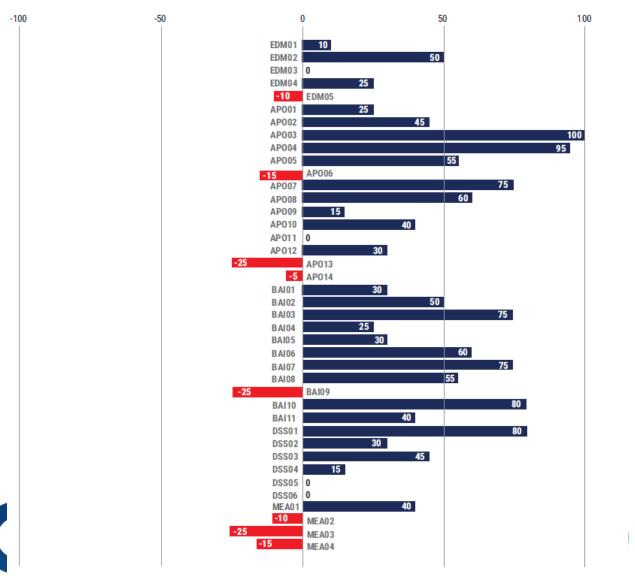
#### Example: Medium-Sized Innovative Company

This case study posits a hypothetical medium-sized innovative company responsible for developing appliances for the automotive sector. It is intended to help practitioners use the COBIT® 2019 companion governance system design tool kit.<sup>19</sup>

The enterprise is relatively small, with only 150 employees, and its claim to fame is its fast innovation. It is critically dependent on IT for product development and manufacturing of appliances. The enterprise is both a user and a developer of software. It is very eager to benefit from every newly available technology. It has made a strategic choice to outsource all infrastructure-related IT services and migrate to the cloud.

### Scope your governance program – Outcome of Design Toolkit

Governance and Management Objectives Importance (All Design Factors)



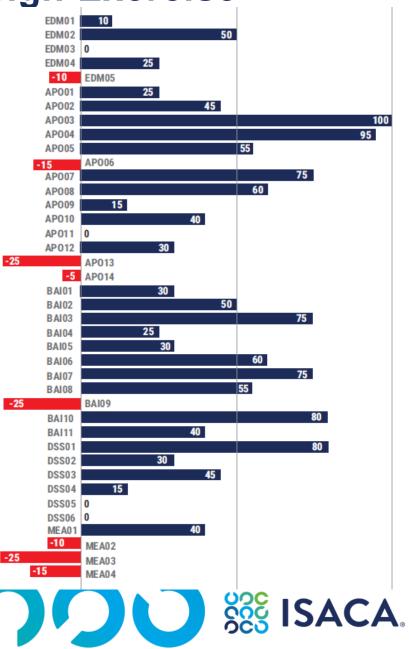
To confirm this rating, the outcome needs to be discussed with the management team, with the goal of obtaining agreement or changing the relative importance and deciding on the priority for the 40 COBIT objectives.



### **Practical Example - Conclusions of the Design Exercise**

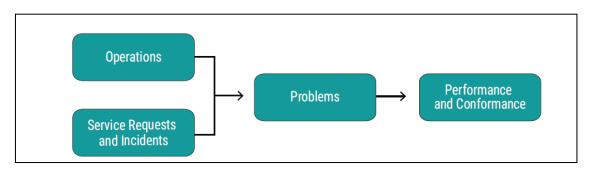
- most important APO objectives:
  - APO03 Managed Enterprise Architecture (100)
  - APO04 Managed Innovation (95)
  - APO07 Managed Human Resources is next (75).
- □ BAI objectives:
  - BAI03 Managed Solutions Identification and Build (75)
  - BAI07 Managed IT Change Acceptance and Transitioning (75)
  - BAI06 Managed IT Changes (60)
- **DSS** domain:
  - DSS01 Managed Operations is the most important (80),
  - DSS03 Managed Problems (45) is next
  - DSS02 Managed Service Requests and Incidents (30).

MEA01 Managed Performance and Conformance Monitoring (40)

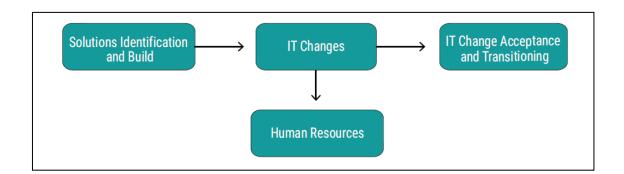


## **Practical Example - How to Use Conclusions**

- Starting with Enterprise Architecture and Innovation, it is not practical
- □ A solid base is needed to guarantee good, efficient and effective management
  - Ensuring the most essential operational processes are developed and the related objectives reached



Initiating <u>building and</u> <u>implementation processes</u>, since this is the example organization's core business



The COBIT SME model consists of 40 governance and management objectives, split into five domains

= the same as the core Governance and Management Objectives guide

**Additional :** 

#### **Focus Area relevance statement**

This statement provides more information about the relevance of each objective, specifically for SMEs.

This general guidance should be evaluated in the context of each enterprise.

Figure 5.1—Display of Governance and Management Objectives		
Domain: <name></name>		
Governance/Management Objective: <name></name>	Focus Area: Small and Medium Enterprises	
Description		
<text></text>		
Purpose		
<text></text>		
Small and Medium Enterprise Focus Area Relevance		
<text></text>		
Source: ISACA, COBIT® 2019 Framework: Governance Management ar https://store.isaca.org/s/store#/store/browse/detail/a2S4w000004		

Domain: Align, Plan and Organize Management Objective: APO10 – Managed Vendors

Description

Manage I&T-related products and services provided by all types of vendors to meet enterprise requirements. This includes the search for and selection of vendors, management of relationships, management of contracts, and reviewing and monitoring of vendor performance and vendor ecosystem (including upstream supply chain) for effectiveness and compliance.

