HDI®

KCS PRINCIPLES

Certification Standard Self-Study Guide

OFFICIAL CURRICULUM, V6.0

UBM

KCS Principles Certification Standard

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Introduction

HDI certification exams are based on an HDI certification standard. The competencies for the certification standards were identified and approved by the HDI International Certification Standards Committee (ICSC), a group of industry experts and experienced practitioners from a number of organizations.

It is the committee's intent to recognize the breadth of knowledge required, document the needed skills, and provide leadership to the support industry on the meaning of a certification for customer service and technical support. Each HDI certification standard is an ***open international certification standard*** that is independent of any training curriculum.

An HDI Standard

HDI bases its certifications on open international industry standards, and is independent of any training curriculum.

- ***Open*** implies that the standards are published, allowing organizations to leverage the standards to improve their services, individuals to study the standards in preparation for a certification exam, and training and consulting providers to develop offerings that align with the standards.
- ***International*** indicates that a committee of professionals that have international experience and/or work for global companies has developed the standards, and that the standards are recognized in the global market.
- ***Industry*** refers to the service and support industry, which initially focused on internal support of information technology and later expanded to include external support organizations.
- ***Standard*** defines the knowledge that a support professional in a specific role is expected to know, and a set of best and common processes and practices within a support center.

CERTIFICATION STANDARD

The International Certification Standards Committee (ICSC) has developed standards for the following positions:

- HDI Customer Service Representative (HDI-CSR)
- HDI Support Center Analyst (HDI-SCA)
- HDI Desktop Support Technician (HDI-DST)
- HDI Support Center Team Lead (HDI-SCTL)
- HDI Support Center Manager (HDI-SCM)
- HDI Desktop Support Manager (HDI-DSM)
- HDI Support Center Director (HDI-SCD)

HDI is also pleased to offer the following certifications:

- KCS Principles
- KCS Foundation
- Coaching Skills for Quality Support
- HDI Problem Management Professional (HDI-PM)
- HDI Technical Support Professional (HDI-TSP)
- HDI Certified Instructor (HDI-CI)
- ITIL Foundation

HDI is committed to defining certification standards for additional support professional roles as the industry evolves and needs change. In business today, customers want educated and certified professionals to support their business needs. Certification provides:

- Validation of current knowledge and skill sets
- Evidence of excellence achieved in your field
- Professional development
- Personal pride
- Credentials that travel

How Is an HDI Standard Organized?

Each ***element*** is a category within the standard. Each category contains a list of topics that share a common focus or relate to a specific concept. Within each topic are one or more ***competencies***. For each competency, there is a ***range of knowledge***.

Take a look at the following example from the HDI Support Center Analyst standard:

(Category) 1.0 Leadership		
Topic	**Competency**	**Range of Knowledge**
1.1 Leadership Principles	1.1.1 Identify the characteristics of an effective leader.	An effective leader: • Leads by example • Motivates others • Encourages participation, creative thinking, and initiative • Demonstrates a positive attitude • Practices active listening skills • Displays ethical behavior

If one approaches the standard as if they were interviewing for a position in a support center, the ***competency*** would be either a specific question or a concept that an interviewer would ask in the interview process, and the ***range of knowledge*** would be the expected answer. In other words, it is expected that someone in a specific support center position will possess the range of knowledge for each competency.

To cover a range of knowledge completely for some competencies would be an endless task (e.g., "Identify characteristics of leadership"). In such cases, the HDI International Certification Standard Committee (ICSC) has either defined the information in the range of knowledge to cover information that is common knowledge or has provided examples that relate to the competency. An experienced professional should be able to expand upon the range of knowledge.

It is also common to have a similar set of competencies in more than one certification standard, with the range of knowledge varying between standards. For example, the standard for a support center analyst and a support center manager may include the competency, "Describe the process of change management." The range of knowledge for this competency will differ in each of the standards. The standard for the support center analyst may include an awareness of the change management process, while the standard for a support center manager may contain a more detailed description of how to use the change management process within the support center.

The following section provides a description of each standard category for the KCS Foundation Certification Standard.

Standard Category Descriptions

1.0 KCS Core Concepts

This section of the standard relates to the history of Knowledge-Centered Services (KCS). It explains the ten KCS Core Concepts as well as defines KCS practices and techniques.

2.0 KCS Principles

The Knowledge-Centered Service principles are discussed individually in this section, focusing on the four KCS Principles and the influencers of the behaviors needed for a successful KCS adoption.

3.0 KCS Double-Loop Processes

The Knowledge-Centered Service double loop model is described including all key practices. Each practice is discussed individually in this section.

4.0 Content Health

This practice focuses on how to define and manage the quality of knowledge articles.

5.0 Process Integration

This practice focuses on the organization's responsibility for defining the processes and enabling them with technology.

6.0 Performance Assessment

This practice focuses on how to measure and monitor success and the action items necessary to support behavioral change at a team and individual level.

7.0 Leadership and Communications

This practice focuses on the aspects of organizational change management required to support the adoption of KCS.

8.0 Adoption Roadmap

The Adoption Roadmap provides a strategy for implementing KCS.

Topic	Competency	Range of Knowledge
1.0 KCS Core Concepts		
1.1 KCS Overview	1.1.1 Define Knowledge-Centered Services (KCS).	Knowledge-Centered Services (KCS) is a proven methodology based on four principles and ten core concepts for integrating the use, validation, improvement, and creation of knowledge in the workflow. Knowledge-Centered Service (KCS) is: • A principle-based methodology • A methodology that seeks to reuse, improve, and create knowledge in the support service delivery process • A means of collaboration • NOT something we do in addition to solving problems; rather, KCS becomes the way we solve problems • About people and process first, enabled by technology (tools)
	1.1.2 Explain what Knowledge-Centered Services (KCS) based on.	KCS is based on: • The concept of knowledge from a few for the use by many • Many-to-many model that it is demand-driven and self-correcting • The academic concept of double-loop learning
	1.1.3 Identify the four KCS principles.	The four KCS principles are: 1. ***Abundance***—share more, learn more 2. ***Create Value***—Work tasks, think big-picture 3. ***Demand Driven***—knowledge is a by-product of interaction 4. ***Trust***—engage, empower, motivate
	1.1.4 Explain a KCS principle.	KCS principles are underlying beliefs and behaviors that serve as the foundation for the KCS practices. Principles tell you ***why*** (rather than how) we are doing what we do.

Topic	Competency	Range of Knowledge
1.0 KCS Core Concepts		
	1.1.5 Explain a KCS core concept.	A KCS core concept is based on one or more principles. Core concepts are more specific and more numerous than the principles.
	1.1.6 Explain a KCS practice.	KCS practices are based on one or more techniques and are organized by what we need to do. The practices are the application or use of the principles and core concepts in organizing activities. KCS practices: • Help organize the techniques (how) • Include examples of how to do things (i.e., implementing a balanced scorecard or value footprint) and are applicable across multiple techniques or functions (i.e., tech support, HR, financial services)
	1.1.7 Describe a KCS technique.	Techniques describe activities or ***how*** we do things. They are the detailed actions on what we need to do. Techniques may include the skills needed to complete the technique or identify the efficient manner of doing/achieving something. Techniques are at a more granular level of detail than a Practice. A collection of KCS techniques make up a KCS practice.

Topic	Competency	Range of Knowledge
1.0 KCS Core Concepts		
	1.1.8 Identify the ten KCS core concepts.	The ten KCS core concepts are: 1. Transformation and Continuous Improvement 2. Buy-In at All Levels 3. Leadership is Required 4. Collective Experience 5. Collective Ownership 6. Seek to Understand Before Seeking to Solve 7. Sufficient to Solve 8. Knowledge Integration 9. Coaching for Success 10. Assess Value
	1.1.9 Define knowledge articles.	Knowledge articles (aka: articles) are the collective experience of the organization in solving issues and answering questions. KCS articles can cover a variety of issues: usage or "how to," configuration, inter-operability, performance, defects, procedural or diagnostic information.
1.2 Core Concepts	1.2.1 Describe the KCS Concept of Transformation and Continuous Improvement.	The concept of Transformation and Continuous Improvement involves a double-loop process which are typically described as consisting of an A and B loop. • The A loop is the activity of getting work done; and it is often reactive in that the activity is triggered by an event or an interaction. • The B loop defines the A loop process and is also reflective. It is a process of continuous improvement for the A loop and the output of the A loop. The B loop activities assess the health of the system by analyzing the patterns and trends that emerge from a collection of A loop activities and outputs, and identify opportunities for improvement.

Topic	Competency	Range of Knowledge
1.0 KCS Core Concepts		
	1.2.2 Describe the KCS concept of Buy-in at All Levels.	The concept of Buy-in at All Levels is maximizing the autonomy of all stakeholders to understand, believe, and choose to contribute. A key motivational factor in a knowledge-centric environment is the sense of autonomy or control. Leadership's goal is to create an environment where people choose to help and feel good about contributing their knowledge; an environment where the purpose is clear and people are bought into that purpose. When representatives understand and believe in the purpose and values of the organization, and they trust their leadership and the people they work with, they will make good judgments about when to reuse, improve, or create knowledge articles.

Topic	Competency	Range of Knowledge
1.0 KCS Core Concepts		
	1.2.3 Describe the KCS concept Leadership is Required.	For a successful KCS Adoption, leadership must drive the organizational change and create/sustain the demand for engagement. The key areas where Leadership is Required include: • Create a ***vision*** that relates the value of KCS to the key stakeholders. This includes: – A compelling purpose—a simple value statement that expresses the importance of KCS and elicits and emotional response – A mission statement—how the organization will achieve the compelling purpose – Explicit values—the behaviors the organization and its people aspire to in achieving the purpose – The brand promise— value attributes to the customers or those who the organization serves • Encourage ***trust*** in knowledge workers and their good judgment in achieving and aligning with the organization's purpose, values and brand promise • Valuing employees for their – Knowledge and ability to follow instructions – Good judgment – Lifelong learning – Collaboration – Quality creation and reuse of knowledge
	1.2.3 cont.	• Measure ***customer success and value***—Move from activity or transaction-based measures to a commitment to measure customer success and value. Provide visibility of the contribution of value by knowledge workers. • ***Continuously improvement of technology integration including performance and functionality to ensure technology*** supports knowledge work and knowledge workers.

