These following pages provide a preview of the information contained in COBIT 5: Enabling Information. The main benefit of this publication is that it provides COBIT 5 users with a reference guide for structured thinking about information and typical information governance and management issues in any type of organisation.

This structured thinking can be applied throughout the life cycle of information, from conception and design, through building information systems, securing information, using and providing assurance over information, and to the disposal of information.

COBIT 5: Enabling Information is available as a complimentary PDF for members and for purchase for non-members (www.isaca.org/cobit). Also available for purchase for members and non-members in hard copy (www.isaca.org/bookstore). We encourage you to share this preview with your enterprise leaders, team members, clients and/or consultants.

COBIT enables enterprises to maximize the value and minimize the risk related to information, which has become the currency of the 21st century. COBIT 5 is a comprehensive framework of globally accepted principles, practices, analytical tools and models that can help any enterprise effectively address critical business issues related to the governance and management of information and technology. Additional information is available at www.isaca.org/cobit.

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Enabling Information

With more than 110,000 constituents in 180 countries, ISACA (www.isaca.org) helps business and IT leaders maximize value and manage risk related to information and technology. Founded in 1969, the non-profit, independent ISACA is an advocate for professionals involved in information security, assurance, risk management and governance. These professionals rely on ISACA as the trusted source for information and technology knowledge, community, standards and certification. The association, which has 200 chapters worldwide, advances and validates business-critical skills and knowledge through the globally respected Certified Information Systems Auditor® (CISA®), Certified Information Security Manager® (CISM®), Certified in the Governance of Enterprise IT® (CGEIT®) and Certified in Risk and Information Systems Control™ (CRISC™) credentials. ISACA also developed and continually updates COBIT®, a business framework that helps enterprises in all industries and geographies govern and manage their information and technology.

Disclaimer

ISACA has designed and created COBIT® 5: Enabling Information (the ‘Work’) primarily as an educational resource for governance of enterprise IT (GEIT), assurance, risk and security professionals. ISACA makes no claim that use of any of the Work will assure a successful outcome. The Work should not be considered inclusive of all proper information, procedures and tests or exclusive of other information, procedures and tests that are reasonably directed to obtaining the same results. In determining the propriety of any specific information, procedure or test, readers should apply their own professional judgment to the specific governance of enterprise IT (GEIT), assurance, risk and security circumstances presented by the particular systems or information technology environment.

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Chapter 1
Introduction

1.1 COBIT 5: Enabling Information in the COBIT 5 Product Family

COBIT 5 is a comprehensive framework that assists enterprises in achieving their objectives for the governance and management of enterprise information technology (IT). COBIT 5: Enabling Information supports and enhances the COBIT 5 framework family of products (Figure 1) by focusing on the Information enabler. This guide addresses the information model attributes and life cycle that are introduced in the COBIT 5 framework. COBIT 5: Enabling Information is a reference guide for structured thinking about information and typical information governance and management issues.

The COBIT 5 framework is built on five basic principles, which are covered in detail, and includes extensive guidance on enablers for governance and management of enterprise IT.

The COBIT 5 product family includes the following products:

• COBIT 5 (the framework)
• COBIT 5 enabler guides, in which governance and management enablers are discussed in detail. These include:
  – COBIT 5: Enabling Processes
  – COBIT 5: Enabling Information
  – Other enabler guides (check www.isaca.org/cobit)
• COBIT 5 professional guides, which include
  – COBIT 5 Implementation
  – COBIT 5 for Information Security
  – COBIT 5 for Assurance
  – COBIT 5 for Risk
  – Other professional guides (check www.isaca.org/cobit)
• A collaborative online environment, which will be available to support the use of COBIT 5 (in development)

1.2 Benefits of COBIT 5: Enabling Information

The main benefit of this publication is that it provides COBIT 5 users with a reference guide for structured thinking about information and typical information governance and management issues in any type of organisation. This structured thinking can be applied throughout the life cycle of information, from conception and design, through building information systems, securing information, using and providing assurance over information, and to the disposal of information.
This guide provides information practitioners with the following three key benefits:

- A comprehensive information model, based on the generic COBIT 5 enabler model, that comprises all aspects of information, e.g., stakeholders, goals (quality), life cycle stages and good practices (information attributes). The model allows practitioners to effectively consider and develop relevant, usable information models from a governance and management point of view.
- Guidance on how to use an established governance and management framework (COBIT 5) to address common information governance and management issues, e.g., big data, master data management, information disintermediation and privacy, and how COBIT 5 principles and concepts, especially the enablers, can address these issues.
- An understanding of the reasons information needs to be managed and governed in an appropriate way and the criticality of information that is contained within a given context.

