Certified Information Professional 2016 Update Outline

Introduction

The 2016 revision to the Certified Information Professional certification helps IT and information management professionals demonstrate their ability to solve an organization's existing information-related problems as well as plan for the future.

Information professionals contribute to the success of their organizations by helping address the following kinds of information management challenges (both on-premises and in the cloud):

1. Ensure information is dynamically delivered to staff and customers
2. Improve information sharing and collaboration
3. Improve enterprise search and access to information
4. Continuously analyze information to identify new business opportunities and improvements
5. Ensure appropriate information security and privacy controls
6. Manage information and records
7. Streamline and automate information intensive processes

The certification is dedicated to enhancing and promoting the profession of information management by providing the premier credential in the industry. The Certified Information Professional certification accomplishes this mission by:

- Establishing standards for professional practice
- Creating a fair, valid, and reliable examination process by which professionals can demonstrate their knowledge and skill
- Granting certification to those who meet the program's standards
- Communicating the value of the credential to employers, customers and partners.

A broad range of subject matter experts identified in 2016 the skills and knowledge measured by this examination, including changes to technology, processes, and strategies since the original CIP exam was released in 2011. These industry experts determined the weighing of domains and ensured that the weighting is representative of the relative importance of the content.

Below is a list of knowledge areas covered on this 2 hours exam, but please know that the bulleted lists below each objective are not exhaustive lists. Other knowledge areas may be included in the exam even though they are not specifically listed.

Domain	% of Examination
1. Creating and Capturing Information	**20%**
2. Organizing and Categorizing Information	**20%**
3. Governing Information	**16%**
4. Automating Information-Intensive Processes	**10%**
5. Managing the Information Lifecycle	**20%**
6. Implementing an Information Management Solution	**14%**
Total:	**100%**

Creating and Capturing Information

1. Creating and Capturing Information *Includes the following major topic areas:* • *Capture (broadly)* • *Document imaging* • *Collaboration*	a. Identify sources of content to be captured, e.g. paper, microfilm, email, born-digital, legacy sources such as file shares b. Explain the challenges associated with managing digital information, e.g. determining what to capture and how, the dynamic nature of some digital information, how formats impact capture and management c. Select the appropriate file format for creating and capturing content based on business requirements, e.g. target audiences, access to content over time, regulatory requirements d. Determine the impact of using proprietary file formats on information creation, capture, and access e. Identify specific types of content to capture that provide unique challenges, e.g. email, social media, forms, rich media, and determine how to capture them, e.g. using a digital asset management system f. Distinguish between structured and unstructured information and the differences in how they are managed g. Determine methods for extracting and capturing data from structured applications h. Determine methods for capturing structured data using electronic forms i. Develop a process for capturing content, e.g. what to capture, approvals, audits j. Determine strategy for capturing backfile, e.g. day-forward, backfile conversion, on-demand and factors that contribute to each k. Select the appropriate file format(s) for captured images based on business

	requirements, e.g. number of pages, compression, need for Web-based access, need for public access, bandwidth l. Identify issues associated with file conversion, e.g. between formats, from digital to analog m. Identify the system of record/system of ownership for a given type of content or information n. Identify the benefits and challenges associated with managing both structured and unstructured data, e.g. in case management applications o. Compare and contrast the content management capabilities of enterprise content management solutions, point solutions, and enterprise file sync and share solutions and select the appropriate solution based on business requirements p. Determine information management needs and issues associated with virtual teams (e.g. synchronous vs. asynchronous collaboration) q. Identify issues associated with sharing content across internal and external organizational boundaries, i.e. between departments, with customers r. Identify issues associated with legacy collaboration approaches, e.g. email s. Identify key features required for effective document-centric collaboration, e.g. version control, workflow, audit trail t. Determine the functionality required for particular collaboration requirements, e.g. wikis, virtual conferencing, social networking, VoIP, blogs, content rating, recommendations u. Determine whether and how to apply governance to collaboration environments/artifacts

