

Getting In-Control - Combining CobiT[®] and ITIL[®] for IT Governance and Process Excellence

Executive Summary:

Nearly all of us who are running an IT shop feel the need to gain or increase control, predictability, and efficiency. That's true whether we've just come off achieving CMM level 3, or are still struggling with legacy IT management practices. Solving these problems from scratch can take daunting amounts of time and effort, and still leave you vulnerable to audit issues.

CobiT[®] and ITIL[®] together are a powerful force for IT Operational efficiency and effectiveness. CobiT provides a framework for IT governance, aligning IT with business requirements. ITIL is a collection of best practices in Service Management, Security, Infrastructure Management, and Application Management. Together they can make the process improvement task much more achievable.

Using CobiT and ITIL in combination links proven IT best practices (ITIL) to CobiT's regulatory and business requirements. CobiT's objectives define the Key Performance Indicators for each major IT process area, assuring both a well-run IT Organization and the ability to meet regulatory requirements.

This paper describes CobiT and ITIL, why Alcyone Consulting combined them, and how your organization can benefit from this work for better IT effectiveness.

What is the business problem?

Before we introduce CobiT and ITIL, and the value of combining them, let's review the business problem that makes this a compelling discussion. The following describes a typical public company's IT organization and change drivers:

- Your auditors are telling you that your team is not doing something right and you have to change it ... now!
- The business is telling you that you don't understand their needs or are not responsive enough.
- The CEO is telling you that you have to make your IT organization more cost effective.

On top of all this, you are being asked to make improvements while living within this year's operating budget. Leveraging either CobiT or ITIL will help you with the above objectives. The questions are: What are they? How do you know which to use - and when?

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CobiT® is a registered Trade Mark of The Information Systems Audit and Control Foundation, and the IT Governance Institute

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What ARE these things?

CobiT: Control Objectives IT

CobiT was developed in the early 1990s by Information Systems Audit and Control Foundation (ISACF) with the goal of providing a set of best practices that are meaningful and useful to IT Staff, auditors, and customers. A major research effort delving into all relevant existing standards and best practices was undertaken to develop the CobiT objectives.

The initial release of the Framework, *Control Objectives and Audit Guidelines*, was in 1996. Over the next four years two additional books were published: *Implementation Toolset* and *Management Guidelines*. These books contain maturity models, performance indicators and critical success factors.

A quote from the introduction:

"The resulting control objectives have been developed for application to organization-wide information systems. The term "generally applicable and accepted" is explicitly used in the same sense as Generally Accepted Accounting Principles (GAAP)."

CobiT is organized into four domains: Planning and Organization, Acquisition and Implementation, Deployment and Support, and Monitoring.

Planning and Organization

PO1 Define a strategic IT plan

PO2 Define the information architecture

PO3 Determine the technological direction

PO4 Define the IT organization and relationships

PO5 Manage the IT investment

PO6 Communicate management aims and directions

PO7 Manage human resources

PO8 Ensure compliance with external requirements

PO9 Assess risks

PO10 Manage projects

PO11 Manage quality

Acquisition and Implementation

All Identify automated solutions

Al2 Acquire and maintain application software

Al3 Acquire and maintain technology infrastructure

Al4 Develop and maintain IT procedures

Al5 Install and accredit systems

Al6 Manage changes

Delivery and Support

DS1 Define and manage service levels

DS2 Manage third-party services

DS3 Manage performance and capacity

DS4 Ensure continuous service

DS5 Ensure system security

DS6 Identify and allocate cost

DS7 Educate and train users

DS8 Assist and advise customers

DS9 Manage the configuration

DS10 Manage problems and incidents

DS11 Manage data

DS12 Manage facilities

DS13 Manage operations

Monitoring

M1 Monitor the processes

M2 Assess internal control adequacy

M3 Obtain independent assurance

M4 Provide for independent audit

Source: The Information Systems Audit and Control Association

Each of the high-level control objectives in the above diagram are divided into detailed control objectives. COBIT identifies a broad set of 318 control points (e.g., Procurement Control) designed to provide reasonable assurance that certain objectives will be achieved. What it does not do, is describe a complete set of IT processes – more on this to come.

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CobiT was largely ignored by the marketplace until the Sarbanes-Oxley Act of 2002 (SOX). Once this act took effect in the United States, CobiT was able to show the direction for compliance was already in place. SOX requires that companies certify internal financial processes, and that auditors issue opinions regarding the completeness of those processes. In addition, SOX requires that companies understand and document internal controls around financial reporting. And that's exactly what implementing CobiT is able to deliver.

ITIL: IT Infrastructure Library

ITIL was developed in the late 1980s by the UK's Central Computer & Telecommunications Agency (in April 2001 the CCTA was renamed into Office of Government Commerce – OGC). The OGC started the project in recognition of the fact that government organizations were becoming increasingly dependent on Information Technology. The objectives of the OGC in developing ITIL were to promote IT business effectiveness and to reduce costs while maintaining or improving IT services.

The specific ITIL best practices were developed by involvement of leading industry experts, consultants and practitioners. It is the only holistic, non-proprietary best practice framework available in the technology marketplace. As a result, it has quickly become the global benchmark by which organizations measure the quality of IT service management.

The Infrastructure Library went through a major re-write in the 1990s. There are eight books in publication today covering everything from implementing ITIL processes through application life cycle management and the core of ITIL IT operations processes. The following graphic represents the ITIL library in its current form:



Source: Information Technology Infrastructure Library

Within the eight domains, each book's processes can be reviewed, utilized, and implemented independently of the others. That said the overall provision of IT services can best be optimized by considering each process as part of the whole.