Topic	Competency	Range of Knowledge
1.0 KCS Core Concepts		
	1.2.4 Describe the KCS concept of Collective Experience.	The KCS concept of Collective Experience means to capture the collective experience of the community of knowledge workers, so that the knowledge will always be more complete and accurate than what any individual or expert knows. KCS leverages collective experience and acknowledges that all the people who interact with knowledge have something to contribute to that knowledge.
	1.2.5 Describe the KCS concept of Collective Ownership.	The concept of Collective Ownership applies to all who use the knowledge. It is a key driver for the efficiency of KCS processes and knowledge quality. If knowledge workers take responsibility for the quality and accuracy of the knowledge they interact with, the knowledge that is being used is constantly being updated. In environments where the intended audience for knowledge includes people outside of the organization (i.e., partners or customers), they too are part of the collective ownership model. Allowing them to improve or at least comment on knowledge, based on their experience with that knowledge, is important. Collective ownership relates to all four of the KCS principles and the observation that the best people to create and maintain the knowledge are those who use it every day.
	1.2.6 Describe the KCS concept of Seek to Understand Before You Seek to Solve.	In the context of KCS, "seek to understand before seeking to solve" has two implications: • Seek to understand the requestor's (or customer's) issue—listen and ask clarifying questions to understand as much as possible about the situation • Seek to understand what is collectively know about this issue—find out what is collectively known about the issue by searching the knowledge base early in the process, and often after that

Topic	Competency	Range of Knowledge
1.0 KCS Core Concepts		
	1.2.7 Describe the KSC concept Sufficient to Solve.	How good is good enough? The concept of Sufficient to Solve applies differently to the Solve and Evolve Loops: • The knowledge article structure and writing style in the Solve Loop, and • The level of detail governed by the content standard and the process in the Evolve Loop.
	1.2.8 Describe the KCS concept of Knowledge Integration.	The concept of Knowledge Integration is the degree to which the knowledge base is integrated into the workflow. This will dictate the degree to which KCS benefits are realized. The health and value of the knowledge is related to how much people use it. In most organizations, people will seek information through a number of different avenues (i.e., asking peers, looking through documentation, searching past e-mails, and often as a last resort, searching or browsing a knowledge base). In a KCS environment, using the knowledge base should be the first thing people do.
	1.2.9 Describe the KCS concept of Coaching for Success.	The concept of Coaching for Success involves changing behaviors, which takes time and usually requires an external influence, such as a coach (peer mentor). Coaching for the knowledge worker is only effective if the knowledge worker wants to learn KCS. It is leadership's responsibility to create demand on the part of the knowledge workers to learn KCS. The job of the KCS coaches is to satisfy that demand.

Topic	Competency	Range of Knowledge
1.0 KCS Core Concepts		
	1.2.10 Describe the KCS concept of Assess Value.	The concept of Assess Value involves: • Assessing the health and value of the knowledge base and the processes used to create and maintain the knowledge • Identifying learning and coaching opportunities for individuals • Acknowledging the creation of value by individuals and teams • Identifying areas for continuous improvement • Assessing the business value of what is created in KCS
1.3 History	1.3.1 Identify the entity that owns and maintains KCS.	The Consortium for Service Innovation created, owns, and is responsible for maintaining the KCS Principles and Core Concepts documentation.
	1.3.2 Explain who the Consortium for Service Innovation is.	The Consortium for Service Innovation is a non-profit alliance of customer service organizations that are working together to solve industry-wide customer service challenges.
	1.3.3 Explain why KCS was created.	KCS was created to reuse, improve, and create knowledge to improve the efficiency and effectiveness of support organizations.

Topic	Competency	Range of Knowledge
1.0 KCS Core Concepts		
	1.3.4 List the common reasons an organization should implement KCS.	Organizations should implement KCS to: • Increase value of services provided • Lower support costs • Enable self-service • Improve First Contact Resolution • Identify opportunities to learn from customers' experiences • Address the challenge of change and increased scope of support • Decrease stress and repetitive work, increasing engagement of representatives • Provide consistent responses to the same questions • Provide answers to complex issues • Respond to and resolve issues faster

Topic	Competency	Range of Knowledge
1.0 KCS Core Concepts		
	1.3.5 Identify some of the common benefits that result from implementing KCS.	Typical benefits of successfully implementing KCS include: • Solve and close issues and cases faster – Improve time to resolution by 50–60% – Increase First Contact Resolution by 30–50% • Optimize resources – Improve time to proficiency by 70% – Improve employee retention by 20–35% – Improve employee satisfaction by 20–35% • Enable e-Service strategies – Improve customer success and adoption of self-service – Increase case deflection up to 50% • Build organizational learning – Close loop with product development through actionable information about customer issues – Issue reduction up to 10% due to root cause removal
	1.3.6 Identify the three levels of KCS benefits.	The three levels of KCS benefits are: • ***Direct***—operational improvements that are near term (3-9 months) • ***Applied***—new ways of delivering service and support (i.e., the knowledge that is created can be used to enable self-service) • ***Leveraged***—Knowledge allows support organizations to offer new kinds of services
	1.3.7 Identify the two types of KCS benefits.	The two types of KCS benefits are: • Qualitative (subjective) • Quantitative (objective)

Topic	Competency	Range of Knowledge
2.0 KCS Principles		
2.1 KCS Principles	2.1.1 Identify the four principles that KCS practices are built on. (reiterates 1.1.3)	KCS practices are built on four KCS principles: 1. ***Abundance***—share more, learn more. 2. ***Create Value***—Work tasks, think big-picture. 3. ***Demand Driven***—knowledge is a by-product of interaction. 4. ***Trust***—engage, empower, motivate.
	2.1.2 Identify the five influencers of behavior in KCS.	Five influencers of behavior in KCS include: 1. ***Technology/toolset***—functionality, navigation, integration (is it easy to do the right thing?). 2. ***Measures***—how people are assessed. 3. ***Recognition and Reputation.*** 4. ***Understanding***—the extent to which the representatives understand the "What's in it for me" (WIIFM) as well as the big picture (organization and customers). 5. ***Coaching***—peers who are trusted change agents and role models.
2.2	2.2.1 Describe the KCS principle of Abundance (share more, learn more).	The KCS principle of abundance is powerful and disruptive for organizations. Knowledge is the by-product of an interactions and experiences. When knowledge workers share knowledge freely, no one leaves an interaction with less knowledge. The more we share, the more we learn. Recognition programs designed on a model of abundance ensure knowledge workers are acknowledged for their strengths and talents based on their ability to create value through collective knowledge.

Topic	Competency	Range of Knowledge
2.0 KCS Principles		
	2.2.2 Describe the KCS principle of Create Value.	Knowledge workers create value through knowledge. While the work knowledge workers perform in tasks and related interactions is important, great things happen when knowledge workers: • Work strategically and balance the value of the task with the value of what is learned from an interaction and patterns that emerge from a collection of interactions. • Complement but do not replace technical documentation, design documents, HR policies, regulatory filings, and other collateral. • Distinguish experience-based from compliance needs (i.e regulatory and legal requirements, high risk processes, company policies). • The KCS principle of create value recognizes that not all knowledge is equal, and allows appropriate control mechanisms in organizations based on the different knowledge requirements.
	2.2.3 Describe the KCS principle of Demand Driven.	Demand drives: • What knowledge is captured? • What knowledge is important or valuable? • How we validate the knowledge? The demand driven principle proposes that the demand for knowledge dictates what knowledge has value to capture. Reused knowledge is validated, based on demand, through reuse - reuse is review. In the Evolve Loop, knowledge reuse patterns help organizations to develop predictive and preemptive capabilities that improve efficiency. Demand is just-in-time, not just-in-case.

Topic	Competency	Range of Knowledge
2.0 KCS Principles		
	2.2.4 Describe the KCS principle of Trust.	Trust is the degree to which the organization believes that people are capable of making good decisions and judgments. Trust in the organization is displayed in many ways including: • Knowledge workers will do the right thing based on the situation with right information and an understanding of the organization's purpose and brand promise • Trust begets trust and is reciprocal among knowledge workers • Knowledge workers believe in the process • Executives create an environment or culture based on trust • Trust is critical for the successful adoption of KCS and for the ability of the organization to maximize and sustain KCS benefits

Topic	Competency	Range of Knowledge
3.0 KCS-Loop Process		
3.1 Double-Loop Process	3.1.1 Describe the double-loop process used in KCS.	The KCS methodology uses double-loop processes to optimize the health of the knowledge base and the capability of the organization. The Solve and Evolve Loop processes are the operational activities that reinforce each other and make up the system. There are 8 practices in the double-loop process; four in the Solve Loop and four in the Evolve Loop. As mentioned in standard 1.2.1: • The A loop is the activity of getting work done; and it is often reactive in that the activity is triggered by an event or an interaction. • The B loop defines the A loop process and is also reflective. It is a process of continuous improvement for the A loop and the output of the A loop. The B loop activities assess the health of the system by analyzing the patterns and trends that emerge from a collection of A loop activities and outputs, and identify opportunities for improvement.
3.2 Solve Loop	3.2.1 Explain the Solve Loop.	The Solve Loop (A Loop) represents the responsibilities of the representative when they are resolving a customer's issue. • The practices within this loop are reactive and transactional. • In the solve loop is the workflow that resolves issues—it is a request-response workflow. • Representatives capture their resolution experiences to create a collective memory for everyone to use.

Topic	Competency	Range of Knowledge
3.0 KCS-Loop Process		
	3.2.2 Describe the four practices in the Solve Loop.	The four practices in the Solve Loop are: **1.** ***Capture***—in the workflow. Capture the: – Experience of resolving issues; customer's context and representative's knowledge – Customer's perception of what is occurring – Environment in which the issue is occurring – Resolution to the issue – Cause of the issue (optional) **2.** ***Structure***—for reuse. – Consistent structure – Simple templates – Improve article readability – New articles build on and integrate with existing knowledge **3.** ***Reuse***—words and phrases used in the search are valuable content and should be reused to improve articles or create a new article. – Searching is part of the request-requester process – Search-early, search-often ensures that one will benefit from existing knowledge and reduces the likelihood of creating duplicates **4.** ***Improve***—reuse is improved. – Representatives take responsibility for the articles they interact with – Use "Flag-It or Fix-It" for articles not understood or those that can be improved or corrected – Licensed users editing articles improves quality, reduces duplicates, and assures currency

Topic	Competency	Range of Knowledge
3.0 KCS-Loop Process		
3.3 Evolve Loop	3.3.1 Explain the Evolve Loop.	The Evolve Loop represents the responsibilities of leadership and the organizational level processes needed for KCS. The Evolve Loop: • Defines the practices that govern and promote the activities of the Solve Loop and the content standard • Is responsible for continuous improvement based on the analysis of the Solve Loop events and the associated articles with those events Characteristics of the Evolve Loop include: • Organizational-level processes that occur across a collection of events (Solve Loop) or content • Systemic (i.e., processes and policies that are implemented to enable the transactional activities) review of knowledge worker activities resolving issues with organizational processes, including the continual improvement and maturity of KCS services
	3.3.2 Identify the four practices in the Evolve Loop.	The four practices within the Evolve Loop are: 1. Content Health 2. Process Integration 3. Performance Assessment 4. Leadership & Communication

Topic	Competency	Range of Knowledge
3.0 KCS-Loop Process		
3.4 Capture (Solve Loop)	3.4.1 Describe the techniques of the Capture practice.	The techniques of the Capture practice include: • Capture Knowledge in the Moment. – KCS articles are created as part of the interaction and immediately made visible to others – The capture process is integral to the Solve Loop from the first description of the request to the final resolution—the article is built along the way (tacit information becomes explicit) – Even if a resolution is not yet known, the KCS article is made visible to others, especially those working in the same product area – Knowledge becomes a by-product of interaction • Capture the Customer's Context. – Understand customer's experience before resolving – Content is captured in the customer's context – Information is captured about the environment – Relevant content is captured into the article, which may be a subset of information captured in the incident/request record
	3.4.1 cont.	• Searching is Creating. – Knowledge is captured as a by-product of problem solving – Capturing knowledge in the moment becomes explicit—tacit knowledge is captured and becomes explicit, you don't know what you know until someone asks – Only relevant content is captured into the article, which may be a subset of information captured in the incident record – The concept of searching the knowledge base before you add – Search words are candidate knowledge

