The eSCM-SP v2:

Practice Details

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Abstract

The eSourcing Capability Model for Service Providers (eSCM-SP) is a "best practices" capability model developed to give IT-enabled sourcing service providers guidance toward improving their capability across the sourcing life-cycle. This helps service providers differentiate themselves from competitors. Additionally, it provides clients with an objective means of evaluating service providers' capabilities. It is comprised of 84 Practices that address the critical capabilities needed by IT-enabled sourcing service providers. This document contains the details of the 84 eSCM-SP Practices. Each Practice is arranged along three dimensions: Sourcing Life-cycle, Capability Area, and Capability Level. The Sourcing Life-cycle is divided into Initiation, Delivery, and Completion, plus Ongoing, which spans the entire life-cycle. The ten Capability Areas are logical groupings of Practices that help users to remember and intellectually manage the content of the Model. The five Levels, numbered 1 through 5, describe an improvement path that progresses from a limited capability to deliver a service that meets a client's particular requirements up to the highest level of sustaining excellence over time.

To learn more about the eSCM-SP, see *The eSourcing Capability Model for Service Providers (eSCM-SP) v2, Part 1: Model Overview*, which describes the development and intent of the Model itself in more detail.

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Introduction

The eSourcing Capability Model for Service Providers (eSCM-SP) is a "best practices" model that provides IT-enabled sourcing service providers with the means of continuously improving their delivery of high-quality services. This helps service providers differentiate themselves from competitors. Additionally, it provides clients with an objective means of evaluating service providers' capabilities.

The current version of the Model, the eSCM-SP v2, is comprised of 84 Practices that address the critical capabilities needed by IT-enabled sourcing service providers. It was developed by a research consortium led by Carnegie Mellon University's Information Technology Services Qualification Center (ITsqc).

The 84 Practices are arranged along three dimensions: Sourcing Life-cycle, Capability Areas, and Capability Levels. The Sourcing Life-cycle includes Initiation, Delivery, and Completion, each of which represents an individual phase of the Life-cycle, plus Ongoing, which spans the entire Life-cycle. Capability Areas are groupings of Practices with similar content and focus. Capability Levels represent a path of improvement for service providers.

This document provides valuable reference information about the eSCM-SP Practices including information on model structure, Practice interpretation, and measurement. It is important to understand the structure of the Model and Practices in order to implement them effectively and properly.

The eSourcing Capability Model for Service Providers (eSCM-SP) v2, Part 1: Model Overview focuses on the Model, rather than the Practices. It covers the Model's development, structure, implementation, and measurement. In addition, Part 1 describes Evaluation for Certification and the methods used for capability determination.

Understanding the Model

The Model Structure

The eSCM-SP is composed of 84 Practices, which can be thought of as the "best practices" that are associated with successful sourcing relationships. Each Practice is arranged along three dimensions: Sourcing Life-cycle, Capability Area, and Capability Level. Figure 1 shows the complete model structure.
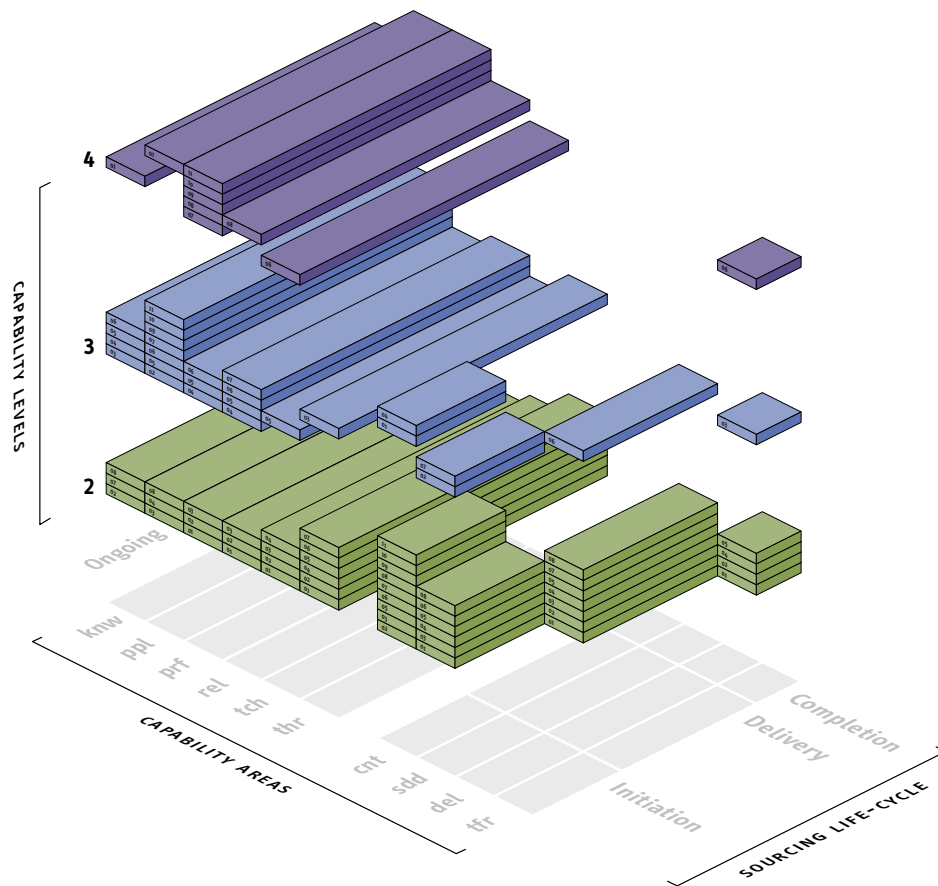
Figure 1.
The eSCM-SP v2
Eighty-four Practices are arranged within three dimensions: Sourcing Life-cycle, Capability Area, and Capability Level.

Practices

Each Practice in the eSCM-SP includes a statement summarizing the best practice, a description of the best practice, a list of activities needing to be performed, and supplemental information that helps clarify those activities. More information on the structure of the Practices is in Chapter 2, "The Practice Structure." Appendix A is a one-page summary of the Practices. Appendix B contains a list of Practices by Capability Area. For a summary of Practice-level changes from v1.1 to v2, see Appendix C.

Sourcing Life-Cycle

The Sourcing Life-cycle is divided into Ongoing, Initiation, Delivery, and Completion. Ongoing Practices span the entire Sourcing Life-cycle, while Initiation, Delivery, and Completion Practices occur in specific phases of that Life-cycle. During Initiation, the organization negotiates with the client, agrees on requirements, designs the service that will be provided, and deploys that service. During Delivery, the organization delivers service according to the agreed-upon commitments. During Completion, the organization transfers resources and responsibility for service delivery back to the client, or their designee. Figure 2 shows the Sourcing Life-cycle.
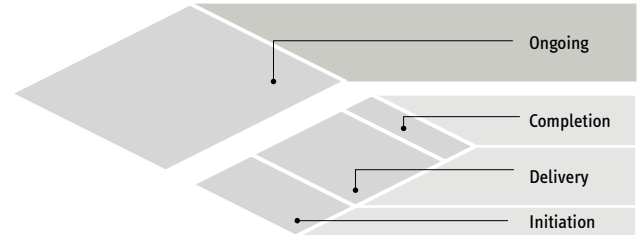
Figure 2.
The Sourcing Life-cycle
Initiation, Delivery, and Completion are phases of the Sourcing Life-cycle, while Ongoing spans the entire Sourcing Life-cycle.

It is important to understand that Ongoing Practices must be performed across the entire Sourcing Life-cycle in order to meet their intent; an organization that only performs an Ongoing Practice during Delivery is not meeting the intent of the Practice. Some Ongoing Practices will typically take place at the engagement level, crossing all phases of the Sourcing Life-cycle for that engagement. For example, prf01, "Engagement objectives," establishes goals for a specific engagement that are relevant regardless of whether the engagement is in the Initiation, Delivery, or Completion phase. In contrast, prf04, "Organizational objectives," establishes goals across the organization, which are applicable to all engagements in all phases of the Sourcing Life-cycle.

Capability Areas

Capability Areas are logical groupings of Practices that can help users better remember and intellectually manage the content of the model. Capability Areas also provide a framework that service providers can use to build or demonstrate capabilities in the different critical sourcing functions.

Practices in the same Capability Area have related content and focus; considering why a Practice has been placed in a Capability Area may help provide context for interpreting that Practice. Figure 3 shows the ten Capability Areas. For example, rel05,
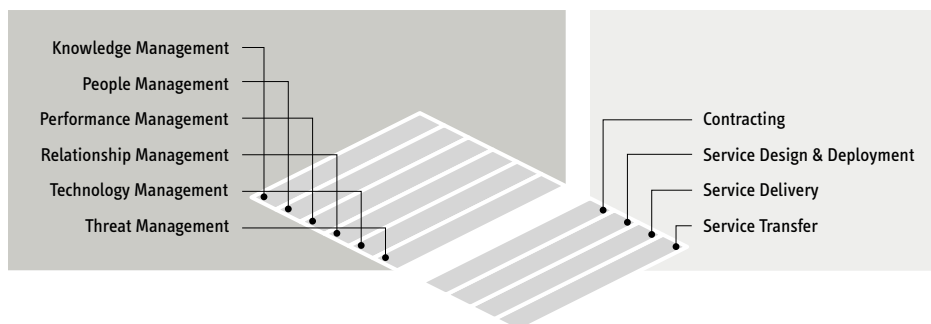
Figure 3.
The Capability Areas
All of the Ongoing Practices are contained within six Capability Areas. The other four Capability Areas are associated with one or more phases.

"Analyze and use client and other stakeholder information," is in the Relationship Management Capability Area, not the Knowledge Management Capability Area. Although the content of the Practice deals with analysis and use of information, the primary focus of the Practice is on using the information to improve relationships and meet stakeholder needs. In this case, the context of the Capability Area helps to clarify that focus.

All of the Ongoing Practices are contained within six of the ten Capability Areas: Knowledge Management, People Management, Performance Management, Relationship Management, Technology Management, and Threat Management. The Ongoing Capability Areas are presented alphabetically. The other four Capability Areas are temporal and are typically associated with a single phase: Initiation, Delivery, or Completion. The exception is Service Transfer, which includes both Initiation and Completion Practices. In addition to Service Transfer, these Capability Areas are Contracting, Service Design & Deployment, and Service Delivery. These four Capability Areas are presented in temporal order.

Capability Levels

The eSCM-SP includes five Capability Levels that describe a path of improvement for service providers. The eSCM-SP is a capability model, not a maturity model. Therefore, service providers will often implement higher-level Practices to meet specific near-term goals. It is perfectly acceptable for an organization to begin implementing some Level 4 Practices before it has completed implementing Level 2 and 3 Practices. Nevertheless, Practices are assigned a Capability Level for a reason, which must be understood before the intent of the Practice can be fully appreciated (see *The eSCM-SP v2, Part 1: Model)*. Figure 4 illustrates the Capability Levels and the Practices associated with each.

Figure 4.
The Capability Levels
Each Capability Level is shown with the Practices associated with it displayed in a color. Note that Level 3, 4, and 5 show the previous Levels' Practices.
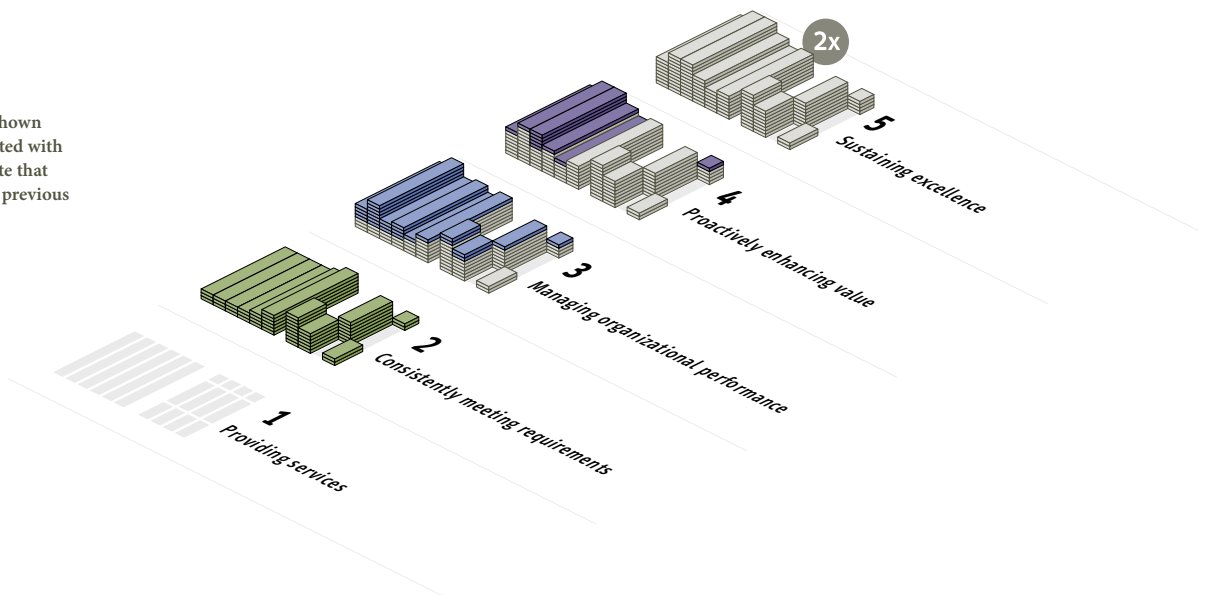
Level 1: Providing Services

Service providers at Level 1 have not implemented all of the Level 2 Practices; there are no Level 1 Practices (see figure 5). The capability of these service providers varies widely. Some may have almost none of the eSCM-SP Practices implemented. These providers are very likely to be a high risk to work with because they often promise more than they deliver. Other service providers may have many of the eSCM-SP Practices implemented, including some Practices at Capability Levels 3 and 4. Because these service providers have not fully implemented all of the Level 2 Practices, they may meet many client's needs successfully, but they will still be at risk of failure in areas where they have not implemented the necessary eSCM-SP Practices.

Figure 5.
Level 1: Providing services
Level 1 has no Practices associated with it.

Level 2: Consistently Meeting Requirements

Service providers at Level 2 have successfully implemented all of the Level 2 Practices (see figure 6). Therefore, they have established procedures for capturing requirements and delivering services according to commitments made to their clients and other stakeholders. These providers are able to deliver specific services according to the stated client expectations, provided the services do not significantly vary from the provider's experiences. They can systematically capture and understand requirements, design and deploy services to meet the requirements, and successfully deliver the services according to the agreed-upon service levels. Their infrastructure—work environment, training, technology, information, etc.—is in place to support consistent performance of work that meets the service provider's commitments.

Figure 6.
Level 2: Consistently meeting requirements
Level 2 has 48 Practices, distributed throughout the Sourcing Life-cycle.

Practices within Level 2 should be interpreted in the context of how they contribute to meeting the requirements of clients and other stakeholders. These Practices are expected to have a benefit to the service provider as well, but the primary focus of these Practices is on enabling the service provider to fully understand and meet client requirements. At Level 2, Practices are implemented for at least one engagement, but could be applied to a larger organizational span.

For example, cnt02 is "Establish guidelines for pricing service." At first look, this Practice may appear to only benefit the service provider, enabling it to have consistent pricing that meets its business objectives (e.g., for profitability). However, in order for the service provider to have a clear agreement with the client about what services are required, the client must receive a clear and consistent message about how services will be priced.

Figure 7.
**Level 3: Managing organizational performance
Level 3 has 26 Practices. To achieve Level 3, a service provider must implement all Level 2 and 3 Practices.**

Level 3: Managing Organizational Performance

Service providers at Level 3 have effectively implemented all Level 2 and Level 3 Practices (see figure 7). As a result, they are capable of delivering services that meet their clients' requirements, even if those requirements differ significantly from their experience. Level 3 service providers improve themselves in reactive, measurable ways. Their improvements are made across the organization, and are aligned with their organizational objectives, which are typically generated from measurement and verification activities.

While Level 2 Practices can be implemented for a single engagement, starting at Level 3, Practices cover a more complex organizational span (e.g., managing multiple engagements simultaneously). Level 3 service providers share and use knowledge gained from previous engagements, objectively measure and reward personnel performance, and optimize their technology infrastructure. They understand the varying requirements of their targeted market services, including specific cultural attributes.

Both the service provider and the client share in the economies of scale achieved by the service provider's improvements. For example, thr03, "Establish and implement procedures to manage risks across client engagements," is broader than the Level 2 risk management Practice, thr02, "Identify, assess, and manage risks specific to the client engagement." The Level 2 Practice is focused on risks for a single engagement, while the Level 3 Practice is focused on managing risks across engagements. This broader focus enables the service provider to manage a portfolio of engagements to achieve balanced risk while still achieving overall organizational objectives.

Level 4: Proactively Enhancing Value

Level 4 providers have effectively implemented all of the Level 2, 3, and 4 Practices (see figure 8). They are able to understand client perceptions, predict their performance based on prior experiences, and customize their approach accordingly. Level 4 focuses on systematically enhancing performance across the entire organization through a set of cross-engagement programs, including those that use innovation to achieve objectives. This focus enhances the value of service delivery to clients who desire access to innovative services and industry best practices. It also benefits service providers who are able to use those programs to achieve enhanced value with respect to their own strategic objectives.

Figure 8.
**Level 4: Proactively enhancing value
Level 4 has 10 Practices. To achieve Level 4, a service provider must implement all Level 2, 3, and 4 Practices.**

Level 4 service providers support their abilities by leveraging their existing workforce competencies, employing professional development programs, and systematically evaluating and incorporating technology advances. Level 4 providers systematically plan, implement, and control their own improvement, typically generating these plans from their own performance benchmarks. To illustrate this organization-wide focus, consider tch06, "Establish and implement procedures to proactively identify and introduce appropriate technology." This Practice specifies that the provider regularly monitors new technologies and identifies the innovations that would enhance value to the organization or its clients. Doing this affects more than a single engagement since innovation can be of broad benefit to the service provider and many of its clients.

Level 5: Sustaining Excellence

To reach Level 5, a service provider must demonstrate measurable, sustained, and consistent performance excellence and improvement by effectively implementing all of the Level 2, 3, and 4 Practices for two or more consecutive Evaluations for Certification (see figure 9). There are no additional Practices required to reach Level 5. Effectively implementing all of the eSCM-SP Practices over a period of two or more years shows an ability to sustain excellence.
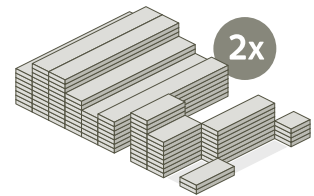
Figure 9.
Level 5: Sustaining excellence Level 5 has no new Practices associated with it. It requires sustained implementation of every Practice over the course of two Evaluations for Certification.

The Practice Structure

What is a Practice? The eSCM-SP is composed of 84 Practices, which address the critical capabilities for IT-enabled sourcing service providers that are associated with successful sourcing relationships. Each Practice in the model is arranged along three dimensions: Sourcing Life-cycle, Capability Area, and Capability Level. Figure 10 illustrates these dimensions.

Figure 10.
Practice Attributes
Each Practice is arranged along each of three dimensions: Sourcing Life-cycle, Capability Area, and Capability Level.
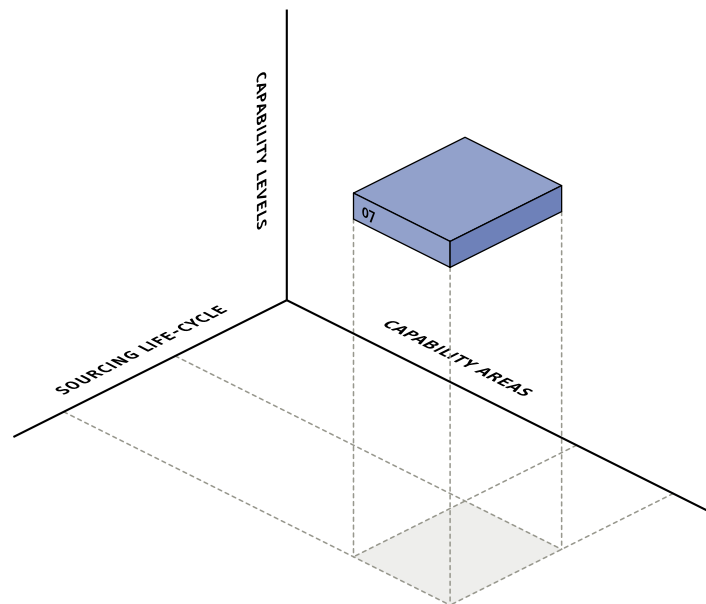
Practice Types

The content and structure of each of the eSCM-SP Practices is based on the type of documentation used when implementing that Practice. Most Practices explicitly refer to establishing a policy, procedure, guideline, program, or plan. This reference has an impact on how the Activities are structured, as well as what type of documentation needs to be in place in order to satisfy the intent of the Practice.

The level of detail required in a Practice's documentation depends on the type of that documentation. Policies are high-level documents used to state guiding principles and demonstrate management's commitment to a topic. Procedures are the most detailed documents since they need to describe step-by-step instructions for how to perform a given task. Guidelines are less detailed and are typically used

for quick reference. Programs are groups of related projects that are described primarily in plans and business cases. Plans are documents used to help execute and control work.

Policy Practices

A policy is "a guiding principle, typically established by senior management, which is adopted by an organization or project to influence and determine decisions." [Paulk 1995] Policies should be brief, high-level descriptions of senior management's expectations in a specific area. Senior management commissions the development and maintenance of policies, approves them, communicates them to their organization, and most importantly, enforces them.

Policies are generally implemented through one or more procedures. They should be kept consistent with current management expectations and business objectives through periodic review and revision. Organizations will have policies other than those specified in this model.

In the eSCM-SP, policy Practices are worded "Establish and implement a policy on…" For example, thr01 is "Establish and implement a policy on risk management." While the Practices may refer to a single policy, the organization may choose to implement this Practice through the creation of multiple policies covering different aspects of the Practice.

Procedure Practices

A procedure is "a written description of a course of action to be taken to perform a given task." [IEEE-STD-610 1990] Procedures are detailed documents that show step-by-step instructions on how to perform a particular activity or set of activities. They typically provide information such as inputs, outputs, diagrams that show steps to be followed, textual descriptions of each diagrammed step, and an indication of roles and responsibilities. Procedures are often supplemented by job aids that are used as quick reference tools by personnel (e.g., checklists and contact lists). They are also often used in conjunction with high-level process documentation; while processes typically describe *what* steps should be performed (e.g., "fill out the risk log"), procedures explain in detail *how* each step is to be performed (e.g., describing how to complete each field on the risk log).

In the eSCM-SP, procedure Practices are worded "Establish and implement procedures to…" For example, cnt10 is "Establish and implement procedures to create contracts." The Practices use the plural form "procedures" because the Practice will typically be implemented through multiple documents. However, an organization may choose to implement the Practice through a single procedure or as procedures incorporated into other types of documents. The procedures must provide sufficient guidance so that personnel have a clear understanding of the steps involved.

Guideline Practices
A guideline is "a rule or principle that provides guidance to appropriate behavior." [Wordnet] Guidelines are high-level documents that provide rules of thumb, expert advice, or other kinds of guidance that would be helpful in standardizing the way personnel perform a Practice. Some types of guidelines (e.g., estimating guidelines) are normally implemented through a tool or database that captures expert knowledge in a way that can be easily reused by others.

In the eSCM-SP, guideline Practices are worded "Establish guidelines for…" For example, cnt02 is "Establish guidelines for pricing services." The Practices use the plural form "guidelines" because it is expected that the Practice will typically be implemented through a set of rules or principles that will provide guidance to personnel.

Program Practices
A program is "a group of related projects managed in a coordinated way." [PMBOK] Programs are generally implemented through a series of related projects that are managed to achieve a common objective. They include a program plan that documents the scope, assumptions, dependencies, cost, effort, due dates, tasks, and work assignments for the program. They also include a business case that clearly indicates the objectives and expected benefits of the program. The program plan and business case are used to track progress against program objectives and determine when progress is insufficient.

In the eSCM-SP, program Practices are worded "Establish and implement programs to…" For example, prf07 is "Establish and implement programs to achieve organizational objectives." The Practices use the plural form "programs" because it is expected that the Practice will typically be implemented through multiple programs. However, an organization may choose to implement the Practice through a single program that impacts multiple engagements.