Focus Area: Small and Medium Enterprises

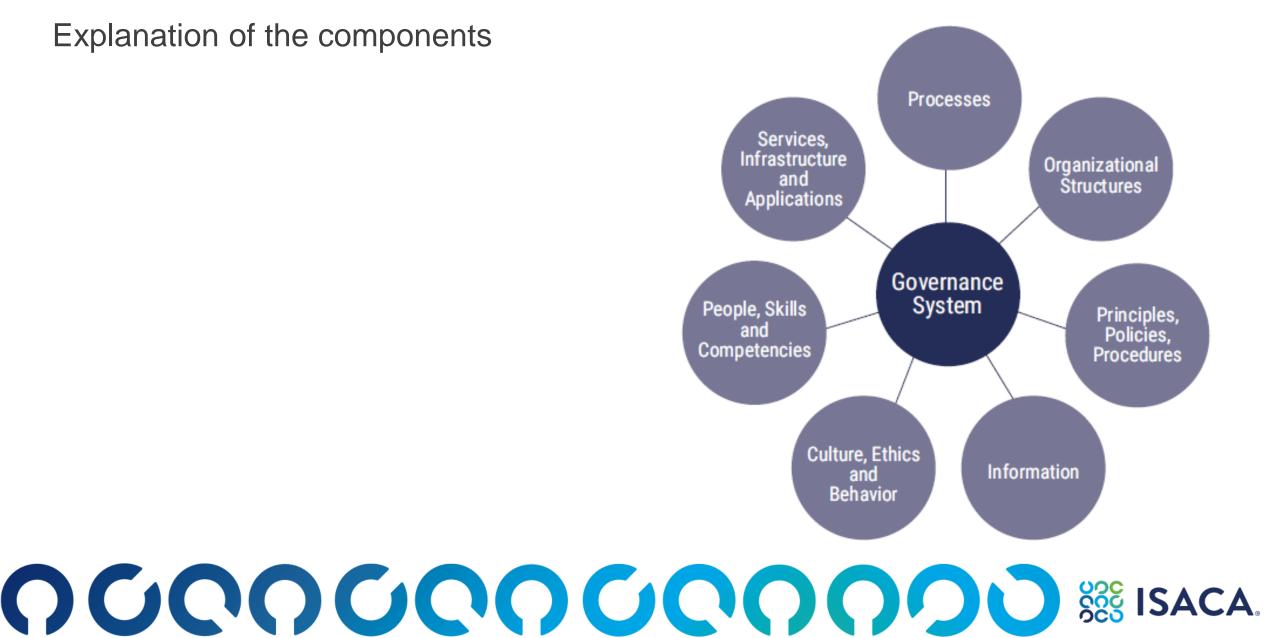
#### Purpose

Optimize available I&T capabilities to support the I&T strategy and road map, minimize the risk associated with nonperforming or noncompliant vendors, and ensure competitive pricing.

Small and Medium Enterprise Focus Area Relevance

Vendor or supplier management needs to be formalized, especially when the organization is <mark>outsourcing critical services</mark> to external providers. Evaluation of pricing and performance is essential to ensure the required service level and quality of services. Potential vendors can be identified when there is a need for a new supplier and periodically for ongoing evaluation.

#### Explanation of the components



#### **Processes**

- Same set of 40 processen
- Each governance and management objective includes several process practices.
- Each process has one or more activities.
- A limited number of example metrics.



#### **Processes**

A. Component: Process		
Governance/Management Practice	Small and Medium Enterprise-specific Metrics	
<ref> <name> <description></description></name></ref>	<metric></metric>	
Small and Medium Enterprise-specific Activities	S	Capability Level
1. <text></text>		<nr></nr>
2. <text></text>		<nr></nr>
n. <text></text>		<nr></nr>
Related Guidance (Standards, Frameworks, Compliance Requirements)	Detailed Reference	
<standard name=""></standard>	<text></text>	
<standard name=""></standard>	<text></text>	

#### **Processes**

A. Component: Process			
Management Practice	Small and Medium Enterprise-specific Metrics		
APO10.01 Identify and evaluate vendor relationships and contracts. Continuously search for and identify vendors and categorize them into type, significance and criticality. Establish criteria to evaluate vendors and contracts. Review the overall portfolio of existing and alternative vendors and contracts.	a. Percent of positive evaluations for existing vendors and contracts b. Percent of vendors or contracts changed due to negative evaluation		
Small and Medium Enterprise-specific Activities		Capability Level	
<ol> <li>Establish and maintain criteria relating to type, significance and criticality of vendors and vendor contracts, enabling a focus on preferred and important vendors.</li> </ol>		3	
<ol> <li>Identify, record and categorize existing vendors and contracts according to defined criteria to maintain a detailed register of preferred vendors that need to be managed carefully.</li> </ol>			
3. Establish and maintain vendor and contract evaluation criteria to enable overall review and comparison of vendor performance in a consistent way.		4	
<ol> <li>Periodically evaluate and compare the performance of existing vendors and evaluate alternative vendors to identify opportunities or a compelling need to reconsider current vendor contracts.</li> </ol>		5	
Related Guidance (Standards, Frameworks, Compliance Requirements)	Detailed Reference		
No related guidance for this management practice			

#### **Processes** Different guidance in Core Publication

A. Component: Process		
Management Practice	Small and Medium Enterprise-specific Metrics	
<b>APO10.01 Identify and evaluate vendor relationships and contracts.</b> Continuously search for and identify vendors and categorize them into type, significance and criticality. Establish criteria to evaluate vendors and contracts. Review the overall portfolio of existing and alternative	a. Percent of positive evaluations for existing vendors ar b. Percent of vendors or contracts changed due to negat a. Percent of defined evaluation criteria achieved	tive evaluation
vendors and contracts.	and contracts b. Percent of alternative suppliers providing equiv	alent services of
Small and Medium Enterprise-specific Activities	existing supplier contracts	
<ol> <li>Establish and maintain criteria relating to type, significance and critical preferred and important vendors.</li> </ol>	ity of venuers and venuer contracts, enabling a rocus on	
<ol><li>Identify, record and categorize existing vendors and contracts accordin preferred vendors that need to be managed carefully.</li></ol>	g to defined criteria to maintain a detailed register of	
3. Establish and maintain vendor and contract evaluation criteria to enable overall review and comparison of vendor performance in a consistent way.		4
<ol> <li>Periodically evaluate and compare the performance of existing vendors opportunities or a compelling need to reconsider current vendor contra-</li> </ol>		5
Related Guidance (Standards, Frameworks, Compliance Requirements)	Detailed Reference	
No related guidance for this management practice		