Topic	Competency	Range of Knowledge
3.0 KCS-Loop Process		
	3.4.2 List the benefits of Capture.	The benefits of Capture include: • Content is in the customer's context • Improves findable articles • Context is captured appropriately and at the point of interaction
3.5 Structure (Solve Loop)	3.5.1 Identify the techniques of the Structure practice.	The techniques of the Structure practice include: • Use A Simple Template—use a simple template or form for capturing and organizing content into the knowledge article. A sample structure includes: – Issue/question – Environment – Resolution/answer – Cause – Metadata • Use Complete Thoughts Not Complete Sentences—using complete thoughts are a more appropriate way to capture knowledge in the issue and environment fields, rather than using complete sentences.
	3.5.2 List the benefits of Structure.	The benefits of Structure include: • Provide context for the content • Improve readability • Promote consistency and quality
3.6 Reuse (Solve Loop)	3.6.1 Identify the techniques of the Reuse practice.	The techniques of the Reuse practice include: • Search early and search often • Seek to understand what we collectively know • Linking

Topic	Competency	Range of Knowledge
3.0 KCS-Loop Process		
	3.6.2 List the benefits of Reuse.	The benefits of Reuse include: • Existing knowledge/articles can be used to resolve issues and minimizing rework within the support organization • Resolution (downtime) time is decreased • Adds additional customer context • Determining if the issue has already been solved • Determining if someone else is working on the same or similar issue
3.7 Improve (Solve Loop)	3.7.1 Identify the techniques of the Improve practice.	The techniques of the Improve practice include: • Reuse is review—content is validated when it is used, "just-in-time quality" • Flag It or Fix It—articles migrate to new audiences based on demand • Licensed to modify—improve existing articles and change visibility of articles
	3.7.2 List the benefits of the Improve practice.	The benefits of the Improve practice include: • Continuous improvement of the quality of articles • Resources are optimized by only spending time on articles that are being used • Improved knowledge articles are available immediately for reuse • Shared ownership of the knowledge base

Topic	Competency	Range of Knowledge
3.0 KCS-Loop Process		
3.8 Content Health (Evolve Loop)	3.8.1 Identify the techniques of the Content Health practice.	The techniques of the Content Health practice include: • Article Structure • Articles State is composed of three components: – Article confidence – Article visibility – Article governance • Content Standard • Evolve loop articles • Archiving Old Articles • Dealing with Legacy Data • Priming the Knowledge Base with New Information • Global Support Considerations • Knowledge Domain Analysis • Content Health Indicators – AQI – Knowledge Sampling • Self-Service Success – Self-service design criteria – Create vs. Reuse • Self-Service Measures

Topic	Competency	Range of Knowledge
3.0 KCS-Loop Process		
3.9 Process Integration (Evolve Loop)	3.9.1 Identify the techniques of the Process Integration practice.	The techniques of the Process Integration practice include: • Structured problem-solving (seek to understand before seeking to solve) • A seamless technology integration, between knowledge management, incident management, and other systems • Search technology is required to find relevant articles • A closed loop feedback system—best practice feedback is used for continuous improvement to the process • Process Integration Indicators
	3.9.2 List the benefits of process integration.	The benefits of process integration include: • Efficiency and effectiveness of the solve loop practices and techniques

Topic	Competency	Range of Knowledge
3.0 KCS-Loop Process		
3.10 Performance Assessment (Evolve Loop)	3.10.1 Identify the techniques of the Performance Assessment practice.	The techniques of the Performance Assessment practice include: • KCS Roles and license model – KCS Candidate – KCS Contributor – KCS Publisher – KCS Coach – KCS Domain Expert – Variations on licensing • Coaching for Success • Assessing Creation of Value – Integrating subjective and objective measures – Shifting performance measures from individual and activity-focused to team and value-creation measurements – Using triangulation to assess who is creating value – Balanced scorecard to facilitate measurement of teams and individuals – Measuring both lagging (results) and leading (activity) metrics – Goals are only set on objectives (results)
	3.10.2 List the benefit of performance assessment.	The benefit of performance assessment is to drive desired behaviors. Value is derived from knowledge, relationships, and influence.

Topic	Competency	Range of Knowledge
3.0 KCS-Loop Process		
3.11 Leadership & Communica-tion	3.11.1 Define the techniques of the Leadership & Communication practice.	The techniques of the Leadership & Communication practice include: • Developing and communicating a vision • Creating a strategic framework • KCS Benefits and ROI • Promoting teamwork • Tapping into internal motivators • Recognition program • Communication is Key • Leadership Accountability to the Knowledge Worker • Leadership and Communication Indicators
	3.11.2 List the benefits of Leadership & Communication.	The benefits of Leadership & Communication include: • Clear goals are communicated facilitating teamwork • Greater participation and buy-in by all involved improving employee engagement • Improved risk management • Improved performance

Topic	Competency	Range of Knowledge
4.0 KCS Content Health		
4.1 KCS Content Health (Practice 5—Evolve Loop)	4.1.1 Explain the purpose of Content Health.	The purpose of Content Health is to provide guidance so that value is captured in the interaction process.
	4.1.2 Describe how value is captured in the interaction process.	Value is captured in the interaction process through: • Capturing all the KCS article information during the interaction process • Respecting the contributions of all of the people who interact with the knowledge • Structuring articles so for reuse • Structuring information for findability and readability • Collective ownership • Evolve-Loop articles

Topic	Competency	Range of Knowledge
4.0 KCS Content Health		
4.2 Article Structure	4.2.1 Identify the common elements/fields of an article.	The common elements/structure of an article: • ***Issue*** (symptom, problem/question) – Issue described in customer's words/phrases from their perspective and context – What is the customer trying to do? – What is not working? • ***Environment*** – Products, categories, business processes – Changes (i.e.,upgrades, deletions, additions) • ***Resolution*** – Answer or steps to resolve the issue • ***Cause (optional)*** – Underlying cause of the issue
	4.2.2 Describe KCS metadata.	Metadata is the collection of attributes of the KCS article. The metadata can be automatically added by the KCS system (e.g., date created, date modified, reuse counts, creator, modifier) or added manually (e.g., visibility, quality (AQI), governance).

Topic	Competency	Range of Knowledge
4.0 KCS Content Health		
	4.2.3 List examples of KCS metadata.	Examples of KCS metadata include: • Article state • Author/Modifier • Date Created • Last Modified Date • Last Modified By • Reuse Counter • Audience and visibility • References and hyperlinks • Identification number • Version • Article Governance • Title • Summary • Knowledge state sub article confidence and visiblity
4.3 Article State	4.3.1 Identify three metadata fields that comprise the KCS article state attributes.	Three metadata fields that compromise the KCS Article State attributes are: • Article governance • Article confidence • Article visibility

Topic	Competency	Range of Knowledge
4.0 KCS Content Health		
	4.3.2 Describe article governance and the two governance attributes.	Article governance is the attribute that determines who can create or modify an article. The two governance attributes are: • ***Experience***— the most open level of governance. Control is a function of being a member of the community and having an identity where sign-in (identify) is required. Articles will be based on the collective experience of those who use the articles. The number of people with this level of rights and privileges will typically be large. • ***Compliance***—everyone should be able to comment on all types of articles; however, not everyone can create or modify articles. Compliance controls sensitive, regulated, or critical information for an organization. This attribute is restrictive—only designated individuals or specific groups of individuals can create and modify articles with the compliance attribute. Depending on the organization, these articles require approvals due to policy, legislation, or other legal or regulatory requirements.
	4.3.3 Describe article confidence.	Article confidence is the attribute that defines the quality of an article and tells the level of certainty in the article's structure and content. Article confidence is used in determining article visibility.

Topic	Competency	Range of Knowledge
4.0 KCS Content Health		
	4.3.4 Identify four article confidence attributes.	The four article confidence attributes are: • ***Work in Progress***—The article has no resolution. The problem and some environmental is captured, but the resolution is unknown. This is sometimes referred to as a framed article. • ***Not Validated***—The article is complete and a resolution has been captured; however, confidence is lacking in structure or content, due to the lack of feedback or article noncompliance with the content standard. • ***Validated***—The article is complete and reusable, it has been used by a licensed KCS user. Articles are validated when there is confidence in the resolution and compliance with the content standard. • ***Archived***—Articles are moved to archived when the article is defined as having no value.
	4.3.5 Describe article visibility.	Article visibility adds an additional layer of control that allows business rules to be created allowing different access to different audiences. The individual's KCS license level defines their rights and privileges in setting the visibility attribute (i.e., internal, partner, external) and the confidence attribute (i.e., not validated or validated).

Topic	Competency	Range of Knowledge
4.0 KCS Content Health		
	4.3.6 Identify the five article visibility attributes.	The five article visibility attributes are: • **Internal**—articles are only visible internally to an organization (Note: anything with wider visibility than internal is referred to as external) • ***Within a domain***—articles are visible to a group associated with a particular product domain, topic, job function, department, etc. • ***Partners***—articles are visible to third parties (who are not employees) who act as a trusted extension of the organization • ***Customers***—articles are visible to customers/clients or users of the products/services provided by the organization. The articles are typically accessible via a web-based self-service portal for users (registered). • ***Public***—The article is intended for anyone unidentified in the public domain. A common practice is to have this article optimized and indexed for a publicly available search appliance like Google.
4.4 Developing a Content Standard	4.4.1 Define the purpose of the content standard.	The purpose of the content standard is to formally document or use a template that describes the decisions that need to be made about KCS article structure and content that promote consistency.

Topic	Competency	Range of Knowledge
4.0 KCS Content Health		
	4.4.2 List common components of a content standard.	Common components of a content standard may include: • KCS Article Structure (field definitions) • Quick (one-page) reference guide • Examples of good and poor articles • Templates • Meta data definitions • Knowledge Article States – Article governance – Article confidence – Article visibility • Style Guide • Supporting material • Vocabulary • Multi-language considerations • Multimedia considerations
4.5 Creating Evolve Loop Articles	4.5.1 Describe two types of KCS articles.	Two types of KCS articles are: • ***Solve Loop***—articles are developed just-in-time based on customer demand. These articles must adhere to the content standard so that the articles have a consistent structure and are findable and usable by the intended audience. • ***Evolve Loop***—articles are high-value articles which are usually created by Knowledge Domain Experts, based on patterns and trends in article reuse or the analysis of self-service activity. This content generally represents a very small percentage of the total knowledge base.