Plan Practices

A plan is "a formal, approved document used to guide both execution and control. The primary uses of the plan are to document planning assumptions and decisions, to facilitate communication among stakeholders, and to document approved scope, cost, and schedule baselines." [PMBOK] Plans should include both descriptive information as well as a schedule of tasks. Descriptive information typically includes objectives, scope, assumptions, dependencies, and other details used to communicate critical pieces of information to stakeholders. The schedule of tasks typically includes estimates of cost and effort for each task as well as due dates and work assignments. The plans are used as the basis for tracking progress and are updated to reflect revised estimates or other changes.

In the eSCM-SP, plan Practices are worded "Plan and track…" For example, sdd03 is "Plan and track the design and deployment of the service." While the Practice may refer to a single plan, the organization may decide to implement the Practice through the creation of multiple plans that cover different aspects of the topic in question.

It is important to note that in addition to those Practices that are considered Plan Practices, there are also planning and tracking Activities in many other eSCM-SP Practices. While planning and tracking is often important for effectively managing work, Plan Practices cover those plans that are particularly critical to sourcing, including negotiations, service design, service deployment, and service delivery.

The eSCM-SP does not intend to duplicate detailed guidance about planning and tracking covered in other quality models and sources. For more information on how to perform effective planning and tracking, please see A Guide to the Project Management Body of Knowledge [PMBOK].

Other Practices

Several Practices in the eSCM-SP do not explicitly mention the use of a specific type of document. These Practices relate to tasks that are critical to success, but are not required to be documented in a policy, procedure, guideline, program, or plan. Although a specific type of documentation is not mentioned, every Practice should be supported by documentation that provides guidance on how to perform that Practice. This guidance enables personnel to consistently and repeatedly perform

the Practice. The work products and tasks required for these Practices, and how each of those will be documented, are determined by the business judgment of the organization. Based on this business judgment, the organization may determine that the most appropriate guidance for the Practice is documented in a policy, procedure, guideline, program, plan, or other type of document.

For example, ppl08 is "Meet identified personnel competency needs by providing training." For some organizations, this Practice may not lend itself to being documented as a policy, procedure, or guideline. However, it will often be documented as part of a plan and will also have guidance documents that describe the roles and responsibilities of personnel who manage training.

Practice Structure
A standard structure is used for all Practices in the eSCM-SP. The following components are included in each Practice. They are illustrated in Figure 13 on page 16.

Practice attributes
The classifying attributes of each Practice are displayed in its left column: Capability Area, Sourcing Life-cycle, Capability Level, and Practice Type.

Practice header
General identification and classification information is displayed in the header. This includes the Practice identifier, the short description, the Capability Area (shown at the top of every page), the Capability Level (indicated by the color of the text in the header), and an "S" icon if the Practice is a Support Practice (Support Practices are discussed later in this document).

Practice statement
The Practice statement is a single sentence that states the requirement of the Practice. For example, the Practice Wording for sdd03 is "Plan and track the design and deployment of the service." When appropriate, the Practice wording reflects whether the Practice is a procedure, policy, guideline, program, or plan Practice.

Practice description
Each Practice description contains one or more paragraphs that explain the Practice's purpose and its expected benefits to the service provider and/or client.

The first sentence of the description provides the rationale for the Practice. Additional information about the intent of the Practice, definitions and examples, and important relationships between Practices are also included in the description. Note that the Practices refer to "service providers" as "organizations."

Activities

The Practice's Activities are the tasks that the organization needs to perform in order to successfully satisfy the Practice. Figure 11 shows how activities are formatted in a practice. Organizations may perform a set of additional activities for any of the Practices in the model.

Figure 11.
Practice Activities
The Major Activities (e.g., b) and Required Activities (e.g., b1) are shown at one level of indentation, while the Recommended Activities (e.g., b1a) and Supplemental Information are shown at another indentation. This indicates the difference between requirements and recommendations within the Practice.

Major Activities

Each Practice includes three Major Activities: *a, b,* and *c.* These are similar among all Practices, except for customizations according to each Practice's type (procedure, policy, guideline, program, plan, or other) and Capability Level. Practices at Level 3 or 4 typically use the phrase "across the organization" to reflect that the Activities should be consistently and systematically performed across engagements and functions. Major Activity *a* is concerned with supporting the creation and maintenance of the Practice. Major Activity *b* is concerned with documenting work products and/or tasks for the Practice. Major Activity *c* is concerned with implementing or doing the Practice.

Sub-activities

Each Major Activity has a set of sub-activities that provide more information about how to perform the Major Activity. There are two levels of sub-activities: Required Activities (e.g., a1, b3, c5) and Recommended Activities (e.g., b2a, b3b). For certification, there must be positive evidence of all the Required Activities in order for the organization to be compliant with the eSCM-SP. While Recommended Activities are not required, it is suggested that the organization also implement them. Only Major Activity *b* has Recommended Activities.

Supplemental Information

If there is supplemental information, it is displayed immediately following its associated Activity, and indicated with an arrow (see figure 12). Supplemental Information provides additional explanatory information to further convey the intent of the Activity. It may also provide examples of how the Activity can be implemented. The information provided here is informative only, and is not exhaustive.

Figure 12.
Supplemental Information for an Activity
Supplemental Information is indicated with an arrow.

10 S

ppl07

3 Plan & Deliver Training

1 ppl07

Establish and implement procedures to plan and deliver training.

4 Plan and manage the delivery of training in order to meet personnel and workforce competency needs. Effective training enables the organization to meet its organizational objectives by filling the gaps in its personnel and workforce competencies.

5 This Practice is related to ppl04, "Assign responsibilities," Ppl06, "Workforce competencies," and ppl08, "Personnel competencies." At Level 2 the focus of training (ppl08) is on meeting personnel competency needs that have been identified while assigning roles and responsibilities (ppl04). At Level 3, training is formalized with plans and procedures in this Practice. This Practice expands training from the coverage of personnel competency needs to the coverage of workforce competency needs as identified in ppl06.

2 People Management

Ongoing

Level 3

Procedure

Activities

a. Provide support for creating and maintaining the procedures for planning and delivering training across the organization.

6

7 1. Provide sponsorship and resources for creating the procedures. (knw04, prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02, rel05)

3. Maintain and improve the procedures as appropriate. (knw04, knw07)

b. Document the procedures for planning and delivering training. Documentation includes the following Activities:

1. Identify training objectives and desired outcomes based on personnel and workforce competency needs and organizational objectives.

2. Create training plans for career development, engagement- or client-specific training, or organizational training.

9 → Career development training can include personal development (e.g., presentation or meeting skills), job-oriented development (e.g., technical or supervisory skills), and leadership development (e.g., engagement management or strategy creation). Engagement- or client-specific training will include any training necessary to meet requirements (e.g., orientation, culture, or business). Organizational training can include the development of skills needed to meet objectives, as well as the organization's policies, procedures, and functions.

3. Create or obtain training based on the training plans.

8 a) Identify materials and tools required for training.

b) Identify facilities required for training.

c) Identify personnel required for training.

d) Create or obtain the materials, tools, and facilities required for training.

4. Deliver training according to the training plans.

5. Track ... and progress against the plan.

Figure 13. Parts of a Practice

1 Practice ID
The Practice identifier is made up of an abbreviation of the Practice's Capability Area and its sequence number within the Capability Area.

2 Practice attributes
The attributes of each Practice are displayed here: Capability Area, Sourcing Life-cycle, Capability Level, and Practice Type.

3 Short Description
A very short description of the Practice.

4 Practice statement
A brief description of the Practice that describes its requirements.

5 Practice description
A paragraph or more that explains the Practice's purpose and its expected benefits.

6 Major Activities
The three Activities at the highest level, labeled a, b, and c, are common to all Practices.

7 Required Activities
Activities at the first and second level.

8 Recommended Activities
Activities at the third level.

9 Supplemental Information
Additional explanation and examples for an Activity.

10 Support Practice Icon
This icon indicates that the Practice is a Support Practice..

Relationships between Practices

Practices are rarely implemented in isolation, and therefore have relationships with other Practices that need to be considered. The eSCM-SP has two relationships that are explicitly described—Practice-level and Support Practices. There are also implicit relationships that may change based on the organization and implementation approach. These relationships are described below.

Implicit Relationships

Many Practices have an implicit relationship where an output in one Practice is useful as an input to another Practice. However, because input/output relationships may vary among organizations and implementation approaches, these are not explicitly described in the eSCM-SP. An organization must use its business judgment to determine which Practices have inputs from other Practices.

For example, the risk management policy created in thr01, "Establish and implement a policy on risk management," might be a useful input for the risk identification Activity in thr02, "Identify, assess, and manage risks specific to the client engagement." However, an organization may decide to implement these two Practices by creating a single document that both meets the intent of a risk management policy, and provides guidance on how to perform risk identification, assessment, and management. In that case it is confusing to describe these Practices as having an input/output relationship with each other.

Practice-level Relationships

Several Practices in the model have a very close relationship with one or more other Practices. These significant relationships are described in the Practice Descriptions. If the relationships are between Practices of different Capability Levels, the relationship is only described in the higher Capability Level Practice. Otherwise, the relationship is described in both Practices.

A progression relationship is formed when a lower level Practice leads toward a higher level Practice. This progression represents an implementation of the same topic, or an aspect of the same topic, at a higher Capability Level. For example, ppl07, "Establish and implement procedures to plan and deliver training," is a Level 3 progression from the Level 2 Practice ppl08, "Meet identified personnel competency needs by providing training."

A dependency relationship occurs when one Practice depends upon Activities or outputs from another Practice. For example, sdd05, "Create the service design based on the service specification," is dependent on sdd04, "Create the service specification."

Support Practices

Major Activities *a* and *c* in all Practices cover the tasks that need to be implemented to ensure that the organization can perform a Practice in a repeatable and consistent way. All eight of the Required Activities in Major Activities *a* and *c* are required for every Practice in the model, and are applied regardless of whether a Practice is a policy, procedure, guideline, program, plan, or other Practice. Each of these Activities is directly linked to one or more Practices, called Support Practices because they provide support for the institutionalization of every eSCM-SP Practice. Table 1 lists these Activities, and their Support Practices.

Table 1. eSCM-SP Support Practices

ACTIVITIES	LEVEL 2	LEVEL 3&4
a. Provide support for creating and maintaining...		
1. Provide sponsorship and resources...	prf03	knw04 prf03
2. Involve relevant stakeholders...	knw02	knw02 rel05
3. Maintain and improve...	knw07	knw04 knw07
b. Document...		
c. Implement the Practice; wording varies.		
1. Communicate the availability and location...	knw02	knw02 knw03
2. Provide resources to effectively perform the work.	knw02 ppl03 prf03 tch01	knw02 knw03 ppl03 prf03 tch01
3. Assign qualified personnel...	ppl04 ppl08	ppl04 ppl05 ppl07 ppl08
4. Communicate planned actions and their outcomes...	knw02	knw02 knw03
5. Verify that the work is consistently and effectively performed...	prf02	knw04 prf02

Support Practices establish infrastructure and the basis for consistently and effectively implementing all of the Practices in the model. When implementing one of these Required Activities, one or more of the Support Practices needs to be referenced in order to fully understand and implement the Required Activity. Each of the eight Required Activities in Major Activities *a* and *c,* and its relationship with the Support Practices, is described below:

Activity a1: Provide sponsorship and resources for creating the work products and tasks. (Supported by knw04, prf03.)

Sponsorship can be demonstrated in many ways, but the minimum sponsorship required to fulfill the intent of a Practice is providing the resources necessary to perform that Practice. Identification and provision of adequate resources is covered by prf03, "Adequate resources."

Support Practice prf03 addresses providing adequate resources for all work assignments in the organization; in this context, the resources are used for creating and deploying assets such as policies, procedures, guidelines, tools, checklists, examples, repositories, etc. Objective evidence of sponsorship is providing adequate resources for creating and maintaining the relevant assets and for deploying those assets to the people who will use them.

At Capability Level 2, the assets related to the Practice may be engagement-specific. At Capability Level 3, knw04, "Process assets," addresses creating and deploying process assets at the organizational level. The use of organization-level assets improves organizational efficiency by supporting common processes, training, and measures. It also supports Practice institutionalization in two ways. The first is by providing common work products and tasks for creating procedures. Common procedures support consistency and predictability, along with other infrastructure such as common measures and training. The second way is that providing the resources to implement knw04 actively demonstrates that management is sponsoring the discipline needed for consistent performance. Slogans and lip service are common but inadequate to change behavior; true management sponsorship is necessary for change, and an investment in defining and improving processes demonstrates that sponsorship.

Although commonality is emphasized at Capability Level 3, some degree of tailoring is expected, and allowances should be made for engagements with unique needs. In some cases, use of process assets may be waived to meet customer needs, but the expectation is that organizational assets will be tailored as appropriate and used in engagements.

Activity a2: Involve relevant stakeholders in creating, improving, reviewing, and approving the work products and tasks as appropriate. (Supported by knw02, rel05.)

Starting at Capability Level 2, stakeholders need to be involved in reviewing the correctness, clarity, and adequacy of the work products used in the performance of work. This involvement, covered by knw02, "Provide required information," ensures that the information provided to and used by personnel is adequate for them to perform their work. The primary stakeholders to include are those involved in implementing the Practice, as they have direct insight into what needs to be documented and supported for effective, consistent implementation. The stakeholders who receive the resulting work products and services of a process (internal customers, for example) can also provide critical feedback. Other types of stakeholders should participate in reviewing and approving assets as appropriate. Stakeholder input is necessary to create buy-in to facilitate deployment and adoption of work products and tasks by their intended users.

Starting at Capability Level 3, management of stakeholder feedback is more rigorous. Formally planning, managing, and tracking feedback helps to further ensure that policies, procedures, guidelines, work products, and activities are being improved. Feedback from stakeholders also helps tailor the work products and tasks to the needs of specific clients or other stakeholders (e.g., suppliers and partners). Management of stakeholder feedback is covered by rel05, "Stakeholder information."

Activity a3: Maintain and improve the work products and tasks as appropriate. (Supported by knw04, knw07.)

Consistent performance is a crucial attribute of Capability Level 2, which is supported by placing work products such as procedures under version control and change control. Work products need to be periodically updated to reflect changes in the way work needs to be done, or to incorporate improvements that have been discovered. Work products should be placed under version control and change control, as described in knw07, "Version & change control," to ensure that the work products are readily available.

Starting at Capability Level 3, management of process improvement is more rigorous. Improving a work product implies that, in addition to maintaining it, there is measurable improvement in its effectiveness and efficiency. Ongoing improvement is one of the indicators of true institutionalization. Continual improvement is a fundamental principle underlying the eSCM-SP and building organizational capability. Definition and improvement of process assets across the organization is a cornerstone of Capa-

bility Level 3. Ensuring that processes are managed and used across the organization, and taking action to make improvements, is covered by knw04, "Process assets."

Activity c1: Communicate the availability and location of the work products and tasks to relevant stakeholders. (Supported by knw02, knw03.)

Starting at Capability Level 2, stakeholders need to be informed about work products and activities relevant to the work they perform. This helps to ensure that they have adequate information to perform their work on a repeatable, consistent basis. Identification and provision of required information, including the availability and location of work products, is covered by knw02, "Provide required information."

Starting at Capability Level 3, management of the information needed by stakeholders is more rigorous. Formally managing information through a knowledge system helps to further ensure that information is easily and systematically available to those who need it. Management of this knowledge system is covered by knw03, "Knowledge system."

Activity c2: Provide resources to effectively perform the work. (Supported by knw02, knw03, ppl03, prf03, tch01.)

Starting at Capability Level 2, personnel need to have supporting resources that help them to effectively perform their work. This includes maintaining a work environment (covered by ppl03, "Work environment"), providing an adequate technology infrastructure (covered by tch01, "Acquire technology"), providing adequate access to information needed by personnel (covered by knw02, "Provide required information"), and any other resources needed to perform the work (covered by prf03, "Adequate resources").

Starting at Capability Level 3, management of the information needed by personnel is more rigorous. Formally managing information through a knowledge system helps to further ensure that information is easily and systematically available to those who need it. Management of this knowledge system is covered by knw03, "Knowledge system."

Activity c3: Assign qualified personnel the responsibility, authority, and accountability to perform the work. (Supported by ppl04, ppl05, ppl07, ppl08.)

Starting at Capability Level 2, personnel need to have both a clear understanding of their roles and responsibilities, as well as the appropriate competency to perform those responsibilities. Responsibility implies the right and trust to make decisions and act; authority implies the power to command or act; and accountability implies that one is answerable for performance, and therefore, responsible. Responsibility without authority is meaningless. Assigning qualified personnel helps ensure that the Practice

can be effectively performed. Assignment of personnel is covered by ppl04, "Assign responsibilities"; if the assigned personnel are missing some required competencies, ppl08, "Personnel competencies," covers the provision of training to meet those needs.

Starting at Capability Level 3, management of work assignments is more rigorous. Formally documenting and managing the definitions of roles and responsibilities is covered by ppl05, "Define roles." Systematic training, as described in ppl07, "Plan & deliver training," builds workforce competencies across the organization, although unique personnel competency and training requirements may still need to be addressed.

Activity c4: Communicate planned actions and their outcomes to relevant stakeholders. (Supported by knw02, knw03.)

Starting at Capability Level 2, stakeholders need to be informed about any planned actions and outcomes resulting from the performance of the Practice. This helps to ensure that the stakeholders have adequate information to perform their work on a repeatable, consistent basis. Identification and provision of the required information is covered by knw02, "Provide required information."

Starting at Capability Level 3, management of the information needed by stakeholders is more rigorous. Formally managing information through a knowledge system helps to further ensure information is easily and systematically available to those who need it. Management of this knowledge system is covered by knw03, "Knowledge system."

Activity c5: Verify that the work is consistently and effectively performed according to the work products and tasks. (Supported by knw04, prf02.)

Starting at Capability Level 2, work needs to be periodically verified to ensure that it is being done in a manner that follows the policies, procedures, guidelines, work product requirements, and tasks that have been defined. This verification helps to ensure consistency and effectiveness of work, while also providing a mechanism to identify opportunities for improving how the work is being performed. Verification that work is performed according to the defined processes and standards is covered by prf02, "Verify processes." Verification is typically done by internal audits, although verification mechanisms can be built into the processes used.

Starting at Capability Level 3, verification is broadened to focus on effectiveness of the organization as a whole. At Level 3, consistent performance based on using organizational assets is emphasized in knw04, "Process assets."

Providing Support for Support Practices

Activities *a* and *c* include references to the Support Practices that help provide support for that Activity. For instance, Activity a1, which is about providing sponsorship and resources, refers to Support Practice prf03, "Adequate Resources." Support Practices have the same references even when the reference is to itself (e.g., Activity a1 in prf03 refers to prf03).

Self-referential Practices can be confusing, yet auditors need to be audited, role assigners need to be assigned to their roles, improvement processes need to be improved, etc. Such practices are inherently recursive (e.g., who audits the auditors of the internal auditors?). While this is not a rhetorical question, in most cases only one level of iteration is necessary. Given the importance of this issue, the eSCM-SP contains self-references in Activities *a* and *c* for the Support Practices. While self-referential entities of any kind can be confusing, there are reasonable interpretations for each self-reference in the eSCM-SP. Each of the self-references for the Support Practices is discussed below.

For knw02, "Provide required information," Activity a2 covers involving stakeholders in identifying the information needed to addressed the quality and comprehensiveness of the information needed by the workers. Issues addressed in c1, c2, and c4 are associated with communicating and providing information needed by personnel to do the work of identifying, controlling, and providing information. For instance, the knowledge management team needs to be aware of the access restrictions that need to be imposed on information and needs to have adequate security tools for implementing those restrictions.

For knw03, "Knowledge system," the issues addressed in c1, c2, and c4 are refinements of knw02, associated with communicating and providing information via an organizational knowledge system. Information about the knowledge system should itself be systematically managed.

For knw04, "Process assets," the sponsorship and resources referred to in a1 are for establishing and maintaining a set of useful and usable process assets. Effectively doing this may itself require access to some process assets (e.g., process notation tools and Web sites). In a3, the work products used to establish and maintain process assets are themselves process assets that need to be maintained. In c5, the processes used to maintain process assets are being verified, and are themselves considered process assets.

For knw07, "Version and change control," the standards, procedures, and tools for doing version and change control, as described in a3, should be controlled using the same rigor as for any other work product. For example, the change control procedure should be placed under version and change control.

For ppl03, "Work environment," the workers responsible for providing and maintaining the work environment need the resources to do their jobs as described in c2. For example, someone may use an online database for assigning conference room space and informing people of the assignments. They also need workspace and telecommunications equipment of their own in order to arrange workspace for others.

For ppl04, "Assign responsibilities," when c3 describes assigning qualified personnel, the people doing the assignments should have the responsibility and authority to make the assignments. They also should have the qualifications and training needed to make appropriate assignment decisions.

For ppl05, "Define roles," the people defining a process, and characterizing the qualifications of those who will perform it, need to have the qualifications and training needed to appropriately define the roles as described in c3. For example, anyone defining the role of an operator in a call center may need skills in both building role definitions and understanding the responsibilities of an operator. The total set of qualifications may be possessed by the team doing the role definitions rather than with a specific individual on the team.

For ppl07, "Plan and deliver training," the qualifications described in c3 should address the ability of personnel to plan and manage training, develop training materials, deliver training, and measure the effectiveness of training.

For ppl08, "Personnel competency," the qualifications addressed in c3 focus on the ability of trainers to analyze training requirements, train others, and effectively track the training provided.

For prf02, "Verify processes," the verification in c5 is of the verification process. This is sometimes phrased as "Who will watch the watchers?" The internal auditing function itself needs to be independently audited to ensure that corporate governance is adequately implemented and that the verification process is providing value to the organization.

For prf03, "Adequate resources," the personnel providing resources need the sponsorship and resources themselves, in order to manage those resources, as described in a1. For example, an inventory control system may be needed to manage resources effectively. Similarly, the resources needed to provide resources covered in c2 could include, for instance, sufficient personnel assigned to manage resource requests.

For rel05, "Stakeholder information," the relevant stakeholders described in a2 could be, for example, the marketing and sales groups, who need to be involved in analyzing and using client information. In turn, clients could be relevant stakeholders who should be involved in reviewing the information about their own (potential) needs.

For tch01, "Acquire technology," the technologists who identify and evaluate technology for other personnel in the organization need the technology to do their work as described in c2. Examples of the necessary technology may include network flow analysis tools and statistical analysis tools.

Measurement in the eSCM-SP
Focusing on the achievement of business objectives, the eSCM-SP provides a progressive measurement path through the Capability Levels. While it is possible to measure multiple attributes of every Practice in the eSCM-SP, the measurement effort should be focused on business objectives that add value to the service provider and its clients. The fundamental principle underlying measurement should be to support the achievement of business objectives. Figure 14 represents the evolution in measurement capability of an organization progressing up the eSCM-SP Capability Levels. The Practices identified in the figure make up the measurement core within the eSCM-SP.

At Level 1, measurement initiatives are often ad hoc, driven by the immediate business needs of the service provider and its clients.

At Level 2, a service provider is expected to define measurable engagement objectives (prf01, "Engagement objectives"), and define the measures needed to track progress toward achieving those objectives (prf02, "Verify processes," knw08, "Resource consumption") until it can be verified that they have been satisfied (prf02, "Verify processes," del04, "Verify service commitments"). Activities performed within an engagement should be aligned with the engagement objectives.

Some engagement objectives may be measured subjectively rather than objectively. The client is expected to establish measurable objectives in service level agreements that will be incorporated into the engagement objectives. These measures will typically be service-specific, and no additional guidance on service-specific measures is planned for the eSCM-SP. Regardless of the objective measures that may be specified, the client's perceptions will shape the course of a client-provider relationship as much as the objective satisfaction of the service commitments. The engagement objectives should therefore include attributes that influence the customer's satisfaction in the market and service context even if they are not required by the client.

The service provider may also be expected to impose business objectives on the engagement, even if the organizational objectives have not yet been formalized. The engagement objectives will therefore address the service provider's business objectives as well as the client's requirements and engagement-specific factors.