#### **Processes** Additional guidance In Core Publication

A. Component: Process			
Management Practice	Small and Medium Enterprise-specific Metrics		
APO10.01 Identify and evaluate vendor relationships and contracts. Continuously search for and identify vendors and categorize them into type, significance and criticality. Establish criteria to evaluate vendors and contracts. Review the overall portfolio of existing and alternative	a. Percent of positive evaluations for existing vendors and b. Percent of vendors or contracts changed due to negative		
vendors1. Continuously scan the enterprise landscape in search for new capabilities and support the realization of the I&T strategy, roa	partners and vendors that can provide complementary d map and enterprise objectives.	ty Level	
<ol> <li>Establish and maintain criteria relating to type, significance and criticali preferred and important vendors.</li> </ol>	ty of vendors and vendor contracts, enabling a focus on	3	
<ol><li>Identify, record and categorize existing vendors and contracts according preferred vendors that need to be managed carefully.</li></ol>	g to defined criteria to maintain a detailed register of		
3. Establish and maintain vendor and contract evaluation criteria to enable overall review and comparison of vendor performance in a consistent way.		4	
<ol> <li>Periodically evaluate and compare the performance of existing vendors and evaluate alternative vendors to identify opportunities or a compelling need to reconsider current vendor contracts.</li> </ol>		5	
Related Guidance (Standards, Frameworks, Compliance Requirements)	Detailed Reference		
No related guidance for this management practice			

#### **Organizational Structures**

#### **Different definition from Core Guide**

- Organizational structures are the committees, functions and roles that make decisions or manage parts of the enterprise.
- For each practice, levels of responsibility and accountability are suggested.



### **Organizational Structures**

Fig	gure G.1—SME Organizational Structures Roles and Descriptions
Role/Structure	Description
Board	The group of the most senior executives and/or non-executive directors of the enterprise who are accountable for the governance of the enterprise and have overall control of its resources
Executive Committee	A group of senior executives appointed by the board to ensure that the board is involved in, and kept informed of, major decisions. The committee is accountable for managing the portfolios of I&T-enabled investments, I&T services and I&T assets, ensuring that value is delivered and risk is managed. The committee is normally chaired by a board member.
General Manager	Typically, the highest-function ranking manager who is in charge of the total management of the enterprise
Financial Manager	The most senior manager of the enterprise who is accountable for all aspects of financial management, including financial risk and controls and reliable and accurate accounts
Operations Manager	The most senior manager of the enterprise who is accountable for operation of the enterprise
Security Manager	The most senior manager responsible for all aspects of security management across the enterprise
Security Expert	An individual responsible for aspects of security management in the enterprise
Business Process Owner	An individual accountable for the performance of a process in realizing its objectives, driving process improvement and approving process changes



### **Organizational Structures**

Steering Committee	A group of stakeholders and experts who are accountable for guidance of projects, including management and monitoring of plans, allocation of resources, delivery of benefits and value, and management of project risk
Project Manager	The manager responsible for the guidance of a specific project, coordinating and delegating time, budget, resources and tasks across the project team
Head Human Resources	The most senior manager of an enterprise who is accountable for planning and policies with respect to all human resources in that enterprise
Head of IT	The most senior manager of the enterprise who is responsible for aligning I&T and business strategies and accountable for planning, resourcing and managing the delivery of I&T services and solutions to support enterprise objectives
IT Development Coordinator	A senior individual accountable for I&T-related solution development processes
IT Operations Coordinator	A senior individual accountable for the I&T operational environments and infrastructure
Privacy Officer	Individual responsible for monitoring risk and business impact of privacy laws and for guiding and coordinating the implementation of policies and activities that ensure compliance with privacy directives
	(In some enterprises, the position may be referenced as the data protection officer.)
Legal Department	The function in the enterprise responsible for guidance on legal and regulatory matters
Compliance or Quality	The function in the enterprise responsible for all guidance on external compliance
Audit	The function in the enterprise responsible for provision of internal audits

## **Organizational Structures :**

Specific responsibilities per management objective are included

- Responsible (R)
  - These roles take the main operational obligation of fulfilling the practice and creating the intended outcome. Who is getting the task done? Who drives the task?
- Accountable (A)
  - These roles carry overall and final accountability. As a principle, accountability cannot be shared. Who accounts for the success and achievement of the task?

The SME can customize this chart by adding two levels of involvement for roles and organizational structures that should be:

- Consulted (C) : These roles provide input for the task. Who provides input?
- Informed (I) : These roles are informed of the achievements and/or deliverables of the task. Who receives information?



# **Governance and Management Objectives – Example APO10**

### **Organizational Structures**

B. Component: Organizational Structures		T	Т			Γ
Key Management Practice	Head of IT	IT Development Coordinator	Operations Co	5	Legal Department	
AP010.01 Identify and evaluate vendor relationships and contracts.	A	1	Т		R	Γ
AP010.02 Select vendors.	A	R	R	R		R
AP010.03 Manage vendor relationships and contracts.	A	R	R	П	R	Γ
AP010.04 Manage vendor risk.	A	R	R	R		F
AP010.05 Monitor vendor performance and compliance.	A	R	R		R	F

# **Governance and Management Objectives – Example APO10**

### **Organizational Structures** In Core Publication

Key Management Practice	Chiné Dick Officer	Chief Information Officer	Technology	Chief Digital Officer	I&T Governance Board	Enterprise Risk Committee	Head Development	Head IT Operations	Head IT Administration	Information Security Manager	, ij	anal Councel
AP010.01 Identify and evaluate vendor relationships and contracts.		R	R	R	А				R			R
AP010.02 Select vendors.		R	R	R	А	Τ	R	R	RF	R	R	Γ
AP010.03 Manage vendor relationships and contracts.		R	R	R	А	Т	R	R	RF	2		R
AP010.04 Manage vendor risk.	F	R	R	R	А	R	R	R	RF	R	R	Γ
AP010.05 Monitor vendor performance and compliance.	F	R R	R	R	А	R	R	R	RF	1	Π	R

## **Principles, Policies and Procedures**

## Adapted to the SME context

- Includes suggested principles, policies, standards and procedures relevant to the governance or management objective.
- The names of relevant principles, policies, standards and procedures are provided, with a description of their purpose and content.



