

## **IT GOVERNANCE - COBIT**



**Dasari Ravi Kumar**

## Introduction

Information Technology is a critical success factor that is strongly influencing the corporate top & bottom lines in many organizations. In fact IT is the semi-tangible asset which is turning to be the most valuable asset of organizations. IT is used widely in organizations to achieve productivity augmentation, operational efficiency, process improvements, customer delight through strong service lines, and intensification of internal management and financial controls. Gone are those days where business goals are formulated in line with IT goals where as the current trend is to integrate the IT functions with business objectives. The Information Systems Audit and Control Foundation (ISACF) and the Canadian Institute of Chartered Accountants (CICA) attempted to guide organizations in this integration, which resulted in COBIT (Control Objectives for Information and Related Technology) and ITCG (Information Technology Control Guidelines).

Control Objectives for Information and related Technology (COBIT) is an information security framework created by Information Systems Audit and Control Association (ISACA), and the IT Governance Institute (ITGI). In the post Enron and WorldCom era COBIT is one of the widely used organizational management tool that is being adopted all over. It functions as a guiding tool that management can use to achieve the business goals. Moreover, it helps management understand and manage the risks associated with IT. However, COBIT's uses are not limited to just management; auditors and external parties can also utilize it. Auditors use it to appraise the competence of an organization's internal controls. COBIT provides IT Users, managers and auditors with a set of generalized IT control objectives to assist them in maximizing the benefits derived through the use of IT and developing the appropriate IT governance and control in a company.

## COBIT Domains

COBIT, in its third edition, has 34 high level objectives that cover 318 control objectives categorized in to four domains:

- ❖ Planning and Organization,
- ❖ Acquisition and Implementation,
- ❖ Delivery and Support, and
- ❖ Monitor.

### ***Planning and Organization (PO)***

COBIT Planning & Organization domain address the fundamental issues of defining a strategic IT plan, defining the information architecture, determining technological trends in the external environment, organizing the IT function, communicating management goals and direction, managing human resources, assessing risks, managing projects, and managing quality. The Planning and Organization domain deals with the best way of using technology to achieve company's objectives. It also accentuates the organizational and infrastructural form that IT has

to take in order to achieve the optimal results and to generate the most benefits from the use of IT. The high level control objectives for the Planning and Organization domain are as follows (refer Table 1.0):

<b>PO1</b>	<b>Define a Strategic IT Plan</b>
<b>PO2</b>	<b>Define the Information Architecture</b>
<b>PO3</b>	<b>Determine Technological Direction</b>
<b>PO4</b>	<b>Define the IT Organization and Relationships</b>
<b>PO5</b>	<b>Manage the IT Investment</b>
<b>PO6</b>	<b>Communicate Management Aims and Direction</b>
<b>PO7</b>	<b>Manage Human Resources</b>
<b>PO8</b>	<b>Ensure Compliance with External Requirements</b>
<b>PO9</b>	<b>Assess Risks</b>
<b>PO10</b>	<b>Manage Projects</b>
<b>PO11</b>	<b>Manage Quality</b>

**Table1.0**

***Acquisition and Implementation (AI)***

Once planning and organization of the IT function is completed, the next step is the acquisition and implementation. The Acquisition and Implementation (AI) domain addresses the organization's strategy in identifying its IT requirements, acquiring the technology, and implementing it. The AI also addresses the development of a maintenance plan that an organization should adopt in order to amplify the life of an IT system. The high level control objectives for the AI domain are as follows (Refer Table 2.0)

<b>AI1</b>	<b>Identify Automated Solutions</b>
<b>AI2</b>	<b>Acquire and Maintain Application Software</b>
<b>AI3</b>	<b>Acquire and Maintain Technology Infrastructure</b>
<b>AI4</b>	<b>Develop and Maintain Procedures</b>
<b>AI5</b>	<b>Install and Accredite Systems</b>
<b>AI6</b>	<b>Manage Changes</b>

***Delivery and Support (DS)***

The DS domain focuses on the delivery angle of the IT. It covers areas such as Service Level Management, Third party services management, capacity and performance management, service continuity management, systems security and costs allocation management. The high level control objectives for the DS domain are as follows (Refer Table 3.0):

<b>DS1</b>	<b>Define and Manage Service Levels</b>
<b>DS2</b>	<b>Manage Third-Party Services</b>
<b>DS3</b>	<b>Manage Performance and Capacity</b>
<b>DS4</b>	<b>Ensure Continuous Service</b>

<b>DS5</b>	<b>Ensure Systems Security</b>
<b>DS6</b>	<b>Identify and Allocate Costs</b>
<b>DS7</b>	<b>Educate and Train Users</b>
<b>DS8</b>	<b>Assist and Advise Customers</b>
<b>DS9</b>	<b>Manage the Configuration</b>
<b>DS10</b>	<b>Manage Projects</b>
<b>DS11</b>	<b>Manage Data</b>
<b>DS12</b>	<b>Manage Facilities</b>
<b>DS13</b>	<b>Manage Operations</b>

**Table 3.0**

### **Monitor**

The Monitor domain deals with the assessment of the on going suitability of the current IT system to meet the specific objectives for which it was originally designed and the controls necessary to comply with regulatory requirements. Monitoring also covers the issue of an independent assessment of the IT system effectiveness in meeting the business objectives and the company's control processes by internal and external auditors. The high level control objectives for the Monitoring domain are as follows (Refer Table 4.0):

<b>M1</b>	<b>Monitor the Processes</b>
<b>M2</b>	<b>Assess Internal Control Adequacy</b>
<b>M3</b>	<b>Obtain Independent Assurance</b>
<b>M4</b>	<b>Provide for Independent Audit</b>

**Table 4.0**

### **Conclusion**

Information Technology beyond any doubt is widely used in organizations to achieve internal management and financial control, productivity and process improvements, operational efficiency augmentation, and to consolidate customer info and trends. IT facilitates business by delighting its customer's through strong service lines. Henceforth aligning the IT function with business goals is of utmost significance. Control Objectives for Information and related Technology (COBIT) framework, created by ISACA and ITGI, provides IT Users, managers and auditors with a set of generalized IT control objectives to assist them in maximizing the benefits derived through the use of IT and developing the appropriate IT governance and control in a company.

### **References:**

Information Systems Audit and Control Association (ISACA), url: <http://www.isaca.org>

Information Technology Governance Institute (ITGI), url: <http://www.ITSCI.org>

Wikipedia (The free Encyclopedia), url: <http://www.wikipedia.org>