Verification that the service commitments are met happens in del04, "Verify service commitments." This Practice also helps the service provider to establish operational definitions for service measures (e.g., identification of the attributes to measure, data collection methods, data analysis methods, etc). Status and progress measures are necessary to implement this Practice. Verification of the provider's conformance to the established processes and procedures happens in prf02, "Verify processes." Nonconformance measures are necessary to implement this Practice. Patterns of nonconformance may be used to initiate improvement actions. Resource consumption data are captured in knw08, "Resource consumption." Cost and effort measures are necessary to implement this Practice.

The focus of Level 2 is on the performance measures that are related to the engagement: status, progress, cost, effort, and nonconformance. The measures answer two questions:

- Is the service provider meeting its service commitments?
- Is the service provider doing the work as planned?

At Level 3, measurement crosses engagements and directly addresses organizational issues. Performance targets are set as part of the organizational objectives and the

set of measures to be used in analyzing organizational performance are determined in prf04, "Organizational objectives." Organizational performance targets will be largely derived from analyzing engagement level performance as described for Level 2. The periodic review and analysis of the performance measures are addressed in prf05, "Review organizational performance." This is done to verify that the organizational objectives are being met, and to address identifying opportunities for improvement. A measurement repository for the organization is established in knw04, "Process assets."
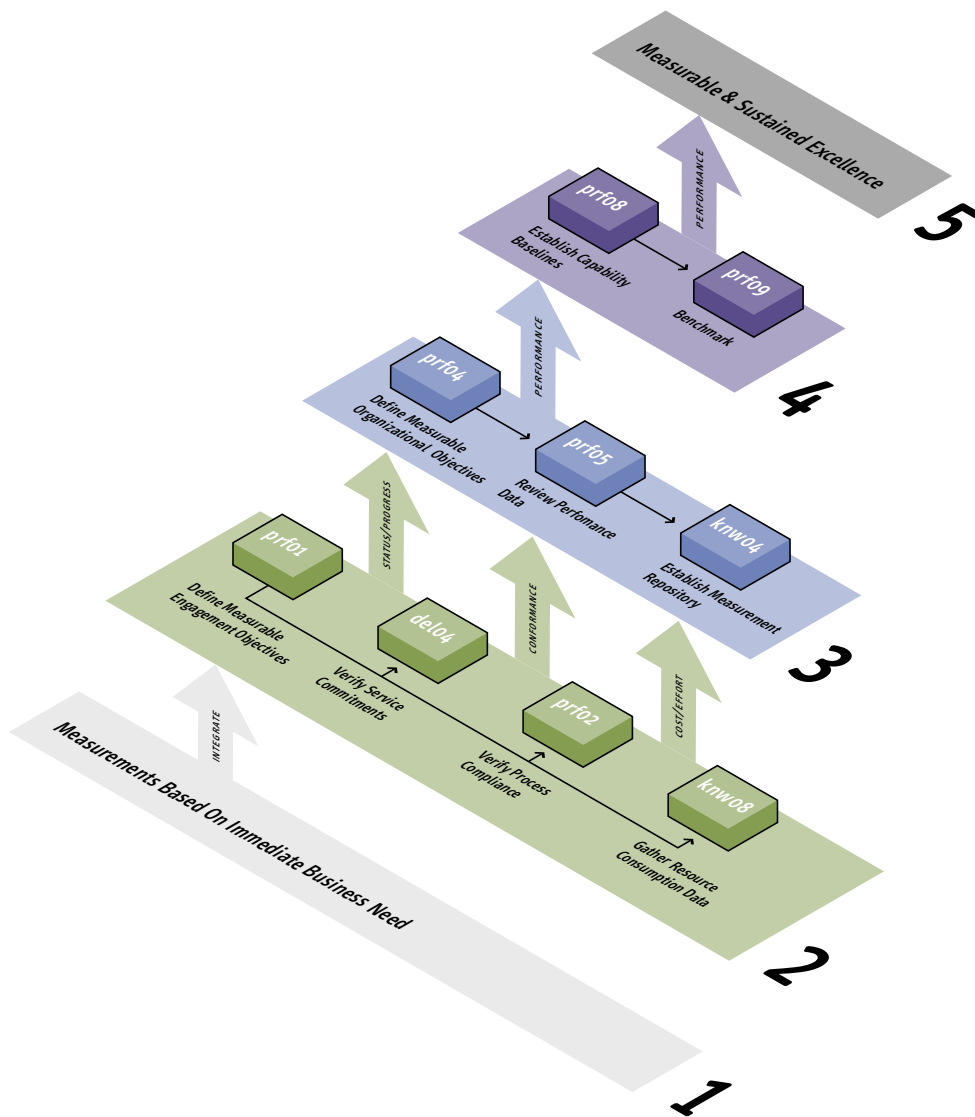
Figure 14.
Measurement Path through the eSCM-SP Capability Levels
The Practices identified here characterize the measurement core within the eSCM-SP.

At Level 4, the analysis of the engagement and organizational data is statistically sophisticated. Process capability baselines, which are based on the consistent performance of effective processes, are established in prf08, "Capability baselines." These support statistically valid conclusions about the expected performance, and comparisons between different processes. They allow the organization to benchmark its performance in order to identify opportunities for improvement and to set performance targets (prf09, "Benchmark").

The theme of Level 5 is sustained excellence. There are no additional Practices in the eSCM-SP at Level 5, but an organization that has implemented the Level 2, 3, and 4 Practices can be expected to measurably improve its performance. Quantitative performance measurement is the key to sustaining performance excellence.

Other Information

The information in this section will help in understanding and implementing the eSCM-SP. Further guidance is provided on documentation requirements and on additional terms that have special meaning in the eSCM-SP.

Additional Documentation Requirements

Every Practice in the model should be supported by documentation that provides guidance on how to perform that Practice. For policy, procedure, guideline, program, and plan Practices, the eSCM-SP sets a minimum standard for what type of documentation is required. For other Practices, the eSCM-SP allows business judgment to determine the appropriate level and type of documentation needed.

Within a Practice, individual Activities often require additional types of documentation. Many Activities explicitly refer to these requirements by naming the type of documentation expected (e.g., disaster recovery plan). In these cases, the organization must have one or more documents covering that Activity in order to meet the Practice's intent.

Many Activities implicitly refer to documentation: although a common document name is not provided, the wording of the Activity implies that a document must be created. For example, the phrase "Identify and document…" implies that a document will be created, but the nature of that document is left to the business judgment of the organization. Whenever Activities use the following verbs, there is an implicit requirement for documentation: create, define, develop, document, gather, or plan.

Terms with Special Meaning

There are sets of terms and phrases that have special meaning in the eSCM-SP. Some of these terms and phrases have already been defined in the discussion of the model structure (e.g., Activities and Capability Areas). Other terms and phrases are commonly used in the Practices (e.g., deployment, process assets, and work products). These terms and phrases are presented here to help the reader understand and interpret the Practices.

Competency

Personnel competency refers to the combination of skills, knowledge, and experience that specific personnel in the organization possess. At Level 2, providers should be able to identify the gaps between their needed skills and those possessed by the available staff (ppl04, "Assign responsibilities"), and address those needs by training or hiring (ppl08, "Personnel competencies"). Tracking skills, knowledge, and experience of personnel in a personnel competency inventory helps the organization identify gaps and meet staffing needs.

Workforce competency refers to the sets of personnel competencies that the organization has or needs in order to meet its organizational objectives. At Level 3, the organization takes a more proactive stance on addressing its current and long-term strategic competency needs by analyzing the sets of personnel competencies that are needed now or in the future (ppl06, "Workforce competencies").

The distinction between personnel and workforce competencies is the distinction between addressing the tactical needs of the engagements and the strategic needs of the organization. The strategic business plans of the organization must be considered when determining workforce competency needs.

Corrective versus Preventive Actions

The eSCM-SP v2 has three practices corresponding to the ISO 9001: 2001 concepts of correction (del05, "Correct problems"), corrective action (del06, "Prevent known problems"), and preventive action (prf10, "Prevent potential problems"), but the ISO 9001 terminology is not used. In ISO 9001, a corrective action is taken to eliminate the cause of a detected nonconformity; the corrective action prevents the recurrence of the corrected nonconformity. Preventive actions eliminate the causes of potential nonconformities. This usage of corrective action does not seem consistent with normal English usage. Rather than following the ISO 9001 usage, preventive actions in the eSCM-SP may be to prevent the recurrence of a known problem or to preclude

potential problems, and corrective actions are taken to correct a problem. Preventive actions for recurrence of a known problem may include work-arounds.

Deployment

Deployment refers to the extent to which services or assets and related support infrastructure are put in place.   This includes putting in place an adequate physical environment, personnel structure, technology infrastructure, and process assets such as policies, procedures, and guidelines. An asset has been fully deployed once it has been used by all appropriate entities within the organization. Considerations in deploying innovative assets include the need for training and support mechanisms such as help desks and user groups (prf11, "Deploy innovations").

Establish and Implement

The phrase "establish and implement" is used in a number of Practices in the eSCM-SP. Most notably, it is used in the Practice wording for all policy, procedure, guideline, and program Practices. As a whole, the phrase is intended to mean that the Activities for the Practice need to be defined and documented in addition to being deployed and put into effect as defined.

Establish means to "set up or found" [WordNet]. This involves creating appropriate guidance documentation that describes how the organization's personnel are expected to perform the Activities. Implement means "to put into practical effect; carry out" [American Heritage]. This involves deploying the guidance documentation and then performing work according to that guidance.

For example, knw01 is "Establish and implement a policy to share knowledge among stakeholders." Establishing the policy involves creating the policy and any other needed documentation. Implementing the policy involves deploying that policy documentation and then performing work in line with that documentation.

Measurement

There are attributes for the engagement and the organization that should be measured. Each attribute has associated measures, data, and indicators. For example, in a call center environment, an attribute may be the speed at which incoming calls are answered. Measures are the variables used to measure those attributes (e.g., the number of minutes a call is on hold before being answered). Data are the actual results of the measurement (e.g., 3 minutes on hold). An indicator is used to help evaluate the data and determine whether any actions are necessary.

A call center may have a hold time indicator, or target, of less than 2 minutes. When comparing the indicator (less than 2 minutes) to the actual result (3 minutes), the organization needs to decide whether actions need to be taken to bring the actual results in line with the indicator, and what those actions should be. Possible actions to take in this example are to hire more agents and/or add capacity to the telecommunications equipment.

Requirements

Requirements are needs or expectations that are either explicitly stated, generally implied, or implicit. Explicit requirements are typically provided by the client in the form of a Request for Proposal (RFP). "Generally implied" means that the need or expectation is customary, or a common practice for the organization, its client, and other stakeholders. Failure to address generally implied requirements would be considered to be unprofessional and could be considered to be negligence. Implicit requirements address a broader set of needs and expectations than generally implied requirements. Implicit requirements should be identified in requirements elicitation and needs analysis if they are to be binding on the service provider.

Expectations may come from different stakeholders (e.g., the client, end-users of the service, senior management in the organization, and regulatory bodies). Requirements are generated by the client and statutory or regulatory bodies, but the expectations of all stakeholders should be actively managed. Resolving the conflicts between requirements, whether explicit, generally implied, statutory, or regulatory, is necessary to establish engagement objectives (prf01, "Engagement objectives").

Resources

Resources include people, knowledge, assets (including work products and infrastructure), and finances needed to effectively perform the work. Specific types of resources may be called out in some Practices. For example, work environment needs are covered in ppl03, "Work environment," technology infrastructure is covered in tch01, "Acquire technology," and information resources are covered in knw02, "Provide required information."

A work product is an item, such as a written document, tool, or repository, that is associated with the execution of a process. It may be used, produced, or changed by a process. An asset is any "valuable item that is owned" [American Heritage]. In a purist sense, all assets are work products since all assets are associated with—or outputs of—some process. In the eSCM-SP, however, the term "work product" is used only in connection with the processes executed by the service provider. It is not

used to describe items provided by the client or a supplier or partner; it is not used to describe facilities and infrastructure assets, such as desks, buildings, or workstations. The term "asset," as used in the model, is a broader term than "work product" and is used to describe items used by the service provider, including those items provided by clients, suppliers, or partners.

Process assets are a particular type of asset (knw04). They are a collection of entities, maintained by an organization, for use in developing, tailoring, maintaining, and implementing processes. These process assets include sets of standard processes, guidelines for tailoring the standard processes, and the organization's measurement repository. Some of the process assets will be work products developed within the organization, such as policies and procedures. Some process assets may be externally supplied, such as knowledge management systems. In this example, the knowledge that populates the knowledge management system may be provided by the organization, but the tools that make it readily available may be externally supplied.

Documents are work products defined by information and its supporting medium. The medium can be paper, electronic media, photographs, etc. Some requirements, such as the requirement to be readable, apply to all types of documents. Some requirements, such as version control and change control, may be specific to particular types of documents (e.g., the service specification). Documents include guidance documents (e.g., policies, procedures, guidelines, templates) and artifacts (e.g., reports, records).

Risk

Risk management is a crucial part of successfully managing a project or organization. The proactive side of risk management deals with identifying risks that could impact the work, and being prepared to prevent risks from occurring, or minimizing their impact, where that is feasible (thr01, "Risk management," thr02, "Engagement risk," thr03, "Risk across engagements"). The reactive side of risk management involves dealing with risks as they become problems (del05, "Correct problems").

One type of risk is that associated with security, privacy, confidentiality, and protection of intellectual property. Addressing security risks is the proactive side of dealing with these related topics (thr04, "Security"). If there is a security breach, appropriately addressing the problem is necessary. Addressing violations of privacy, confidentiality, or intellectual property (thr05, "Intellectual property") may involve legal remedies, and the adequacy of the security mechanisms may be evidence that the service provider was not negligent if an illegal act has occurred.

Disasters are a type of risk that must be considered, although fires, floods, acts of war, terrorism, etc., are outside the control of the service provider (thr07, "Disaster recovery"). A capable service provider will be prepared to continue to deliver an acceptable level of service in the event of a catastrophic event regardless of its cause (within reason).

Risk exposure is the product of the probability of the risk becoming a problem and its potential impact. The risk exposure helps the organization to identify the risks that should be actively managed, those that should be tracked, and those that can be reasonably ignored.

Suppliers and Partners

Suppliers provide products and services to the service provider. In some cases these products and services may be viewed as commodities, such as pencils and paperclips, with many potential suppliers. In such cases supplier management is a relatively trivial matter. In other cases the supplier provides products or services that are critical to the organization's success. For example, there may be a single telecommunications supplier available and that supplier may be heavily regulated. In these cases effective supplier management may be a critical task for the organization (rel02, "Select suppliers & partners").

Partners also provide products and services, but the interdependencies between partners are based on a relatively equal relationship. Many types of partnership exist, including co-sourcing, multi-sourcing, alliances, joint ventures, and in-sourcing. In a co-sourcing arrangement, two service providers work together to fulfill an agreement for a client. In multi-sourcing, multiple service providers are managed by the client. In alliances, multiple service providers collaborate to serve one or more clients. In joint ventures, the client and one or more service providers go into a joint business venture—a partnership. In in-sourcing, a group within the client organization is selected to provide services, but is largely treated as a separate entity.

The Practices

knw

Knowledge Management Practices

Knowledge Management Practices focus on managing information and knowledge systems so personnel have easy access to the knowledge they need to work effectively. All Knowledge Management Practices are Ongoing. These Practices cover the following:

- Demonstrating a commitment to knowledge sharing through formal policies.

- Providing the information needed by personnel in a knowledge system that allows controlled but efficient access.

- Effectively managing the use of process assets across the organization, ensuring consistency as appropriate. Reusing process assets to improve the effectiveness of personnel and to take advantage of expert practices.

- Controlling changes to the work products through formal version control and change control.

- Maintaining information on resource usage and lessons learned to improve current and future performance.

knw01   Share Knowledge
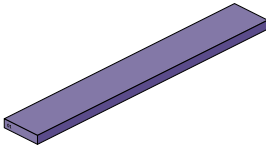
Knowledge Management

Ongoing

Level 4

Policy

Establish and implement a policy to share knowledge among stakeholders.

Encourage knowledge sharing among stakeholders in order to enable them to learn and improve performance while they establish stronger relationships among themselves. A knowledge sharing policy also clarifies the rules by which knowledge can be shared between the organization, client, suppliers, and partners.

Activities

a. Provide support for creating and maintaining a policy for sharing knowledge among stakeholders across the organization.

1. Provide sponsorship and resources for creating the policy. (knw04, prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the policy as appropriate. (knw02, rel05)

> → Reviews should address whether the policy is consistent with current engagement and organizational objectives, and should resolve any conflicts.

3. Maintain and improve the policy as appropriate. (knw04, knw07)

b. Document the policy for sharing knowledge among stakeholders. Documentation includes the following Activities:

1. Communicate the purpose for sharing knowledge.

2. Identify stakeholders to participate in knowledge sharing.

3. Establish procedures and incentives to encourage sharing and the contribution of useful knowledge.

> → Incentives may include rewards and recognition for improvements attributable to knowledge sharing.

4. Create systems and processes for knowledge sharing among stakeholders.

> → Methods for sharing knowledge include meetings, queriable databases, intranets, bulletin boards, and seminars.

5. Track knowledge sharing tasks, taking action when appropriate.

c. Implement knowledge sharing, according to the policy.

1. Communicate the availability and location of the policy to relevant stakeholders. (knw02, knw03)

2. Provide resources to effectively perform the work. (knw02, knw03, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl05, ppl07, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02, knw03)

5. Verify that the work is consistently and effectively performed according to the policy across the organization. (knw04, prf02)

knw02   Provide Required Information   **S**
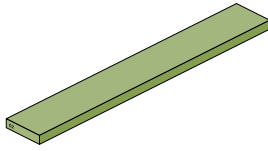
Knowledge Management

Ongoing

Level 2

Identify, control, and provide the information that personnel need to perform their work.

Provide access to the information that is essential for personnel to do their work in order to enable personnel to work efficiently. Appropriate levels of control must be maintained, including version control of documents, access control to ensure that the appropriate people have access to the appropriate information, and information maintenance that is consistent with the organization's approach (policies and procedures) for security and the protection of intellectual property. Easy access to required information enables personnel to be more efficient and effective in the performance of their work.

Activities

a. Provide support for creating and maintaining the work products and tasks for identifying, controlling, and providing the information personnel need to perform their work.

1. Provide sponsorship and resources for creating the work products and tasks for identifying, controlling, and providing the information personnel need to perform their work. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving work products and tasks as appropriate. (knw02)

3. Maintain and improve work products and tasks as appropriate. (knw07)

> → Action taken to increase effectiveness includes improving access to information with better software, hardware, and network bandwidth.

b. Document work products and tasks needed for identifying, controlling, and providing information personnel need to perform their work. Documentation includes the following Activities:

1. Identify the information needed by personnel to perform their work.

> → Information needed by personnel may include guidance on how to perform their work (e.g., policies, procedures, guidelines), and on how to use or create work products (e.g., project plans, service specifications, reports, historical data).

2. Identify personnel, or other stakeholders, requiring access to the information.

3. Select tools and methods for organizing, controlling, and providing the information.

> → Methods for controlling information include version control, templates, naming conventions, etc. Organizations may use intranets, the Internet, compact discs, and hard copy to provide access to required information.

4. Determine and communicate the steps personnel need to follow to request additional information.

5. Verify that access and control of information comply with procedures for security and protection of intellectual property.

> → Verify that information access and control meet the client's and other stakeholders' requirements for security and protection of intellectual property.

6. Review the identified information for correctness, clarity, and adequacy before making it available.

7. Modify the information collected, as needed, within defined time frames.

8. Provide the information to appropriate personnel.

→ Providing information includes anticipating, as well as responding to, information requests. For instance, procedures and handbooks should be provided automatically to relevant stakeholders, whereas market information could be provided upon request.

c. Identify, control, and make available the information personnel need to perform their work, using the documented work products and tasks.

1. Communicate the tasks and the availability and location of work products to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed. (prf02)

knw03   Knowledge System   Ⓢ
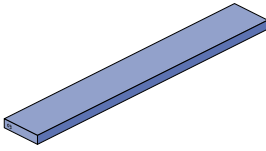
Knowledge Management

Ongoing

Level 3

Establish and maintain a knowledge system to identify, control, and provide information.

Provide a coordinated knowledge system in order to allow the organization to keep information current and to allow personnel to easily locate required information. A knowledge system is not necessarily a central electronic repository of information, but is rather a coordinated method for managing and communicating needed information. A knowledge system may be implemented through one or more databases, file systems, physical storage media, or other appropriate methods for systematically providing the necessary access and control of information.

This Practice expands on knw02, "Provide required information," which covers the provision of information needed for personnel to perform their work. The focus of this Practice is expanded to control and provide information and knowledge through a formal knowledge system. This Practice is closely related to knw04, "Process assets," since this knowledge system is the primary place where process assets are maintained, and is considered a process asset itself.

Activities

a. Provide support for creating and maintaining the work products and tasks for establishing a knowledge system.

1. Provide sponsorship and resources for creating the work products and tasks for establishing a knowledge system. (knw04, prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving work products and tasks as appropriate. (knw02, rel05)

3. Maintain and improve work products and tasks as appropriate. (knw04, knw07)

b. Document work products and tasks required for establishing and maintaining a knowledge system. Documentation includes the following Activities:

1. Identify sources and classes of information needed to support organizational objectives.

    a) Identify information about clients.

    b) Identify information about employees.

    c) Identify information about suppliers and partners.

    d) Identify information to support the Sourcing Life-cycle.

    → Information to support the Sourcing Life-cycle includes information needed during Initiation, Delivery, and Completion. Information needed by personnel may include guidance on how to perform their work (e.g., policies, procedures, guidelines), work products (e.g., project plans, service specifications, reports, historical data).

    e) Identify personnel, or other stakeholders, requiring access to the information.

2. Create a plan for establishing and maintaining the knowledge system.

    → The plan for implementing the knowledge system should include activities needed to collect, organize, review, and provide the needed information.

3. Collect, organize, and review the identified information according to the plan.

a) Select tools and methods for collecting and maintaining information.

b) Collect identified information using selected tools and methods.

c) Review the identified information for correctness, clarity, and adequacy.

d) Determine methods for organizing the identified information.

e) Determine methods for controlling the identified information.

4. Provide the collected information according to the plan.

a) Create an information communication strategy.

→ The organization needs to decide what and how information gets communicated. Some information will be provided on demand (e.g., user requests for help), while other information will be supplied as it becomes available (e.g., broadcast of a change in policy).

b) Select methods and media for providing information to relevant stakeholders.

→ Methods and media should support the communication strategy. Some methods and media are more suited for broadcast (e.g., newsletters, posters, and e-mail announcements) versus on-demand information (e.g., web browser, knowledge databases, and telephone help desk).

c) Create guidelines on how to use the knowledge system.

d) Provide the information to appropriate personnel.

5. Track status and progress against the plan.

a) Determine actions to take when progress deviates from the plan.

b) Take actions and track them to closure.

6. Track usage of available knowledge, taking action when appropriate.

→ Attributes to track may include ease of access, response time of the knowledge system, availability of needed information, and information usage. Actions taken may include increasing infrastructure capacity, removing obsolete information, and obtaining modified information.

c. Establish and maintain a knowledge system, using the documented work products and tasks.

1. Communicate the tasks and the availability and location of work products to relevant stakeholders. (knw02, knw03)

2. Provide resources to effectively perform the work. (knw02, knw03, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl05, ppl07, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02, knw03)

5. Verify that the work is consistently and effectively performed across the organization. (knw04, prf02)

knw04   Process Assets   Ⓢ
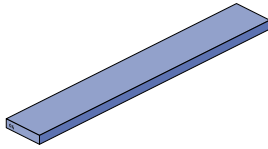
Knowledge Management

Ongoing

Level 3

Establish and maintain a set of process assets for use across the organization.

Create a consistent set of process assets across engagements in order to help the organization achieve economies of scale and apply best practices from prior engagements to similar new engagements. Focusing on systematically collecting knowledge is fundamental to organizational learning. Providing a coordinated set of process assets enables the collected knowledge to be made available consistently across engagements.

Process assets include any guidance documentation—lasting documents that provides guidance on how work should be performed—such as processes, policies, procedures, guidelines, job aids, templates, checklists, etc. Process assets also include infrastructure, such as repositories and the tools needed to perform the work described in the guidance documentation.

