White Paper

Introduction to the iServer IT Governance Solution

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This white paper will provide an introduction to the iServer IT Governance Solution based on the COBIT®5 IT governance and management framework from ISACA. COBIT 5 is described as a 'comprehensive framework that assists enterprises in achieving their objectives for the governance and management of enterprise IT' (ISACA 2011, pg.13).[i]

The IT Governance Solution, using the COBIT 5 principles and concepts, will further assist enterprises with the governance of their IT business through its central repository for all governance guidance, policies and other documentation (consistent with the COBIT 5 Principle of a Framework Integrator), as well as its user-friendly interface and easy reporting and impact analysis tools.

In this paper we will explore what the IT Governance Solution consists of, what the benefits of this solution will be for your organization, and consequently, the return on investment (ROI) in adopting COBIT 5 and the IT Governance Solution in an organization. Additionally, we will explore a number of practical use cases for this industry leading solution.

This paper is aimed at providing summary knowledge on the IT Governance Solution and COBIT 5 to an audience of business executives, IT auditors, enterprise architects, and other IT governance practitioners. Basic knowledge of IT Governance and the COBIT 5 specification is assumed.

Overview of COBIT 5

COBIT 5 is a 'business framework for the governance and management of enterprise IT' (ISACA 2011, Pg. 11).[ii] The framework has been developed, and is still being extended, by ISACA and is based on lessons learnt and experience of IT, risk, security, and auditing and assurance communities. The framework has evolved from over 15 years of application (ISACA 2011, Pg. 15).[iii]

The COBIT 5 specification consists of a base framework as well as a number of additional modules that go into more detail in specialized areas. The IT Governance Solution currently consists of the COBIT 5 base framework as well as the COBIT 5 Enabling Processes enabler guide.

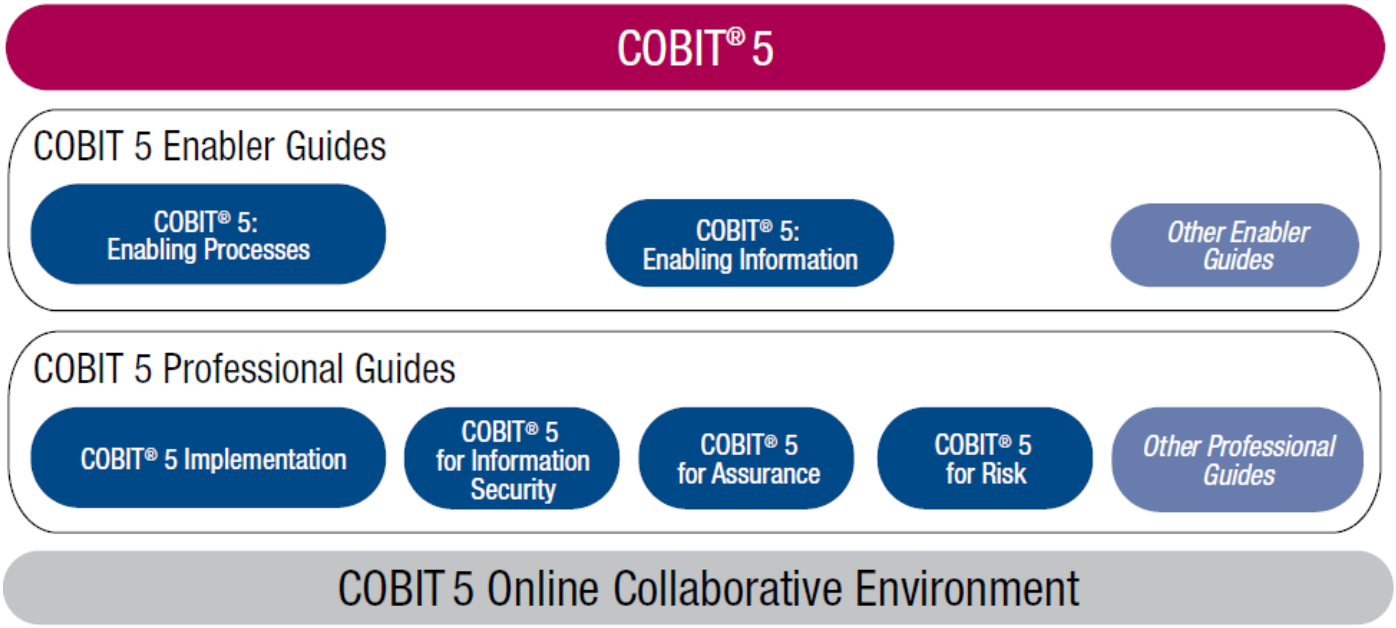

Figure 1 - COBIT 5 Product Family

The COBIT 5 base framework is centred on five main governance and management principles (ISACA 2011)[iv], namely;

- meeting stakeholder needs;
- covering the enterprise end to end;
- applying a single integrated framework;
- enabling a holistic approach;
- separating governance from management.