Topic	Competency	Range of Knowledge
4.0 KCS Content Health		
4.6 Archiving Old Articles	4.6.1 Identify considerations for archiving.	When considering articles for archive: • Do so in a way that improves the findability of what is collectively know, not by reducing what is collectively known • Assess whether the archiving will compromise the completeness of the knowledge base. (The greatest value from the knowledge base comes from it being a complete collection of the organization's experience and the ability to quickly find what is needed when it is needed.) • Archiving old articles treats the symptoms of findability, not the cause • There is often higher value in seldom used articles, since this knowledge does not typically exist in most of the knowledge worker's heads/memory • Age and size of articles should not be considerations

Topic	Competency	Range of Knowledge
4.0 KCS Content Health		
4.7 Dealing with Legacy Data	4.7.1 Describe the considerations when migrating and integrating legacy data.	When migrating and integrating legacy data consider: • Creating a demand-based process that will help identify the legacy content that has value • Keeping the legacy content in a separate repository and making it available to knowledge workers to search • Letting demand focus the attention on the legacy content that has value • Creating KCS articles in the new knowledge base for the content that is being used (found) from the old knowledge base • Legacy data/content is typically not in the KCS structure, nor is it expressed in the context of the customer. Most who have done a mass migration of legacy data/content) have ended up removing the legacy content because it disrupts findability) • The investment of time and money to clean, write scripts, and move legacy knowledge is typically not worth the cost to migrate it, and often turns out to be counter-productive • Experience shows that 90%-95% of what is in the old knowledge base will never be referenced
	4.7.2 Identify the strategies for a successful demand-based migration strategy.	Strategies that support a demand-based migration strategy include: • Making the old knowledge repositories read-only • The concept of searching the new knowledge base first • If a KCS article is not found in the KCS knowledge base, search the old knowledge repositories • Re-purposing the old content that is useful (based on demand) by creating articles in the customer's context and in the KCS structure

Topic	Competency	Range of Knowledge
4.0 KCS Content Health		
4.8 Priming the Knowledge Base with New Information	4.8.1 Describe the considerations when priming the knowledge base with new information.	Prime the knowledge base with new information when: • Content should only be added when there is demand—don't add unless someone asks. Examples of demand include: – Alpha and beta testers will experience the issue – If the issue is worth resolving, it's worth capturing • New products and processes deem it necessary: – Ensure that the context is how customers will use it – Capture experiences (context) of alpha & beta testers – Capture context of user acceptance testing – Create content in the context of beta testers experience – Identify the article state as draft or validated (internal) – Create content from training and pilot phase experiences – Expect articles to improve as customer context is added

Topic	Competency	Range of Knowledge
4.0 KCS Content Health		
4.9 Global Support	4.9.1 Describe KCS challenges in a global organization.	KCS challenges in a global organization may include: • English is often the default language for global, multi-lingual, multi-cultural organizations • KCS does not specifically address cultural issues • The KCS article content structure and style of "complete thoughts, not complete sentences" – Complete thoughts are easier to comprehend for those where ESL – KCS article structure provides meaning and context, making translations easier
	4.9.2 List examples of translation strategies.	Some examples of translation strategies include: • Just do it— machine translation (all articles) • Demand driven—only translate articles that have been reused • Hybrid— machine translation with manual edit and posting for reused articles • Side-by-Side— the original article is available along-side the translated article
4.10 Knowledge Domain Analysis	4.10.1 Describe the purpose of Knowledge Domain Analysis.	Knowledge Domain Analysis focuses on the health of the knowledge base with an emphasis on: • The quality of the articles • The effectiveness of the workflow that produces and improves the articles • The use of the articles Knowledge Domain Analysis is most effective with cross-organizational participation.

Topic	Competency	Range of Knowledge
4.0 KCS Content Health		
	4.10.2 Identify the output of Knowledge Domain Analysis techniques.	Knowledge Domain Analysis outputs includes the identification of: • Improvements to the content standard and process integration (workflow) • Recommendations on findability issues • Content gaps—knowledge people are looking for that does not exist • Content overlaps—consolidating duplicate articles, identifying the best or preferred resolution among many proposed resolutions • Improvements in how known issues are leveraged, eliminating re-work, improving access and findability • Improvements in how new issues are solved, suggestions for problem-solving and collaboration to solve new issues quickly • Pervasive issues—facilitating root cause analysis and working with process, product, and business owners on high impact improvements • Value of the knowledge base: – Article reuse rates – Self-service success – Contribution in improving time to resolve – Contribution to reducing downtime – Contribution to increasing service availability • Archiving strategy for the knowledge base

Topic	Competency	Range of Knowledge
4.0 KCS Content Health		
	4.10.3 Describe the role of the Knowledge Domain Expert (KDE).	• The Knowledge Domain Expert (KDE) seeks to: – Optimize the creation, improvement, and use of articles – Identify patterns and trends of reuse to identify potential product, process, or policy changes that could eliminate the root cause of the most frequent issues – Work with Coaches and the KCS Council to improve the content standard (based on their analysis) and the KCS workflow • KDE's are typically subject matter experts (SME) who continue to have other functional responsibilities (the KDE is not usually a full-time role) • KDE's are individuals who are naturally attracted to using data analytics to figure out what can be learned from the collection of knowledge • KDE's must establish a relationship with the business functions that need to take corrective actions: – Depending on the domain, may be the owners of business policy or processes and/or the owners of the product or services functionality and road maps – Provides the functional/product owner with quantifiable, actionable information that is based on the users' experience
		• Success of the Knowledge Domain analysis function is measured through: – Improvements in findability – Self-service use – Incident volume reduction that is a result of corrective actions taken to eliminate the cause of pervasive issues

Topic	Competency	Range of Knowledge
4.0 KCS Content Health		
	4.10.4 Describe a Knowledge Domain.	Knowledge domains are virtual collections of KCS articles that are related to a common topic, function, process, technology, or product family. Knowledge domains are not precise or absolute in their boundaries; and they often overlap. A knowledge domain is the collection of content that makes sense to include for pattern recognition and cluster analysis. Therefore, the purpose or intent of the analysis defines the collection of articles that are relevant.
	4.10.5 Provide examples of Evolve Loop articles.	Examples of Evolve Loop articles include: • Procedural articles, diagnostic articles, or step-by-step procedures (how to do a specific thing) • Resolution paths—a collection of linked procedural articles that defines a complex process (procedural or diagnostic)—created by Knowledge Domain Experts to address generic or high level symptoms. Often created by KDE to address in a large/unwieldy number of Solve Loop KCS articles. • High impact issues— issues that are pervasive, cause outages, or articles about new or strategic processes, policies, products or services • KCS articles created to fill knowledge gaps—articles on topics or issues users are looking for that do not exist. (Typically identified through self-service and search analytics.)
	4.10.6 Explain the concept of new vs. known analysis.	The new vs. known analysis is an example of the continuous improvement processes in the Evolve Loop. The new vs. known process can help assess the health and effectiveness of an organization's KCS practices.

Topic	Competency	Range of Knowledge
4.0 KCS Content Health		
	4.10.7 Describe the objective of new vs. known analysis.	The objective of new vs. known analysis is to identify opportunities to reduce the resources spent on known issues and accelerate the resolution of new issues. The two major components to achieve this are: • Reduce the resources spent on known issues—this is achieved by improving customer use and success with the self-service model • Improve the speed and accuracy in solving new issues—this is achieved by getting the right resources working on the issue as quickly as possible By analyzing incidents closed from the perspective of new vs. known and analyzing incidents in each category one can: • Create a baseline of the percentage of new vs. known issues being worked on in the organization—measure the impact of future improvements against this baseline • Assess the characteristics of known issues solved by the organization and assess why they were not solved through self-service • Assess the characteristics of new issues and identify opportunities to improve the speed and accuracy of the problem-solving process
	4.10.8 Describe the scope of new vs. known analysis.	The scope of the new vs. known fnalysis should include the following: • Support centers, call centers, help desks, or service desks for internal and/or external customer support • First point of contact (level 1), first point of escalation (level 2), second point of escalation (level 3) • Products/services, hardware, Software, systems, networking, or any other business process or outcome supported • Performed periodically (typically not more than once a quarter)

Topic	Competency	Range of Knowledge
4.0 KCS Content Health		
	4.10.9 Identify four steps in the new vs. known analysis approach.	The four steps in the new vs. known analysis approach are: 1. Scope Definition—products/domains 2. Data Collection 3. Incident Analysis 4. Identify and Discuss Opportunities
	4.10.10 Describe known in new vs. known analysis.	When conducting a new vs. known analysis, 'known' includes: • Content that was captured and findable • Incident/issue closed with existing content and linked to a pre-existing article • If there is a lot of "tribal knowledge" (e.g., things that are known by all but that are not in the knowledge base), it may be helpful to identify "known but not captured". (Note, if this condition exists it is an indicator that knowledge workers are not doing KCS. If the question is being asked, it should be in the KB.)
4.11 Content Health Indicators	4.11.1 Identify the five key elements that contribute to article quality.	The five key elements that contribute to article quality are: • A content standard that defines the organization's requirements for effective articles • Having an Article Quality Index (AQI) for measuring the quality of articles • Process Integration Indicators (PII) that measure compliance to the KCS workflow • Having KCS licensing and a KCS coaching model in place • A broad and balanced performance assessment model

Topic	Competency	Range of Knowledge
4.0 KCS Content Health		
	4.11.2 Identify the basic checks that should be included in an Article Quality Index (AQI) model.	The basic checks that should be included in an Article Quality Index (AQI) model are: • ***Unique***—the article is not a duplicate article; there is no other article with the same content whose create date preceded this article's created date (this element is a critical part of the AQI) • ***Complete***—the problem, environment, cause, resolution description, and types are complete • ***Content Clear***—statements (e.g., issue, environment, cause, description) are complete thoughts, not sentences • ***Title Reflects Article***—the title contains the description of the main environment and the main issue (cause if available) • ***Links Valid***—hyperlinks are persistently available to the intended future audience • ***Metadata Correct***—the metadata set is appropriate: article state, visibility, type, or any other key metadata defined in the content standard are correct
	4.11.3 Explain how KCS article value is assessed.	KCS article value is assessed through: • Article value of reuse—how often the article is used to resolve an issue • Article value based on reference—how often is the article reference as contributing to the solution (e.g., the article provided insight or diagnostic information that assisted in the resolution of the issue) • The value of the collection of articles—the rate of customer success (i.e., finding the resolution via self-service. Also referred to as call deflection or call avoidance.) • Content speed and accuracy—findability and usability of KCS articles are valued more than presentation and format

Topic	Competency	Range of Knowledge
4.0 KCS Content Health		
	4.11.4 Explain the concept of good enough.	Articles need to be 'good enough' to be findable and usable, or what is called "sufficient to solve." Most organizations deal with different types of knowledge, and not all types of articles have the same criteria for quality. Organizations typically have a higher tolerance for variability and interpretation for experienced-based articles, while there is no tolerance for variability or interpretation for compliance-based articles. Perfection is too expensive.
4.12 Self-Service Success	4.12.1 Describe the goal of KCS self-service.	The goal of KCS self-service is to increase customer engagement by providing access to knowledge so that the customer can resolve their issue without the interaction of others.
	4.12.2 Identify the elements in a self-service strategy.	The elements that should be included in a self-service strategy are: • Vision—what is the desired end-state? • Audience • Goals—how will you know if the desired end-state is achieved? • Measurements and metrics • Assessment and continuous improvement

Topic	Competency	Range of Knowledge
4.0 KCS Content Health		
	4.12.3 Identify the enablers of self-service success.	The enablers of self-service success are: • ***Findability*** – Context of the customer – Structure—can the search-engine find the content and is it usable – Rich environment statements—improves the precision and confidence that the article is correct • ***Completeness***—most of what we know needs to be available quickly • ***Access***—is the access point integrated and context sensitive (portal or integrated into application/ system/service UI) • ***Navigation*** – Is it intuitive and aligned with the intent of the requester? – Is the transition from self-service to assisted-support clear? • ***Marketing***—Is there a marketing plan?
4.13 Self-Service Measures	4.13.1 Identify the types of measures that should be used for self-service.	The types of measures that should be used for self-service are: • Data analysis of user behavior patterns (e.g., click stream analysis) • Data analysis of volume variations • Direct users feedback • Surveys • Comments and feedback • Observations—usability testing

Topic	Competency	Range of Knowledge
4.0 KCS Content Health		
	4.13.2 Describe the challenge of measuring self-service.	Self-service measures are imprecise and do not directly represent the user experience. It is the trends in the measures, and the ability to correlate the perspectives via triangulation to obtain the necessary confidence of the assessment of the user experience.