This Practice is closely related to knw03, "Knowledge system," which describes the use of a knowledge system for identifying, controlling, and communicating information. This knowledge system is the primary place where process assets are maintained, and is considered a process asset itself. This Practice is related to all other knowledge management Practices since the collected knowledge will typically become a process asset (e.g., reusable work products from knw06, "Reuse").

Activities

a. Provide support for creating and maintaining the work products and tasks for establishing and maintaining a set of process assets.

1. Provide sponsorship and resources for creating the work products and tasks for establishing and maintaining a set of process assets. (knw04, prf03)

> → Support for establishing and maintaining process assets typically includes the creation of a process team that has responsibility for these tasks. The role of the process team should be communicated broadly to the organization, so the personnel have a clear understanding of how process management is being performed and how personnel are expected to interact with the process team (e.g., to submit improvement suggestions).

2. Involve relevant stakeholders in creating, improving, reviewing, and approving work products and tasks as appropriate. (knw02, rel05)

3. Maintain and improve work products and tasks as appropriate. (knw04, knw07)

b. Document work products and tasks required for establishing and maintaining a set of process assets. Documentation includes the following Activities:

1. Identify and establish needed process assets.

> a) Identify the process assets to establish and maintain based on organizational objectives.

> b) Identify relevant stakeholders for each process asset.

> → Relevant stakeholders include senior management, engagement managers, process owners, process users, process customers, the client, suppliers, and partners.

> → Management establishes policies, sponsors process management, and acts as a role model to communicate that process discipline and improvement are important to the organization. Suppliers and partners may impact the process by executing tasks in it, interacting with it, or supporting it. Customers of the process provide vital feedback on whether the process is

achieving tactical goals. The client provides feedback at a more strategic level on whether the process is addressing client needs adequately.

c) Identify the process owners responsible for coordinating the creation, maintenance, and improvement of the process assets.

→ Process owners should coordinate with process users in defining and improving process assets. The general recommendation is to begin with the "as is" process and transition to the "should be" process in collaboration with the process users.

d) Identify intellectual property ownership and restrictions associated with identified process assets.

e) Identify and obtain tools needed to establish and maintain process assets.

f) Establish the identified process assets.

2. Establish a measurement repository to contain the data collected for the process assets.

3. Make process assets and data available to relevant stakeholders.

→ Training and communication are important aspects of deploying process assets, and changes to process assets.

4. Establish tailoring guidelines that establish parameters for when it is appropriate, and permissible, to tailor process assets for specific engagement needs.

→ Tailoring guidelines establish bounds on what additions, deletions, and changes to a documented process are allowed when tailoring a process asset.

5. Review tailoring of the process assets, as appropriate.

→ It is important to distinguish the notions of "tailoring" and "improvement." Tailoring changes are made to account for specific needs of one group. For example, if only one engagement involves co-sourcing, that engagement may need to change the security procedures to account for non-employee access to restricted data. This change only occurs in the one engagement, since this situation is specific to it. In contrast, improvements to the organization's process assets are made based on organizational learning and are intended to make a change that benefits any group using that process asset in the future. For example, a security procedure is modified to account for a new type of threat that wasn't being tracked previously.

c. Establish and maintain a set of process assets, using the documented work products and tasks.

1. Communicate the tasks and the availability and location of work products to relevant stakeholders. (knw02, knw03)

2. Provide resources to effectively perform the work. (knw02, knw03, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl05, ppl07, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02, knw03)

5. Verify that the work is consistently and effectively performed across the organization. (knw04, prf02)

→ Processes should be assessed for effectiveness and efficiency. The assessment should include measurement against engagement and organizational objectives. It may also include assessment against a standard, such as a quality model.

knw05   Engagement Knowledge
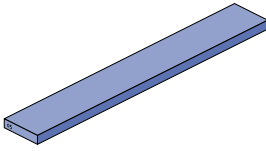
Knowledge Management

Ongoing

Level 3

Analyze and use knowledge gained from client engagements.

Use lessons learned from current and past engagements in order to make improvements in current and future engagements. Effectively analyzing and using the knowledge gained from prior and current engagements enables the organization to reuse its best practices, to address problems that have occurred, and to improve overall performance in current and future engagements.

This Practice is related to rel05, "Stakeholder information," prf06, "Make improvements," and knw08, "Resource consumption." This Practice covers analyzing and using engagement knowledge; resource consumption data from knw08 is a type of engagement knowledge. Both this Practice and rel05 analyze and use information from engagements. The focus of this Practice is on using this information as the basis for improvement on current and future engagements, as managed in prf06. The focus of rel05 is on using this information, with a particular emphasis on stakeholder feedback, as a basis for improving relationships and better meeting the needs of stakeholders.

Activities

a. Provide support for creating and maintaining the work products and tasks for analyzing knowledge gained from client engagements.

1. Provide sponsorship and resources for creating the work products and tasks for analyzing knowledge gained from client engagements. (knw04, prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving work products and tasks as appropriate. (knw02, rel05)

3. Maintain and improve work products and tasks as appropriate. (knw04, knw07)

b. Document work products and tasks required for analyzing knowledge gained from client engagements. Documentation includes the following Activities:

1. Determine types of engagement knowledge that need to be collected and analyzed.

    a) Determine information about process asset use to be collected and analyzed.

    b) Determine information needed to analyze work products for reuse.

    c) Determine types of lessons learned to be collected and analyzed.

    → Types of lessons learned may include resource consumption, best practices in use, innovative approaches to problem resolution.

2. Identify sources for engagement knowledge.

    → Lessons learned are typically obtained by collecting feedback from stakeholders involved in an engagement. Milestone review sessions and end-of-project sessions are common ways of collecting feedback. Information about the use of process assets can also be a valuable source of information, since it can help identify which process assets can be improved and which can be effectively reused.

3. Collect and maintain the engagement knowledge.

a) Select tools and methods to collect and maintain knowledge, creating or purchasing tools and methods as appropriate.

→ Methods to collect knowledge can include feedback sessions, surveys, and analysis of frequency of process assets and other work products used.

b) Determine time-frames for collecting and maintaining engagement knowledge.

c) Identify contact personnel and media for collecting engagement knowledge.

d) Collect and organize obtained engagement knowledge into the knowledge system.

4. Analyze the collected engagement knowledge.

a) Analyze lessons learned.

b) Analyze process asset use.

c) Analyze work products for reuse.

→ Work products that are selected for reuse become part of the set of process assets.

d) Analyze applicability of knowledge to other areas of the organization.

e) Identify opportunities for improvement.

5. Use engagement knowledge gained, as appropriate.

→ Knowledge gained should be used to maintain and improve service on current and future engagements. Knowledge gained is typically used as the basis for selecting work products for reuse and for making organizational improvements.

c. Analyze knowledge gained from client engagements, using the documented work products and tasks.

1. Communicate the tasks and the availability and location of work products to relevant stakeholders. (knw02, knw03)

2. Provide resources to effectively perform the work. (knw02, knw03, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl05, ppl07, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02, knw03)

5. Verify that the work is consistently and effectively performed across the organization. (knw04, prf02)

knw06   Reuse
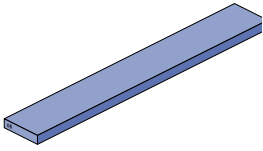
Knowledge Management

Ongoing

Level 3

Identify and reuse work products.

Provide access to prior work products in order to enable personnel to take advantage of past successes and to propagate expert practices. Reuse of work products can help an organization save considerable amounts of effort, time, and cost while also helping to standardize the quality of work products.

Work products are used during the sourcing process, and include work products internal to the organization (e.g., policies, technical designs), client deliverables (e.g., customized software, user documentation), and service components (e.g., service specifications, service delivery procedures). Work products identified for reuse become process assets.

Activities

a. Provide support for creating and maintaining the work products and tasks for identifying and reusing work products.

1. Provide sponsorship and resources for creating the work products and tasks for identifying and reusing work products. (knw04, prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving work products and tasks as appropriate. (knw02, rel05)

3. Maintain and improve work products and tasks as appropriate. (knw04, knw07)

    → Reusable work products will evolve over time as problems are corrected and enhancements are added in response to changing needs.

b. Document work products and tasks required for identifying and reusing work products. Documentation includes the following Activities:

1. Identify reusable work products.

2. Collect identified work products.

3. Review collected work products before making them available for reuse.

    → Topics to be reviewed include intellectual property issues, completeness, correctness, usability, compliance with organizational standards, and readiness for use.

4. Modify collected work products, based on the review.

    → Modifications to improve content may include removing work products that are not being reused and removing client- or engagement-specific information.

5. Create guidelines for reuse of the identified work products.

6. Provide the reusable work products to relevant stakeholders.

    → Electronic catalogs or databases are methods the organization can use to provide reusable work products.

c. Identify and reuse work products, using the documented work products and tasks.

1. Communicate the tasks and the availability and location of work products to relevant stakeholders. (knw02, knw03)

2. Provide resources to effectively perform the work. (knw02, knw03, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl05, ppl07, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02, knw03)

5. Verify that the work is consistently and effectively performed across the organization. (knw04, prf02)

knw07   Version & Change Control   Ⓢ
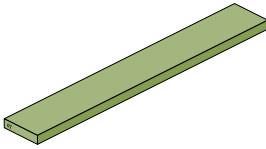
Knowledge Management

Ongoing

Level 2

Procedure

Establish and implement procedures to apply version control and change control to work products.

Control changes to work products in order to maintain the integrity of the service. Version control involves tracking changes to work products in a controlled manner, with the version of each work product being identified. Change control consists of the analysis, coordination, approval or disapproval, and implementation of changes to work products. Both version control and change control are needed to maintain the integrity of the service, but the rigor used to control changes will depend on the needs of the client and the organization.

Work products placed under version and change control include work products internal to the organization (e.g., work instructions, process specifications, quality specifications), client deliverables (e.g., customized software, user documentation), and service components (e.g., service specifications, service delivery procedures).

Activities

a. Provide support for creating and maintaining the procedures for version control and change control.

1. Provide sponsorship and resources for creating the procedures. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02)

3. Maintain and improve the procedures as appropriate. (knw07)

b. Document the procedures for version control and change control. Documentation includes the following Activities:

1. Create or obtain version and change control methods and tools, as appropriate.

   → Version control methods can include a version numbering system.

2. Identify the work products to be controlled.

3. Review and obtain approval for proposed changes to the identified work products by the relevant stakeholders.

   → Authority for reviewing and approving changes to work products under change control is typically formally established in a change control board or other group. Stakeholders are responsible for reviewing changes for their impact, benefits, and risks.

4. Make approved changes to the identified work products.

5. Track changes made to the identified work products, taking action when appropriate.

   → Changes should be verified against expected results.

c. Implement version and change control, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed according to the procedures. (prf02)

knw08

Resource Consumption
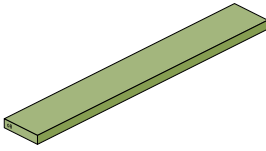
Knowledge Management

Ongoing

Level 2

Procedure

Establish and implement procedures to analyze and use information on resources consumed.

Understand resource usage for current client engagements in order to better understand and control resource utilization. This understanding is the basis of accurate estimates and planning for the resources required for new client engagements. Resource analysis enables the organization to accurately estimate future usage and balance needs, while delivering services to existing clients.

This Practice is related to knw05, "Engagement knowledge," prf03, "Adequate resources," sdd03, "Plan design & deployment," and del01, "Plan service delivery." Analyzing and using engagement knowledge is covered by knw05; resource consumption data is a type of engagement knowledge. Analysis of resource consumption data is fundamental for deciding the adequacy of resources in prf03. Resource consumption data is also fundamental to tracking performance against plans, as performed in sdd03 and del01.

Activities

a. Provide support for creating and maintaining the procedures for analyzing and using information on resource consumption.

1. Provide sponsorship and resources for creating the procedures. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02)

3. Maintain and improve the procedures as appropriate. (knw07)

b. Document the procedures for analyzing and using information on resource consumption. Documentation includes the following Activities:

1. Identify the resource data that needs to be collected, aggregated, and analyzed.

> → Examples of resource data include the number of personnel utilized, duration of tasks, technology used (e.g., computers, storage devices, media, software), network utilization, and transaction rates.

2. Select and document the methods used to collect, aggregate, and analyze the identified resource data.

3. Document resource utilization information for the tasks performed on each client engagement.

4. Aggregate and analyze the data collected.

> → Data should be aggregated into comparison sets for analysis. Comparison sets are sets of data similar to each other. Inappropriate aggregation will lead to incorrect conclusions.

5. Identify and document any inefficiencies in resource utilization by comparing actual to planned utilization levels.

6. Identify other opportunities to use data on resource consumption.

→ Data and analysis results can be used to estimate needs for new engagements, to adjust pricing guidelines, and to determine feasibility of requirements. Resource consumption data are also critical inputs into tracking progress against plans.

7. Determine actions needed.

c. Implement resource consumption analysis, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed according to the procedures. (prf02)

ppl

People Management Practices

People Management Practices focus on managing and motivating personnel to effectively deliver services. They address understanding the organization's workforce and personnel competency needs, filling those needs, and encouraging the appropriate behaviors to effectively deliver service. All People Management Practices are Ongoing. They cover the following:

- Demonstrating a commitment to people through formal policies covering participation of personnel in decision-making, career development, and encouragement of innovation.

- Providing an adequate work environment.

- Clearly defining and communicating roles and responsibilities to personnel.

- Identifying workforce and personnel competency needs, and developing (i.e., training) or acquiring the necessary competencies.

- Appraising personnel performance on a timely basis, and providing appropriate rewards and recognition to encourage the desired performance.

ppl01   Encourage Innovation
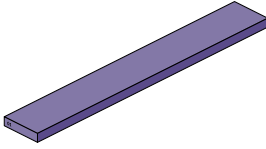
People Management

Ongoing

Level 4

Policy

Establish and implement a policy to encourage and support innovation across the organization.

Demonstrate a management commitment to innovation and encourage personnel to adopt innovative approaches to performing work, in order to benefit the organization and its clients. Process and service innovation can lead to breakthrough improvements in performance that deliver improved value to clients. In turn, it can lead to new business opportunities and improved client satisfaction.

Once these innovative opportunities are researched and identified, they must be deployed and adopted in the appropriate parts of the organization. Part of this process is translating the innovative idea into a work product, process, or service that can be used to benefit the organization or its clients. These tasks are covered in prf11, "Deploy innovations."

Activities

a. Provide support for creating and maintaining a policy for encouraging and supporting innovation across the organization.

1. Provide sponsorship and resources for creating the policy. (knw04, prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the policy as appropriate. (knw02, rel05)

> → Reviews should address whether the policy is consistent with current engagement and organizational objectives, and should resolve any conflicts.

3. Maintain and improve the policy as appropriate. (knw04, knw07)

b. Document the policy for encouraging and supporting innovation. Documentation includes the following Activities:

1. Communicate the purpose for encouraging and supporting innovation.

2. Identify actions that encourage and support innovation.

> → Examples of approaches to encourage innovation include providing personnel with flexibility to choose solutions that achieve assigned objectives, implementing new management techniques, establishing improvement initiatives, and implementing new tools to foster creative thinking and communication.

a) Create rewards and recognition that encourage innovation.

> → This may include publishing information on innovative approaches that were implemented in the organization, and giving formal recognition to personnel responsible for those innovations.

b) Identify opportunities for personnel to learn about innovation in the organization and industry.

c) Address innovation goals in personnel's career plans.

> → Innovation is risky by its nature. Encouragement of innovation includes not punishing failure.

d) Encourage identification of value creation opportunities.

3. Verify that innovative ideas raised by personnel are analyzed and deployed in the organization, as appropriate.

4. Identify support and infrastructure needed to translate the innovations into a value-added work product, process, or service, and deploy them across the organization.

c. Implement actions to encourage and support innovation, according to the policy.

1. Communicate the availability and location of the policy to relevant stakeholders. (knw02, knw03)

2. Provide resources to effectively perform the work. (knw02, knw03, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl05, ppl07, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02, knw03)

5. Verify that the work is consistently and effectively performed according to the policy across the organization. (knw04, prf02)

ppl02   Participation in Decisions
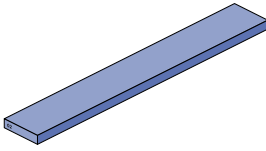
People Management

Ongoing

Level 3

Policy

Establish and implement a policy on the participation of personnel in decisions that affect their work commitments.

Encourage participation in the organization's decision-making process by the affected personnel, including individuals and teams, in order to improve the quality of decisions. Participation in decision-making leverages the knowledge of the staff, motivates them to perform better, and establishes their buy-in to work commitments. Decision-making styles may vary from consensus-based to hierarchical. This policy should be consistent with whichever styles are used in the organization.

Activities

a. Provide support for creating and maintaining a policy on the participation of personnel in decisions that affect their work commitments across the organization.

1. Provide sponsorship and resources for creating the policy. (knw04, prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the policy as appropriate. (knw02, rel05)

> → Reviews should address whether the policy is consistent with current engagement and organizational objectives, and should resolve any conflicts.

3. Maintain and improve the policy as appropriate. (knw04, knw07)

b. Document the policy on the participation of personnel in decisions that affect their work commitments. Documentation includes the following Activities:

1. Communicate the purpose for the participation of personnel in decisions that affect their work commitments.

2. Communicate potential work commitments to personnel.

3. Obtain feedback from affected personnel and teams about the work commitments.

> → An example of feedback on work commitments is to ask personnel to review estimates and targets for work that is being assigned to them and to agree that those targets can be achieved. This gives personnel the opportunity to raise concerns about inaccurate estimates or unreasonable targets.

4. Use feedback in decisions made about the work commitments.

5. Involve personnel, as appropriate, in reviewing the progress against commitments and in modifying those commitments.

c. Implement actions to get participation of personnel in decisions that affect their work commitments, according to the policy.

1. Communicate the availability and location of the policy to relevant stakeholders. (knw02, knw03)

2. Provide resources to effectively perform the work. (knw02, knw03, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl05, ppl07, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02, knw03)

5. Verify that the work is consistently and effectively performed according to the policy across the organization. (knw04, prf02)

ppl03   Work Environment   Ⓢ
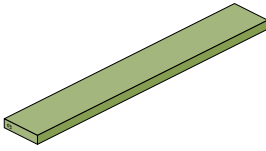
People Management

Ongoing

Level 2

Establish and maintain a work environment that enables personnel to work effectively.

Provide an effective work environment in order to improve the satisfaction, retention, and performance of personnel. An effective work environment supports the ability of personnel to perform work, thus enabling the organization to meet client requirements consistently. In addition to the physical workspace, the work environment includes corporate culture (e.g., grievance handling).

Activities

a. Provide support for creating and maintaining the work products and tasks for establishing and maintaining a work environment that enables personnel to work effectively.

1. Provide sponsorship and resources for creating the work products and tasks for establishing and maintaining a work environment that enables personnel to work effectively. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving work products and tasks as appropriate. (knw02)

3. Maintain and improve work products and tasks as appropriate. (knw07)

b. Document work products and tasks required for establishing and maintaining an effective work environment. Documentation includes the following Activities:

1. Identify the characteristics of the work environment that impact work effectiveness and the factors affecting personnel.

   → Factors that affect personnel include noise, air and water quality, lighting, ergonomics, harassment, and safety.

2. Identify the physical, social, and legal requirements of the work environment.

   → These requirements are identified from the service design, industry norms, statutory or regulatory requirements, client requirements, and feedback from personnel. The physical environment includes individual and public elements such as space, storage, air-conditioning, water, light, safety, rest rooms, and food. Public spaces include space for meetings, training, eating, and recreation. Feedback from personnel should be obtained on a regular basis to identify work environment issues that may affect job satisfaction and performance.

3. Create designs for a work environment to meet identified requirements.

4. Create dispute handling and escalation methods for personnel.

   → Internal dispute handling and escalation, including grievances, is typically handled through a different process than disputes with either clients or suppliers and partners. However, the process will be similar in that methods for all three need to be defined for identifying, managing, and tracking disputes.

   a) Select and document methods to prioritize personnel disputes or other problems.

   b) Identify types of potential personnel disputes or problems to be escalated.

   c) Determine decision-making and prioritization processes.

   d) Determine notification rules for each priority.

→ Rules include who is notified at each stage, under what conditions the rules change, and what systems are necessary to support the notification rules.

e) Determine reports needed.

5. Deploy a work environment according to the design.

a) Coordinate modification, acquisition, and establishment of facilities.

b) Coordinate movement, transfers, and delivery of equipment.

→ Movement of equipment may include relocation of workstations and furniture within a site, while transfers typically involve relocation and change of ownership within sites or entities.

c) Maintain an inventory of facilities and equipment.

6. Track personnel disputes and escalations.

a) Determine actions to take when personnel disputes arise or when problems need to be escalated.

b) Take actions and track them to closure.

c. Establish and maintain an effective work environment, using the documented work products and tasks.

1. Communicate the tasks and the availability and location of work products to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

→ Information communicated about the work environment may include fire safety procedures, workspace requirements, and space and phone assignments.

5. Verify that the work is consistently and effectively performed. (prf02)

→ Verification of the quality of the work environment is carried out through collecting feedback from personnel, inspections, and comparison with industry norms.

ppl04   Assign Responsibilities   Ⓢ
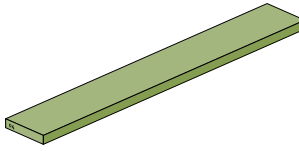
Assign roles and responsibilities to personnel based on appropriate personnel competencies.

People Management

Ongoing

Level 2

Understand personnel competencies and use them as a basis for role assignments, in order to help ensure that qualified personnel are assigned the appropriate roles. Having qualified personnel helps to ensure that work can be performed as assigned, which leads to meeting and exceeding client expectations. Personnel competency is the combination of skills, knowledge, and experience that specific personnel in the organization possess.

This Practice is related to ppl08, "Personnel competencies," which focuses on providing training to meet personnel competency needs that were identified while assigning roles and responsibilities in this Practice.

Activities

a. Provide support for creating and maintaining the work products and tasks for assigning roles and responsibilities to personnel.

1. Provide sponsorship and resources for creating the work products and tasks for assigning roles and responsibilities to personnel. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving work products and tasks as appropriate. (knw02)

3. Maintain and improve work products and tasks as appropriate. (knw07)

b. Document work products and tasks required for assigning roles and responsibilities to personnel. Documentation includes the following Activities:

1. Determine and document the roles, responsibilities, and authority needed to meet client and organizational requirements.

2. Identify the personnel competencies required to perform the defined roles.

> → A role is analyzed for required competencies by identifying the specific tasks to be performed, the proposed reporting structure, the delegation of authority, and decisions to be made. Specific tasks are identified based on client requirements, feedback, and previous experiences. Competencies of assigned personnel are defined through structured evaluations, performance reviews, on-the-job evaluations, work experience, and prior training or education.

3. Identify gaps in personnel competencies.

> → Personnel competencies, and associated gaps, are typically documented in personnel competency inventory records. These records include a list of personnel and their competencies.

4. Obtain personnel with requisite competencies from external sources, as appropriate.

> → Acquisition of personnel can be accomplished by hiring or sourcing.

5. Assign personnel to the defined roles based on personnel competencies.

c. Assign roles and responsibilities, using the documented work products and tasks.

1. Communicate the tasks and the availability and location of work products to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed. (prf02)

ppl05   Define Roles   **S**
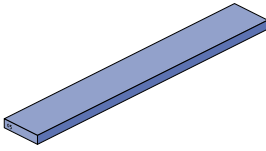
People Management

Ongoing

Level 3

Define and communicate the roles, responsibilities, and authority of personnel in the organization.

Clearly define the roles, responsibilities, and authority of personnel, in order to enable them to effectively perform their work. Aligning personnel's roles, responsibilities, and authority with organizational objectives should result in improved performance. Periodically reviewing them helps to verify the effectiveness of personnel's roles and their assignments. Also, clearly defining the primary and secondary responsibilities helps to ensure that important functions and tasks in the organization are covered.

This Practice builds upon the roles and responsibilities that are initially defined in ppl04, "Assign responsibilities." The focus of ppl04 is on assigning qualified personnel to identified roles in order to effectively deliver service for a client engagement. The focus of this Practice broadens this to align roles and responsibilities not only with engagement requirements but also with long-term organizational objectives. This ensures that not only are qualified personnel assigned to roles, but that the defined roles are the ones the organization needs in order to meet its objectives.