An overview of these principles can be seen below. The IT Governance Solution repository is structured according to these same principles for ease of reference.

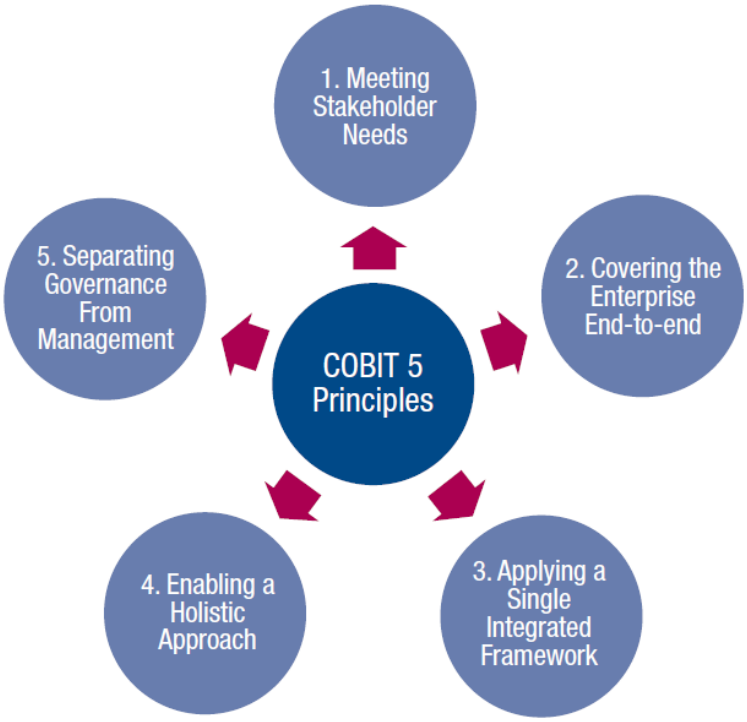

Figure 2 - COBIT 5 Governance & Management Principles (ISACA 2011, Pg. 13)[iv]

These five key principles guide the adoption and implementation of the management and governance of enterprise IT. Each COBIT 5 principle is broken down into more detailed guidance and best practice.

Another key concept of COBIT 5 are the governance enablers (see Figure 3 - COBIT 5 Seven Enablers as seen in iServer). Governance enablers are defined as 'factors that, individually or collectively, influence whether something will work' (ISACA 2011).[vi] In the COBIT 5 context these refer more specifically to enabling the successful governance and management of enterprise IT.

The seven COBIT 5 governance enablers can be seen in the diagram below.

As mentioned, the IT Governance Solution includes the COBIT 5 base framework as well as the Enabling Process enabler guide extension. This extension provides details into best practice processes defined in COBIT 5. These processes include a process reference model (which is available in iServer as part of the IT Governance Solution), as well as five levels of functions and processes consisting of the following (ISACA 2012)[viii]:

- two functional areas – namely the governance and management areas;
- decomposing into functional domains;
- then expanded into 37 processes;
- further decomposed into governance of management practices;
- drilling further down into activities at the lowest level.

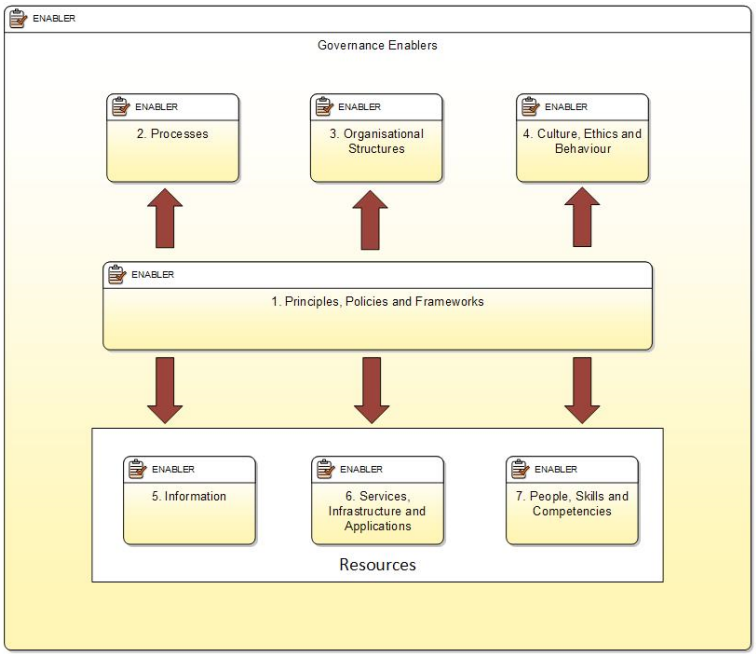

Figure 3 - COBIT 5 Seven Enablers as seen in iServer (ISACA 2011, Pg.27)[vii]

Associated with these processes, at the governance and management practice level, are detailed process inputs, process outputs as well as process and IT-related goals. These goals, in turn, have metrics to allow the measurement of efficiency and success.