Topic	Competency	Range of Knowledge
5.0 Process Integration		
5.1 Process Integration (Evolve Loop)	5.1.1 Describe the purpose of process integration.	The purpose of process integration is to make the solve loop frictionless—ensure that the processes and procedures used with the system of record and knowledge management are integrated with the workflow.
5.2 Structured Problem-Solving	5.2.1 Identify the two key concepts of structured problem-solving (SPS) in KCS.	The two key concepts of structured problem-solving (SPS) in KCS are: • Seek to understand before you seek to solve (core concept) • Search early, search often (solve loop technique)
	5.2.2 Describe the two major activities in the structured problem-solving process.	The two major activities in the structure problem-solving process are: • ***Manage the conversation***—ensure that the conversation with the requester is logical and flows, only asking for information once. – Design the workflow to minimize the need to jump between system-of-record and knowledge management systems. – Deal with administrative issues at the beginning of the contact and the end of the contact (wrap up). • ***Enable collaboration***—effective collaboration, or what the consortium calls ***Intelligent Swarming***, is a function of relevance. (Relevance means that for a given issue, an organization wants to bring together the best resources they have that know something about the issue and the resources (people and/or content) to solve the issue.

Topic	Competency	Range of Knowledge
5.0 Process Integration		
	5.2.3 Describe some of the key concepts in Intelligent Swarming.	Intelligent swarming includes the concept of people profiles that capture both the experiences and interests of the people. • People profiles are dynamic and must be largely programmatic or maintained by the system and tunable by the people in order to reflect interests • Where KCS helps connect people to content or knowledge for known issues, Intelligent Swarming helps connect people to people for new issues • Swarming is about evolving organizations from escalation-based models to collaboration-based models
5.3 Seamless Technology Integration	5.3.1 Explain the objective of seamless technology integration.	The objective of seamless technology integration is to enable the scaling of the KCS practices and techniques across multiple people in multiple locations; who are most likely working at different times. Seamless Technology Integration with the KCS methodology will allow collaboration, independent of space and time.

Topic	Competency	Range of Knowledge
5.0 Process Integration		
	5.3.2 Identify examples of criteria used for the KCS Verified program.	Examples of criteria used for the KCS Verified program include: • An article object and search engine • Supports distinction between problem content and environment content • Search engine granularity • Search problem content against problem content • Search environment content against environment content • Ability to link/point/relate incidents to KCS articles and KCS articles to incidents • KCS article visibility management • KCS article state categories • Search arguments are preserved as the basis for a new KCS article • Reporting and metrics
	5.3.3 Describe two perspectives in the seamless technology integration technique.	Seamless technology integration needs to be addressed from two perspectives: • The solve loop perspective (representatives) where the tools must be integrated to enable a seamless workflow and the interaction between the knowledge base and KCS article creation are integrated with problem-solving • Users perspective using self-service mechanisms

Topic	Competency	Range of Knowledge
5.0 Process Integration		
	5.3.4 Identify capabilities that would be expected in the ideal solve loop integration between the knowledge management system and the system of record (incident/CRM).	In the ideal solve loop integration between the knowledge management system and the system of record (incident/CRM): • Search the knowledge base using information in the system of record (incident/CRM) to launch or refine the search • Link an existing KCS article to an incident—linking occurs with two types of knowledge: reference information and resolution/fix information. Reference information is found in materials such as service manuals or installation manuals. The specific sentence or paragraph must be findable by the search engine, the information must be accessible by the audience being served, be in the context of the audience being served, and it must be in a maintained repository. • View a KCS article that has been linked to an incident, and incidents linked to KCS articles • Modify existing KCS articles in the process of reuse based on the KCS licensing model • Create a KCS article in the knowledge base from information in the incident record • Collaborate with the subject matter experts who are relevant to the problem and quickly contact them through e-mail or chat

Topic	Competency	Range of Knowledge
5.0 Process Integration		
5.4 Search Technology	5.4.1 Identify the factors used in a search engine to determine relevance.	The factors used in a search engine to determine relevance include: • Number of the query terms/words that appear in the document • Frequency of query terms/words • How rare or meaningful query terms/words are in the documents being searched (e.g., "0x32565" is more unique than "Error," so the query "Error 0x32565" will be a closer match to "Code 0x32565" than to "Error -135") • Proximity in which the query terms/words appear to each other • Location of the query terms/words; for example, query terms in the title are presumed to be more meaningful than when the query terms are buried in the text • Closeness of match of concepts (not just the query terms/words themselves) contained in the query terms and documents • Presumed quality or reputation of the document based on link counts, ratings, age of the last view, or other similar factors
5.5 Closed Loop Feedback for the Whole System	5.5.1 List the benefits of closed-loop feedback for the whole system.	Benefits of closed-loop feedback for the whole system include: • KCS provides the opportunity to continuously improve the user's productivity and experience • KCS creates a system of persistent learning that is based on experience • KCS can identify patterns and trends in the knowledge base which can be used to drive documentation, product and service improvements

Topic	Competency	Range of Knowledge
5.0 Process Integration		
	5.5.2 List four areas that can benefit from KCS closed-loop feedback.	Areas that can benefit from KCS closed-loop feedback are: • Root Cause Analysis • Evolve Loop Content • Continuous Improvement of the Workflow • Content Standard
	5.5.3 Explain the concept 'quick click'.	Quick click is used when there are frequently raised issues and the standard KCS workflow provides little value, as the issue and resolution are known, but the rate of occurrence of the issues is being tracked. Quick click is intended to ensure that the reuse of the article recorded, and when/if a new resolution is added, the quick click could inform/flag the resolver of the updated solution.
5.6 KCS Process Integration Indicators (PII)	5.6.1 Explain the purpose of KCS Process Integration Indicators (PII).	The purpose of KCS Process Integration Indicators (PII) is to enable the organization to assess how often and how well the KCS workflow is followed and identify coaching opportunities.
	5.6.2 Identify two types of Process Integration Indicators (PII).	Two types of Process Integration Indicators (PII) are: • ***Search Indicators*** – Understand when and how often the knowledge base is searched. Search indicator metrics (e.g., timing of search to opening case/ticket, or frequency of search to stage in structured problem management) may come from observation or reports. • ***Contribution Indicators*** – understand how often articles are reused and linked (accuracy), modified/improved, or created.

Topic	Competency	Range of Knowledge
5.0 Process Integration		
	5.6.3 Identify examples of contribution indicators.	Examples of contribution indicators include: • ***Link rate***—the percentage of closed cases with an article linked. Link rate is an activity, so it should be reported and trended, but should not have a goal. (Link rates of 60% to 80% are sufficient to identify improvements.) • ***Link accuracy***—the percent of articles linked that are actionable, specific, and relevant to the case. Link accuracy is an outcome, so goals for link accuracy are appropriate. (Link accuracy >90% is needed to provide actionable information on reuse.) • ***Modify rate***—the modify rate reflects the percent of time an existing article is modified when appropriate. (Modify rate = # articles modified/#articles reused where modification was appropriate.) • ***Create rate***—the percentage of the time new articles are created. (Create rate = # new articles/# opportunities to create a new article.)
	5.6.4 Describe the Contribution Index.	The contribution index is a measure (%)of the time an article was linked, modified, or created compared to the opportunities where linking, modifying, or creating was appropriate. It is the ratio of the number of times there was a contribution as a percentage of the total opportunity to contribute. Simplistically, it is a measure of how often the 'right thing' is being done.

Topic	Competency	Range of Knowledge
6.0 Performance Assessment		
6.1 KCS Roles in the Licensing Model	6.1.1 Identify the various roles involved in the implementation of KCS.	The various roles involved in the KCS implementation are: • Management/ Leaders—motivates and supports • KCS Candidate— a knowledge worker that contributes drafted knowledge articles for the knowledge base. • KCS Contributor—a knowledge worker that uses, contributes, enhances, and approves knowledge articles as per the standards. Contributes knowledge articles without the requirement of those articles being reviewed by others. • KCS Publisher— a knowledge worker that contributes, enhances, approves, and publishes knowledge articles. • KCS Coach—individuals who have achieved the level of KCS Publisher and have coaching skills • Knowledge Domain Expert— individuals who have achieved the level of KCS Publisher and have strong knowledge of a domain • KCS Adoption Team • KCS Program Team— responsible for developing the KCS practices and designing the KCS implementation plan • KCS Council—cross-functional group consisting of the Knowledge Manager, KCS Coaches, the Knowledge Domain Experts, and representatives from management. The council is lead by the Knowledge Manager.

Topic	Competency	Range of Knowledge
6.0 Performance Assessment		
	6.1.2 Describe the roles for the KCS Adoption Team.	• ***Management/Leaders***—managers must become leaders and define the vision of what success looks like at their level of the organization. Leaders support the knowledge workers in deciding how the work should be done (workflow) and in defining the standards for findable and usable KCS articles (content standard). • ***Knowledge Workers***—Anyone responding to an interaction or request – KCS Candidate – KCS Contributor – KCS Publisher • ***KCS Coaches***—change agents and KCS practice experts who support the development of KCS competencies and the proficiency development of knowledge workers from KCS Candidate to KCS Publisher. Generally, this role is a peer working part time as a Coach. • ***Knowledge Domain Experts***—responsible for identifying Evolve Loop content based on KCS articles created in the Solve Loop workflow. KDE's look after the health of the knowledge base, are usually focused on a collection or domain of content, and have technical expertise in the domain and a profound understanding of KCS processes.

Topic	Competency	Range of Knowledge
6.0 Performance Assessment		
6.2 Knowledge Workers	6.2.1 Describe the responsibilities of a KCS Candidate.	A KCS Candidate is a person whose responsibilities include: • Understand the structured problem-solving process • Accurately and consistently capture the customer's context in the workflow • Search for and find existing KCS articles • Review and either link or flag articles in the problem-solving workflow • Modify their own KCS articles • Frame new KCS articles (Work in Progress or Not Validated) which will be reviewed or finished by a KCS Contributor or KCS Coach
	6.2.2 Describe the responsibilities of a KCS Contributor.	A KCS Contributor is a person whose responsibilities include: • Review (as they reuse) or finish KCS articles that are framed by themselves or others ensuring that the articles adhere to the content standard • Create or validate articles in their product area (without review by a Coach) • Author and approve articles for broad audience visibility • Directly improve articles that have article visibility set to Internal and flag articles in an External state that need to be updated or improved

Topic	Competency	Range of Knowledge
6.0 Performance Assessment		
	6.2.3 Define the responsibilities of a KCS Publisher.	A KCS Publisher is a person whose responsibilities include: • Set the article visibility to external or publish content to an external audience (typically on the web) • Modify externally-facing content and exercise good judgment about modifying external articles • Understand the technical implications of the knowledge being published • Understand what material is priority information • Understand the copyright and trademark policies enforced by the organization • Understand the external audience and publishing requirements outlined in the content standard

Topic	Competency	Range of Knowledge
6.0 Performance Assessment		
6.3 KCS Coach	6.3.1 Describe the responsibilities of a KCS Coach.	Responsibilities of a KCS Coach include: • Promote user skill development • Help the KCS Candidate understand the problem-solving workflow and how the KCS article management process is integrated • Influence knowledge workers to practice effective knowledge management and to apply standards for creating and improving knowledge within the knowledge base • Review KCS articles framed by the KCS Candidate until they reach required levels of competency • Perform internal validation of KCS articles to ensure accuracy for the described context and adherence to the quality standard • Provide ongoing feedback to knowledge workers and management about organizational KCS skill development • Provide feedback to the knowledge developing organization, within the defined processes, to improve KCS article management • Develop and monitor their own coaching skills through work with head Coaches • Participate in the KCS Council
6.4 Coaching for Success	6.4.1 Explain the goal of a KCS Coach.	The goal of a KCS Coach is to increase the competencies of others.