Activities

a. Provide support for creating and maintaining the work products and tasks for defining and communicating the roles, responsibilities, and authority of personnel in the organization.

1. Provide sponsorship and resources for creating the work products and tasks for defining and communicating the roles, responsibilities, and authority of personnel in the organization. (knw04, prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving work products and tasks as appropriate. (knw02, rel05)

3. Maintain and improve work products and tasks as appropriate. (knw04, knw07)

b. Document work products and tasks required for defining and communicating the roles, responsibilities, and authority of personnel in the organization. Documentation includes the following Activities:

1. Determine and document the functional areas needed within the organization and their associated tasks.

> → Organizational and engagement objectives should be used as the basis for deciding which functions and tasks need to exist in the organization. Typical functions include finance, human resources, technology, operations, etc. Other functions may include program management, service management, quality assurance, testing, and process improvement.

2. Document all personnel roles, responsibilities, and authority.

> → Role definitions should include primary and secondary responsibilities. For example, the Vice President of Finance has primary responsibilities related to financial tasks, but may also be involved in negotiation as a secondary responsibility. Role definitions should clearly describe responsibilities (e.g., team functions, engagement-level tasks, and organizational-level tasks) and authority (e.g., approval of resource acquisition, ability to commit to clients, and other decision-making authority).

3. Document any changes in roles, responsibilities, and associated authority.

> → Documentation should be updated to reflect movement of personnel from one role to another as well as to reflect changes in responsibilities and authority associated with a given role.

c. Define and communicate the roles, responsibilities, and authority of personnel in the organization, using the documented work products and tasks.

1. Communicate the tasks and the availability and location of work products to relevant stakeholders. (knw02, knw03)

2. Provide resources to effectively perform the work. (knw02, knw03, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl05, ppl07, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02, knw03)

5. Verify that the work is consistently and effectively performed across the organization. (knw04, prf02)

ppl06   Workforce Competencies

Develop the workforce competencies needed to achieve organizational objectives.

People Management

Ongoing

Level 3

Maintain the necessary workforce competency levels in order to ensure that the organization has the necessary skills to meet its clients' requirements and achieve its long-term organizational objectives. Analyzing and maintaining personnel competency records enables the organization to have an accurate understanding of the skills of its workforce and to more quickly respond to workforce competency changes due to the requirements of new and existing clients.

Personnel competency is the combination of skills, knowledge, and experience that specific personnel in the organization possess. Workforce competency is the set of personnel competencies that the organization has or needs, to meet its organizational objectives.

This practice is related to ppl04, "Assign responsibilities," which covers the identification of personnel competencies, helping to ensure that personnel assignments meet the competency requirements of specific roles. The focus of this Practice is expanded to workforce competency. Identifying training needs through a gap analysis of workforce competencies is addressed in ppl07, "Plan & deliver training."

Activities

a. Provide support for creating and maintaining the work products and tasks for developing workforce competencies.

1. Provide sponsorship and resources for creating the work products and tasks for developing workforce competencies. (knw04, prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving work products and tasks as appropriate. (knw02, rel05)

3. Maintain and improve work products and tasks as appropriate. (knw04, knw07)

b. Document work products and tasks required for developing workforce competencies. Documentation includes the following Activities:

1. Determine future workforce competency needs based on organizational and engagement objectives.

> → Examples of workforce competency needs include technical, managerial, communication, negotiation, and leadership skills. Leadership skills are often fundamental to the organization's ability to meet long-term objectives; leadership needs are critical to understand when identifying future workforce competency needs.

2. Obtain input on future workforce competency needs from the relevant stakeholders.

3. Identify existing personnel and workforce competencies.

    a) Identify sources and classes of information about personnel competencies.

    > → This Activity includes identifying personnel, personnel skills, personnel experience, and relevant knowledge held by personnel.

    b) Collect and document information on competencies in a personnel competency inventory.

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c) Identify existing workforce competencies based on the aggregate of personnel competencies.

→ Personnel competencies are identified and tracked in a personnel competency inventory. Existing workforce competencies are identified by aggregating the set of personnel competencies. For instance, the organization may have nine people who each have a personnel competency in project management. The organization then has a workforce competency in project management, and has identified nine people who contribute toward that workforce competency.

4. Identify and analyze gaps between existing workforce competencies and future workforce competency needs.

→ The workforce competency analysis should be modified as organizational needs change. Changes in required competencies can occur due to changes in services, technology, the organization's market strategy, client expectations, and competition. The analysis should produce a list of current competencies, a list of required competencies, and a prioritized list of required competencies.

5. Create a plan to develop workforce competencies.

a) Determine actions needed to develop workforce competencies.

→ Actions taken to develop workforce competencies include obtaining needed competencies through transferring, hiring, or outsourcing. Personnel competencies can be developed through career development and training.

b) Review the plan with relevant stakeholders.

6. Track status and progress against the plan.

a) Determine actions to take when progress deviates from the plan.

b) Take actions and track them to closure.

c) Analyze the effectiveness of actions taken to develop workforce competencies.

7. Maintain information on personnel and workforce competencies.

→ Personnel competency information is typically stored in a personnel competency inventory. Workforce competency information is usually an organizational view of that same data and may not be stored as a separate inventory.

8. Maintain the results of the workforce competency analysis.

c. Develop workforce competencies, using the documented work products and tasks.

1. Communicate the tasks and the availability and location of work products to relevant stakeholders. (knw02, knw03)

2. Provide resources to effectively perform the work. (knw02, knw03, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl05, ppl07, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02, knw03)

5. Verify that the work is consistently and effectively performed across the organization. (knw04, prf02)

ppl07   Plan & Deliver Training   **S**
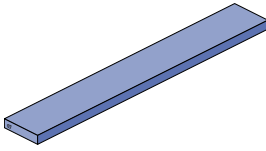
People Management

Ongoing

Level 3

Procedure

Establish and implement procedures to plan and deliver training.

Plan and manage the delivery of training in order to meet personnel and workforce competency needs. Effective training enables the organization to meet its organizational objectives by filling the gaps in its personnel and workforce competencies.

This Practice is related to ppl04, "Assign responsibilities," ppl06, "Workforce competencies," and ppl08, "Personnel competencies." At Level 2 the focus of training (ppl08) is on meeting personnel competency needs that have been identified while assigning roles and responsibilities (ppl04). At Level 3, training is formalized with plans and procedures in this Practice. This Practice expands training from the coverage of personnel competency needs to the coverage of workforce competency needs as identified in ppl06.

Activities

a. Provide support for creating and maintaining the procedures for planning and delivering training across the organization.

1. Provide sponsorship and resources for creating the procedures. (knw04, prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02, rel05)

3. Maintain and improve the procedures as appropriate. (knw04, knw07)

b. Document the procedures for planning and delivering training. Documentation includes the following Activities:

1. Identify training objectives and desired outcomes based on personnel and workforce competency needs and organizational objectives.

2. Create training plans for career development, engagement- or client-specific training, or organizational training.

> → Career development training can include personal development (e.g., presentation or meeting skills), job-oriented development (e.g., technical or supervisory skills), and leadership development (e.g., engagement management or strategy creation). Engagement- or client-specific training will include any training necessary to meet requirements (e.g., orientation, culture, or business). Organizational training can include the development of skills needed to meet objectives, as well as the organization's policies, procedures, and functions.

3. Create or obtain training based on the training plans.

   a) Identify materials and tools required for training.

   b) Identify facilities required for training.

   c) Identify personnel required for training.

   d) Create or obtain the materials, tools, and facilities required for training.

4. Deliver training according to the training plans.

5. Track status and progress against the plan.

a) Determine actions to take when progress deviates from the plan.

b) Take actions and track them to closure.

6. Document and maintain records of training.

→ Records of training include inventories of trainers, classes, training materials, as well as class offerings and student records. Student records may include class grades. Training may result in updating the personnel competency inventory.

7. Determine measures to track the effectiveness of training.

→ The primary purpose of measuring the effectiveness of training is to determine whether the training has achieved the identified training objectives.

a) Determine the attributes to measure to determine the effectiveness of the training.

→ Attributes can include learner feedback on training, on-the-job behavior or performance, and organizational effectiveness.

b) Determine the performance measures for the attributes.

→ Sources of information should provide insights into training effectiveness during Initiation, Delivery, and Completion. Sources of information should include stakeholders such as training participants, instructors, the participants' supervisors, team members, and clients or peers who can provide feedback on trainees' skills, knowledge, and performance.

c) Determine the analyses and indicators that support understanding and decision-making based on data related to the effectiveness of training.

8. Collect data on training effectiveness.

→ Methods for collecting data include obtaining and analyzing feedback from the trainee on the trainer, training material, training duration, and their ability to perform after training; collecting exams on the material taught; observing the effectiveness of trainees in the use of their training; and obtaining feedback from supervisors.

9. Identify gaps between actual and acceptable training outcomes, taking corrective action, as appropriate.

→ Actions taken may include retraining the trainees, retraining the trainers, replacing trainers, obtaining trainers from outside, and improving the training material and method of training.

c. Implement training planning and delivery, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02, knw03)

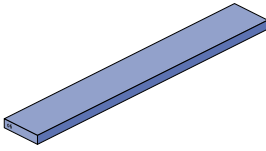2. Provide resources to effectively perform the work. (knw02, knw03, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl05, ppl07, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02, knw03)

5. Verify that the work is consistently and effectively performed according to the procedures across the organization. (knw04, prf02)

ppl08   Personnel Competencies   **S**
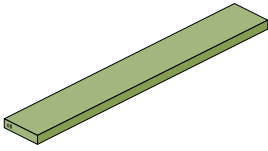
People Management

Ongoing

Level 2

Meet identified personnel competency needs by providing training.

Address personnel competency gaps in order to enable personnel to effectively perform their roles and responsibilities. Effective training helps to ensure that personnel can perform their assigned roles and responsibilities. Training requirements must be identified to satisfy the needs of both the engagement and the organization.

This Practice focuses on providing training to meet personnel competency needs identified while assigning roles and responsibilities (ppl04, "Assign responsibilities").

Activities

a. Provide support for creating and maintaining the work products and tasks for meeting identified personnel competency needs.

1. Provide sponsorship and resources for creating the work products and tasks for meeting identified personnel competency needs. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving work products and tasks as appropriate. (knw02)

3. Maintain and improve work products and tasks as appropriate. (knw07)

b. Document work products and tasks required for meeting personnel competency needs. Documentation includes the following Activities:

1. Identify personnel to train, using identified gaps in personnel competencies.

2. Determine training requirements, based on identified gaps.

> → Training requirements should include training on the organization's policies, procedures, and roles and responsibilities. For personnel who directly interact with the client, training requirements typically include familiarity with the organization's services, relationship management, gathering client requirements, and listening skills. Factors that affect the requirements include market sector, services offered, and performance expectations.

3. Create or obtain training based on the identified requirements.

> → Training may include classroom coaching, simulation, on-the-job training, and group exercises. Training may involve pursuing formal certification in specific skills (e.g., project management) for some personnel, based on client and organizational requirements.

4. Identify and provide resources for required training, including trainers and facilities, as appropriate.

5. Deliver training, as appropriate.

6. Maintain records of training provided, trainers, and trainees.

c. Meet identified personnel competency needs, using the documented work products and tasks.

1. Communicate the tasks and the availability and location of work products to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

> → The required materials and tools include training manuals, work instructions, case studies, and exams on the material being taught.

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

> → Trainers are identified based on their training skills, their relevant experience, and feedback from participants who have received training.

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed. (prf02)

ppl09   Performance Feedback
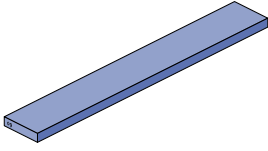
Establish and implement procedures to provide feedback on performance to personnel.

People Management

Ongoing

Level 3

Procedure

Identify the strengths and weaknesses of individuals and teams and provide appropriate feedback in order to improve the personnel competencies and performance. Effective performance feedback helps personnel develop their competencies, and enables the organization to better achieve its objectives. This feedback may or may not include rewards and recognition, as described in ppl11, "Rewards." Performance appraisals are one mechanism for providing feedback, but others may be used.

Activities

a. Provide support for creating and maintaining the procedures for providing performance feedback to personnel across the organization.

1. Provide sponsorship and resources for creating the procedures. (knw04, prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02, rel05)

3. Maintain and improve the procedures as appropriate. (knw04, knw07)

b. Document the procedures for providing performance feedback to personnel. Documentation includes the following Activities:

1. Determine the attributes to be used for the different types of feedback.

   → Attributes can be quantitative (e.g., efficiency, profitability, on time, on budget, performance against team objectives) or qualitative (e.g., leadership, and satisfaction of clients, employees, and teams). Attributes can be defined by a review of organizational and engagement objectives, personnel and workforce competency needs, and training objectives.

   a) Verify that attributes and types of feedback are aligned with the engagement and organizational objectives, and the role assignments and definitions.

   b) Select and document the methods used for analyzing the defined attributes.

   → Methods typically involve comparing performance against targets that are used to determine when performance is considered inadequate, adequate, or exceptional.

   c) Obtain agreement from personnel on the defined attributes.

2. Determine and document the methods used for, and the frequency of, performance feedback.

3. Collect information on the defined attributes.

4. Analyze information collected and identify actions to be considered.

5. Document and provide the performance feedback.

   → Feedback can be provided at a defined frequency or as events or performance warrants.

6. Obtain agreement with the relevant stakeholders on actions to take.

→ Actions taken based on the results of feedback include retraining individuals or teams, identifying areas of improvement in the organization, and changing existing procedures.

7. Track the actions discussed and agreed upon, taking action when appropriate.

c. Implement performance feedback, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02, knw03)

2. Provide resources to effectively perform the work. (knw02, knw03, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl05, ppl07, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02, knw03)

5. Verify that the work is consistently and effectively performed according to the procedures across the organization. (knw04, prf02)

ppl10   Career Development
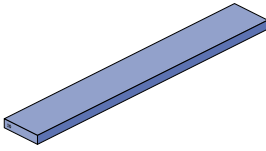
People Management

Ongoing

Level 3

Procedure

Establish and implement procedures to provide personnel with opportunities for career development.

Provide clearly defined career paths and opportunities for personnel to develop their skills and knowledge in order to improve their competencies and motivation. Succeeding in a dynamic business environment requires the organization to develop and retain personnel with the personnel competencies that it needs. Career development improves personnel's motivation and competencies, thereby enabling the organization to better achieve its objectives.

Activities

a. Provide support for creating and maintaining the procedures for career development across the organization.

1. Provide sponsorship and resources for creating the procedures. (knw04, prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02, rel05)

3. Maintain and improve the procedures as appropriate. (knw04, knw07)

b. Document the procedures for career development. Documentation includes the following Activities:

1. Determine the set of career paths for personnel.

> → The set of career paths is based on the long-term workforce competency needs of the organization, and should be aligned with the plan to address future workforce competency needs.

2. Communicate the set of career paths to appropriate personnel.

3. Obtain feedback on the set of career paths.

4. Select methods of obtaining input from personnel on their career development.

5. Determine frequency and type of feedback appropriate for personnel following various career paths.

> → Types of feedback include performance appraisals and peer reviews.

6. Create personnel career development plans, based on the defined set of career paths.

> → Information in a personnel career development plan includes career objectives, paths to achieve those objectives, and competencies needed to progress toward those objectives.

   a) Identify personnel career goals.

   b) Identify opportunities for career development of personnel.

7. Track status and progress against career development plans.

> → The progress of an individual against a career development plan can be tracked through self-assessment; formal or informal performance feedback; review by peers, mentors, or coaches; additional professional qualifications; and tests and evaluations.

a) Determine actions to take when progress deviates from the plan.

b) Take actions and track them to closure.

c) Verify that actions taken are aligned with career development plans.

8. Provide feedback to personnel on their progress on career development.

c. Implement actions to provide personnel with opportunities for career development, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02, knw03)

2. Provide resources to effectively perform the work. (knw02, knw03, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl05, ppl07, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02, knw03)

5. Verify that the work is consistently and effectively performed according to the procedures across the organization. (knw04, prf02)

ppl11   Rewards
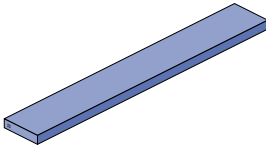
People Management

Ongoing

Level 3

Provide rewards and recognition that encourage the achievement of organizational objectives.

Reward personnel for performance and achievements in order to motivate them and retain the personnel competencies critical for achieving organizational objectives. Rewards and recognition may take the form of intangible rewards such as formal recognition, or tangible rewards such as profit sharing or changes in compensation. Consideration should be given to whether the best way to achieve the organization's objectives is to base rewards on team performance rather than just individual performance.

Activities

a. Provide support for creating and maintaining the work products and tasks for establishing rewards and recognition that encourage the achievement of organizational objectives.

1. Provide sponsorship and resources for creating the work products and tasks for establishing a rewards and recognition program to encourage the achievement of organizational objectives. (knw04, prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving work products and tasks as appropriate. (knw02, rel05)

3. Maintain and improve work products and tasks as appropriate. (knw04, knw07)

b. Document work products and tasks required for establishing rewards and recognition to encourage the achievement of organizational objectives. Documentation includes the following Activities:

1. Communicate the purpose for the rewards and recognition program.

2. Identify the organizational objectives whose achievement should be rewarded or recognized.

3. Identify the rewards and recognition necessary to encourage achievement of the identified organizational objectives.

> → Achievement of objectives may require individual, as well as team, effort. Consideration should be given to whether the best way to achieve an objective is to base rewards on team performance, rather than just individual performance.

4. Determine measures to encourage achievement of organizational objectives.

   a) Determine the attributes to measure to determine if rewards and recognition are appropriate.

   > → The attributes may be based on the performance of personnel or teams (e.g., quantity of work, service quality, supervisory skills, attendance), outstanding service to clients, customer feedback, outstanding skill development, or improvements by personnel or teams.

   b) Determine the performance measures for the attributes.

   c) Determine the analyses and indicators that support understanding and decision-making based on data for rewards and recognition.

5. Collect data related to encouraging the achievement of organizational objectives.

6. Periodically review performance against defined indicators and provide rewards or recognition, as appropriate.

c. Implement rewards and recognition, using the documented work products and tasks.

1. Communicate the tasks and the availability and location of work products to relevant stakeholders. (knw02, knw03)

2. Provide resources to effectively perform the work. (knw02, knw03, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl05, ppl07, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02, knw03)

5. Verify that the work is consistently and effectively performed across the organization. (knw04, prf02)

prf

Performance Management Practices

Performance Management Practices focus on managing the organization's performance to ensure that the client's requirements are being met, that the organization is continually learning from its experience, and that the organization is continually improving across engagements. These Practices address the effective capture, analysis, and use of data, including data on the organization's capabilities relative to its competitors. All Performance Management Practices are Ongoing. They cover the following:

- Defining engagement and organizational objectives and reviewing performance against those objectives.

- Establishing organization-wide programs to meet the objectives.

- Identifying and implementing performance improvements.

- Measuring the organization's capabilities and benchmarking its performance as the basis for improvements.

- Providing adequate resources to enable personnel to effectively perform their work.

- Deploying innovations across the organization in order to broadly improve performance.

prf01   Engagement Objectives
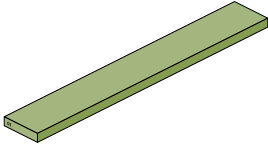
Performance Management

Ongoing

Level 2

Define, communicate, and track engagement objectives.

Gain a clear understanding of the objectives for each engagement in order to enable the effective formation, management, and expansion of successful sourcing relationships. Clearly defined engagement objectives help the organization set expectations with internal and external stakeholders.

Objectives should be as measurable as possible so that progress can be tracked. Objectives are typically based either on client relationship factors (e.g., increase client satisfaction by x%) or on operational factors (e.g., improve productivity by y%).

This Practice is related to del04, "Verify service commitments," which covers verifying that service commitments are met. Engagement objectives are aligned with the broader business objectives, but service commitments provide the fundamental input into decisions about setting objectives.

All of the other Practices in the Model should contribute to achieving—at least indirectly—the engagement objectives. For example, planning and tracking Practices for design, delivery, etc., address subsets of the engagement objectives.

Activities

a. Provide support for creating and maintaining the work products and tasks for defining, communicating, and tracking engagement objectives.

1. Provide sponsorship and resources for creating the work products and tasks for defining, communicating, and tracking engagement objectives. (prf03)

→ The information needed for setting engagement objectives includes the expected performance, existing organizational standards, and feedback from the client at different Phases of the engagement.

2. Involve relevant stakeholders in creating, improving, reviewing, and approving work products and tasks as appropriate. (knw02)

→ Stakeholders review engagement objectives with respect to relevant policies, related procedures, and pertinent statutes and regulations. Examples of relevant policies include those addressing security, protection of intellectual property, and risk.

→ Engagement objectives should be aligned with policies whenever possible, but policies may need to be modified to be consistent with the changing business environment. Cases where engagement objectives cannot be aligned with policies should be reviewed at an appropriate level of authority within the organization. Engagement objectives may be changed to satisfy policies, policies may be modified to fit evolving business objectives, or waivers may be granted for specific objectives when conflicts between engagement objectives and policies need to be resolved.

3. Maintain and improve work products and tasks as appropriate. (knw07)

b. Document work products and tasks required for defining, communicating, and tracking engagement objectives. Documentation includes the following Activities:

1. Determine engagement objectives.

2. Address the engagement objectives at appropriate levels in the organization.

→ Engagement objectives are addressed at appropriate levels in the organization by defining relevant functional, departmental, team, and individual objectives. Engagement objectives include time frames for achieving the objectives.

3. Verify that engagement objectives are aligned with business objectives.

> → The organization should establish a set of general business objectives that may address market share, profitability, and competitive differentiators. Objectives for each engagement should be defined to support, and be consistent with, the overall business objectives.

4. Determine measures to track engagement performance.

a) Determine the attributes to measure to verify if engagement objectives are being met.

b) Determine the performance measures for the attributes.

> → The measurement method should define the frequency and granularity of data collection. It should ensure that the data collected are reliable, accurate, and valid.

c) Determine the analyses and indicators to be used to understand and make decisions about engagement performance.

> → Indicators provide an evaluation of data in relation to criteria that support decision-making. The evaluation may be with respect to requirements, ranges of acceptable performance, stretch goals, expected performance based on historical data, or similar standards.

5. Create a plan for communicating and achieving the engagement objectives.

6. Collect data on engagement performance.

> → Examples of tools used to collect performance measurements are software programs and standard templates. Examples of automatically collected measurements are time-stamped activity logs and process-generated data.

7. Periodically review performance against the engagement objectives.

8. Determine corrective actions to take when performance trends deviate from achieving the objectives.

9. Track the corrective actions.

10. Track status and progress against the plan for engagement objectives.

a) Determine actions to take when progress deviates from the plan.

c. Define, communicate, and track engagement objectives, using the documented work products and tasks.

1. Communicate the tasks and the availability and location of work products to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed. (prf02)

prf01

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prf02   Verify Processes   **S**

Performance Management

Ongoing

Level 2

Procedure

Establish and implement procedures to verify that processes are consistently performed as defined.

Verify that work complies with the organization's policies, procedures, and standards, and that the required work products are being produced, in order to help ensure that the work is being consistently and adequately performed. Verification is typically performed through reviews and audits by management or by personnel who are independent from those performing the work. Effective verification ensures that process requirements are being met. Process requirements may come from policies, procedures, standards, client requirements, and statutes or regulations; they may also include work product requirements either directly or by reference.

Activities

a. Provide support for creating and maintaining the procedures for verifying that processes are consistently performed.

1. Provide sponsorship and resources for creating the procedures. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02)

3. Maintain and improve the procedures as appropriate. (knw07)

b. Document the procedures for verifying that processes are consistently performed. Documentation includes the following Activities:

1. Determine measures to track process performance.

> → Performance measurements address status, progress, effectiveness, and efficiency. They may be used for control or improvement and may provide insight into potential process violations when performance is inadequate.

> → The quality specification is a source for determining the process verification needs, since it should indicate the quality strategy, which drives decisions about what needs to be verified,

a) Determine the attributes to measure to determine if processes are being consistently performed as defined.