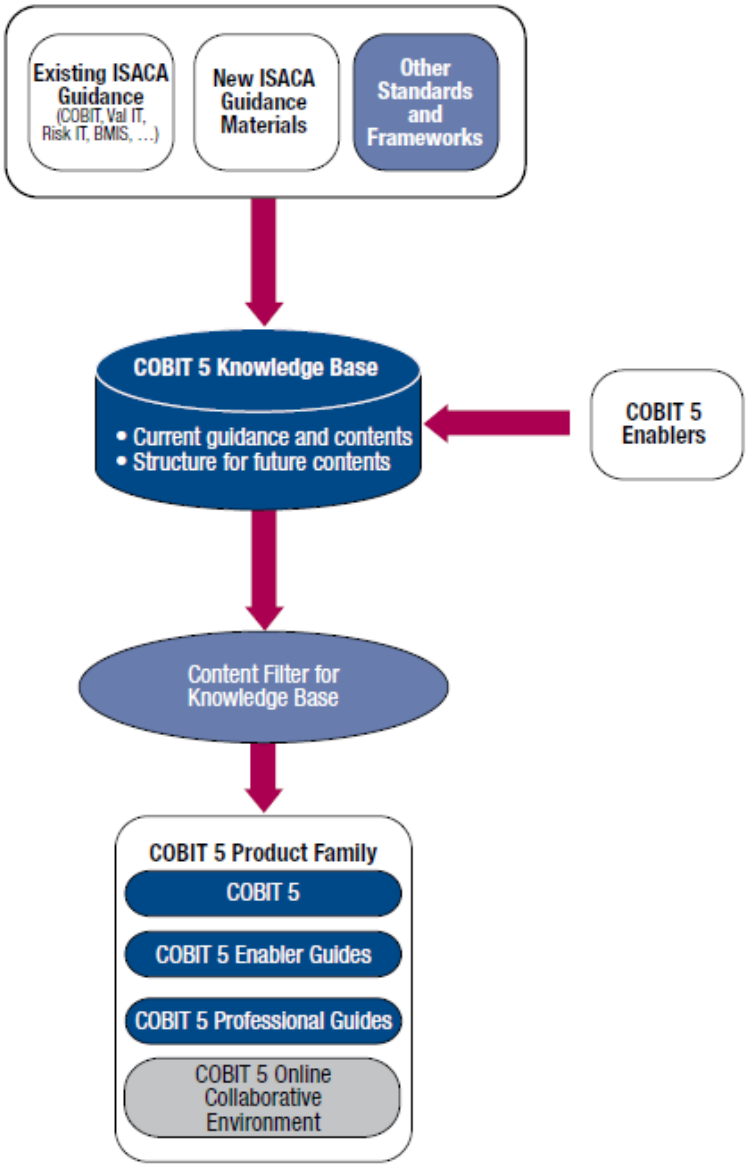

Figure 4 - COBIT 5 Single Integrated Framework (ISACA 2011, Pg. 25)

Overview of the IT Governance Solution

The COBIT 5 Framework is said to be a single and integrated framework (Principle 3: Applying a Single Integrated Framework) (ISACA 2011).[ix] Figure 4 (COBIT 5 Single Integrated Framework) illustrates the concept of the COBIT 5 framework integrator.

Aligning with this concept, the IT Governance Solution provides a platform for an organization's overarching IT Governance function. A number of governance and audit standards, regulations and practices applicable to the organization can be integrated and related in the IT Governance repository adding to the organization's IT Governance knowledge base.

The IT Governance Solution provides a platform to enable and support this integrated framework through the iServer repository. In the table below, on the left are the motivations for COBIT 5 being considered a single integrated framework, and the right hand column highlights some of the ways in which the IT Governance Solution supports this principle of an integrated and overarching framework.