Topic	Competency	Range of Knowledge
6.0 Performance Assessment		
	6.4.2 List competencies of an effective KCS Coach.	Effective coaching relies on: • A thorough understanding of KCS Practices • The ability to articulate why we are doing KCS and what's in it for the knowledge worker • Understanding support processes and tools • Inquiry, Advocacy, Appreciation and Reflection • Excellent communication skills, particularly in the following areas: – Listening skills, seek to understand – Explaining and describing concepts – Providing feedback – Influencing to generate results • Mindfulness of feelings • Demonstrated ability to: – Manage time effectively – Identify coaching moments—using data and measures to help others become more proficient – Communication effectively with management • Being able to deal with objections like: – "Can't capture in the workflow" – "Don't have time to create articles" – "Dumbing down my job" – "Giving away my value" • Demonstrated commitment to the success of team members

Topic	Competency	Range of Knowledge
6.0 Performance Assessment		
	6.4.3 Identify the benefits of a KCS coaching program.	Benefits of a KCS coaching program include: • Training with coaching has an 86% increase in productivity vs. 22% by training alone. • The average ROI for coaching is 6x's the cost of coaching • Coaching increases consistency and replicable bottom-line results
	6.4.4 Identify considerations for effective coaches.	The most successful organizations use Social Network Analysis (SNA) to view their organizations' trust network and to: • Gain insight into who to select as Coaches • Identify collaborators in the organization to validate Coach selections that have already been made, and to diagnose the cause of inconsistent KCS results Too often organizations have made the mistake of picking the subject matter experts (SME), technical leads, or documentation editors to be Coaches without considering their social skills.

Topic	Competency	Range of Knowledge
6.0 Performance Assessment		
6.5 Knowledge Domain Expert	6.5.1 Describe the responsibilities of a Knowledge Domain Expert.	Responsibilities of a Knowledge Domain Expert include: • Ensure efficient and effective problem-solving by the team • Apply expertise in data mining to perform trend analysis and find the significant patterns in the data • Assist in the fundamental development and maintenance of knowledge base quality and flow, including the knowledge base quality methodology, article standards, and process guidelines • Develop and analyze reports on key metrics for business value of the knowledge base, such as article reuse rates, web-enabled call avoidance, and improvements to resolution times • Ensure effective knowledge base operations by monitoring related information (i.e., organizational effectiveness, resource allocation, new article creation trends) and making recommendations to management to accommodate changing conditions • Advocate for changes necessary to maintain the knowledge base as an effective tool for achieving business objectives • Provide input for items that have a worldwide impact. For example, monitoring and defining the KCS article metadata, prioritizing enhancement requests, coordinating training efforts where feasible, and planning for upgrades and systems integration enhancements. • Influence the owners of products, documentation, processes, and policies to make improvements • Participate in the KCS Council

Topic	Competency	Range of Knowledge
6.0 Performance Assessment		
6.6 KCS Council	6.6.1 Describe the responsibilities of the KCS Council.	The KCS Council assumes ongoing management and is the body that provides the guidance on changes to the content standard, knowledge workflow, reports, incident workflow, etc. This is often done through biweekly meetings to discuss issues and evolving improvements. The KCS Council focuses on continuous improvement, which is critical in order to sustain and optimize the KCS benefits.
6.7 KCS License Metaphor	6.7.1 Describe the KCS License Metaphor.	The KCS licensing model defines system rights and privileges for each role: KCS Candidate, KCS Contributor, and KCS Publisher. • Some people will choose to progress farther, study more, and gain more advanced skills while others will remain at a level they are more comfortable with • Performance assessment must include guidance on how, when, and whether to advance. Each license is earned based on demonstrated consistent behaviors that align with the KCS role. • A knowledge worker who frequently breaks the rules or demonstrates poor judgment should lose their license
	6.7.2 Explain what a KCS License is.	A KCS license is a metaphor for a defined set of access rights that an individual earns by demonstrating their ability to contribute quality articles as well as follow and understand the KCS practices.

Topic	Competency	Range of Knowledge
6.0 Performance Assessment		
6.8 Assessing the Creation of Value	6.8.1 List the three components of the KCS Performance Assessment model.	The KCS Performance Assessment model consists of: • Linking individual goals to departmental and organizational goals to help people see how their performance is related to the bigger picture • Looking at performance from multiple points of view—the typical scorecard considers the key stakeholders: customers, employees, and the business • Distinguishing leading indicators (activities) from lagging indicators (outcomes)
	6.8.2 Identify considerations for developing a performance assessment model.	When developing a performance assessment model, consider the following: • Understand the difference between leading indicators (activities) and lagging indicators (outcomes) • Triangulation—view performance from at least three perspectives to understand who is creating value • Radar Charts—presentation/visualization technique to understand the value footprint • Sample Scorecards—for both individuals (knowledge workers) and teams (manager)
	6.8.3 List common examples of leading indicators.	Common examples of leading indicators include: • Link Rate • License levels (# KCS candidates, # KCS Contributors) • Contribution Index • Articles Reused, Articles modified, Articles created • Article life-cycle

Topic	Competency	Range of Knowledge
7.0 Leadership & Communication		
7.1 Leadership & Communica-tions	7.1.1. Identify the techniques leaders need to understand for a successful KCS transformation.	Techniques leaders need to understand for a successful KCS transformation include: • Define the vision, which includes: – A compelling purpose – A mission statement – Explicit values – The brand promise • Define organizational metrics and goals that support the vision • Capitalize on the inherent motivation factors in KCS • Nurture people in a collaborative environment • Gain buy-in and support for the KCS initiative • Communicate, communicate, communicate
	7.1.2 Explain what 'Leadership is Fractal' means.	"Leadership is Fractal" means that at each level of the organization the understanding of what the organization is trying to accomplish is identical (e.g., compelling purpose, mission, values and brand promise). If people at different places in the organization have different views or interpretations of the vision, it creates dissonance, and the goals will not be achieved.
7.2 Develop and Communicate a Vision	7.2.1 Identify the four common elements of an effective vision statement.	The four common elements of an effective vision statement are: • A compelling purpose— a simple value proposition • A mission statement—our approach to achieving the purpose (a paragraph) • Explicit values—defines acceptable behavior in achieving the purpose • The brand promise–describes the attributes of our relationship with those we serve

Topic	Competency	Range of Knowledge
7.0 Leadership & Communication		
	7.2.2 Describe compelling purpose/value statements.	The compelling purpose/value statement is what the organization is about. It is a simple phrase that describes our value proposition. ***Values*** are the definition of acceptable behaviors in accomplishing the purpose. Alignment to the purpose is a result of understanding and caring. The compelling purpose has to be something we care about, something we have a connection to. Motivation comes from a corresponding belief that one's actions will make a difference in achieving that purpose. Balance the tension goals of customer loyalty and operational efficiency.
	7.2.3 Explain components of a compelling purpose statement.	A compelling purpose is: • known by all, • does not reference the organization or individual, • brief, clear, and concise, • a value proposition, • and elicits and emotional response.
7.3 Create a Strategic Framework	7.3.1 Define strategic framework.	The strategic framework aligns the benefits of KCS to the goals of the organization. A strategic framework: • Provides the basis for the communication plan • Is critical for gaining executive support • Can help sustain KCS focus across executive turnover and changing priorities
	7.3.2 List the stakeholders for the strategic framework.	Stakeholders of the support organization are: • Customers • Employees • Organizational leaders

Topic	Competency	Range of Knowledge
7.0 Leadership & Communication		
7.4 Promote Teamwork	7.4.1 Explain why teamwork is important for KCS.	Teamwork and collaboration are critical for KCS as the foundation of KCS is capturing and improving the collective experience of the organization. While tools can enable collaboration, the behaviors (teamwork) are what drives the benefits.
7.5 Leadership Accountability to the Knowledge Worker	7.5.1 Identify the key competencies for successful team leaders in a KCS environment.	Key competencies for successful team leaders in a KCS environment include: • Strategic agility—understand how tasks relate to the big picture (double-loop thinking) • Innovation leadership—encourage creativity • Dealing with ambiguity— understanding how to measure things that cannot be counted and that lacks a single indicator for the creation of value • Courage—willing to try new things and then iterate for improvement • Motivating others—understand the motivational factors in knowledge work • Customer focus—living the brand promise

Topic	Competency	Range of Knowledge
7.0 Leadership & Communication		
	7.5.2 Describe how leaders are accountable for knowledge workers' success.	Leadership accountability for knowledge workers includes: • Leadership development—leaders at the team level (formally called managers) need the training and coaching to make the transition from managing to leading. Leadership is accountable for supporting the knowledge workers' success with KCS • Ensuring that the Knowledge Workers have the perspective, training, and coaching they need to be successful • Ensuring that the technology infrastructure has the functionality, integration, and performance to support the Solve Loop • Reporting on the status and progress on the "What's in it for me?" (WIIFM) for the knowledge worker • Provide knowledge workers with continuous visibility to the impact of their contribution
7.6 Tap into Internal Motivators	7.6.1 List the top four motivation factors related to work.	The top four motivation factors related to work are: 1. Achievement 2. Recognition 3. The Work Itself 4. Responsibility

Topic	Competency	Range of Knowledge
7.0 Leadership & Communication		
	7.6.2 Explain how KCS impacts Achievement.	KCS impacts Achievement by: • Earning the right to publish or become a KCS Coach • Creating knowledge articles that others use • Expanding breadth of product knowledge • Contributing to the goals of the organization in a measurable way • Collaborating as part of a group that is create value for the business
	7.6.3 Explain how KCS impacts Recognition.	KCS impacts Recognition by: • Reputation of the author—based on the creation of value in the knowledge base, one becomes known based on their articles in the knowledge base • Acknowledging knowledge contribution through KCS measures and reports that are visible to the group • Acknowledging organization leaders as role models for others
	7.6.4 Explain how KCS impacts the Work Itself.	KCS impacts the Work Itself by: • Reducing redundancy, always working on interesting new things • Increasing confidence allows analyst to handle a broad range of incidents because the knowledge base compliments existing knowledge