> → Feasibility of verification should be considered when deciding the process attributes to be verified. Process attributes are typically defined through a checklist of items to be verified, including key process steps, deliverables, and measurements (e.g., number of hours spent performing each process step, number of defects discovered while performing the process).

b) Determine the performance measures for the attributes.

c) Determine the analyses and indicators to be used to understand and make decisions about process performance.

2. Create a plan for verifying processes.

> → The plan should address the points in time, or points in the process, when verification is needed. It should also include review criteria, scope, task assignments, and conformance reporting that will be created based on the reviews.

3. Collect data on process performance.

4. Periodically review adherence of the process to the specified requirements.

> → The selection of reviewers, and reviewing the adherence of the process, should ensure objectivity and impartiality. Periodic verification is intended to be an internal quality assurance function rather than external audits and assessments (e.g., ISO 9001 audits or Software CMM® assessments), which fill a different role in verifying quality and supporting process improvement.

5. Review the adherence of work products to the specified requirements at the identified times.

6. Document nonconformances to requirements.

7. Communicate nonconformances of processes or work products to relevant stakeholders.

8. Escalate nonconformances when issues cannot be addressed locally.

9. Track resolution of nonconformances, taking action when appropriate.

> → Resolution of a nonconformance may address the problem, change the requirement, or obtain a waiver from a designated authority.

10. Track status and progress against the plan for verifying processes.

   a) Determine actions to take when progress deviates from the plan.

   b) Take actions and track them to closure.

c. Implement process verification, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

> → Personnel performing the verification should be independent of those performing the activities being verified.

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed according to the procedures. (prf02)

prf03   Adequate Resources   Ⓢ
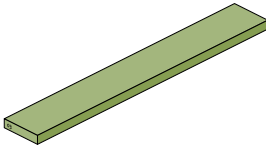
Performance Management

Ongoing

Level 2

Identify and provide adequate resources that personnel need to perform their work.

Provide adequate resources to satisfy client requirements in order to establish positive client relationships and to provide stable service delivery. Resource requirements such as personnel, expertise, technology infrastructure, work environment, work products, and funding are made available for all functional areas.

This Practice is closely related to knw08, "Resource consumption," which covers the analysis of data on resource consumption and is fundamental to understanding whether adequate resources are being provided. Identification and provision of some resources are covered in other Practices. Information is covered in knw02, "Provide required information." Personnel are covered in ppl04, "Assign responsibilities," and ppl08, "Personnel competencies." Technology is addressed in tch01, "Acquire technology." The work environment is covered in ppl03, "Work environment."

Activities

a. Provide support for creating and maintaining the work products and tasks for identifying and providing adequate resources to personnel.

1. Provide sponsorship and resources for creating the work products and tasks for identifying and providing adequate resources to personnel. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving work products and tasks as appropriate. (knw02)

3. Maintain and improve work products and tasks as appropriate. (knw07)

b. Document work products and tasks required for identifying and providing adequate resources to personnel. Documentation includes the following Activities:
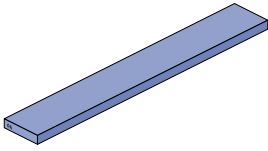
1. Identify resources needed by personnel to perform their duties.

   a) Identify existing resources available to personnel to perform their duties.

   b) Estimate resources needed by personnel to perform their duties, including future needs.

2. Analyze gaps between existing resources and identified resource needs.

3. Determine costs of meeting resource needs.

4. Determine actions to take based on the analysis.

   → Types of actions include deciding whether to create the resources in-house versus out-of-house, and deciding whether to lease or buy.

5. Determine the steps personnel need to follow in order to request resources.

6. Periodically review whether resources are adequate, taking corrective action as appropriate.

   → One way to assess the adequacy of resources is to track utilization of resources and requests for additional resources.

c. Identify and provide adequate resources, using the documented work products and tasks.

1. Communicate the tasks and the availability and location of work products to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

> → Information needed to identify resource requirements includes improvement programs, historical utilization data, personnel skills, technology inventory, service commitments, and client needs.
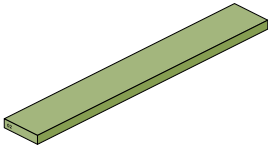
3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed. (prf02)

prf04   Organizational Objectives

Define, communicate, and track organizational objectives.

Performance Management

Ongoing

Level 3

Have a clear understanding of the organization's objectives in order to establish the organization's long-term direction and enable the effective formation, management, and expansion of successful sourcing relationships. Clearly defined and measurable organizational objectives enable management to set and attain performance expectations for the organization. These objectives are usually long term and are derived by analyzing the organization's environment (including client expectations, competitors, and business trends). To be effective, organizational objectives must be measurable, address the needs of stakeholders, and establish both desired and expected performance targets.

There are two Practices in the model that cover establishing and achieving objectives: prf01, "Engagement objectives," and this Practice. At Level 2, prf01 focuses on defining engagement-specific objectives that, at a minimum, are derived from long-term business objectives. At Level 3, this Practice focuses on defining organization-level objectives that are derived from long-term business objectives, including improvement objectives. All organizations have basic business objectives, for example, profitability, growth, increased efficiency, and higher capability. Organizational objectives are a formalization of business objectives and should be measurable and derived from the organization's vision, mission, and goals. Examples of organizational objectives include increasing client satisfaction scores by X%, growing market share by Y%, increasing productivity by Z%, and decreasing problem reports by A%. Level 3 organizations are expected to have an organizational focus and to establish engagement objectives based on their organizational objectives.

Tracking organizational performance against organizational objectives occurs in prf05, "Review organizational performance," which focuses on the control of organizational performance. Improvement objectives are addressed in prf06, "Make improvements." This Practice is broadly related to all other Practices in the model since addressing those Practices should contribute to achieving the organizational objectives, at least indirectly.

Activities

a. Provide support for creating and maintaining the work products and tasks for defining, communicating, and tracking organizational objectives.

1. Provide sponsorship and resources for creating the work products and tasks for defining, communicating, and tracking organizational objectives. (knw04, prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving work products and tasks as appropriate. (knw02, rel05)

> → Organizational objectives should be aligned with policies whenever possible, but policies may need to be modified to be consistent with the changing business environment. Policies should evolve to fit strategic direction rather than requiring strategy to be based on current policies. Cases where organizational objectives cannot be aligned with policies should be reviewed at an appropriate level of authority within the organization. Organizational objectives may be changed to satisfy policies, policies may be modified to fit evolving business objectives, or waivers may be granted for specific objectives when conflicts between organizational objectives and policies need to be resolved.

3. Maintain and improve work products and tasks as appropriate. (knw04, knw07)

b. Document work products and tasks required for defining, communicating, and tracking organizational objectives. Documentation includes the following Activities:

1. Determine organizational objectives.

> a) Collect appropriate market analysis and other relevant data.

> → Analyses can include strategic analysis, cost-benefit analysis, historical performance data, competitor analysis, and trend analysis.

> b) Determine the organization's performance targets.

2. Address the organizational objectives at appropriate levels in the organization.

> → Organizational objectives are addressed at appropriate levels in the organization by defining relevant functional, departmental, team, and individual objectives.

3. Determine measures to track organizational performance.

> a) Determine the attributes to measure to determine if organizational objectives are being met.

> b) Determine the performance measures for the attributes.

> → The measurement method should define the frequency and granularity of data collection. It should ensure that the data collected are reliable, accurate, and valid.

> c) Determine the analyses and indicators to be used to understand and make decisions about organizational performance.

> → Indicators provide an evaluation of data in relation to criteria that support decision-making. The evaluation may be with respect to requirements, ranges of acceptable performance, stretch goals, expected performance based on historical data, or similar standards.

4. Create a plan for communicating and achieving the organizational objectives.

5. Track status and progress against the plan for organizational objectives.

> → Organizational performance reviews are the primary mechanism for tracking status and progress.

> a) Determine actions to take when progress deviates from the plan.

> b) Take actions and track them to closure.

c. Define, communicate, and track the organizational objectives, using the documented work products and tasks.

1. Communicate the tasks and the availability and location of work products to relevant stakeholders. (knw02, knw03)

2. Provide resources to effectively perform the work. (knw02, knw03, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl05, ppl07, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02, knw03)

5. Verify that the work is consistently and effectively performed across the organization. (knw04, prf02)

prf04

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prf05

Review Organizational Performance

Establish and implement procedures to review organizational performance.

Performance Management

Ongoing

Level 3

Procedure

Analyze key performance measurements and base management decisions on the results in order to manage and improve organizational performance. Using well-defined performance measurements as a basis for making managerial decisions helps to ensure the consistency and relevance of the decisions. Periodic reviews allow management to compare performance to the performance requirements, thereby enabling the organization to make performance improvements.

Performance measures relate to both the effectiveness in achieving the intended objectives and the efficiency of the procedures or programs. Measures of business performance include customer satisfaction, service quality, and productivity. Measures of operational performance include status, cost, and nonconformance. Measures are typically either based on a single data source (e.g., the number of hours worked on all requests), or combined into ratios, indices, etc. from two or more data sources (e.g., average hours worked per request).

This Practice is closely related to prf01, "Engagement objectives," prf04, "Organizational objectives," and prf06, "Make improvements." Performance measures are defined at the engagement level in prf01 and at the organizational level in prf04. The performance reviews in prf05 are done using these performance measurements, with a key outcome being the identification of improvement opportunities, which are managed in prf06.

Activities

a. Provide support for creating and maintaining the procedures for reviewing organizational performance across the organization.

1. Provide sponsorship and resources for creating the procedures. (knw04, prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02, rel05)

3. Maintain and improve the procedures as appropriate. (knw04, knw07)

b. Document the procedures for reviewing organizational performance. Documentation includes the following Activities:

1. Collect data on organizational performance.

   → Organizational performance depends on engagement performance. Much of the data used for monitoring and controlling organizational performance will be collected at the engagement level and aggregated as appropriate for organizational analysis.

2. Periodically review performance against the organizational objectives.

   → Multiple levels of performance review may be performed for different audiences with different interests. Frequency, scheduling, and duration of review, and critical reviewers should be determined.

3. Determine corrective actions to take when performance trends deviate from achieving the objectives.

→ Corrective actions are targeted at addressing a specific performance issue (e.g., renegotiating due dates, asking personnel to work overtime, etc.). Improvement actions are targeted at achieving long-term performance improvement (e.g., improving processes or technology, addressing root causes of recurring problems, etc.).

4. Track the corrective actions, taking action as appropriate.

c. Implement organizational performance reviews, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02, knw03)

2. Provide resources to effectively perform the work. (knw02, knw03, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl05, ppl07, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02, knw03)

5. Verify that the work is consistently and effectively performed according to the procedures across the organization. (knw04, prf02)

prf05

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prf06   Make Improvements
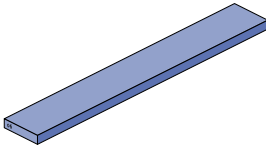
Performance Management

Ongoing

Level 3

Make improvements based on reviews of organizational performance.

Use the knowledge gained from performance reviews in order to improve organizational performance and increase the stakeholders' value. Improvements can build upon existing strengths to continue to differentiate the organization; they can also address areas for improvement that are causing problems with performance, morale, satisfaction, or other aspects of service delivery.

This Practice is closely related to prf01, "Engagement objectives," prf04, "Organizational objectives," and prf05, "Review organizational performance." Engagement (prf01) and organizational (prf04) objectives are used as a basis for establishing performance measures. In prf05, these performance measurements are used during performance reviews to identify improvement opportunities. These opportunities are then analyzed and managed in this Practice.

Activities

a. Provide support for creating and maintaining the work products and activities for making improvements.

1. Provide sponsorship and resources for creating the work products and tasks for making improvements. (knw04, prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving work products and tasks as appropriate. (knw02, rel05)

3. Maintain and improve work products and tasks as appropriate. (knw04, knw07)

b. Identify work products and activities required to make improvements. Documentation includes the following Activities:

1. Collect data used to identify potential candidates for improvement.

> → Data are collected to identify needed improvements (e.g., performance deficiencies), opportunities for improvement (e.g., new technology), and improvement priorities.

   a) Collect data from reviews of organizational performance.

   b) Identify and collect other sources and types of information.

> → Information sources other than performance reviews include stakeholder surveys, improvement requests, improvement suggestions, and Service Level Agreement tracking data.

2. Analyze the data collected to identify the improvements to pursue.

> → Examples of potential improvements include revising organizational standards, policies, and procedure, adopting new technologies and tools, outsourcing needed capabilities, and enhancing training.

   a) Analyze the data to identify candidate improvements.

> → Causal analysis can be used to identify high leverage opportunities.

   b) Create a business case for each candidate improvement.

   c) Prioritize the improvements to pursue, based on the business cases and organizational objectives.

   d) Select the improvements to pursue, based on the priorities.

3. Create a plan for organizational improvement.

> a) Identify the tasks needed to make improvements.

> b) Create a schedule of improvement tasks.

> c) Determine resources needed to make improvements.

> d) Review the plan for correctness, clarity, and adequacy.

> e) Obtain approval of the plan from the relevant stakeholders.

4. Track performance against the improvement plan and business case.

> a) Determine actions to take when performance deviates from the plan.

> b) Determine actions to take when improvements are not meeting business case objectives.

> → Progress implies a positive, non-trivial return on investment. Examples of return on investment measures include client satisfaction, win rate, reliability, and cost per transaction. The organization may decide to reprioritize, including eliminating a set of improvement tasks, if the benefits expected are not being achieved.

> c) Take actions and track them to closure.

> d) Maintain the business case, as appropriate.

> → The business environment may change before an improvement can be implemented and deployed, changing priorities and perhaps removing the need.

c. Make improvements, using identified work products and activities.

1. Communicate the tasks and the availability and location of work products to relevant stakeholders. (knw02, knw03)

2. Provide resources to effectively perform the work. (knw02, knw03, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl05, ppl07, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02, knw03)

5. Verify that the work is consistently and effectively performed across the organization. (knw04, prf02)

prf06

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prf07

Achieve Organizational Objectives

Performance Management

Ongoing

Level 4

Program

Establish and implement programs to achieve organizational objectives.

Establish programs to improve processes or deploy innovative technology in order to improve organizational performance. These programs enable the organization to achieve its objectives across functions and levels, including delivering services that meet the needs of new or existing clients. Periodically reviewing these programs will demonstrate to management whether the planned benefits are being achieved, and whether corrective action needs to be taken.

A program is "a group of related projects managed in a coordinated way" [PMBOK]. At any one time, an organization is expected to have one or more programs in place to help it achieve its organizational objectives. For example, an organizational objective to "increase market share by x%" may result in one program to create a new service and another program to improve the skill level of personnel.

This Practice is closely related to prf04, "Organizational objectives," prf05, "Review organizational performance," and prf06, "Make improvements." Organizational objectives and the performance measurements used to manage their achievement are defined in prf04. In Level 3, prf05 focuses on conducting performance reviews in which those measurements are collected and analyzed; prf06 focuses on taking action based on those reviews. In Level 4, this Practice expands upon the Activities in prf05 and prf06 by establishing programs that proactively take action to ensure that objectives are met. This is done both by looking at innovation (prf11, "Deploy innovations") and by performing detailed analyses of past performance (e.g., through statistical analysis). At Level 4, statistical comparison of the capability baselines (prf08, "Capability baselines") will determine the effectiveness of these actions, and benchmarking (prf09, "Benchmark") will support the identification and adoption of best practices.

Activities

a. Provide support for creating and maintaining the work products and tasks for establishing and implementing programs to achieve organizational objectives across the organization.

1. Provide sponsorship and resources for creating the work products and tasks for establishing and implementing programs to achieve organizational objectives across the organization. (knw04, prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving work products and tasks as appropriate. (knw02, rel05)

3. Maintain and improve work products and tasks as appropriate. (knw04, knw07)

b. Document the work products and tasks required for establishing programs to achieve organizational objectives. Documentation includes the following Activities:

1. Identify the programs necessary for achieving organizational objectives.

→ Programs are typically identified based on an analysis of improvement opportunities or an identified need to develop or enhance capabilities within the organization. For example, the organization may receive feedback pointing out a needed organizational improvement. The organization may decide, based on its organizational objectives, to deploy innovative technology across several parts of the organization. Improvement programs may be identified based on benchmarking of organization performance. Examples of improvement opportunities include defining and improving organizational procedures, and standards.

2. Create a business case for each program.

→ Business cases should be based on an analysis of costs, benefits, and resource constraints. Business cases identify the anticipated benefits to be achieved by the program; periodic tracking of business cases helps verify that the anticipated benefits will be realized.

3. Prioritize and determine programs to pursue based on the business case and organizational objectives.

→ Dependencies between programs should be considered when establishing priorities. For instance, a training program to develop a new workforce competency may need to be completed before implementing a program to market a new service based on that competency.

4. Create estimates of the programs.

a) Identify the tasks required to achieve program objectives.

b) Create estimates of the resources required for each program, including the effort and time frame for each task.

c) Create schedules of milestones and progress reviews.

5. Determine the attributes of the program to be tracked.

6. Select and document methods used for tracking the defined attributes.

7. Create the program plans.

a) Identify barriers to the adoption of candidate programs.

b) Create a schedule of program tasks.

→ Program tasks should include the creation of an implementation approach for the program. Size and complexity may impact the implementation approach (e.g., large programs may be implemented through a series of small releases).

c) Determine resources needed to implement each program.

→ Implementation will typically involve a systematic deployment across the organization (e.g., a program to create a service measurement methodology could involve rollout of that methodology to the entire organization).

d) Document personnel assignments in the program plans.

8. Review the program plans.

a) Review the program plans for correctness, clarity, and adequacy.

b) Obtain approval of the program plans from the relevant stakeholders.

c) Periodically review and maintain the program plans.

9. Track performance against the program plan and business case, according to the defined tracking methods.

a) Determine actions to take when performance deviates from the program plan.

b) Determine actions to take when program is not meeting business case objectives.

Achieve Organizational Objectives cont'd

        c) Take actions and track them to closure.

        d) Maintain the business case as appropriate.

c. Implement programs to achieve organizational objectives, using the documented work products and tasks.

1. Communicate the tasks and the availability and location of work products to relevant stakeholders. (knw02, knw03)

2. Provide resources to effectively perform the work. (knw02, knw03, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl05, ppl07, ppl08)

      → Identify sponsors and assign responsibility for the program.

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02, knw03)

5. Verify that the work is consistently and effectively performed across the organization. (knw04, prf02)

prf08   Capability Baselines

Performance Management

Ongoing

Level 4

Define capability baselines for the organization by analyzing performance data.

Use well-defined capability baselines in order to predict performance, make accurate estimates, and improve the quality of services. A statistically significant capability baseline provides a basis for the organization to analyze whether performance deviations are within expected ranges or if they represent exceptions that need to be investigated and addressed. Doing this provides a firm basis for deciding how to allocate resources and make organizational improvements.

This Practice expands on the measures established in prf04, "Organizational objectives," which covers the creation of organizational objectives. While the focus of prf04 is on establishing the measures that help the organization effectively manage and improve its performance, the focus of this Practice is on establishing performance baselines for specific organizational capabilities. This is done through statistical process control techniques that rely on historical performance data collected in prf05, "Review organizational performance." Statistical comparison of the capability baselines will determine the effectiveness of these programs undertaken to achieve organizational objectives (prf07, "Achieve organizational objectives"), and may be used in benchmarking organizational performance (prf09, "Benchmark").

Activities

a. Provide support for creating and maintaining the work products and tasks for defining capability baselines.

1. Provide sponsorship and resources for creating the work products and tasks for defining capability baselines. (knw04, prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving work products and tasks as appropriate. (knw02, rel05)

3. Maintain and improve work products and tasks as appropriate. (knw04, knw07)

b. Document work products and tasks required for defining capability baselines. Documentation includes the following Activities:

1. Select the capabilities to baseline.

    a) Review organizational and engagement objectives.

    b) Review performance measurements and standards.

    c) Determine scope and types of baselines to be created based on the reviews.

    → The set of baselines that are defined should cover the organization's capabilities as a whole, but may also be made up of individual baselines at engagement, project, or other level of detail.

    → A separate capability baseline should be created whenever there are substantial differences in services characteristics. Service characteristics include infrastructure used to design, deploy, or deliver the service; personnel competencies; and client attributes. Organizational capability baselines can include time-to-deliver, time-to-respond, number of defects, and cost.

2. Identify the performance measures to be used for the capability baselines.

3. Collect performance data for identified measures.

4. Analyze performance measurements to derive capability baselines.

→ A common method of analysis is to use statistical techniques, such as control charts.

5. Periodically review data from performance measurements and maintain the capability baselines, as appropriate.

c. Define capability baselines, using the documented work products and tasks.

1. Communicate the tasks and the availability and location of work products to relevant stakeholders. (knw02, knw03)

2. Provide resources to effectively perform the work. (knw02, knw03, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl05, ppl07, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02, knw03)

5. Verify that the work is consistently and effectively performed across the organization. (knw04, prf02)

prf08

4

prf09   Benchmark
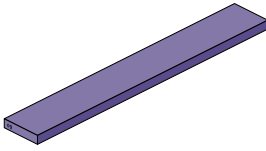
Performance Management

Ongoing

Level 4

Benchmark organizational performance to identify opportunities for improvement.

Benchmark organizational practices using best practices from reference models, competitors, or industry leaders in order to identify opportunities for improvement. Benchmarking allows the organization to objectively analyze the processes it uses to deliver its service. When compared with the organization's goals and objectives, these analyses provide a basis for deciding how to allocate resources in order to make organizational improvements.

There are three different types of benchmarks that are commonly used by organizations to improve performance, each of which should be considered when implementing this Practice. The first type of benchmarking measures the performance of the organization's processes and compares them to the measured performance of industry best practices. This type of benchmarking is used to determine the quantifiable difference in performance, and whether the difference matters. The second type of benchmarking compares the organization's processes to industry best practices in order to identify the practices that lead to superior performance [Camp 1989]. This type of benchmarking is used to identify how to achieve superior performance. The third type of benchmarking compares the performance of the organization's processes against standards or models. This type of benchmarking is used by the organization to determine what processes need to be defined or improved to achieve superior performance.

This Practice is closely related to knw04, "Process assets," prf08, "Capability baselines," and prf07, "Achieve organization objectives." The focus of this Practice is on identifying the best practices that will lead to measurably superior performance of the organization. Improvement programs that lead to the adoption of best practices are a natural consequence of benchmarking.

Activities

a. Provide support for creating and maintaining the work products and tasks for benchmarking organizational performance.

1. Provide sponsorship and resources for creating the work products and tasks for benchmarking organizational performance. (knw04, prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving work products and tasks as appropriate. (knw02, rel05)

3. Maintain and improve work products and tasks as appropriate. (knw04, knw07)

b. Document work products and tasks required for benchmarking organizational performance. Documentation includes the following Activities:

1. Identify processes to benchmark based on organizational objectives and client input.

2. Identify the "best practice" processes to use as the basis for comparison.

> → A best practice is an accepted and customary way of doing something that has been shown to significantly improve the bottom line in terms of productivity, costs, schedule, quality, user satisfaction, or predictability. Although commonly used, the modifier "best" can be misleading since it depends on the context in which the practice is being implemented. For example, earned value is a best practice for projects doing service design work; in an operational environment where planning is based on the level of effort, earned value is not useful. "Accepted and customary" also depend on context. Accepted and customary best practices in a commercial

context may be unacceptable, perhaps even illegal, in the context of government contracting. In government contracting the priority tends to be on fairness and equitability rather than efficiency because of the need to avoid the appearance of corruption.

3. Identify the information required to create the desired benchmark comparison.

4. Create the approach used for comparing data between the best practice and the organizational processes.

→ Because no two situations are ever exactly alike, performance data can vary widely. Understanding this variability, and accounting for it in a methodical and systematic manner, is key to a fair and repeatable benchmarking approach. For this reason, the benchmarking plan should not only identify the attributes to be measured and the sources of data for comparison, but should also identify factors that influence the attributes. Factors such as size, complexity, and reliability required for a process can substantially affect the identified attributes. The influencing factors will be useful in establishing a mechanism for adjusting or normalizing the data to more fairly compare organizational processes against best practice and establish realistic expectations for improvement.

5. Collect internal data on the organizational processes to benchmark.

→ A capability baseline may already exist that contains the necessary performance data. If one does not exist, it may need to be created, although benchmarking is not necessarily quantitative.