The most popular (and first published) ITIL books are <u>Service Support</u> and <u>Service Delivery</u>. They describe the processes that are common to every IT service provider and must be

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addressed to enhance the provision of quality IT services for its customers. These sets form the basis of the certifications granted by the Netherlands Examination Institute for IT (EXIN) and the Information Systems Examinations Board (ISEB).

Many organizations have embraced the ITIL concept because it offers a systematic and professional approach to the management of IT service provision. There are many benefits to be reaped by adopting the guidance provided by ITIL. Chief of which is getting to the goal of control and predictability much more quickly than starting from scratch.

When should you use one or the other?

In general, CobiT is used for audit functions and ITIL is used for process improvement. We recommend that, instead of selecting between CobiT and ITIL, you combine both from the beginning in all process improvement activities. In the long run, you will eventually get there, so starting with an integrated approach is the most effective option. It will save you time and money and provide a process which meets stakeholder requirements earlier in the game.

As a public company, your auditors will expect use of CobiT for SOX compliance. As a growing IT Organization, you will formalize your processes and procedures either based on ITIL or another framework which borrows heavily from ITIL (for example the Microsoft Operations Framework.)

As described earlier, both ITIL and CobiT are excellent tools for the IT Organization to improve processes and align IT functions with business and regulatory requirements. In

An informal survey of IT Organizations in the Chicago-land area shows that many are implementing SOX compliance in a process vacuum.

The additional paperwork (or electronic equivalent) generated for compliance does not add value to the IT work flow - but rather detracts from product deployment and incident resolution activities, and comes off as additional regulatory burden

bringing them to the table as one initiative instead of two separate initiatives, you gain from both a single work effort and an integrated IT process and compliance solution.

CobiT and ITIL complement each other. For example, the COBIT framework identifies a Software Release Policy as a control point, but leaves it to the organization to define those processes and procedures associated with Software Release. ITIL describes the best practices associated with Software Release Management; the interfaces to other activities such as Infrastructure Deployment, Change Management and Configuration Management; and how to implement Software Release Management within the ITO.

What is the industry saying?

Gartner Group:

"CobiT and ITIL are not mutually exclusive and can be combined to provide a powerful IT governance, control and best-practice framework in IT service management. Enterprises that want to put their ITIL program into the context of a wider control and governance framework should use CobiT."

(June 2002 / TG-16-1849)

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Meta:

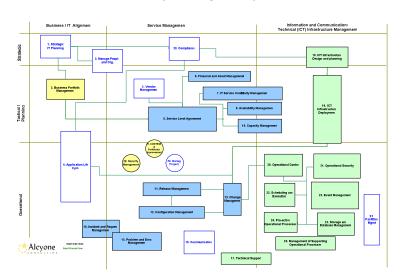
"It is critical, that organizations taking advantage of the COBIT framework have a set of defined IT processes/procedures and utilize COBIT as a control checklist against their defined IT processes/procedures."

(Oct 2004 / Meta Practice #2263)

Alcyone Process Framework for IT Effectiveness:

At Alcyone Consulting, we have performed the upfront analysis and combined ITIL and CobiT to create an effective IT process framework that enables you to quickly and easily understand the impact of regulatory requirements on every aspect of your IT processes. Our framework also allows you to identify the impact a specific IT process has on your regulatory environment.

The Alcyone process framework is based on a review of the complete set of ITIL books (not just Service Management.) After laying out the initial ITIL process families, we aligned all 318 detailed CobiT objectives to a specific process family. The detailed CobiT objectives which were yet unassigned we grouped into process families which fit harmoniously within the existing framework. This completed the Alcyone Process Framework for IT Effectiveness.



As the Alcyone framework is based on existing standardized IT frameworks, you are not locked into a proprietary solution that depends upon one company to maintain. You are able to leverage the training and tools which exist for CobiT and ITIL in the marketplace today and in the future.

Leveraging the Framework in your organization:

We start our engagements by identifying all known IT processes, whether they have been documented or are yet-to-be-documented within your organization. We then map those processes into the appropriate process family. After this exercise, you will have a solid assessment of the completeness of your IT processes which prepares you for making the necessary improvements.

Next we work with company executives, the legal department and auditors to identify the regulatory drivers for your business, which are then aligned to their appropriate CobiT objective. For SOX and HIPPA this is well understood, and auditors have already identified the specific CobiT objectives. Now we look at your organization's existing IT processes that are affected by your regulatory environment and answer these questions:

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- Do you have a process?
- Is the process documented?
- Does the process address the Key CobiT Objectives?
- Will your auditor agree that your process is sufficient?

The answers to the above questions will give you a good idea of how well the IT processes protect your company and its stakeholders. The resulting information is typically eye-opening and can lead to projects geared to improving your IT Organization's effectiveness (not to mention the sleep of your company's officers).

About Alcyone Consulting:

Alcyone Consulting is an IT Consultancy providing IT Strategy and Governance services. Our principals have worked together for over a decade providing high quality IT solutions to a wide range of clients. Our practitioners are all former Big-5 consulting professionals with years of experience.

The Alcyone Process Framework for IT Effectiveness comes out of a rich history of process activities, starting in the late 1980s with the introduction of Service Level and Operational Level Agreements, and then maturing into IT Support Organizations and the subsequent reporting metrics. In the early 1990s Alcyone practitioners created some of the initial development methodologies for the then-new client/server systems. By the mid 1990s we were performing Capability Maturity Model assessments for our own development organizations.

Exposure to the ITIL concepts started in the late 1990s with growing an IT support organization from 14 Chicago based individuals to a global team of 80 supporting over 1200 users in seven locations in five countries. This specific framework comes from working on client engagements which required HIPPA and SOX compliance in addition to IT process improvements.

At Alcyone Consulting we speak IT, CobiT, ITIL and Business. We leverage this to provide our clients with high quality solutions that maximize their Information Technology investment.

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