COBIT 5 is an Integrated Framework	iServer IT Governance Solution Support
It aligns with other latest relevant standards and frameworks, and thus allows the enterprise to use COBIT 5 as the overarching governance and management framework integrator. (ISACA 2011)[x]	The iServer central repository allows the integration of frameworks that manage and guide other IT disciplines such as TOGAF, ITIL, Prince 2 etc. This integration within the same repository allows COBIT 5 to be used as an overarching governance and management framework for enterprise IT.
It is complete in enterprise coverage, providing a basis to integrate effectively other frameworks, standards and practices used. A single overarching framework serves as a consistent and integrated source of guidance in a nontechnical, technology-agnostic common language. (ISACA 2011)[xi]	Central repository for all IT governance and management guidance, frameworks and other content. Integration with IT architecture, service management and project and change management content in the same repository.
It provides a simple architecture for structuring guidance materials and producing a consistent product set. (ISACA 2011)[xii]	The iServer IT Governance repository structure is according to the COBIT 5 Principles. All guidance materials are easily reported on through visually rich impact analysis tools and relationship matrixes.
Defining a set of governance and management enablers, which provide a structure for all guidance materials. (ISACA 2011)[xiii]	The structured, object-orientated iServer IT Governance repository, as well as the associated meta-model provides the required structure for guidance materials. The full Enabling Process Module is available in the iServer IT Governance Solution repository 'out of the box'.
Populating a COBIT 5 knowledge base that contains all guidance and content produced now and will provide a structure for additional future content. (ISACA 2011)[xiv]	As mentioned the iServer IT Governance Solution meta-model provides the required structure for all governance content and is flexible to allow customization and future extensions.
Providing a sound and comprehensive reference base of good practices. (ISACA 2011)[xv]	The COBIT 5 good practice framework is available via the iServer repository explorer or a web browser (iServer software installation not required) provide access to a broader audience within the organization.

The iServer IT Governance Meta-Model

The IT Governance Solution, based on COBIT 5, has been structured according to a pre-defined meta-model. This meta-model reuses components of the TOGAF 9.1 business architecture meta-model, as well as the TOGAF 9.1 governance extension (see Figure 5 - IT Governance Solution Meta-Model).

The TOGAF 9.1 business architecture objects reused in the IT Governance meta-model can be seen in the green block on top left corner of Fig. 4. The objects and descriptions of the concepts are aligned with TOGAF 9.1, while the relationships are unique to the COBIT 5 meta-model.

In the top right corner of Fig. 4 in orange are the new COBIT 5 meta-model concepts. The COBIT 5 concepts of enablers, as well as two of the three enabler dimensions, namely lifecycle and good practice.

In the bottom right corner, the green block indicates the object reused from the TOGAF 9.1 Governance extension. The measure concept is aligned with the COBIT 5 metric concept and has been reused.

The bottom right hand blue block contains the object used in the COBIT 5 Enabling Process extension module. Notice the relationship between the COBIT 5 Enabler object and the COBIT 5 Process object it extends. In the COBIT 5 framework Process is one of the seven governance and management enablers.