Topic	Competency	Range of Knowledge
7.0 Leadership & Communication		
	7.6.5 Explain how KCS impacts Responsibility.	KCS impacts Responsibility by: • Licensing an analyst to publish (KCS competency) without review by others (autonomy & accountability) • Licensing an analyst to modify/improve content • Being part of a team • Being part of the collective ownership of content – "flag it or fix it"

Topic	Competency	Range of Knowledge
7.0 Leadership & Communication		
7.7 Recognition Programs	7.7.1 Describe the considerations for designing recognition programs.	Considerations for designing recognition programs include: • Legitimate metrics—tied to independent feedback and customer input, most often done through satisfaction or effort surveys • Alignment to organizational goals—links to and reinforces desired outcomes and the strategic framework • Time constraints—clear beginning and end, and a plan for what is appropriate for the next phase of the KCS journey • Balance of individual and team rewards—consider virtual teams as well as geographical and subject matter expert teams (SMEs) • Compatibility with the individual—tailored to the values, interest, and styles of the person or team (don't embarrass an introvert!) • Equal opportunity for participation—include recognition for different positions, roles, and responsibilities • Recognition of diversity of skills—good generalists are as valuable as good specialists; recognition for each of the skills needed for success • Promote collaboration, not competition—measure and recognize individual's own progress and achievements

Topic	Competency	Range of Knowledge
7.0 Leadership & Communication		
7.8 Communication is Key	7.8.1 Describe the components of a KCS communications plan.	Components of a KCS communications plan include: • ***Target Audiences***—Whom do we need to engage and influence to have a successful adoption? – The critical audiences are: executives, managers, and knowledge workers – The expanded list would include IT staff, product management, marketing, and sales personnel • ***Key Messages***—Different audiences (i.e., executives vs. knowledge workers) require different messages because they have different roles and objectives • ***What's In It For Me (WIIFM)*** — Clearly communicate relevant personal benefits, not just benefits to the organization as a whole • ***KCS Q&A/FAQ*** — Capture the questions that are frequently asked and develop thoughtful answers—an easily accessible written response ensures consistent messaging • ***Overcoming Objections***—Consider the real and perceived objections for each audience and include enough detail in the responses to alleviate concerns

Topic	Competency	Range of Knowledge
7.0 Leadership & Communication		
	7.8.1 cont.	• ***Elevator Pitch***—A quick (seconds) overview of KCS benefits and why it matters to the listener—a good elevator pitch captures the listener's interest, makes them want to learn more, and creates a positive perception • ***Delivery Vehicles***—Different audiences will require different communication tools (i.e.,on-line, in-person, and through organizational communication tools). Think through and identify the most appropriate delivery vehicles, by audience, so that the message will be heard and be remembered. • ***Programs and Activities for Engagement and Socialization***—With messages and communication tools in mind, identify the mechanism to socialize the ideas – How will you create interactive conversations, solicit input, and encourage support? – What programs or activities will reach each of the target audiences? • ***Project Plan and Timeline***—all communication plan elements should be organized in a project plan with a timeline (and appropriate budget)

Topic	Competency	Range of Knowledge
7.0 Leadership & Communication		
	7.8.2 Identify examples of different types of programs that could be used for engagement and socialization.	Examples of different types of programs that could be used for engagement and socialization: • Meetings (all-hands, group, 1:1) • "Management By Walking Around" (MBWA)—casual skip-level communications) • Coaching and training • Conference calls • Themed giveaways • Newsletters (hardcopy and online/e-mail) • E-mail updates • Bulletin boards • Posters • Videos • Websites
	7.8.3 Identify tactics for handling objections.	When handling objections: • Be sensitive to the feelings behind the objection • Acknowledge the validity of feelings and empathize • Seek to understand the issue from the other person's perspective • Offer an alternative perspective (don't debate or argue) • Use "What's in it for me" (WIIFM) to craft a response they can relate to

Topic	Competency	Range of Knowledge
7.0 Leadership & Communication		
7.9 Leadership and Comm. Indicators	7.9.1 Identify the three indicators of organizational value.	Identify the three indicators of organizational value: 1. Operational efficiency – Increased capacity 2. Self-service success – Increase the frequency of users self-service – Increase the user's success rate 3. Business improvements (i.e., products, documentation, processes, and policies) – Number of improvements identified and submitted to the business owner – Number of improvements implemented by the business owners
	7.9.2 Identify required investments to implement KCS.	Investments that would be required to implement KCS are: • Leadership and management—sponsorship, program resources, and leadership development (training and coaching) • Infrastructure and development—modification of existing tools or the acquisition and implementation of new tools, as well as the integration of those tools with existing systems • Learning and growth—training and coaching for knowledge workers • Implementation and development— of new roles and skills in the organization (i.e., Coaches, Knowledge Domain Experts (KDEs)) • KCS article management—the processes and resources for the Evolve Loop activities

Topic	Competency	Range of Knowledge
7.0 Leadership & Communication		
	7.9.3 Identify expected benefits of KCS for the three key stakeholders.	Expected KCS benefits include: ***Employee benefits*** • Qualitative—recognition for problem-solving skills, peer feedback, sense of accomplishment, sense of autonomy • Quantitative—attrition rate, job satisfaction, technical scope (increased expertise), development of new knowledge related to competencies ***Customer benefits*** • Qualitative—customer satisfaction and loyalty, improved support experiences (speed, accuracy, consistency), customer/user productivity, sense of connectedness (via web/online) • Quantitative—renewal rates, rate of repeat business, frequency of use of the Web/online services B***usiness benefits*** • Qualitative—image and reputation; good place to work, good company to do business with • Quantitative—support cost per user/customer, cost per incident, cost to create or maintain content for web/online delivery, capacity, time to technical proficiency, ease of recruitment and retention
	7.9.4 Identify the benefit of a brand promise.	A brand promise is the list of attributes that describe your relationship with those you serve (your customers). The brand promise is based on the interactions with your customers. Over time it is what those you serve (e.g., customers) say about the relationship they have with you.

Topic	Competency	Range of Knowledge
8.0 Adoption Roadmap		
8.1 KCS Phases	8.1.1 Describe the four phases of a KCS adoption.	The KCS adoption phases are really a continuous process of learning and improvement. However, each phase is a level or maturity that must be understood and achieved before moving to the next phase. Each of the phases have a focus, actions, and exit criteria. • Phase 1 – Planning and Designing • Phase 2 – Adopting • Phase 3 – Proficiency • Phase 4 – Leveraging
	8.1.2 List the KCS adoption activities.	The activities in a KCS adoption include: • KCS Assessment—understanding and sizing the opportunity • Executive briefing and buy-in • Selection of the KCS Adoption team • HDI's KCS Foundation Certification workshop and KCS Principles certification for the Adoption team • KCS design session • Management workshop(s) • Wave 1 (pilot), representative training for participants • Technology update • Workflow and content standard update • Coach training and certification • Wave 2, representative training for participants • KCS Publisher certification • Knowledge Domain Expert (KDE) training (Evolve Loop)

Topic	Competency	Range of Knowledge
8.0 Adoption Roadmap		
	8.1.3 Identify the critical components for a successful KCS adoption.	The critical components for a successful KCS adoption include: • Gain cross-functional buy-in and alignment through thoughtful and continuous communications • Develop content guidelines and workflows that support a just-in-time publishing model • Define and practice the workflow before purchasing tools • Develop measures and baseline values for the expected results • Implement training, coaching, and the certification programs for representatives • Implement training programs for 1st and 2nd line managers
	8.1.4 List the benefits of a wave approach implementation.	The benefits of a wave approach implementation are: • Minimizes risks to the service levels compared to a big bang approach • Early focus is on teams/groups with a high likelihood of success which promotes the adoption to laggards • Change can be managed in smaller components • Multiple milestones and decisions points allow for adjustments • Representatives from early waves can serve as coaches for later waves • Leverage the experience and learning of previous waves increasing probability of success • The wave approach minimizes the resource impact of coaching on the organization during the learning phase

Topic	Competency	Range of Knowledge
8.0 Adoption Roadmap		
	8.1.5 Describe why the measurement system must continue to evolve for each adoption phase.	The measurement system must continue to evolve for each adoption phase because: • The right measurements for each phase will provide honest feedback and promote the correct behaviors for a successful KCS Adoption • Phase-appropriate measurements are used to assess when the wave is ready to move to the next phase • Getting measurements wrong means a premature advancement to the next phase, and the result may prove to be a failure for the KCS initiative
	8.1.6 Describe the intent of the wave and phase approach in KCS.	The intent of the wave and phase approach in KCS is to: • Create demand in the organization • Create an environment where people see value in KCS • Create an environment where people want to learn • Understand that KCS practices are key for a healthy and sustainable knowledge-centered organization • Facilitate the organizational evolution so that it can continue to provide value for representatives, the business, and most importantly—the customers • Minimize risk and maximize opportunity for success

E

EXAM PROCEDURES

How to Prepare for the Certification Exam

There are two options available that will assist one in preparing to take a certification exam. Attending a training course is the preferred option for most candidates seeking certification. Training will assist course participants in preparing to take a certification exam while also building skills valuable to one's profession in the support industry. Training will help the candidate understand the best practices and concepts that have been captured within an HDI certification standard, as well as how to apply them within the workplace. HDI offers the following training delivery methods. Please note, not all options are available for all courses.

- ***Instructor-Led Training***—Instructor-led training is offered by HDI and HDI partners in both public classroom settings and private onsite training settings. Some organizations elect to have an internal trainer earn the HDI Certified Instructor status in order to deliver a course in-house for their employees.
- ***Virtual Classroom***— HDI's virtual classroom training is a popular choice for those looking for a convenient yet undiminished learning experience without the cost and hassle of travel. These scheduled courses allow course participants to minimize the impact on his/her daily schedule with live, interactive, instructor-led training via a virtual meeting room.
- ***Online Training Courses***—HDI's online training courses provides self-pace, Web-based courses anytime, day or night, for 12 weeks from the registration date. This is the most cost effective means for employees to achieve certification particularly for companies with remote employees or multiple office locations.

While the training delivery option assists one in preparing to take the certification exam, the candidate must study the HDI certification standard. Remember, the certification exam is based on the HDI certification standard and not the training offering.

The second option available for preparing to take a certification exam is using the Certification Standard & Self-Study Guide. Using this guide, the candidate should read the competency and use it as a review question—they should try to answer the question before reading the range of knowledge. If their answers do not match the range of knowledge for that competency, then they should mark that competency for further review.

What should I expect from the certification exam?

HDI certification exams are randomly generated from a pool of pre-authorized exam questions. As a result, each certification exam is different.

- Each HDI certification exam consists of sixty-five (65) multiple-choice questions
- Candidates will have seventy-five (75) minutes to complete the exam
- The passing score for the certification exam is 80%. HDI Certified Instructors must achieve a 90% or better to qualify to facilitate HDI training courses
- Candidates will have six (6) weeks to take the exam before it expires
- If a candidate does not pass the exam, there is a $99 fee to retake the exam
- If the six (6) weeks has expired, there is a $50 fee for a 28-day extension

Are certification exams weighted?

All HDI certification exams are weighted. The exam questions are classified according to the categories contained in the certification standard. The certification exam is designed to test the candidate's mastery of the knowledge in each category. The number of questions representing each category is determined by a preset weighting rubric. If you have limited time to study for the exam, consider focusing your review on the categories that have the highest weight percentage.