6. Collect performance data on the best practice to benchmark.

→ Locating and securing relevant external data and making comparisons is often quite involved. Some data can be collected through regular literature research and the collection of knowledge from organizational interactions in the market. Offering-specific, or service-specific, comparison data may also be obtained from organizations specializing in the collection and comparison of such information. Close attention should be given to the quality of the external data by examining the data collection methodologies (for consistency), the environmental data that are available to characterize the desired performance attribute data, data currency, and data sources (e.g., the type of service provider from which the data was obtained: external, internal, or tier 1 and tier 2).

7. Compare the performance of organizational processes to best practices, identifying gaps in performance.

→ Benchmark processes and systems will continue to evolve even as they are being adopted. This continuing evolution should be factored into the comparison. Although the organization should have the ability to statistically compare organizational processes to best practices, statistical or quantitative comparisons are not always necessary. For example, comparisons of functions or attributes may be sufficient in some benchmarking projects.

8. Identify the improvement programs that are needed as a result of benchmarking.

c. Benchmark organizational performance, using the documented work products and tasks.

1. Communicate the tasks and the availability and location of work products to relevant stakeholders. (knw02, knw03)

2. Provide resources to effectively perform the work. (knw02, knw03, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl05, ppl07, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02, knw03)

5. Verify that the work is consistently and effectively performed across the organization. (knw04, prf02)

prf10   Prevent Potential Problems
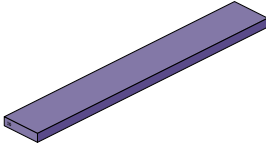
Performance Management

Ongoing

Level 4

Program

Establish and implement programs to take preventive action on potential problems.

Proactively identify potential problems and reduce the probability of their occurrence or minimize their impact, in order to improve organizational performance and enhance value to clients. The organization's ability to identify problem trends in its services and processes enables it to take these actions prior to the occurrence of a problem.

The identification of potential problems may be based on the analyses of the organizations capability baselines, on benchmarks of competitors' performance, or on market trends. The prevention programs may include the adoption of innovative technologies, processes, and tools. They may also include shifts in the organization's strategic direction. These programs typically create robust processes, including error-proofing (Poka-Yoke), fault-tolerant design, Failure Mode and Effect Analysis (FMEA), and Design for Six Sigma [Breyfogle 1999, Creveling 2002].

This Practice expands on del06, "Prevent known problems," which covers preventive actions for known service delivery problems. Other Level 3 Practices, such as knw05, "Engagement knowledge," and prf06, "Make improvements," address problems in both service delivery and in the organization as a whole. At Level 4, this Practice expands on this idea by covering the prevention of known and potential problems across the entire Sourcing Life-cycle. This Practice also increases the depth of analysis through a focus on statistical analysis of data to decide which actions to take.

Activities

a. Provide support for creating and maintaining the work products and tasks for establishing and implementing programs to take preventive action on potential problems.

1. Provide sponsorship and resources for creating the work products and tasks for establishing and implementing programs to take preventive action on potential problems. (knw04, prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving work products and tasks as appropriate. (knw02, rel05)

3. Maintain and improve work products and tasks as appropriate. (knw04, knw07)

b. Document work products and tasks required for establishing programs to take preventive action on potential problems. Documentation includes the following Activities:

1. Identify and document the problem types to be analyzed.

> → Problem types should be selected to cover all aspects of the Sourcing Life-cycle and to address critical aspects of the organization. At a high level, problem types may include categories such as business relationship, service delivery, statutory, regulatory, and political. These will typically be further divided (e.g., service delivery problems may be divided into hardware, software, personnel, process).

2. For each identified problem type, determine the analysis methods to be used to identify potential problems.

> → Statistical analysis techniques can be used to review performance data taken from organizational baselines and benchmarks and to identify potential problems. Analysis may reveal statistically significant trends in the data. These trends can be further analyzed to identify common problem areas faced by the organization.

3. Use defined analysis methods to identify and document potential problems.

> → Potential problems may include hardware failure, brief power outages, absence of personnel, legal and political climate changes, market changes, and breaks in the supply chain.

4. Analyze the potential problems and select solutions to take preventive action or otherwise address the potential problems.

   a) Collect data on problems that have occurred.

   b) Analyze root causes to identify common causes of problems.

   > → To anticipate problems that have not occurred, conduct analysis on trends in service delivery and scenario-based planning and analysis, e.g., search conference techniques.

   c) Identify candidate solutions to address common causes of problems.

   d) Create a business case for each solution.

   e) Prioritize solutions based on business case and organizational objectives.

   f) Select the solutions to pursue based on the priorities.

5. Establish programs to create and implement selected solutions.

   a) Create estimates of the programs.

   b) Create a plan for each program.

   c) Determine the attributes of the program to be tracked.

   d) Select and document methods used for tracking the defined attributes.

   e) Review the program plans for correctness, clarity, and adequacy.

6. Track performance against the program plan and business case, according to the defined tracking methods.

   a) Determine actions to take when performance deviates from the program plan.

   b) Determine actions to take when the program is not meeting business case objectives.

   c) Take actions and track them to closure.

   d) Maintain the business case as appropriate.

c. Implement programs to take preventive action on potential problems, using the documented work products and tasks.

1. Communicate the tasks and the availability and location of work products to relevant stakeholders. (knw02, knw03)

2. Provide resources to effectively perform the work. (knw02, knw03, ppl03, prf03, tch01)

prf10

4

Prevent Potential Problems cont'd

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl05, ppl07, ppl08)

> → Personnel may undergo training in relevant areas, such as statistical methods and causal analysis.

> → Identify sponsors and assign responsibility for the program.

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02, knw03)

5. Verify that the work is consistently and effectively performed across the organization. (knw04, prf02)

prf11   Deploy Innovations
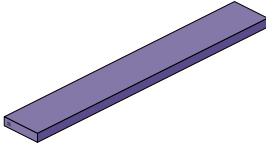
Performance Management

Ongoing

Level 4

Program

Establish and implement programs to deploy innovations across the organization.

Establish programs for deploying innovations across the organization, including new technologies, tools, and processes, in order to continually improve organizational performance and meet or exceed organizational objectives. It is the organization's responsibility to deploy these innovations, and they are typically deployed across the entire organization. But adoption of the innovations is done on an engagement level, and often involves clients and end-users.

Innovation implies a major change in the way that work is done; these changes are significant enough to require planning and managing them as a program. Incremental changes are managed as part of the normal support for the organization's technologies, tools, and processes. Major changes that affect the services that the organization offers—whether directly deployed into the service or not—need to be actively managed because of the learning curve associated with the change. In some cases, major changes may be driven by client or regulatory requirements rather than by innovation. These types of changes, while major, are not covered by this Practice.

This Practice is closely related to prf07, "Achieve organizational objectives," since deploying innovations is often done to achieve an organizational objective. Innovation may be driven by opportunities to create value, covered in rel08, "Value creation," or by the development of technology, covered in tch06, "Proactively introduce technology." Innovation should be encouraged by the organization to improve its competitive position or provide value to the client, as stated in ppl01, "Encourage innovation".

Activities

a. Provide support for creating and maintaining the work products and tasks for establishing and implementing programs to deploy innovations.

1. Provide sponsorship and resources for creating the work products and tasks for establishing and implementing programs to deploy innovations. (knw04, prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving work products and tasks as appropriate. (knw02, rel05)

3. Maintain and improve work products and tasks as appropriate. (knw04, knw07)

b. Document work products and tasks required for establishing programs to deploy innovations. Documentation includes the following Activities:

1. Identify candidate innovations to consider for deployment across the organization.

  → Sources of candidate innovations include internal research and development, published research, benchmarking against best practices, and vendor offerings.

2. Analyze candidate innovations.

  → Major changes frequently involve piloting innovations on a limited basis and comparing the pilot results against capability baselines.

  a) Create a business case for each candidate innovation.

b) Prioritize and select innovations for deployment based on the business case and organizational objectives.

3. Create the program plans for selected innovations.

a) Identify barriers to the adoption of candidate innovations.

→ Barriers to innovation include the lack of a perceived advantage over existing technologies, tools, and processes; the complexity of the innovation, which can affect the learning curve; and compatibility with current technologies, tools, and processes, which can affect the deployment.

b) Identify the tasks required to achieve program objectives.

→ Examples of tasks used to support for adoption of innovations include briefings, training, user groups, and help desks.

c) Create estimates of the resources required for each program, including the effort and time frame required for each task.

d) Create schedules of milestones and progress reviews.

e) Determine the attributes of the program to be tracked.

f) Select and document the method used for tracking the defined attributes.

g) Create a schedule of program tasks.

→ Program tasks should include the creation of an implementation approach for the program. Size and complexity of the program may impact the implementation approach (e.g., large programs may be implemented through a series of small releases).

h) Document personnel assignments in the program plans.

i) Review the program plans.

→ The program plans should be reviewed for correctness, clarity, and adequacy. Input on, and approval of, the program plans should be sought from the relevant stakeholders.

4. Implement programs according to the program plans.

5. Track performance against the program plan and business case, according to the defined tracking methods.

a) Determine actions to take when performance deviates from the program plan.

b) Determine actions to take when program is not meeting business case objectives.

→ There will typically be a learning curve associated with adopting an innovation, with an associated decrease in performance until the innovation is assimilated. The learning curve should be separated from the steady state performance after adoption is complete to distinguish between successful and unsuccessful innovations. An innovation that performs well with innovators may not fare as well when deployed to the larger community of users. Ultimately, innovations should result in a change in the capability baseline for the affected process.

c) Take actions and track them to closure.

d) Maintain the business case based on tracking actions.

Deploy Innovations cont'd

c. Implement programs to deploy innovations, using the documented work products and tasks.

1. Communicate the tasks and the availability and location of work products to relevant stakeholders. (knw02, knw03)

2. Provide resources to effectively perform the work. (knw02, knw03, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl05, ppl07, ppl08)

> → Identify sponsors and assign responsibility for the program.

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02, knw03)

5. Verify that the work is consistently and effectively performed across the organization. (knw04, prf02)

rel

Relationship Management Practices

Relationship Management Practices focus on actively managing relationships with stakeholders, including the client, as well as suppliers and partners who are integral to the delivery of services to the client. All Relationship Management Practices are Ongoing. They cover the following:

- Managing interactions with clients to ensure their effectiveness, and to capture critical information uncovered during these interactions.

- Formally managing relationships with clients, suppliers, and partners by establishing relationship objectives and tracking progress against those objectives.

- Selecting suppliers and partners based on their ability to meet the identified requirements, and managing their performance against the agreed-upon commitments.

- Obtaining feedback from all stakeholders, including clients, end-users, employees, suppliers, and partners. Using this feedback to improve performance and relationships with those stakeholders.

- Proactively identifying opportunities that will provide added value to clients or to the organization.

rel01   Client Interactions
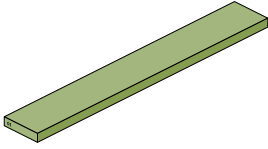
Relationship Management

Ongoing

Level 2

Procedure

Establish and implement procedures to manage interactions with clients.

Manage client interactions consistently in order to achieve a common, comprehensive understanding of client needs. Effective collection, analysis, and tracking of client interactions enable the creation of an extensive record of client requirements.

Providing a single point of contact (i.e., the client interaction team) helps ensure the continuity of communication. It also establishes redundancy and ensures that there is an appropriate set of skills available to interact with the client. The client interaction team may be formed before a formal relationship with the client exists. As long as there is a relationship with a client—or potential client—there will be a client interaction team. The team should be maintained throughout the Sourcing Life-cycle, but its membership should be changed as necessary at each phase of the Life-cycle. Besides the client interaction team, there may be other personnel who interact with the client (e.g., the design team will interact with the client during design reviews), but the client interaction team is responsible for verifying that the interactions are managed.

Activities

a. Provide support for creating and maintaining the procedures for managing client interactions.

1. Provide sponsorship and resources for creating the procedures. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02)

3. Maintain and improve the procedures as appropriate. (knw07)

b. Document the procedures for managing client interactions. Documentation includes the following Activities:

1. Determine objectives for the client interaction team.

2. Determine the roles and responsibilities needed to meet the identified objectives.

3. Identify the personnel competencies required for the client interaction team.

> → Personnel competencies for the client interaction team will depend on the phase of the sourcing process, the client, and the services offered to the client. Personnel competencies to consider for choosing team members include market sector expertise, service expertise, communication skills, listening skills, comprehension skills, relationship-management skills, and crisis-handling skills. Identified personnel competencies should be aligned with the defined objectives.

4. Identify points of contact with the client and alternative backup contacts.

> → There may be differences in roles and responsibilities for each point of contact.

5. Create plans for managing client interactions.

> → Plans include a schedule for key interactions, an assignment of responsibilities for managing interactions, and an approach to collecting and managing information.

a) Identify the types of client interactions to be managed and determine the types of interactions that require formal documentation.

→ Typically, a large number of personnel will have the potential of interacting with the client from time to time, not just members of the client interaction team. When identifying the types of client interactions to be managed, it is important to consider which interactions will be the sole responsibility of the client interaction team and how other types of interactions will be managed. For instance, if a staff member has an informal encounter with a client and learns about client dissatisfaction, that information should be collected and reported to the client interaction team.

b) Identify the information to be documented for each type of client interaction.

c) Select tools and methods for documenting client interactions.

→ Types of information associated with client interactions can include originator, respondent, date, time, and the nature and status of the interaction. Tools used to document client interactions include questionnaires, templates, spreadsheets, e-mail, and specialized software.

6. Create dispute handling and escalation methods for clients.

→ Client dispute handling and escalation is typically handled through a different process than disputes with either personnel or suppliers and partners. However, the process will be similar in that methods for all three need to be defined for identifying, managing, and tracking disputes.

a) Select and document methods to prioritize client disputes or other problems.

b) Identify types of potential client disputes or problems to be escalated.

c) Determine decision-making and prioritization processes.

d) Determine notification rules for each priority.

→ Rules include deciding who is notified at each stage, under what conditions the rules change, and the systems necessary to support the notification rules.

e) Determine which reports are needed.

7. Document the identified information during client interactions, using selected tools and methods.

8. Obtain client approval, as appropriate, on documented information.

9. Analyze documented information to better understand client requirements and expectations.

10. Track the issues and decisions made, based on the analysis, taking action when appropriate.

11. Track client disputes and escalations.

a) Determine actions to take when client disputes arise or when problems need to be escalated.

b) Take actions and track them to closure.

12. Track status and progress against the plan.

a) Determine actions to take when progress deviates from the plan.

b) Take actions and track them to closure.

13. Communicate relevant information from client interactions to relevant stakeholders.

rel01

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Client interactions cont'd

14. Periodically review the competencies required for the client interaction team and change team composition depending on changes in required competencies.

> → Changes in required competencies may occur due to changes in the phase of the sourcing relationship. For instance, during Initiation, when the organization has not had any previous interaction with a prospective client, the client interaction team will have more of an emphasis on sales and marketing. As the relationship progresses toward a contract the team composition should change to include personnel with negotiation and technical skills.

15. Provide continuity of client interactions when team composition changes.

   a) Communicate required information to new team member(s).

   b) Maintain communication lines with client.

   c) Communicate changes in team composition to the client.

c. Implement client interaction management, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed according to the procedures. (prf02)

rel02   Select Suppliers & Partners
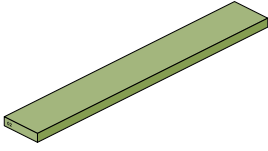
Relationship Management

Ongoing

Level 2

Procedure

Establish and implement procedures to select suppliers and partners based on their ability to meet identified requirements.

Select capable suppliers and partners in order to help ensure consistency in meeting requirements and service levels. Failures of incapable suppliers and partners could lead to the failure of the engagement and possible legal action.

The phrase "suppliers and partners" represents a broad set of relationships where one or more entities are working with the organization to provide support or to deliver service. Suppliers and partners include subcontractors, vendors, alliances, joint ventures, co-sourcing, multi-sourcing, and combinations of these. Suppliers and partners may become involved at any time during the sourcing process, depending on the relationship between the organization, the supplier or partner, and the client.

This Practice is closely related to rel03, "Managing suppliers & partners," where selected suppliers and partners are managed to ensure they are meeting their commitments.

Activities

a. Provide support for creating and maintaining the procedures for selecting suppliers and partners.

1. Provide sponsorship and resources for creating the procedures. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02)

3. Maintain and improve the procedures as appropriate. (knw07)

b. Document the procedures for selecting suppliers and partners. Documentation includes the following Activities:

1. Select candidate suppliers and partners based on their ability to meet identified requirements.

> → Suppliers can be selected from a short list of preferred vendors. Preferred vendors will already have been analyzed for their capabilities and the organization can select the suppliers whose capabilities enable them to meet the identified requirements. In some cases, the client may require the organization to involve specific suppliers and partners during Delivery.

a) Identify the types of relationships to be used to deliver service.

> → The type of relationship desired may have legal or other impacts that need to be considered. Contractual relationships involve clearly identifying the prime contractor and subcontractor responsibilities. Joint ventures may involve creating separate legal entities. Some relationships may involve plans to only use the relationship for a single client, where others may involve plans to market services to multiple clients.

b) Identify requirements that suppliers and partners need to meet.

> → Requirements are usually specific to a client engagement. However, they may be broader and based upon organizational needs (e.g., telecommunications support for a call center with multiple client engagements).

c) Determine the criteria for selecting suppliers and partners based on the identified requirements.

→ The selection criteria includes factors such as prior experience in providing similar services or products, minimum capacity in terms of resources, location, statutory issues, and market share.

→ Other capabilities that should be considered include a track record that demonstrates the capability to deliver required quality within contracted delivery schedules; pricing; referrals from past clients; personnel skills, including project management and organizational skills; management systems; financial strength and stability; and infrastructure reliability, including redundancies.

d) Collect information on prospective suppliers and partners and their ability to meet identified requirements.

e) Analyze the ability of prospective suppliers and partners to meet identified requirements.

f) Select candidate suppliers and partners based on the selection criteria.

2. Obtain approval on commitments between the organization, suppliers, and partners.

a) Document the expectations the organization has of the suppliers and partners, based on the identified requirements.

b) Document the expectations the suppliers and partners have of the organization, in order to meet their commitments.

c) Analyze rights, responsibilities, and ownership of current and future intellectual property.

d) Determine final suppliers and partners based on their ability and willingness to satisfy identified commitments.

3. Establish and maintain a formal agreement with the selected suppliers and partners, verifying that the agreement meets identified requirements.

→ While most agreements are expected to be contractual in nature, some types may not be legally binding (e.g., multi-sourcing organizations who have been independently selected by a client, or relationships between two different departments within the same organization). In these cases, it is nevertheless important for the suppliers and partners to have a documented agreement on their expected relationships and commitments to each other. The agreement should include provisions for security that adequately satisfy the organization's policies.

c. Implement supplier and partner selection, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed according to the procedures. (prf02)

rel02

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rel03

Relationship Management

Ongoing

Level 2

Manage Suppliers & Partners

Manage the performance of suppliers and partners against their commitments.

Manage the performance of suppliers and partners in order to help ensure that the organization is able to effectively deliver service, even when it is dependent on others. Effective management includes identifying deviations in the performance of suppliers and partners, and taking the appropriate corrective action to help meet commitments. Tracking the performance of suppliers and partners may be a stand-alone task but it is more likely to be a part of service delivery tracking.

Relationship management should ideally be proactive and collaborative, with customers and their suppliers and partners working together to resolve issues. In rel01, "Client interactions," the organization is itself a supplier and is proactively managing the relationship with its client to ensure that requirements are clearly understood. In this Practice the organization is a client and is proactively managing the relationship with its suppliers and partners to ensure that its requirements are clearly understood and met. Although an organization can only control one side of the relationship, in general it is recommended that organizations treat their suppliers as they wish their clients to treat them. This Practice is closely related to rel02, "Select suppliers & partners," which covers the selection of the suppliers and partners that need to be managed.

Activities

a. Provide support for creating and maintaining the work products and tasks for managing the performance of suppliers and partners against their commitments.

1. Provide sponsorship and resources for creating the work products and tasks for managing the performance of suppliers and partners against their commitments. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving work products and tasks as appropriate. (knw02)

3. Maintain and improve work products and tasks as appropriate. (knw07)

b. Document work products and tasks required for managing the performance of suppliers and partners against their commitments. Documentation includes the following Activities:

1. Provide suppliers and partners access to the resources they need in order to understand and analyze their ability to meet the service expectations.

2. Identify points of contact with the supplier or partner and alternative backup contacts.

> → There may be differences in roles and responsibilities for each point of contact.

3. Document supplier and partner interactions, as appropriate.

4. Determine and document the steps to identify, analyze, and address clarifications required by suppliers and partners.

5. Provide training to suppliers and partners, as appropriate.

a) Identify the type, content, and format of training to be delivered to suppliers and partners.

→ Training is based on commitments made to the client. Training may be classroom-based; self-taught with supporting course materials, including electronic materials; or web-based.

b) Obtain acceptance from suppliers and partners about the identified training.

c) Communicate the availability and conditions of training to suppliers and partners.

6. Determine the attributes of supplier and partner performance to be tracked.

→ Attribute selection for supplier or partner performance may occur as a stand-alone planning task, but is more likely to be part of planning for service delivery.

7. Select and document the methods used for tracking the defined attributes.

→ The nature and level of tracking depends on the kind of service or product, as well as the prior experience with the supplier or partner. The tracking may be in the form of a status or coordination review, a technical review, or some other type of formal review. A status or coordination review includes cost, staffing, performance against commitments, risks addressed, conflict resolution, and corrective actions taken. A technical review includes verification of the implementation and interpretation of technical requirements, and verification of the timely resolution of technical issues.

8. Track supplier and partner tasks, according to the defined tracking methods.

a) Determine actions to take when performance deviates from expectations.

→ There may not be a formal plan for managing supplier and partner performance. In this case, performance should be tracked against expectations agreed to with the supplier or partner.

→ The actions taken include awarding additional contracts, reducing the amount of work performed by the supplier or partner, increasing or decreasing the frequency of tracking, and providing additional training to supplier or partner personnel.

b) Take actions and track them to closure.

9. Create dispute handling and escalation methods for suppliers and partners.

→ Supplier and partner dispute handling and escalation is typically handled through a different process than disputes with either personnel or clients. However, the process will be similar in that methods for all three need to be defined for identifying, managing, and tracking disputes.

a) Select and document methods to prioritize supplier and partner disputes or other problems.

b) Identify types of prospective supplier and partner disputes or problems to be escalated.

c) Determine decision-making and prioritization processes.

d) Determine notification rules for each priority.

→ Rules include deciding who is notified at each stage, under what conditions the rules change, and the systems necessary to support the notification rules.

e) Determine which reports are needed.

10. Maintain records of supplier and partner performance.

→ Records may be used to determine type of future relationship with the supplier or partner, including expanding or curtailing the relationship.

11. Track supplier and partner disputes and escalations.

rel03

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Manage Partners & Suppliers cont'd

a) Determine actions to take when supplier and partner disputes arise or when problems need to be escalated.

b) Take actions and track them to closure.

12. Periodically review the status of the relationship with each supplier or partner, and take action as appropriate.

c. Manage suppliers and partners, using the documented work products and tasks.

1. Communicate the tasks and the availability and location of work products to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)
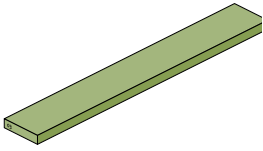
3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed. (prf02)

rel04   Cultural Fit

Relationship Management

Ongoing

Level 3

Identify cultural attributes that impact the service, and implement actions to achieve a cultural fit.

Integrate the cultures of the organization, the client, and the suppliers and partners in order to support the coordination necessary to meet the client's requirements. Addressing cultural differences also improves client satisfaction and enables personnel to work together effectively.

Cultural differences that impact the success of service delivery can include language, country, region, decision-making style, and background. While it is not always necessary or appropriate for the organization to change its culture to that of the client, it is important to achieve a fit between those cultures to allow for effective service delivery. In some cases, cultural attributes may be specifically required for the engagement (e.g., language and accent requirements for call center engagements). In other cases the organization, the client, and the suppliers and partners may need to accept the differences and to identify ways to work together effectively (e.g., if the organization has a hierarchical decision-making style and the client has a consensus decision-making style).