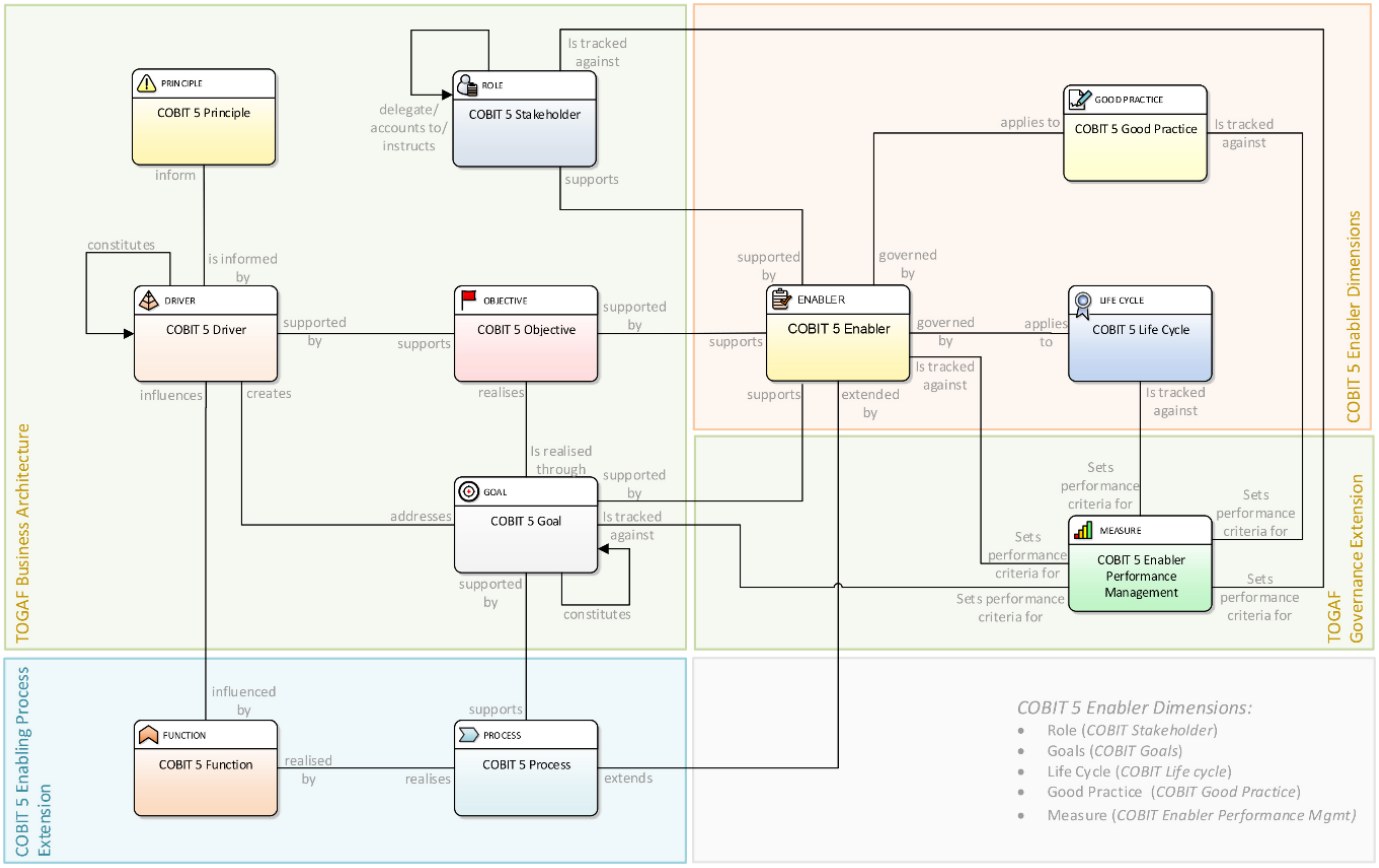

Figure 5 - iServer IT Governance Solution Meta-Model

The IT Governance Solution repository is structured according to the five COBIT 5 framework principles (see Figure 2 - COBIT 5 Governance & Management Principles above). This helps navigate the concepts and models within the iServer repository. Each model, guideline and concept that COBIT 5 introduces is captured in the repository and contains introductory text on the concepts and models.

iServer IT Governance Use Cases

At a functional level, the IT Governance Solution and COBIT 5 can be seen to contribute to an organization's success through efficient and compliant operations in the following four ways, through strategic alignment, by managing IT related risk, by ensuring value delivery, and through IT resource and performance management. (ISACA 2011).[xvi]

Strategic alignment

Strategic alignment of IT-related and enabler goals back up to enterprise goals, stakeholder needs and drivers, and ultimately the organization's strategy, vision and mission.

Use Case #1: Identify all the goals associated with a Balanced Score Card (BSC) objective and define their measures for success.

As per the COBIT 5 framework, both enterprise goals as well as IT-related goals are categorized into balanced scorecard (BSC) objectives. Using the iServer IT Governance "out of the box" Solution means a quick view using the Impact Analysis tool can be generated. As an example of this analysis, below is a view of all the COBIT 5 enterprise goals that support the BSC Financial objective, as well as suggested measures for the success of those goals.

Figure 6 - iServer Impact Analysis: BSC Financial

Risk Management

Identification, acceptance or mitigation of IT-related risks within the organization.

Use Case #2: Ensure IT service vendors and outsource partners are compliant with COBIT 5 best practice IT governance framework.

By benchmarking the processes, RACI roles, process goals and measures of vendors and partners, one can identify risks within outsourced capabilities and the organization's support structure. Enforcing COBIT 5 best practice IT governance framework compliance will assist in controlling, transferring or accepting outsource risks and reduce audit costs by increasing audit efficiency.

Reporting on the level of compliance and conformance with COBIT 5 processes, goals and measures would be a key output of vendor and partner benchmarking.

An example of the COBIT 5 best practice process decomposition for the 'APO03: Manage Enterprise Architecture' processes can be seen in Fig. 7.