This guide assists enterprises with information issues and challenges, such as:

- Disparate, uncoordinated data sets are implicated in increasing cost and risk from missed project deadlines, lack of transparency and operational failures.
- Records management, legal and IT teams need a common base reference to coordinate activities, because records retention and legal discovery are of growing concern and cost to managers, and security classifications overlap with record classifications.
- The number of data elements with multiple compliance dimensions is increasing. How can an enterprise maintain appropriate practices to comply with relevant global and regional legislation and regulatory and compliance requirements, such as:
  - Payment Card Industry (PCI)
  - Health Insurance Portability and Accountability Act (HIPAA)
  - Health Information Technology for Economic and Clinical Health (HITECH) Act
  - Gramm-Leach-Bliley (GLB) Act
  - European Union (EU) Directive on Data Protection

Specifically, how are such practices operationalised in terms of data and information management? Enterprises are experiencing increasing difficulty in maintaining control of their data to comply with legal and regulatory requirements. What needs to be done to address this issue?

- Information is increasingly being recognised as an asset or resource that delivers benefits to the enterprise when the enterprise meets necessary quality goals. However, identifying, defining and prioritising these goals against the cost of quality are always a challenge.

The intent of this guide is to provide readers with a better understanding of information governance and management issues and improve their ability to generate benefits and manage information-related risk. This guide supports readers in their efforts to use information-centric thinking about their enterprises.

### 1.3 Target Audience for This Guide

**Figure 2** shows that the target audience for this publication includes a broad range of business and IT professionals, because all work with information as a resource and/or assets.

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Stakeholder-specific Benefits of Using COBIT 5: Enabling Information</th>
</tr>
</thead>
</table>
| Board of directors and executive management (Chief executive officer [CEO], Chief operations officer [COO], Chief financial officer [CFO]) | - Basic understanding of the meaning of information governance and management, based on COBIT 5 principles, and the assertion that a comprehensive model exists for describing and dealing with all aspects of information management.  
- Better understanding of information as a valued asset/resource and an enabler and facilitator. |
| Business process owners, business process architects | - Basic understanding of the meaning of information governance and management, based on COBIT 5 principles, and the assertion that a comprehensive model exists for describing and dealing with all aspects of information management.  
- Well-defined overview of information items required to run specific business processes. |
| Information architects, information solution builders, information managers, IT architects, IT developers | - A COBIT 5-oriented model for describing, specifying and designing all aspects of information that support all information-based processes and information systems, whether automated or not.  
- Ability to identify the information items that need to be managed through the applications that are being developed. |
### 1.4 Prerequisite Knowledge

**COBIT 5: Enabling Information** builds on COBIT 5 (the framework). Relevant key concepts of COBIT 5 are repeated and elaborated on in this guide, making it a fairly stand-alone guide—in essence, not requiring any prerequisite knowledge of COBIT 5. However, an understanding of COBIT 5 principles, concepts and structure at the foundation level will accelerate and improve comprehension of the contents of this guide. If readers wish to know more about COBIT 5, beyond what is required to address information governance and management business goals and issues, they are referred to the COBIT 5 framework publication.

In addition, **COBIT 5: Enabling Information** refers to:

- The COBIT 5 process reference model and the COBIT 5 governance and management processes that are described therein. If readers wish to know more about COBIT 5 processes, perhaps to implement or improve some of them as part of addressing an information-related issue, they are referred to the **COBIT 5: Enabling Processes** guide.

- The other COBIT 5 enablers that are discussed in the COBIT 5 framework publication.

Finally, readers can find more information on information risk management, information security and providing assurance over information in the corresponding COBIT 5 professional guides: **COBIT 5 for Risk, COBIT 5 for Information Security** and **COBIT 5 for Assurance**.

### 1.5 Document Overview and Scope

**COBIT 5: Enabling Information** addresses fundamental questions and issues about information as an enterprise asset or governance/management enabler. This guide also discusses information governance and information management practices and enabler arrangements. **Figure 3** shows these questions, explains how and where **COBIT 5: Enabling Information** addresses them or if the topic is out of the scope of this guide, and defines key concepts.
### Common Questions