### **Principles, Policies and Procedures**

Figure 5.8—Display of Principles, Policies and Procedures Component				
E. Component: Principles, Policies and Procedures				
Relevant Policy	Policy Description			
<name></name>	<description></description>			
Source: ISACA, COBIT® 2019 Framework: Governance Management https://store.isaca.org/s/store#/store/browse/detail/a2S4w0000				



# **Governance and Management Objectives – Example APO10**

## **Principles, Policies and Procedures**

E. Component: Principles, Policies and Procedures					
Relevant Policy	Policy Description				
Third-party IT service delivery management policy	Sets guidelines for managing risk related to third-party services. Establishes framework of expectations for behavior and enumerates security precautions required of third-party service providers in managing related risk.				

### Additional guidance in the core publication

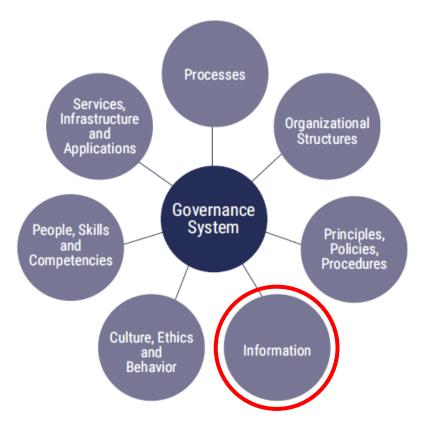
IT procurement policy	Outlines principles and procedures for procuring IT hardware, software and hosting solutions. Details standards for operating systems, computer networks, hardware specifications, etc. Provides guidelines for contract management (e.g., terms and conditions, monitoring of contracts).
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## **Information Flows and Items**

## Adapted to the SME context

- For each practice, inputs and outputs are provided, with indications of origin and destination.
- In general, each output is sent to one or a limited number of destinations, typically another COBIT process practice. That output then becomes an input at its destination
- There are a number of outputs that have many destinations, such as all COBIT processes or all processes within a domain.
   For readability reasons, these outputs are not listed as

inputs in these processes.



## **Information Flows and Items**

Figure 5.5—Display of Infor C. Component: Information Flows and Items				
Governance/Management Practice		nd Medium specific Inputs		d Medium ecific Outputs
<ref> <name></name></ref>	From	Description	Description	То
	<ref></ref>	<text></text>	<ref></ref>	<text></text>

# **Governance and Management Objectives – Example APO10**

## **Information Flows and Items**

Management Practice		all and Medium ise-specific Inputs	Small and Mee Enterprise-specific	
APO10.01 Identify and evaluate vendor relationships and	From	Description	Description	То
contracts.	Outside COBIT	Vendor contracts	Vendor catalog	BAI02.02
			Potential revisions to vendor contracts	Internal
			Vendor significance and evaluation criteria	Internal
APO10.02 Select vendors.	BAI02.02	High-level acquisition/ development plan	Vendor RFIs and RFPs	BAI02.01 BAI02.02
			RFI and RFP evaluations	BAI02.02
			Decision results of vendor evaluations	BAI02.02 EDM04.01
APO10.03 Manage vendor relationships and contracts.	There are no sm specific inputs f	all and medium enterprise- for this practice.	Results and suggested improvements	Internal
			Vendor roles and responsibilities	Internal
APO10.04 Manage vendor risk.	AP012.04	<ul> <li>Risk analysis and risk profile reports for stakeholders</li> </ul>	Identified vendor delivery risk	AP012.01 AP012.03 BAI01.01
		<ul> <li>Results of third-party risk assessments</li> </ul>	Identified contract requirements to minimize risk	Internal
APO10.05 Monitor vendor performance and compliance.	There are no sm specific inputs f	nall and medium enterprise- for this practice.	Vendor compliance monitoring criteria	Internal
			Vendor compliance monitoring review results	MEA01.03

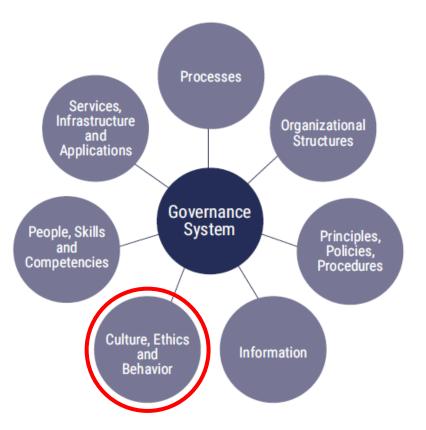
## Additional guidance n the core publication

3.04	Approved acquisition plan	Results and suggested improvements	Internal
		Communication and review process	Internal
		Vendor roles and responsibilities	Internal

## **Culture, Ethics and Behavior**

## Adapted to the SME context

- Provides detailed guidance on cultural elements within the enterprise that support the achievement of a governance or management objective.
- Where relevant, references to other standards and additional guidance are included.
- The related guidance cites specific chapters or sections wherein more information may be consulted.



## **Culture, Ethics and Behavior**

Figure 5.9—Display of Culture, Ethics and Behavior Component				
F. Component: Culture, Ethics and Behavior				
Key Culture Elements				
<name></name>				
Source: ISACA, COBIT® 2019 Framework: Governance Management and Objectives, USA, 2018, https://store.isaca.org/s/store#/store/browse/detail/a2S4w000004Ko5aEAC				



# **Governance and Management Objectives – Example APO10**

## **Culture, Ethics and Behavior**

F. Component: Culture, Ethics and Behavior

#### **Key Culture Elements**

Build and manage an ecosystem of vendors that can assist the organization in its digital transformation and innovation. Continuously scan the landscape in search of new and effective partners.

#### Additional guidance in the core publication

Management sets the tone and exemplifies correct behaviors when communicating with vendors to agree on and implement required improvements. Ensure that contracts conform to enterprise standards, and legal and regulatory requirements.

## **People, Skills and Competencies**

## The same as in the Core Guide

- Identifies the human resources and skills required to achieve a governance or management objective.
- COBIT® 2019 based this guidance on the Skills Framework for the Information Age (SFIA®) V6.
- All listed skills are described in detail in the SFIA framework.