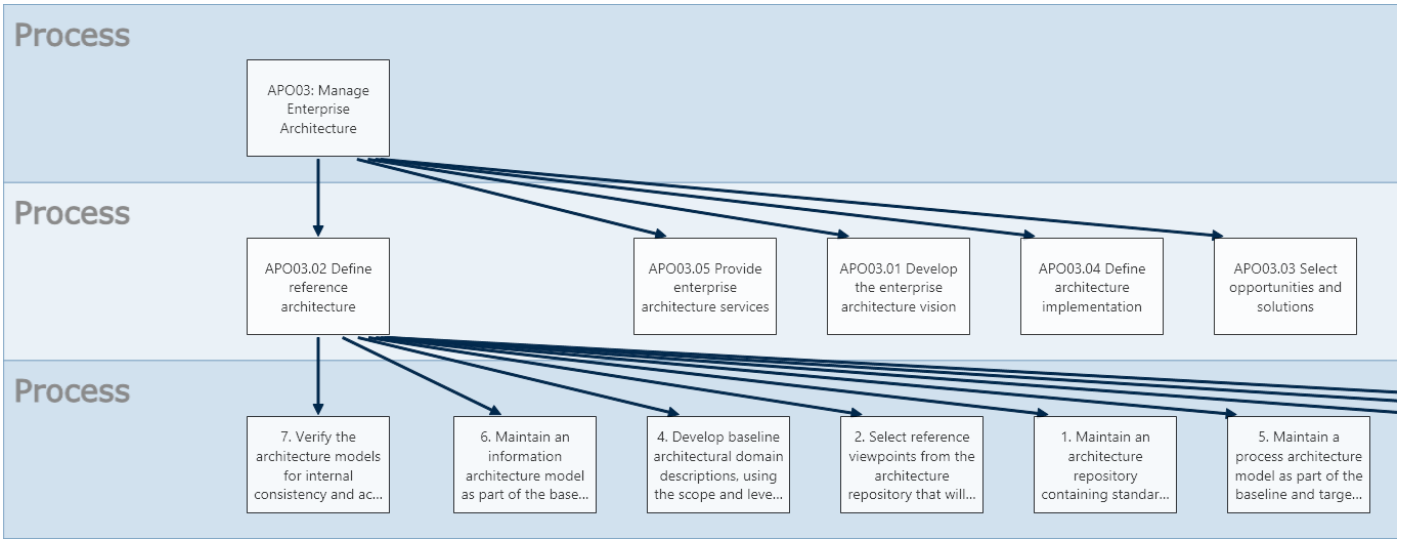

Figure 7 - COBIT 5 Process Decomposition: APO03

Value Delivery

Value delivery involves optimizing IT costs and measuring the business value added by IT within an organization.

Use Case #3: Ensuring IT capabilities add business value by contributing to enterprise goals.

Any IT-related project being implemented in an organization should align with enterprise level goals and strategies in order to add value to the organization. Ensuring the organization's IT governance and management processes aim to support and meet the COBIT 5 IT-related