<table>
<thead>
<tr>
<th>Question</th>
<th>Guidance in This Publication</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is data? What is information?</td>
<td>Data can be defined as something that is, or represents, a fact. This can be in many forms (e.g., text, numbers, graphics, sound, video).</td>
</tr>
<tr>
<td>Why is information important?</td>
<td>Information is used at every level of the enterprise, i.e., at operational, management and governance levels. Information is one of the enablers of every business function reliant on IT, including IT itself. As such, information contributes to the achievement of overall enterprise objectives. Chapter 2 explains how the COBIT 5 goals cascade is a useful tool for analysing and illustrating this dependency.</td>
</tr>
<tr>
<td>What types of information does this guide consider?</td>
<td>This guide is applicable to all types of information. Because no universal classification or model exists for all enterprise information, this guide proposes a simple model to distinguish different levels of information, as described in chapter 3, in section 3.1 COBIT 5 Information Model Overview and section 3.1.4.1 Good Practices. Section 2.1.2 explains Principle 2: Covering the Enterprise End-to-end.</td>
</tr>
</tbody>
</table>
| What is the difference between information governance and information management and how does this guide help me? | Based on definitions from COBIT 5 and Data Management Body of Knowledge (DMBOK) frameworks, information governance and management can be described as follows. **Information governance** ensures that:  
  - Stakeholder needs, conditions and options are evaluated to determine balanced, agreed-on enterprise objectives, which are to be achieved through the acquisition and management of information resources.  
  - Direction is set for information management capabilities through prioritisation and decision making.  
  - Performance and compliance of the information resource are monitored against agreed-on direction and objectives.  
**Information management** plans, builds, runs and monitors the practices, projects and capabilities that acquire, control, protect, deliver and enhance the value of data and information assets, in alignment with the direction set by the data and information governance body. Section 2.1.5 further distinguishes the terms. |
| How can one guide deal with all types of information?                    | Information and data management have been topics of both study and practice for many decades, and a number of principles and good practices have been identified that persist regardless of the type of information. Chapter 3 includes a rich and yet sufficiently high-level model for information that is capable of dealing with all types of information. |
| Are there any related standards?                                        | DAMA-DMBOK is a complete guide for data management practitioners, from business analysts through technical operations. The Open Group's TOGAF has extensive coverage of data architecture, which is one of the essential pillars of enterprise architecture. The Object Management Group has more prescriptive standards for data management syntax (metamodels), such as Semantics of Business Vocabulary and Business Rules, Common Warehouse Metamodel, Common Terminology Services and Ontology Definition Metamodel. |
| What topics about information are not included in this guide?           | ISO 15489 is a standard for records management that includes setting policies and standards; assigning responsibilities and authorities; establishing and promulgating procedures and guidelines; providing a range of services relating to the management and use of records; designing, implementing and administering specialised systems for managing records; and integrating records management into business systems and processes. Appendix A provides details about the DAMA-DMBOK framework and ISO 15489-1:2001 and compares them to COBIT 5. |

Many topics are deliberately not included in this document because they require a level of detail beyond its scope, such as: solutions architecture, logical and physical data modelling at a practice level; solutions design, including choice of database management system (DBMS); implementation and operation of DBMS; detailed business practices to help govern and manage information.
To provide a structured approach to the information in this guide, COBIT 5: Enabling Information is divided into four chapters and three appendices. Following is a brief description of each section and how those sections are interconnected:

- **Chapter 1**—Introduction
- **Chapter 2**—Applies the COBIT 5 principles to information. This chapter:
  - Demonstrates the relationship between information and enterprise goals using the COBIT 5 goals cascade.
  - Differentiates information types, distinguishing between business information and IT-related information and illustrating both.
  - Differentiates information governance and management.
  - Demonstrates how information fits into the overall holistic view of an enterprise and its constituent parts and introduces the COBIT 5 enabler concept.
- **Chapter 3**—Elaborates on the information model that is presented in the COBIT 5 framework publication by presenting multiple examples of how to apply the model to all aspects of information governance and management.
- **Chapter 4**—Elaborates on a number of typical information governance and management issues that enterprises encounter, explains the issues and their relevance in the enterprise context, and suggests how COBIT 5 and its enablers can help to address the issues.
- **Appendix A**—Reference to relevant other guidance
- **Appendix B**—Comprehensive list of information items that are related to all business processes
- **Appendix C**—Comprehensive list of IT-related information items, their key quality criteria and related metrics

**COBIT 5: Enabling Information** focuses on governance and management of information at a high level and is **not** intended to:

- Assist organisations with technical or operational guidance on how to build a complete data set, information items and artefacts or databases, or how to operate storage systems. These items are dependent on specific enterprise policies, information standards and software specifications.
- Be comprehensive in any specific area of business, e.g., industry-specific data models that facilitate exchange of data or information

Note: Although structured thinking may lead to the development of good information-related practices, process practices are not the focus of this guide. Processes are documented in **COBIT 5: Enabling Processes**.