### **People, Skills and Competencies**

d Reference
CODE>
CODE>



# **Governance and Management Objectives – Example APO10**

### **People, Skills and Competencies**

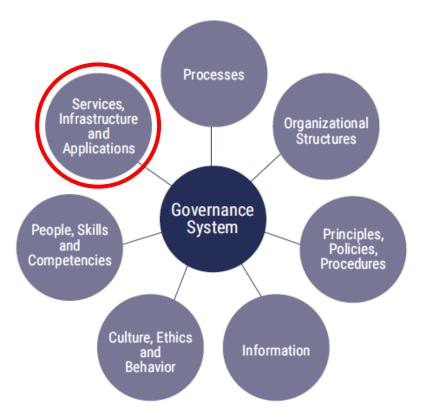
D. Component: People, Skills and	D. Component: People, Skills and Competencies								
Skill         Related Guidance (Standards, Frameworks, Compliance Requirements)         Detailed Reference									
Contract management	e-Competence Framework (e-CF)—A common European Framework for ICT Professionals in all industry sectors - Part 1: Framework, 2016	D. Enable—D.8. Contract Management							
Contract management	Skills Framework for the Information Age V6, 2015	ITCM							
Purchasing	e-Competence Framework (e-CF)—A common European Framework for ICT Professionals in all industry sectors—Part 1: Framework, 2016	D. Enable—D.4. Purchasing							
Sourcing	Skills Framework for the Information Age V6, 2015	SORC							



## **Services, Infrastructure and Applications**

## Adapted to the SME context

- Provides detailed guidance on third-party services, types of infrastructure and categories of applications that support the achievement of a governance or management objective.
- Guidance operates at a generic level.
- The intention is to provide direction for enterprises to build their governance system for I&T without naming specific vendors or products.



### **Services, Infrastructure and Applications**

#### Figure 5.10-Display of Services, Infrastructure and Applications Component

- G. Component: Services, Infrastructure and Applications
- <CATEGORY OF SERVICES, INFRASTRUCTURE OR APPLICATIONS>
- <CATEGORY OF SERVICES, INFRASTRUCTURE OR APPLICATIONS>

Source: ISACA, *COBIT®* 2019 Framework: Governance Management and Objectives, USA, 2018, <u>https://store.isaca.org/s/store#/store/browse/detail/a2S4w000004Ko5aEAC</u>

# **Governance and Management Objectives – Example APO10**

### **Services, Infrastructure and Applications**

G. Component: Services, Infrastructure and Applications

- Contract management system
- Third-party assurance services



# Simple tools to help

# Check if your organization can be considered as an SME

Suitability Test

### Scope your governance program

- Design Toolkit
- Goals Cascade



## **Suitability Test**

2 tests designed to assess an enterprise's suitability for implementing control over I&T based on this SME guidance



# **Staying in the Blue Zone**

#### Suitability Assessment (1)

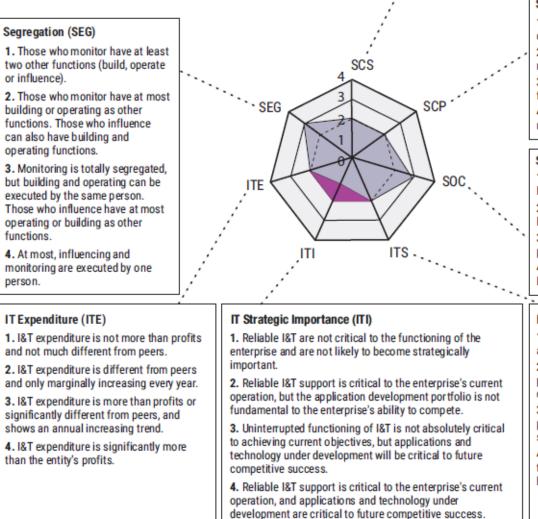
<<Stay in the Blue Zone>>

## This test focuses on

 the organizational structure of an enterprise and

**NCONCO** 

- the importance and criticality of I&T.

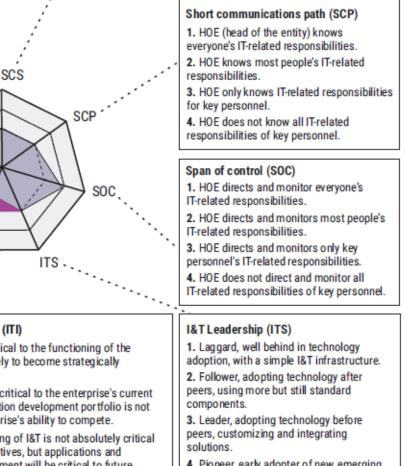


#### Simple command structure (SCS)

1. CS is informal and verbal, only short term and tactical.

 CS is primarily informal and verbal, somewhat short-term, but largely medium-term oriented, and still primarily tactical.

 CS is primarily formal and documented, begins looking at the long term, but is more medium-term oriented, somewhat tactical, with strategic views emerging.
 CS is strictly formal and documented, covers short, medium and long term, and is strategy oriented.



 Pioneer, early adopter of new, emerging technology, well ahead of the industry, highly complex I&T environment.

## Watch the Heat

The second test will help determine if this SME guide is suitable for the enterprise. Answers generate following advice:

- the majority of answers = red => apply the full COBIT guide
- the majority of answers = green
   => implement this SME guide
- The answers = mix of red, yellow and green => refer to both guides, for different aspects

## Suitability Assessment (2)

<<Watch the Heat>>

- The I&T infrastructure is an open (as opposed to closed) system (interconnections with customers, suppliers etc.).
- There are I&T-related regulations or contractual requirements applying to the enterprise.
- There is a need to provide outside assurance about I&T.
- Enterprise management is aware of I&T issues and wonders whether a minimum baseline is insufficient.
- Enterprise management has identified the need for significant formal training relative to I&T.
- Some I&T practices and procedures have been defined, standardized and documented in a sustainable manner.
- Enterprise management knows that common tools would make some I&T processes more effective and efficient.
- The IT experts of the enterprise are needed for developing/improving business processes.