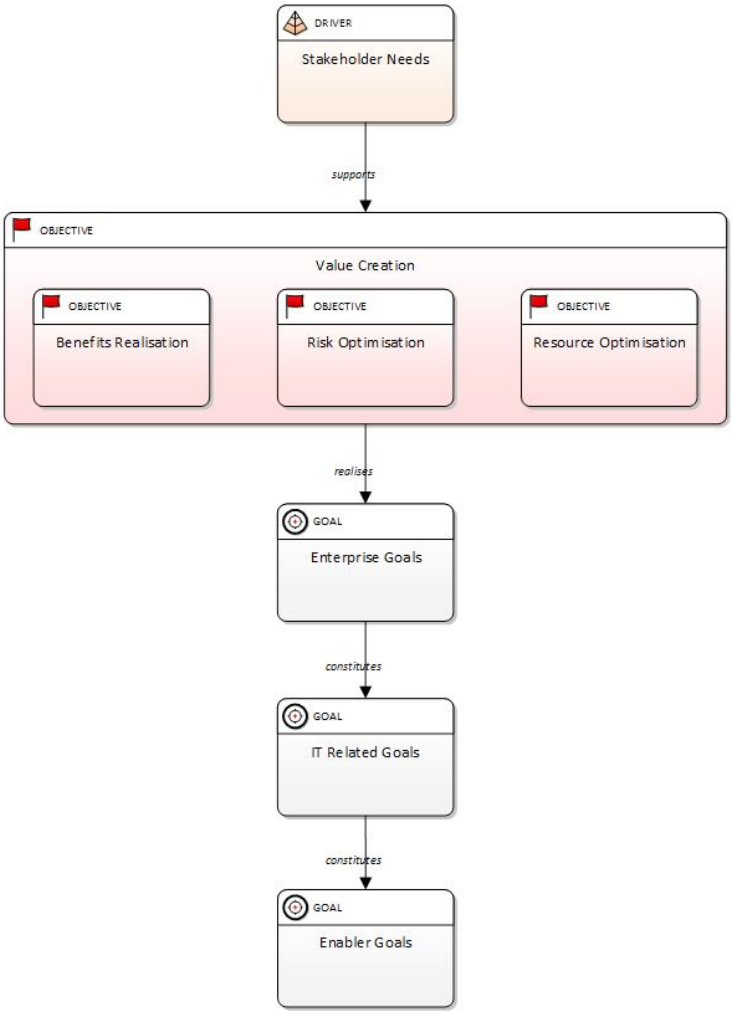

Figure 8 - COBIT 5 Goals Cascade as seen in iServer

process goals and will enable traceability back to enterprise level goals. This traceability allows organizations to quantify the value added by IT capabilities as well as giving organizations visibility into the support structure of enterprise goals and strategy.

The COBIT 5 concept of the goals cascade, as seen in the IT Governance Solution, is shown in Fig. 8. Stakeholder drivers influence and support organizational objectives. The primary objective of the organization is value creation for stakeholders. This objective realizes (and is realized though) enterprise goals, which in turn cascade down to IT-related goals and enabler goals such as process goals.

IT Resource Management

Identify and provision the right amount of IT resources to best support the business strategy and enterprise level goals.

Use Case #4: Define the roles and responsibilities of the IT governance practice within the organization.

The IT Governance Solution supports the resources management in a number of ways. One of which would be use of the goals cascade as mentioned above. Understanding what lower level goals and processes support the organization's strategy allows for better and more efficient resource provisioning.

	APO03.01 Develop the enterprise architecture vision [Process]	APO03.02 Define reference architecture [Process]	APO03.03 Select opportunities and solutions [Process]
Architecture Board [Role]	R	A	R
Audit [Role]	C	C	C
Board [Role]			
Business Continuity Manager [Role]			
Business Executive [Role]	R	R	R
Business Process Owners [Role]	C	C	C
Chief Executive Officer [Role]	A	C	A
Chief Financial Officer [Role]	C	C	C
Chief Information Officer [Role]	R	R	R
Chief Information Security Officer [Role]	C	C	C
Chief Operating Officer [Role]	C	C	C