Organizing and Categorizing Information

2. Organizing and Categorizing Information *Includes the following major topic areas:* • *Metadata* • *Taxonomies & classification structures* • *Search* • *eDiscovery*	a. Describe the importance of information architecture to effective information management b. Identify specific business benefits associated with effective metadata usage, e.g. lifecycle management, security management,

	improved findability c. Define a metadata strategy and the elements to include, e.g. consistency of metadata model & vocabulary, metadata maintenance, mandatory v. optional metadata, metadata automation d. Describe and compare different methods for applying metadata to information objects, e.g. manual data entry, recognition technologies, inheritance, workflow, analytics e. Identify sources of metadata and compare and contrast the benefits and drawbacks of getting metadata from each source f. Identify challenges of sharing/propagating metadata across tools and systems g. Describe methods to improve the quality of metadata values, e.g. data validation, data masking, controlled vocabularies h. Identify approaches to automating metadata application and the benefits associated with them i. Compare and contrast the use of formal classification schemes, search, and navigation and their impact on findability j. Identify the benefits of developing and deploying a thesaurus in support of search and classification k. Compare and contrast various classification schemes, e.g. lists, trees, hierarchies, facets, system maps, folksonomies l. Compare and contrast different approaches to classification scheme development, e.g. buy vs. build m. Compare & contrast different approaches to developing classification schemes, e.g. thesaurus-based vs. hierarchical, organizational vs. matter/topical vs. functional n. Identify the stakeholders for a formal classification scheme o. Describe and apply techniques for automating information extraction, description, & classification, e.g. autocategorization, autoclassification, entity extraction, summarization p. Compare & contrast application and enterprise search capabilities q. Compare approaches for improving

	findability of enterprise content, e.g. metadata, consistent classification structures, saved searches r. Uses for, strengths, weaknesses and overlap of usability of different findability mechanisms, e.g. keyword based search, typed-field search, semantic techniques s. Define the issues associated with collecting information from sources not owned/controlled by the organization, e.g. personal devices, commercial social media platforms t. Provide information from a variety of sources in response to requests, e.g. litigation, audit, regulatory inquiry, or Freedom of Information Act-type requirements

Governing Information

3. Governing Information *Includes the following major topic areas:* • *Information governance* • *Security*	a. Define the concept of data and information "stewardship" b. Identify the ethical considerations associated with not following a comprehensive information governance (IG) program **c.** Identify strategic benefits of improved information management, e.g. improved engagement, process automation d. Define the objective of an information and/or information systems inventory e. Identify desired information to gather as part of an information and/or information systems inventory f. Gather information about the context of the organization, e.g. jurisdiction(s) and nature of organization g. Identify current business, legal, and other requirements for IG, e.g. privacy, confidentiality, national security, regulatory requirements h. Describe the purpose of an information management maturity model i. Identify key stakeholders for an IG initiative j. Gain support for the IG program from senior management k. Establish IG roles & responsibilities, e.g. champion, center of excellence, community

	of practice, IG-specific roles, IG support roles l. Evaluate existing IG strategy, processes, documents, and tools m. Develop a framework for evaluating and understanding information risk n. Identify the role of content quality and content standards in an information governance program o. Identify key information management concepts, e.g. core technologies and related terms p. Compare and contrast different information management disciplines, e.g. enterprise content management, records management, document management, knowledge management q. Identify the IG implications for cross-border/cross-jurisdictional storage of content r. Identify the IG implications of cloud vs. on-premises deployment, e.g. costs, security, uptime, management/maintenance, lock-in s. Identify the IG implications of commercial social media platforms (e.g. Facebook, LinkedIn, Twitter), e.g. security, third party control of information, privacy, "liking"/sharing, ownership t. Identify the IG implications of mobile platforms, e.g. security, BYOD, bandwidth, user experience, accessibility u. Identify key events to be captured into the system audit trail, e.g. changes to content, changes to system settings like security v. Develop appropriate IG policies and procedures w. Describe key considerations for using security technologies effectively, e.g. redaction, encryption, digital rights management x. Describe the importance of reviewing IG program with senior management

Automating Information-Intensive Processes

4. Automating Information-Intensive Processes *Includes the following major topic areas:* • *BPM and workflow* • *Process analysis*	a. Articulate typical reasons for business process change b. Distinguish among different business process scenarios and determine which are most suited for change c. Describe the benefits of formal business

	analysis d. Describe the role of the business analyst in an information management initiative e. Compare different approaches to information gathering, e.g. interviewing, process mapping f. Develop a flowchart using best practices and standard methodologies g. Identify the limitations of flowcharting processes h. Ask the right troubleshooting questions and evaluate each step in an existing business process i. Determine how to plan routing of tasks or information using a workflow/BPM system, e.g. deadlines/time stamp, parallel processing, sequential processing, via API j. Compare and contrast modeling and flowcharting k. Distinguish between process modeling and execution and the role of standards l. Compare and contrast workflow and BPM technologies, e.g. routing, workflow, BPM, transactional content management, case management m. Identify and compare various approaches to workload balancing n. Describe the benefits of formal process monitoring o. Identify different metrics to capture and oversee p. Distinguish between on-demand and automated reporting