## Watch the Heat – outcome advice

**NCONCIONODO** 

COBIT SME guidance may be useful for controlling the I&T environment, but conditions exist that need to be monitored.

*If they deteriorate, fuller* application of COBIT may be required.

### Suitability Assessment (2)

<<Watch the Heat>>

The I&T infrastructure is an open (as opposed to closed) system (interconnections with customers, suppliers etc.).	$\geq$	$\bigcirc$		$\bigcirc$	(
There are I&T-related regulations or contractual requirements applying to the enterprise.	$\geq$	$\bigcirc$		$\bigcirc$	(
There is a need to provide outside assurance about I&T.	$\geq$	$\bigcirc$		$\bigcirc$	(
Enterprise management is aware of I&T issues and wonders whether a minimum baseline is insufficient.	$\geq$		$\bigcirc$	$\bigcirc$	(
Enterprise management has identified the need for significant formal training relative to I&T.	$\geq$	$\bigcirc$		$\bigcirc$	(
Some I&T practices and procedures have been defined, standardized and documented in a sustainable manner.	$\geq$		$\bigcirc$	$\bigcirc$	(
Enterprise management knows that common tools would make some I&T processes more effective and efficient.	$\geq$	$\bigcirc$		0	(
The IT experts of the enterprise are needed for developing/improving business processes.	$\geq$	$\bigcirc$		0	(
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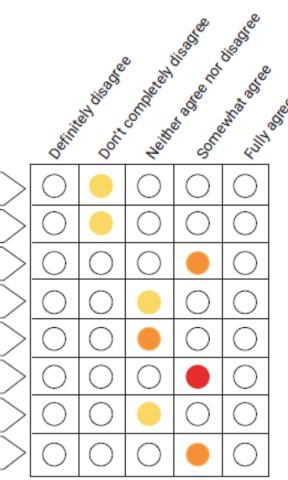
## Watch the Heat – outcome advice

Conditions exist that require a thorough review of full COBIT for application to the I&T environment of the enterprise.

### Suitability Assessment (2)

<<Watch the Heat>>

The I&T infrastructure is an open (as opposed to closed) system (interconnections with customers, suppliers etc.).
There are I&T-related regulations or contractual requirements applying to the enterprise.
There is a need to provide outside assurance about I&T.
Enterprise management is aware of I&T issues and wonders whether a minimum baseline is insufficient.
Enterprise management has identified the need for significant formal training relative to I&T.
Some I&T practices and procedures have been defined, standardized and documented in a sustainable manner.
Enterprise management knows that common tools would make some I&T processes more effective and efficient.
The IT experts of the enterprise are needed for developing/improving business processes.



# Scope your governance program - Design Toolkit

## APPENDIX C Applying Design Factors

#### Example: Medium-Sized Innovative Company

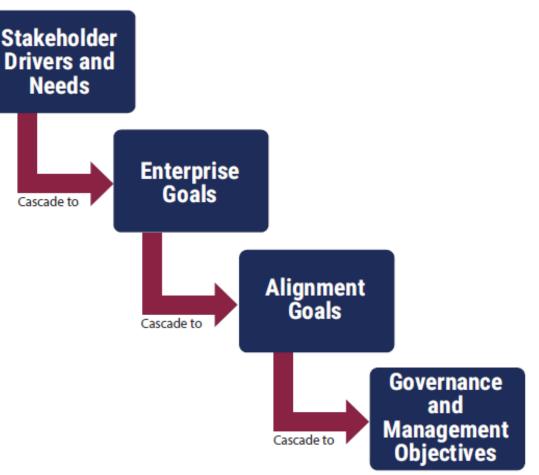
This case study posits a hypothetical medium-sized innovative company responsible for developing appliances for the automotive sector. It is intended to help practitioners use the COBIT® 2019 companion governance system design tool kit.<sup>19</sup>

The enterprise is relatively small, with only 150 employees, and its claim to fame is its fast innovation. It is critically dependent on IT for product development and manufacturing of appliances. The enterprise is both a user and a developer of software. It is very eager to benefit from every newly available technology. It has made a strategic choice to outsource all infrastructure-related IT services and migrate to the cloud.

# Scope your governance program - Alternative > Simple Toolkit = Goals Cascade

Alignment goals emphasize the alignment of all IT efforts with business objectives

There is a frequent misunderstanding that these goals indicate purely internal objectives of the IT department within an enterprise.



# Scope your governance program - Goals Cascade > Enterprise Goals

REF	BSC DIMENSION	ENTERPRISE GOAL
EG01	Financial	Portfolio of competitive
		products and services
EG02	Financial	Managed business risk
EG03	Financial	Compliance with external
		laws and regulations
EG04	Financial	Quality of financial
		information
EG05	Customer	Customer-oriented service
		culture
EG06	Customer	Business service continuity
		and availability
EG07	Customer	Quality of management
		information

REF	BSC DIMENSION	ENTERPRISE GOAL						
EG08	Internal Optimization of internal							
		business process						
		functionality						
EG09	Internal	Optimization of business						
		process costs						
EG10	Internal	Staff skills, motivation and						
		productivity						
EG11	Internal	Compliance with internal						
		policies						
EG12	Growth	Managed digital						
		transformation programs						
EG13	Growth	Product and business						
		innovation						

# > Alignment Goals

REF	BSC DIMENSION	ALIGNMENT GOAL
AG01	Financial	IT compliance and support for
		business compliance with external
		laws and regulations
AG02	Financial	Managed information- and
		technology-related risk
AG03	Financial	Realized benefits from
		information- and technology-
		enabled investments and services
		portfolio
AG04	Financial	Quality of technology-related
		financial information
AG05	Customer	Delivery of I&T services in line
		with business requirements
AG06	Customer	Agility to turn business
		requirements into operational
		solutions
AG07	Internal	Security of information, processing
		infrastructure and applications,
		and privacy

REF	BSC DIMENSION	ENTERPRISE GOAL
AG08	Internal	Enabling and supporting
		business processes by
		integrating applications and
		technology
AG09	Internal	Delivery of programs on time,
		on budget, and meeting
		requirements and quality
		standards
AG10	Internal	Quality of IT management
		information
AG11	Internal	IT compliance with internal
		policies
AG12	Learning and	Competent and motivated staff
	Growth	with mutual understanding of
		technology and business
AG13	Learning and	Knowledge, expertise and
	Growth	initiatives for business
		innovation