Figure 9 - COBIT 5 RACI Matrix for Process APO03 as seen in iServer

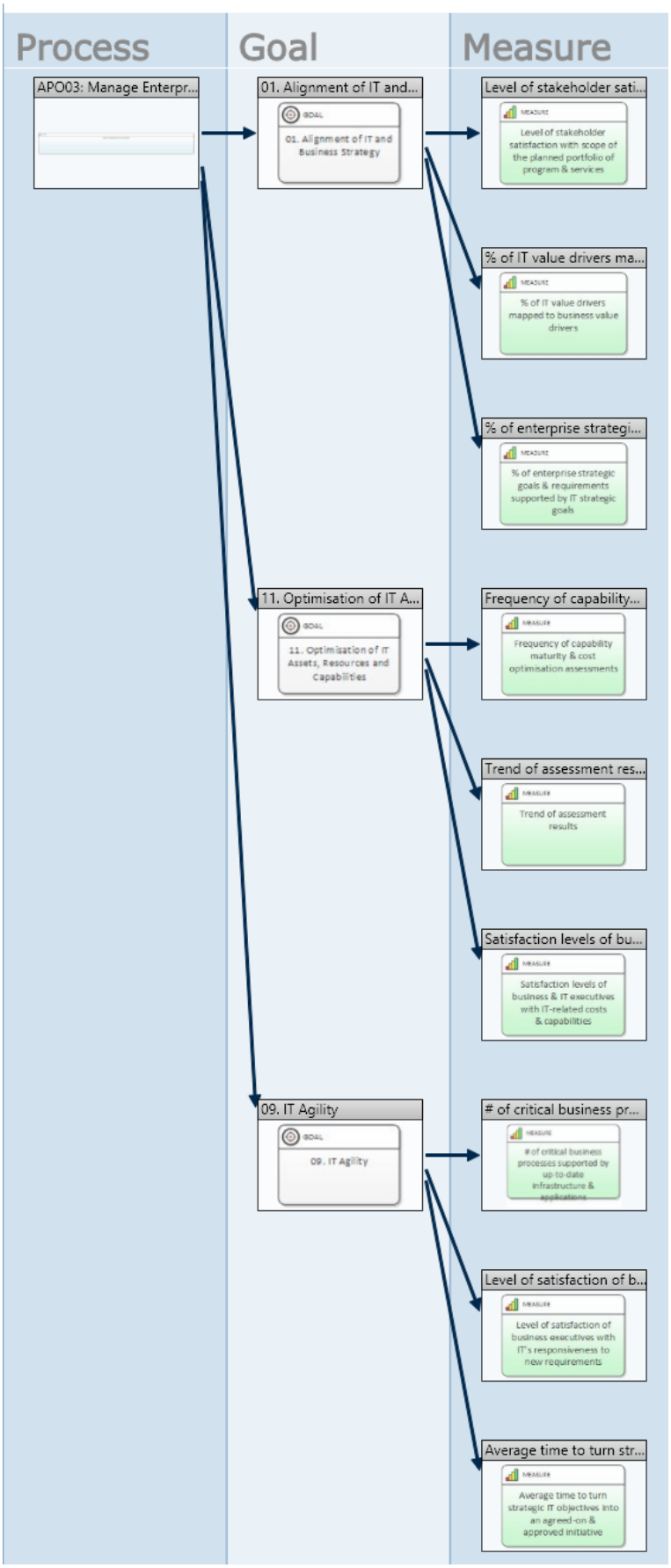

Figure 10 - Process, Goals and Measures for APO03

Another way in which the IT Governance Solution and COBIT 5 support resource management and allocation is through suggested best practice roles and accountability. The roles, groups and stakeholders defined in COBIT 5 are associated with best practice governance or management practice processes with responsible, accounted, consulted and informed (RACI) relationships.

This is very valuable as it helps an organization understand what roles are required for managing a governance practice, as well as what processes each of these roles are involved in, and in what capacity.

Fig. 9 shows an example of the RACI matrix for the 'APO03: Manage Enterprise Architecture' sub-processes. As you will notice, COBIT 5 suggests the Chief Executive Officer (CEO) is accountable (A) for 'developing the enterprise architecture vision'.

Performance Management

Monitoring and reporting on the success of governance and management of IT processes and goals. Show how successfully the IT organisation is performing against pre-defined measures.

Use Case #2: Map governance processes and measure success of the IT governance practice

Using the IT Governance Solution and COBIT 5 best practices an organization can measure the success of the governance and management processes using the pre-defined measures COBIT 5 prescribes. For the sake of consistency, Fig.10 shows the IT-related goals associated with the 'APO03: Manage Enterprise Architecture' process. Each of these three IT-related goals have three metrics or measures associated with them which will allow an organization to assess how successfully the goals are being supported or fulfilled, and hence manage process performance accordingly.

Conclusion

The IT Governance solution based on COBIT 5 is the first solution fully integrated with TOGAF. This allows organizations to use the same repository for enterprise and IT architecture artefacts, and IT governance guidance, ensuring architecture development and change is adequately governed according to best practice, as well as aligned with enterprise goals and strategy.

A few use cases identified in this paper illustrate how organizations can use the COBIT 5 framework practically and measure the business value from the organization's investment in information technology, and subsequently, what the return on this investment is (ROI).

Entrenching and integrating a best practice IT governance framework, such as COBIT 5, is sure to increase efficiency of the organization, reduce risk, and build a trusting relationship between business and IT stakeholders – a prerequisite for synergy within the organization, where the whole is greater than the sum of its parts.

References

i ISACA (2011), A Business Framework for the Governance and Management of Enterprise IT, Pg. 13.

ii ISACA (2011), A Business Framework for the Governance and Management of Enterprise IT, Pg. 11.

iii ISACA (2011), A Business Framework for the Governance and Management of Enterprise IT, Pg. 15.

iv ISACA (2011), A Business Framework for the Governance and Management of Enterprise IT.

v ISACA (2011), A Business Framework for the Governance and Management of Enterprise IT, Pg. 13.

vi ISACA (2011), A Business Framework for the Governance and Management of Enterprise IT, Pg. 27.

vii ISACA (2011), A Business Framework for the Governance and Management of Enterprise IT, Pg. 27.

viii ISACA (2012), Enabling Processes, Pg. 23 – 27.

ix ISACA (2011), A Business Framework for the Governance and Management of Enterprise IT, Pg. 25 - 26

x ISACA (2011), A Business Framework for the Governance and Management of Enterprise IT, Pg. 25

xi ISACA (2011), A Business Framework for the Governance and Management of Enterprise IT, Pg. 25

xii ISACA (2011), A Business Framework for the Governance and Management of Enterprise IT, Pg. 25

xiii ISACA (2011), A Business Framework for the Governance and Management of Enterprise IT, Pg. 25

xiv ISACA (2011), A Business Framework for the Governance and Management of Enterprise IT, Pg. 25

xv ISACA (2011), A Business Framework for the Governance and Management of Enterprise IT, Pg. 25

xvi ISACA (2011), IT Governance isn't one thing, it's everything, Presentation; Steve Romero

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