The KCS Foundation Certification Standard is weighted as follows:

Category	Weighting %
1.0 KCS Core Concepts	5%
2.0 KCS Principles	5%
3.0 KCS Double-Loop Processes	30%
4.0 Content Health	20%
5.0 Process Integration	5%
6.0 Performance Assessment	15%
7.0 Leadership & Communication	15%
8.0 Adoption Roadmap	5%

If you have any additional questions, please contact the HDI Customer Care Center at 800-248-5667 in the US or 00-1-719-268-0174 worldwide, or e-mail us at support@ThinkHDI.com.

Is a practice test available?

Practice tests are a tool for course participants to gauge their understanding and knowledge of a HDI certification standard. A practice test is included in the appendix of a training course manual. The practice test:

- Allows a course participant to become familiar with the types of questions that make up the certification exam pool.
- Are representative of the type of questions asked on an HDI certification exam, but will not be the exact same questions.
- Have the goal of self-assessment of the individual competencies, and are not intended to provide a complete sample of all the types of questions that might be asked on a certification exam.
- Contains 30 multiple-choice questions, with four possible answers, and only one correct answer.

HDI also offers ***online*** practices tests for a number of its certification exams. Our Web site at www.ThinkHDI.com has practice test availability and pricing. Practice tests are intended to be used as a preparation aid only. Success on a practice test should not be interpreted as full preparation for a certification exam. Each online practice test is 30 questions and must be completed in 35 minutes. Once a practice test is completed, course participants will know their results immediately. A practice test may be taken multiple times, as questions are randomly generated from a pool of over 75 questions. As a result of random generation, questions may appear multiple times on practice tests.

What is the difference between an online practice test and a practice test in the appendix of a course manual?

Both the online practice tests and the hardcopy in the course training manual are designed to help the course participant prepare for the certification exam. The practice test in the appendix of the course training manual is 30 questions. Each time you take an online practice test, 30 questions are randomly generated from a pool of questions. Students may take multiple online practice tests, while there is only one practice test in the course training manual. Course participants can take an online practice test as many times as they would like, which allows a more comprehensive assessment of the complete certification standard than what is available in the course training manual. The online practice test uses the same interface as the certification exam, which allows the course participant to become familiar with the testing environment.

What is the difference between a practice test and a certification exam?

There are separate pools of questions for the practice tests and the certification exams. Questions from the certification exam will not appear on the practice test. Questions for both the online practice test and the certification exam are randomly generated. The online certification exam for 2-3 day courses is 65 questions and must be completed in 75 minutes. Each online practice test is 30 questions and must be completed in 35 minutes. Certification exam questions are typically more challenging than the questions included in the practice tests.

The practice test is designed as a learning and assessment tool. When a course participant completes an online practice test, they are told which questions they answered incorrectly and what competency needs further review.

The certification exam is an audit of the candidate's knowledge. When an individual completes the certification exam they are presented with a pass/fail score and a percentage of how well they scored in each category. They are not informed which question(s) they answered incorrectly.

What are the similarities between an online practice test and a certification exam?

The practice test is designed to be similar in structure to the certification exam.

- Both use multiple choice questions based on the same criteria for assessment. Each question is presented with four (4) potential answers, and only one correct answer.
- Both utilize the same user interface, thus the practice test allows the candidate a chance to become familiar with the testing interface prior to taking the certification exam.
- Both are timed—if questions are not answered prior to the expiration of the practice test/ certification exam, then the questions will be scored as incorrect when calculating the score.
- Both are meant to be taken from memory—without notes, the course participant manual, or other reference materials.
- Both are based on the same HDI individual certification standard; not the training course materials—questions are designed to test the candidates understanding and ability to apply the certification standard—not their memorization of it.

Is passing a practice test a good indicator that one will pass the certification exam?

Passing a practice test is a good indicator that the candidate understands the specific competencies presented; however, there are only 30 questions in the course manual which does not address the full range of the competencies. Passing multiple online practice tests is a demonstration that you are prepared to take the certification exam. Failing to pass a practice test is a good indicator that you are not ready to take the certification exam.

Candidates are advised to study the certification standard to prepare for a certification exam, and not rely on their ability to pass a 30 question practice test as the sole indicator of the probability of their future success on the certification exam.

What about third party test preparation vendors?

There are companies in the market that provide sample tests for various certifications. While some of these sites may be legitimate, some are known as test theft sites. They steal and publish actual test questions as preparation questions. Candidates are unaware that they may be cheating on their certification exam by using a questionable third party provider. These companies may also be using test questions that are not reflective of our current or most up to date certification standard.

For those companies that are legitimate, there are some things to consider:

- Official HDI courseware is available only from HDI or an HDI authorized partner
- HDI includes a copy of the standard with each official HDI course, other training providers do not include the HDI standard.
- While some organizations claim to improve certification pass rates, this is a marketing statement without any justification. These organizations do not have access to our pass rates, nor does HDI analyze exam pass rates based on *how* the candidate prepared for the exam. There is no data to support such a marketing claim. If a provider makes such a claim, ask them for the data to support it.HDI standards are not static. At least once and sometimes twice a year, HDI standards are updated to reflect changes in our industry. When these standards are updated, HDI updates the certification exams, as well as the official HDI course materials. Since HDI does not verify other training products in the industry, HDI cannot guarantee that those products are current and adequately assist a person in preparing for an HDI certification exam.

PRACTICE TEST

KCS Practice Test

1 Which of the following is a common reason for implementing KCS?

a. Increase analyst attrition rates.

b. Increase customer satisfaction.

c. Increase the number of calls within the support center.

d. Increase the responsibilities of the support center.

2 What is the minimum structure of an article as defined by the KCS methodology?

a. Issue, Environment, Cause (if any), Resolution, Metadata

b. Issue, Environment, Cause (if any), Resolution, Product

c. Issue, Environment, Resolution, Metadata

d. Issue, Resolution, Metadata

3 What is an example of metadata?

a. Author

b. Hyperlinks

c. Resolution

d. Issue

4 What is article confidence?

a. It is a condition when information is defined as trusted knowledge.

b. It is the form used to define knowledge.

c. It is the status of the article in the article lifecycle.

d. It is the time when tacit knowledge becomes explicit.

5 What is the minimum number of confidence transitions necessary for a KCS solution life cycle?

a. 2

b. 3

c. 4

d. 5

6 What is an example of a confidence transition?

a. Validated

b. WIP (work in progress)

c. Obsolete

d. Not Validated

7 What document must be defined and communicated before implementing a knowledge monitoring process?

a. The KCS Quality Criteria

b. The Report Distribution Matrix

c. The Strategic Framework

d. The Visibility Matrix

8 What is the Article Quality Index?

a. A categorization of all articles within the knowledge base based on the knowledge state and the reuse counter.

b. A number assigned to each article indicating the article's relevance.

c. A ranking of all articles each month that identifies the most frequently used articles in the knowledge base.

d. A score given to a person or group indicating the result of a review of the knowledge they contributed.

9 Who normally performs the knowledge monitoring process?

a. Everyone
b. KCS Coaches
c. KCS Contributor
d. KCS Program Team

10 What is the primary purpose of knowledge monitoring?

a. Create a knowledge quality index.
b. Ensure that the process is being followed.
c. Identify and eliminate redundancy.
d. Improve the skills of the analysts.

11 What are three metadata fields of the KCS Article State?

a. Article confidence, article visibility, and article governance.
b. Audience, Knowledge State, Reuse Counter
c. Audience, Reuse Counter, Access Rights
d. Knowledge State, Reuse Counter, Access Rights

12 Which KCS role is responsible for promoting skill development?

a. KCS Coach
b. KCS Contributor
c. KCS Publisher
d. KCS Council

13 Which KCS role is responsible for providing the vision, objectives, and resources?

a. KCS Council
b. KCS Manager
c. Knowledge Workers
d. Leaders/Management

14 Which KCS role is responsible for designing the implementation and building the foundation?

a. KCS Council

b. KCS Manager

c. KCS Program Team

d. Management

15 Which of the following is a leading indicator?

a. Cost per Incident

b. Customer Satisfaction

c. Article Quality Index

d. Participation Rate

16 What should you do before you seek to solve an issue?

a. Search to see if it is a known problem.

b. Seek out analysts who know more about the issue.

c. Set an expectation for the customer that this may take some time.

d. State the issue clearly, in your own words.

17 Which KCS role is responsible for managing/supervising the KCS Coaches?

a. KCS Council

b. KCS Domain Manager

c. KCS Manager

d. Management

18 What does the customer contribute to a knowledge article?

a. Cause

b. Environment

c. Resolution

d. Title

19 Why is it important to search the knowledge base after you solve an issue?

a. To minimize redundancy.

b. To find related articles.

c. To follow the process.

d. To create a framed article.

20 What are the three levels of KCS benefits?

a. Centralized, distributed, virtual

b. Direct, applied, leveraged

c. Operational, tactical, strategic

d. Significant, major, minor

21 Which of the following is least likely to motivate staff?

a. Additional responsibility

b. Monetary compensation

c. A sense of achievement

d. The level of challenge

22 What is the primary objective of the strategic framework?

a. Create a balanced scorecard of overall performance.

b. Establish a triangulation of balanced metrics.

c. Link the benefits of KCS with the goals of the organization.

d. Map out a wave-flow analysis to identify impact and risk.

23 Which of the following drives understanding of, engagement with, and belief in the KCS implementation?

a. Balanced Scorecard

b. Communications Plan

c. Competency Model

d. Quality Criteria

24 Improved reputation, decreased costs, and scalability are examples of which of the following?

a. Disadvantages of implementing KCS in the support center.

b. Expected return from an investment in KCS for the business.

c. Measurements within the KCS balanced scorecard.

d. Quick wins within the incident management process.

25 Which KCS role is the most important when it comes to establishing the vision and objectives of the KCS program?

a. KCS Coach

b. KCS Council

c. KCS Program Team

d. Knowledge Domain Expert

26 Which of the following would be responsibilities of the KCS II Contributor role in the KCS competency model?

a. Establish the vision of the KCS implementation.

b. Fix articles on demand and finish framed articles.

c. Monitor and enhance the health of the knowledge base.

d. Monitor processes and mentor people.

27 Who created Knowledge-Centered Service (KCS)?

a. HDI

b. The Consortium for Knowledge Management (CKM)

c. The Consortium for Service Innovation (CSI)

d. The Office of Government Commerce (OGC)

28 What is a benefit of Structure?

a. Ease of measurement

b. Promotes consistency and quality

c. Structured problem-solving

d. Template created saves time on future documentation

29 The issue/question and the resolution are two components of an article structure. What is the third?

a. Environment

b. Incident Reference

c. Problem-Solving Steps

d. Taxonomy / Categorization

30 What is the first phase of the KCS adoption process?

a. Planning and Design.

b. Define tool requirements.

c. Design the foundation.

d. Development of the Core KCS team.

Practice Test Answers

1. B
2. A
3. A
4. C
5. C
6. C
7. A
8. D
9. B
10. D
11. A
12. A
13. D
14. C
15. D
16. A
17. C
18. B
19. B
20. B
21. B
22. C
23. B
24. B
25. D
26. B
27. C
28. B
29. A
30. A