## Enterprise goals to alignment goals

		Figu	ure E.	1—Map	ping Ta	ble: E	nterpr	ise Goa	als-Alig	ynment	Goals	\$		
		EG01	EG02	EG03	EG04	EG05	EG06	EG07	EG08	EG09	EG10	EG11	EG12	EG13
		Portfolio of competitive products and services	Managed business risk	Compliance with external laws and regulations	Quality of financial information	Customer- oriented service culture	Business service continuity and availability	Quality of management information	Optimization of internal business process functionality	Optimization of business process costs	Staff skills, motivation and productivity	Compliance with internal policies	Managed digital transformation programs	Product and busines innovatio
AG01	I&T compliance and support for business compliance with external laws and regulations		s	Р								S		
AG02	Managed I&T-related risk		Р				S							
AG03	Realized benefits from I&T-enabled investments and services portfolio	S				S			S	S			Р	
	Quality of technology-related financial information				Р			Р		Р				
AG05	Delivery of I&T services in line with business requirements	Р				S	S		S				S	
AG06	Agility to turn business requirements into operational solutions	Р				s			S				S	s
AG07	Security of information, processing infrastructure and applications, and privacy		Р				Р							
AG08	Enabling and supporting business processes by integrating applications and technology	Р				Р			S		s		Р	s
AG09	Delivering programs on time, on budget and meeting requirements and quality standards	Р				S			S	S			Р	s
AG10	Quality of I&T management information				Р			Р		S				
AG11	I&T compliance with internal policies		S	Р								Р		
AG12	Competent and motivated staff with mutual understanding of technology and business					s					Р			
AG13	Knowledge, expertise and initiatives for business innovation	Р		S									S	Р

Source: ISACA, COBIT® 2019 Framework: Governance and Management Objectives, USA, 2018, https://store.isaca.org/s/store#/store/browse/detail/a2S4w000004Ko5aEAC



> alignment goals to governance and management objectives

	Figure E.	2-Ma	pping	Table:	Align	nent Go	bals-G	overna	nce an	d Mana	ageme	nt Obj	ectives	
		AG01	AG02	AG03	AG04	AG05	AG06	AG07	AG08	AG09	AG10	AG11	AG12	AG13
		I&T compliance and support for business compliance with external laws and regulations	Managed I&Trelated risk	Realized benefits from I&T-enabled investments and services portfolio	Quality of technology- related financial information	Delivery of I&T services in line with business requirements	Agility to turn business requirements into operational solutions	Security of information, processing infrastructure and applications, and privacy	Enabling and supporting business processes by integrating applications and technology	Delivering programs on time, on budget and meeting requirements and quality standards	Quality of I&T management information	I&T compliance with internal policies	Competent and motivated staff with mutual understanding of technology and business	Knowledge, expertise and initiatives for business innovation
EDM01	Ensured governance framework setting and maintenance	Р	s	Р					S			s		
EDM02	Ensured benefits delivery			Р		S	S		S					S
EDM03	Ensured risk optimization	S	Р					Р				S		
EDM04	Ensured resource optimization			S		S	S		S	Р			S	
	Ensured stakeholder engagement				S						P	S		
AP001	Managed I&T management framework	S	S	Р		S		S	S	S	S	Р		
AP002	Managed strategy			S		S	S		Р				S	S
AP003	Managed enterprise architecture			S		S	Р	S	Р					
AP004	Managed innovation			S			Р		S				S	Р
AP005	Managed portfolio			Р		P	S		S	S				
AP006	Managed budget and costs			S	Р					Р	S			
AP007	Managed human resources			S		S				S			P	Р
AP008	Managed relationships			S		Р	Р		S	S			Р	Р
AP009	Managed service agreements					Р			S					
AP010	Managed vendors					Р	S			S				

alignment goals to governance and management objectives

Fig	gure E.	2-Ma	pping	Table:	Alignr	nent Go	bals-G	overna	nce an	d Mana
		AG01	AG02	AG03	AG04	AG05	AG06	AG07	AG08	AG09
		I&T compliance and support for business compliance with external laws and regulations	Managed I&T-related risk	Realized benefits from I&T-enabled investments and services portfolio	Quality of technology- related financial information	Delivery of I&T services in line with business requirements	Agility to turn business requirements into operational solutions	Security of information, processing infrastructure and applications, and privacy	Enabling and supporting business processes by integrating applications and technology	Delivering programs on time, on budget and meeting requirements and quality standards
APO10 Managed ve	ndors					Р	S			S
	14-			-	-	-				_

# Scope your governance program - Goals Cascade > alignment goals – example METRICS

AG05	Customer	Delivery of I&T services in line with business requirements	•	Percent of business stakeholders satisfied that I&T service delivery meets agreed service levels Number of business disruptions due to I&T service incidents
			•	Percent of users satisfied with the quality of I&T service delivery
AG06	Customer	Agility to turn business requirements into operational	•	Level of satisfaction of business executives with I&T's responsiveness to new requirements
		solutions	•	Average time-to-market for new I&T-related services and applications
		•	•	Average time to turn strategic I&T objectives into an agreed and approved initiative
			•	Number of critical business processes supported by up-to-date infrastructure and applications
AG09	Internal	Delivery of programs on time, on budget and meeting	•	Number of programs/projects on time and within budget
		requirements and quality standards	•	Number of programs needing significant rework due to quality defects
			•	Percent of stakeholders satisfied with program/project quality

Enterprise goals to alignment goals

		Figu	ure E.	1—Map	ping Ta	ble: E	nterpr	ise Goa	als-Alig	ynment	Goals	6		
		EG01	EG02	EG03	EG04	EG05	EG06	EG07	EG08	EG09	EG10	EG11	EG12	EG13
		Portfolio of competitive products and services	Managed business risk	Compliance with external laws and regulations	Quality of financial information	Customer- oriented service culture	Business service continuity and availability	Quality of management information	Optimization of internal business process functionality	Optimization of business process costs	Staff skills, motivation and productivity	Compliance with internal policies	Managed digital transformation programs	Product and business innovatior
AG05	Delivery of I&T services in line with business requirements	Р				S	S		S				S	
AG06	Agility to tum business requirements into operational solutions	Р	/			S			S				S	S
AG07	Security of information, processing infrastructure and applications, and privacy		Р				Р							
AG08	Enabling and supporting business processes by integrating applications and technology	P				Р			S		S		P	s
AG09	Delivering programs on time, on budget and meeting requirements and quality standards	Р	)			s			S	S		(	Р	s