Managing the Information Lifecycle

5. Managing the Information Lifecycle *Includes the following major topic areas:* • *Records management* • *Knowledge management* • *Retention & disposition of all information* • *Digital preservation*	a. Identify the steps in the information lifecycle b. Compare and contrast the characteristics of data vs. documents vs. records vs. knowledge c. Explain the purpose of capturing and managing records d. Distinguish between records and non-records based on legal, historical, administrative, and operational requirements e. Define the concept of vital records and explain their importance f. Identify and compare sources of electronic records, e.g. office documents, email, scanned images, communications

	technologies g. Explain the challenges associated with managing digital information, e.g. determining what to capture and how, the dynamic nature of some digital information, how formats impact capture and management h. Determine how long to retain different types of content based on legal, regulatory, and operational requirements i. Describe the purpose of a retention schedule and the elements it should contain, e.g. records identifiers, retention periods, disposition instructions j. Define legal holds and the importance of legal holds in the information lifecycle k. Compare & contrast different approaches to disposition of information based on the type and sensitivity of information and the type of media l. Compare and contrast approaches to automating disposition, e.g. automated archiving, scripting, workflow m. Differentiate between archiving, backups, and active storage n. Determine appropriate storage technologies based on business requirements, e.g. regulatory requirements, speed of access and retrieval, costs, openness, long-term accessibility o. Describe how file format and archiving standards affect long-term access to information p. Select the appropriate file format and storage media to ensure long-term access to information, e.g. PDF/A q. Identify preservation risk factors, e.g. format obsolescence, media/hardware obsolescence, media degradation r. Identify and compare approaches to address each of the preservation risk factors, e.g. select standard/open media and file formats, storage considerations, emulation, migration s. Identify the elements to include in a digital preservation strategy t. Identify the steps to include in a migration plan u. Differentiate between tacit and explicit

	knowledge and their impact on an information management program v. Define and compare approaches to expertise location, e.g. social graphing, analytics

Implementation Planning

6. Implementation Planning *Includes the following major topic areas:* • *Information management (IM) strategy* • *Business case* • *Requirements* • *System design & implementation* • *Change management*	a. Determine the impact of an information management initiative, e.g. on ways of working, on business processes, on training and change management requirements b. Develop an information management strategy, e.g. vision, key performance indicators, critical success factors, success measures c. Identify the roles & responsibilities required for an information management implementation program, e.g. sponsor, champion, management, specialists, business users, others d. Conduct a baseline organizational assessment, e.g. business and regulatory environment, organizational culture e. Conduct a baseline technical assessment, e.g. existing enterprise architecture, system lifecycle stage, enterprise architecture roadmap f. Identify existing information management-related systems and determine whether they can be used/expanded/improved for a particular information management initiative g. Determine how to prioritize areas in scope, e.g. by identifying quick wins, areas with the biggest pain point, areas most receptive to change, platform, information type/class h. Develop a project charter for an information management initiative i. Develop an information management program roadmap j. Compare & contrast metrics for determining the success of an information management initiative, e.g. financial, non-financial, non-quantifiable k. Determine specific metrics for an information management initiative l. Develop a business case for improving information management m. Determine the value associated with

	improved information management n. Determine the right approach for buy vs. build for a given information management initiative o. Conduct risk analysis for an information management initiative and develop a risk mitigation plan p. Determine all costs associated with an information management initiative, e.g. acquisition costs, maintenance costs, one-time costs q. Determine the role of business and system requirements in an information management initiative r. Determine the appropriate logical architecture for an information management solution, e.g. centralized, decentralized, federated s. Design new ways of working with information, e.g. collaboration, security, governance t. Design required interfaces, e.g. configuration, forms, overlays, templates u. Design system and content migration processes, e.g. data cleaning, data conversion, quality control v. Develop plans for business continuity/ disaster recovery in the event of a major data loss or breach w. Develop change management plan x. Develop communications plan y. Develop training plan z. Determine approaches for continuous improvement post-implementation