# Scope your governance program - Goals Cascade > Enterprise goals – example METRICS

EG01	Financial	Portfolio of competitive products and services	<ul> <li>Percent of products and services that meet or exceed targets in revenues and/or market share</li> </ul>
			<ul> <li>Percent of products and services that meet or exceed customer satisfaction targets</li> </ul>
			<ul> <li>Percent of products and services that provide competitive advantage</li> </ul>
			• Time-to-market for new products and services
EG12	Growth	Managed digital	Number of programs on time and within budget
		transformation programs	<ul> <li>Percent of stakeholders satisfied with program delivery</li> </ul>
			<ul> <li>Percent of business transformation programs stopped</li> </ul>
			<ul> <li>Percent of business transformation programs with regular reported status updates</li> </ul>



# Practical Example Using This Publication : Generic Implementation Steps Practical Example



### **Understand the Context of Your I&T Governance Program**

#### To consider different factors in the external and internal environment

- Governing laws, regulations and policies
- International standards
- Industry practices
- The economic and competitive environment
- Technology advancements and evolution
- The threat landscape
- The community's culture and ethics

- The enterprise's:
  - Reason for existence, mission, vision, goals and values
  - Governance policies and practices
  - Culture and management style
  - Models for roles and responsibilities
  - Business plans and strategic intentions
  - Operating model and level of maturity

### **Create the Appropriate Environment**

To implement EGIT improvements in the appropriate context.

#### Avoid the following Threads and Pitfalls

- Inadequate management direction, support and oversight
- Inadequate support and direction from key stakeholders, resulting in new policies and procedures lacking proper ownership or lasting effect
- Missing management structure that assigns roles and responsibilities, leading to improvements are unlikely to become normal business practices.

### **Start With the Design Canvas**

To scope the governance program using the design factors

Tailor your governance system to realize most value from your I&T assets

- 1. Prioritize governance and management objectives, together with their target capability levels.
- 2. Identify related or specific variant governance system components.
- 3. Select appropriate focus areas such as information security, risk or DevOps.

### **Establish an Implementation Team**

Include people from the business and IT functions

Identify the team members'

knowledge, expertise, experience, credibility and authority

### The team should commit to:

- $\checkmark~$  A clear vision of success and desired goals
- ✓ Clarity and transparency of team processes, accountabilities and communications
- ✓ Integrity, mutual support and commitment to each other's success
- ✓ Mutual accountability and collective responsibility
- Venturing out of comfort zones, always looking for ways to improve, uncovering new possibilities and embracing change

### **Working the Prioritized Objectives**

Use the detailed guidance described in Chapter 7 for each of the identified objectives

- 1. Assess each objective and determine the baseline.
- 2. Determine the target capability level for each identified objective.
- 3. Identify the gaps using the practices and activities for each objective.
- 4. Create a plan to close the identified gaps (a business case may be needed, and involving a project manager is key).
- 5. Implement the plan.
- 6. Monitor the governance system to ensure that it operates at the desired capability level.

### **Detailed Steps, Using the COBIT Guidance**

- To determine which Organizational Structures in its own organizational structure, correspond with the COBIT functions (mentioned in component B)
- □ For each practice, in the selected objectives
  - 1. Evaluate whether the practice is relevant and needs to be developed and implemented.
  - 2. Check all activities for relevance, and adapt the wording to make the practice understandable in the enterprise context.

Small and Medium Enterprise-specific Activities	Capability Level
1. Develop and maintain operational procedures and related activities to support all delivered services.	2
2. Maintain a schedule of operational activities and perform the activities.	
3. Verify that all data expected for processing are received and processed completely, accurately and in a timely manner. Deliver output in accordance with enterprise requirements. Support restart and reprocessing needs. Ensure that users are receiving the right outputs in a secure and timely manner.	3
4. Manage the performance and throughput of the scheduled activities.	4
<ol><li>Monitor incidents and problems dealing with operational procedures and take appropriate action to improve reliability of operational tasks performed.</li></ol>	5

#### General guidance is that:

- Activities at capability level 2 are basic and should be implemented.
- Activities at capability level 3 move the enterprise to a higher maturity level and thus help it move forward.
- Activities at capability levels 4 and 5 can be considered optional and may be implemented in a later phase.

### **Detailed Steps, Using the COBIT Guidance**

While defining the activities for the enterprise,

you should also consider the inputs and outputs defined in the guide.

Management Practice DSS01.01 Perform operational procedures.	Small and Medium Enterprise-specific Inputs		Small and Medium Enterprise-specific Outputs	
	From	Description	Description	То
	BAI05.05	Operation and use plan	Backup log	Internal
			Operational schedule	Internal
DSS01.02 Manage outsourced I&T services.	AP009.03	• SLAs • OLAs	Independent assurance plans	MEA04.02
	BAI05.05	Operation and use plan		
DSS01.03 Monitor I&T infrastructure.	BAI03.11	Service definitions	Asset monitoring rules and event conditions	DSS02.01; DSS02.02
			Incident tickets	DSS02.02
			Event logs	Internal
DSS01.04 Manage the environment.			Environmental policies	AP001.09
			Insurance policy reports	MEA03.03
DSS01.05 Manage facilities.			Health and safety awareness	Internal
			Facilities assessment reports	MEA01.03

### **POLLING QUESTION** (all options are possible)

Do you agree that your learned during this webinar

- 1. Clear introduction to enterprise governance of information and technology (EGIT) for small and medium enterprises
- 2. How to get started with your own governance initiative
- How to use the information about the governance and management objectives, how they are linked to organizational functions, which inputs are used by the related processes, and which outputs they produce.
- 4. Explanation of some simple tools that can help you to define if it is applicable for your organization and how to scope your governance program.





### **QUESTIONS?**

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