This Practice is related to rel05, "Stakeholder information." Information obtained in rel05 is used to achieve a better cultural fit.

Activities

a. Provide support for creating and maintaining the work products and tasks for achieving a cultural fit.

1. Provide sponsorship and resources for creating the work products and tasks for achieving a cultural fit. (knw04, prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving work products and tasks as appropriate. (knw02, rel05)

3. Maintain and improve work products and tasks as appropriate. (knw04, knw07)

b. Document work products and tasks required for achieving a cultural fit. Documentation includes the following Activities:

1. Identify the potential interactions between the organization, clients, end users, suppliers, and partners.

> → The greater the number of interactions between the organization, client, end-users, suppliers, and partners, the greater the need to bridge cultural differences. For example, the need to achieve a cultural fit is much greater in a call center—where language, accent and use of words play a very important role in service delivery—than in a network service engagement, where there is little interaction between the organization and client, or end-user, during service delivery.

2. Identify the cultural attributes that affect the organization's performance during interactions.

3. Identify the cultural gaps for each of the identified attributes.

> → Cultural gaps can arise from differences in market sector, geographic area, or size of organizations. Gaps can include differences in language (e.g., accent and vocabulary), symbolism (e.g., colors and graphics), holidays, work ethic, as well as social and behavioral aspects (e.g., actions or words to be avoided).

4. Determine the effect of cultural gaps on interactions and service, and their possible adverse consequences on service.

5. Identify actions required to achieve a cultural fit.

> → Actions can include training and guidelines on appearance (e.g., dress and grooming). Personnel who interact with clients, prospective clients, and end-users, and any other personnel who design, deploy, deliver, and support the services are affected by these actions.

> → Issues of cultural fit can be even more significant in environments where the organization and client personnel work side-by-side (e.g., differing holidays, dress codes, and overtime policies may be particularly noticeable).

> → Managing a cultural gap does not always mean the organization has to make changes. Sometimes managing cultural gaps can just mean recognizing the gaps.

6. Create a plan to achieve a cultural fit.

7. Obtain feedback on the plan from the relevant stakeholders, modifying the plan as appropriate.

> → All identified cultural gaps may not have the same impact. However, it is important for clients to know these differences, so that they may also initiate actions to bridge the gap from their end, and support the organization's management of the cultural gaps.

8. Track performance against the plan for achieving a cultural fit.

a) Determine actions to take when performance deviates from the plan.

b) Take actions and track them to closure.

9. Obtain and analyze stakeholder feedback on effectiveness of actions taken to achieve a cultural fit.

c. Achieve a cultural fit, using the documented work products and tasks.

1. Communicate the tasks and the availability and location of work products to relevant stakeholders. (knw02, knw03)

2. Provide resources to effectively perform the work. (knw02, knw03, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl05, ppl07, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02, knw03)

> → It is important to communicate cultural differences to clients, so they may take actions to bridge the gap from their end, and support the organization's management of the cultural gaps.

5. Verify that the work is consistently and effectively performed across the organization. (knw04, prf02)

rel04

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rel05   Stakeholder Information   **S**
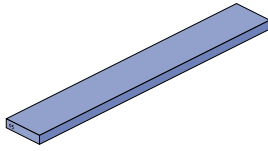
Relationship Management

Ongoing

Level 3

Analyze and use client and other stakeholder information.

Analyze and use stakeholder information in order to improve service delivery and relationships with stakeholders. Effectively analyzing and using stakeholder information enables the organization to better understand its stakeholders' expectations, and to take action to better meet their needs. A better understanding of stakeholders' expectations can help the organization to identify opportunities to create new services, enter new markets, and improve service delivery.

Stakeholder information primarily comes from feedback received directly from the stakeholders, although information from independent sources (e.g., from marketplace analysis) is also important. Understanding this information can lead to improvement actions whether the information is positive (e.g., using feedback about what worked well on one engagement) or negative (e.g., conducting root cause analysis of reported problems). Stakeholders include clients, end-users, employees, suppliers, and partners.

Both this Practice and knw05, "Engagement knowledge," analyze and use information from engagements. The focus of knw05 is on using this information as the basis for improvement on current and future engagements. The focus of rel05 is on using this information, with a particular emphasis on stakeholders' feedback, as a basis for improving relationships and better meeting the stakeholders' needs. Information obtained in this Practice is used to improve relationships with employees (ppl03, "Work environment"), clients (rel06, "Client relationships"), end-users, and suppliers and partners (rel07, "Supplier & partner relationships"), including achieving a better cultural fit (rel04, "Cultural fit").

Activities

a. Provide support for creating and maintaining the work products and tasks for analyzing client and other stakeholder information.

1. Provide sponsorship and resources for creating the work products and tasks for analyzing client and other stakeholder information. (knw04, prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving work products and tasks as appropriate. (knw02, rel05)

3. Maintain and improve work products and tasks as appropriate. (knw04, knw07)

b. Document work products and tasks required for analyzing client and other stakeholder information. Documentation includes the following Activities:

1. Determine types of stakeholder information that need to be collected and analyzed.

    a) Identify client, supplier, and partner business drivers and objectives.

    b) Identify information about client use of service.

    c) Identify information about client, supplier, and partner culture.

    d) Identify information needed from employees.

    → Information needed includes feedback on employees' work products and tasks. This feedback is crucial for quality and process improvement.

e) Determine attributes that require client and other stakeholder feedback.

→ Attributes typically focus on stakeholder satisfaction in areas of service quality, service timeliness, effectiveness of interaction, etc.

2. Identify sources for stakeholder information.

→ Stakeholder information is typically gathered both directly from the stakeholders and from external sources. Direct stakeholder feedback can be gathered through satisfaction surveys, meetings, and documenting feedback received by the client interaction teams and others. External sources can include structured research and participation in industry forums.

3. Collect and maintain the identified stakeholder information.

a) Select tools and methods to collect and maintain stakeholder information, creating or purchasing tools and methods as appropriate.

b) Determine time-frames for collecting and maintaining stakeholder information.

c) Identify contact personnel and media for collecting information.

d) Collect and organize obtained information into the knowledge system.

4. Analyze the collected stakeholder information.

a) Analyze effectiveness of how service supports and satisfies client, supplier, and partner business goals.

b) Determine actions needed to improve relationships with clients, suppliers, and partners.

c) Identify other opportunities for improvement.

→ Opportunities for improvement can include improving procedures to better address client requirements, improving employee conditions and work effectiveness, and creating new services that better support client business objectives, etc.

5. Use stakeholder information, as appropriate.

c. Analyze client and other stakeholder information, using the documented work products and tasks.

1. Communicate the tasks and the availability and location of work products to relevant stakeholders. (knw02, knw03)

2. Provide resources to effectively perform the work. (knw02, knw03, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl05, ppl07, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02, knw03)

5. Verify that the work is consistently and effectively performed across the organization. (knw04, prf02)

rel05

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rel06

Client Relationships

Relationship Management

Ongoing

Level 3

Procedure

Establish and implement procedures to manage client relationships.

Develop and manage relationships with current and prospective clients in order to fully understand their needs, foster long-term relationships, and position the organization. Having effective relationships with existing clients helps the organization to understand the clients' changing needs and to proactively determine how to address them while also addressing the organization's objectives. Having effective relationships with prospective clients helps the organization to understand market needs and to position its capabilities to meet those needs.

This Practice is closely related to rel01, "Client interactions." At Level 2, client relationship management is focused on effectively managing interactions with clients (rel01). At Level 3, this is expanded into formal client relationship management, which includes understanding the long-term business objectives of the client and how the organization will support them (rel06).

Activities

a. Provide support for creating and maintaining the procedures for managing client relationships across the organization.

1. Provide sponsorship and resources for creating the procedures. (knw04, prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02, rel05)

3. Maintain and improve the procedures as appropriate. (knw04, knw07)

b. Document the procedures for managing client relationships. Documentation includes the following Activities:

1. Identify key contact personnel for the organization, the current and prospective clients, and the organization's suppliers and partners.

   → The organization should make sure that it is not dependent on a single contact person for any relationship. This will help mitigate risk in the event that a contact is unreachable. Similarly, in order to establish an effective relationship with the client, the organization should provide backup contact personnel. This will help ensure that the client is able to reach someone when necessary.

2. Determine the contact personnel's roles, responsibilities and authorities in regard to the sourcing relationship.

3. Determine and document how the organization will support the client's organizational and business objectives.

   → This can be documented in a business case.

4. Establish relationships with client contact personnel.

   → Relationships have formal and informal aspects. While the organization and the client often explicitly recognize the formal aspect (e.g., an account lead is assigned as a point of contact to a client executive), it is often advantageous to supplement this with informal relationship building (e.g., finding out about client personnel's personal interests and hobbies, or keeping a record of client birthdays and special events) to foster good will.

a) Identify target roles for developing relationships.

→ Target roles in the client organization typically include senior executives (e.g., CEO, CIO, CFO) and other members of client management who have a significant impact on the relationship (e.g., vice president of purchasing).

b) Determine relationship goals for each identified target.

→ Relationship goals typically change over the length of the relationship. Initial goals may include learning more about the personal career objectives and decision-making style of the person. Later goals may include becoming a trusted advisor and gaining insight about future business direction.

c) Verify that the relationship goals are aligned with organizational objectives.

d) Identify tasks needed to establish and maintain the relationships.

5. Provide regular channels of communication with the client.

a) Identify preferred communication methods and media for each contact.

b) Coordinate communications between the client and the organization's suppliers and partners.

c) Identify and make available any information required by present and prospective clients.

d) Obtain feedback from contacts on the status of the relationship.

6. Track the status of the relationships and support of client objectives, taking action when appropriate.

a) Determine actions to take when the relationship deviates from expectations.

b) Determine actions to take when client objectives are not being supported.

c) Take actions and track them to closure.

c. Implement client relationship management, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02, knw03)

2. Provide resources to effectively perform the work. (knw02, knw03, ppl03, prf03, tch01)
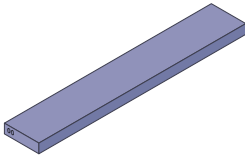
3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl05, ppl07, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02, knw03)

5. Verify that the work is consistently and effectively performed according to the procedures across the organization. (knw04, prf02)

rel06

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rel07

Supplier & Partner Relationships

Relationship Management

Ongoing

Level 3

Procedure

Establish and implement procedures to manage relationships with suppliers and partners.

Establish and manage relationships with suppliers and business partners in order to support the long-term objectives of providing value-added service to clients. Having effective relationships with existing suppliers and partners helps the organization expand its capabilities and respond to clients' changing demands. Relationships with prospective suppliers and partners help the organization to keep current with new capabilities that can be used to meet market needs.

It is important to recognize that a company may be a supplier or partner in one engagement and a competitor in another, so it is necessary to verify that competitive issues are taken into account. Specific language may need to be added to any formal agreements with the supplier or partner to ensure that related issues (e.g., ownership of intellectual property) are documented and agreed upon.

This Practice is closely related to rel02, "Select suppliers & partners," where suppliers and partners are formally selected for use in a particular engagement, and rel03, "Managing suppliers & partners," where the performance of suppliers and partners is managed. This Practice expands this engagement-specific view of suppliers and partners into a broader relationship that may span multiple engagements.

Activities

a. Provide support for creating and maintaining the procedures for managing relationships with suppliers and partners across the organization.

1. Provide sponsorship and resources for creating the procedures. (knw04, prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02, rel05)

3. Maintain and improve the procedures as appropriate. (knw04, knw07)

b. Document the procedures for managing relationships with suppliers and partners. Documentation includes the following Activities:

1. Identify the critical suppliers and partners for whom it is crucial to manage the relationship.

> → Not all relationships need to be formally managed; the organization should identify those suppliers and partners who are critical to the operation of the organization and the delivery of service.

2. Identify key contact personnel for the organization, and selected suppliers and partners.

> → The organization should make sure that it is not dependent upon a single contact person for any relationship. This helps mitigate risk in the event that a contact is unreachable.

3. Determine the roles, responsibilities, and authorities of the organization's contact personnel in regard to the sourcing relationship.

4. Create a business case that documents how the identified supplier or partner will support the organization's business objectives.

→ The business case should cover the value that the supplier or partner is providing the organization, as well as what benefits that translates into for current or prospective clients. It should include measurements of success that allow the organization to quantitatively measure value delivered by the supplier or partner.

5. Establish relationships with the supplier and partner's contact personnel.

→ Relationships have formal and informal aspects. While both the organization and the supplier or partner often explicitly recognize the formal aspect (e.g., an account lead is assigned as a point of contact), it is often advantageous to supplement this with informal relationship development (e.g., finding out about contacts' personal interests and hobbies, or keeping a record of birthdays and special events) to foster goodwill.

a) Identify target roles for developing relationships.

→ Target roles in the supplier or partner organization typically include senior executives (e.g., CEO, CIO, CFO) and other members of management who have a significant impact on the relationship (e.g., vice president of purchasing).

b) Determine relationship goals for each identified target.

c) Verify that the relationship goals are aligned with organizational objectives.

d) Identify tasks needed for establishing and maintaining the relationships.

e) Create and document strategic agreements.

→ Strategic agreements may involve formal contracts with a supplier or partner that span multiple engagements. These are typically in the form of strategic alliances or preferred supplier arrangements. Strategic agreements are typically separate from contracts for services for a specific engagement.

6. Provide regular channels of communication with suppliers and partners.

a) Identify preferred communication methods and media for each contact.

b) Communicate the business case.

c) Coordinate communications between the client and organization's suppliers and partners.

d) Identify and make available the information required by current and prospective suppliers and partners.

e) Obtain feedback from contacts on the status of the relationship.

7. Track the status of the relationships and business case, taking action when appropriate.

a) Determine actions to take when the relationship deviates from expectations.

b) Determine actions to take when the business case objectives are not being met.

c) Take actions and track them to closure.

d) Maintain the business case as appropriate.

Supplier & Partnership Relationships cont'd
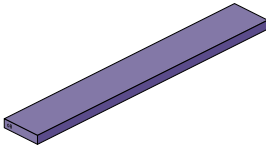
c. Implement supplier and partner relationship management, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02, knw03)

2. Provide resources to effectively perform the work. (knw02, knw03, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl05, ppl07, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02, knw03)

5. Verify that the work is consistently and effectively performed according to the procedures across the organization. (knw04, prf02)

rel08　　Value Creation

Relationship Management

Ongoing

Level 4

Proactively identify value creation opportunities and communicate them to the client.

Proactively look for opportunities to improve both the organization and the client in order to create value for clients. Helping the client to meet their changing business objectives contributes to client satisfaction and helps them to see the organization as a valued business partner. New business opportunities for the organization may be identified as well.

"Value creation" refers to an increase in the business benefit to the client. In the context of this Practice, value creation is more than adding value through the service delivery already being provided. It includes the act of identifying opportunities of greater business value for the client, including innovative business arrangements or technologies (prf11, "Deploy innovations"), and other opportunities.

Activities

a. Provide support for creating and maintaining the work products and tasks for identifying and communicating value creation opportunities.

1. Provide sponsorship and resources for creating the work products and tasks for identifying and communicating value creation opportunities. (knw04, prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving work products and tasks as appropriate. (knw02, rel05)

3. Maintain and improve work products and tasks as appropriate. (knw04, knw07)

b. Document work products and tasks required for identifying and communicating value creation opportunities. Documentation includes the following Activities:

1. Collect information about the client's business objectives and communicate it to appropriate personnel.

2. Establish methods for proactively identifying value creation opportunities for the client.

　　a) Identify sources of information to be analyzed.

　　→ Sources of information can be both internal (e.g., similar service offerings) and external (e.g., industry innovations).

　　b) Determine frequency of analysis.

3. Identify value creation opportunities.

　　→ Types of value creation opportunities can include technology, processes, tools, personnel management approaches, training, and business models.

4. Analyze the potential impact of identified opportunities.

　　a) Create an organizational business case for each opportunity.

　　→ The organizational business case should show a compelling need for change in terms that are quantifiable. Each opportunity analyzed should include a description of the value derived and a preliminary time line that outlines the sequence of potential programs that can be undertaken to achieve that value.

b) Prioritize opportunities based on the business case and organizational objectives.

c) Determine the opportunities to pursue based on the priorities.

d) Identify clients who will benefit from the opportunities.

→ It may not be appropriate to share all opportunities with all clients. Not only does applicability of the opportunity need to be analyzed, but the organization should also consider the client's receptiveness to innovation.

e) Create a client business case for each selected opportunity.

→ The client business case may include customizing the service currently being offered to the client.

→ When creating a business case, it is important to understand intellectual property issues. If not adequately protected, innovations viewed by the organization as proprietary or competitive may be used by the client, or even shared with competitors, without the organization's permission. The organization should take steps to protect any intellectual property before sharing information with clients.

5. Communicate identified opportunities, business cases, and impact analysis to identified clients.

6. Obtain agreement with the relevant stakeholders on potential changes to service, or service levels to be pursued, based on identified opportunities.

7. Modify services, or service levels, based on agreed-upon opportunities.

c. Identify and communicate value creation opportunities, using the documented work products and tasks.

1. Communicate the tasks and the availability and location of work products to relevant stakeholders. (knw02, knw03)

2. Provide resources to effectively perform the work. (knw02, knw03, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl05, ppl07, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02, knw03)

5. Verify that the work is consistently and effectively performed across the organization. (knw04, prf02)

rel08

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tch

Technology Management Practices

Technology Management Practices focus on managing the availability and adequacy of the technology infrastructure used to support the delivery of services. These Practices include Activities that control the existing technology, manage changes to that technology, and appropriately integrate the technology infrastructure with the client, suppliers, and partners to effectively deliver service. All Technology Management Practices are Ongoing. They cover the following:

- Managing the acquisition and deployment of technology.
- Integrating the organization's technology infrastructure with that of the client and other service providers, as appropriate.
- Managing the licensing of technology.
- Optimizing the performance of the technology infrastructure.

tch01   Acquire Technology   **S**
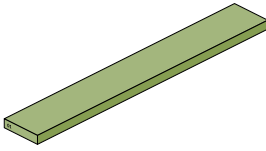
Technology Management

Ongoing

Level 2

Procedure

Establish and implement procedures to acquire and deploy technology.

Acquire, upgrade, and deploy technology in an orderly manner and without disruption to service delivery in order to help meet the agreed-upon service levels, and engagement and business objectives. New technologies may be necessary to meet these service levels and objectives.

This Practice is related to tch03, "Control technology," since the acquisition and deployment of technology will lead to changes in the technology infrastructure that need to be tracked and controlled. However, tch03 also covers tracking changes in the technology infrastructure, which may occur on a day-to-day basis.

Activities

a. Provide support for creating and maintaining the procedures for acquiring and deploying technology.

1. Provide sponsorship and resources for creating the procedures. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02)

3. Maintain and improve the procedures as appropriate. (knw07)

b. Document the procedures for acquiring and deploying technology. Documentation includes the following Activities:

1. Identify the needs for acquiring and upgrading technology, based on business objectives, client requirements, and contractual commitments.

2. Identify and analyze technology alternatives that meet the identified needs and selecting the appropriate alternative.

> → Analysis should be done based on defined criteria, including compatibility with existing technology, capability of existing personnel to operate and maintain the technology, expected stability of the technology, and the proprietary nature of the technology and supporting systems. Criteria should also include a decision between upgrading or replacing existing technology.

3. Identify and select partners or suppliers to provide or support technology acquisition and deployment tasks.

4. Make necessary changes to licensing provisions.

5. Create a plan for deploying technology into the organization.

> → Deployment plans include the selection and acquisition of technology, installation, testing, training of personnel, and integration with the existing infrastructure of the organization and the client.

6. Create contingency plans to ensure continuity of service in the event of failures during deployment.

> → The contingency plans should cover parallel operations of the new and old technology, when appropriate. Parallel operations help ensure that service delivery will not be disrupted in the event of the failure of a new technology or if it does not operate as expected.

→ The contingency plans should be created before making changes to the technology infrastructure. They should include an analysis of the impact on the service design, deployment, and delivery tasks, as well as a plan for feasible alternatives. Impacts of the changes in the technology infrastructure include disruptions in service delivery, service accessibility, service functionality, and operational efficiency, as well as the additional effort required to convert files and change storage mechanisms.

7. Deploy the technology into the organization.

8. Track status and progress against the plan.

    a) Determine actions to take when progress deviates from the plan.

    b) Take actions and track them to closure.

9. Track and control changes to licenses or to the technology infrastructure during deployment, taking action when appropriate.

10. Identify and analyze the problems encountered during deployment, and track them to closure.

11. Verify that the deployed technology meets identified needs, and take action as appropriate.

    → Verification may be done through testing, inspection, simulation, and prototyping.

c. Implement actions to acquire and deploy technology, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed according to the procedures. (prf02)

tch01

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tch02   Technology Licenses
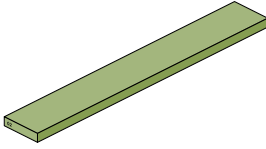
Technology Management

Ongoing

Level 2

Procedure

Establish and implement procedures to manage technology licenses.

Manage technology licenses in order to avoid liabilities and legal actions that could impact service performance. This can be a complex issue if the service or the client relationship spans national boundaries or other legal entities where multiple legal or regulatory requirements may be imposed. Proactively addressing licensing issues also helps to establish clients' trust.

Technology resources that require licensing include specific software libraries, applications, development tools, maintenance tools, and hardware components. These may be proprietary in nature (e.g., resources created specifically for a particular client using technology that gives them a competitive advantage) or they may be resources that are sold by a third party (e.g., packaged applications).

Activities

a. Provide support for creating and maintaining the procedures for managing technology licenses.

1. Provide sponsorship and resources for creating the procedures. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02)

3. Maintain and improve the procedures as appropriate. (knw07)

b. Document the procedures for managing technology licenses. Documentation includes the following Activities:

1. Identify requirements for technology licenses.

> a) Identify existing client technology resources to be used in designing, deploying, and delivering the service.

> b) Identify existing technology resources from the organization, suppliers, or partners to be used in designing, deploying, and delivering the service.

> c) Identify new technology resources that need to be obtained.

> d) Analyze and document usage restrictions on identified technology.

> → Usage restriction should clearly indicate the organization's rights, if any, to use the licensed technology for other purposes (e.g., in support of other clients).

2. Address licensing requirements in the contracts between the organization, client, suppliers and partners, as appropriate.

> → Contracts need to verify that appropriate licensing coverage is obtained to protect the client, organization, suppliers, and partners. Inability of all parties to obtain required licenses for the technology may cause significant risks and delays in responding to client needs.

3. Coordinate with clients and third parties to obtain the licenses needed, based on identified requirements.

4. Review the obtained licenses to verify they meet identified requirements.

> → The attributes of the licenses should be matched with requirements. For example, if the organization has 20 users then the license should allow for 20 users. Other attributes to address include pricing, vendor support, expiration, and renewal methods.

5. Create an inventory of obtained licenses.

6. Track license usage, taking action when appropriate.

7. Maintain licenses and associated documentation.

> → Licenses may need to be modified due to a number of circumstances, such as change in number of personnel, change in number or location of sites used to deliver the service, change in use of suppliers, or technology upgrades.

8. Address licensing issues during Completion.

> → During Completion the organization may need to relinquish, reassign, or transfer the licenses to the client or designee. The organization may not have direct ability to influence the transfer of licenses (e.g., licenses to use a third party technology). However, the organization is expected to facilitate the process to ensure a smooth transition of service delivery back to the client, or designee.

c. Implement technology license management, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed according to the procedures. (prf02)

tch02

❷

tch03   Control Technology

Establish and implement procedures to track and control changes to the technology infrastructure.

Track and control changes made to the technology infrastructure in order to maintain its integrity. A rigorous approach to technology asset management and configuration control helps to verify that service delivery infrastructure is effectively managed. Effective management includes maintaining the technology infrastructure's stability and preventing failures in service delivery.

This Practice is related to tch01, "Acquire technology," since the acquisition and deployment of technology leads to changes in the technology infrastructure that need to be tracked and controlled. However, this Practice also covers tracking changes in the configuration of the technology infrastructure that may also occur on a day-to-day basis.

Technology Management

Ongoing

Level 2

Procedure

Activities

a. Provide support for creating and maintaining the procedures for tracking and controlling changes in the technology infrastructure.

1. Provide sponsorship and resources for creating the procedures. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02)

3. Maintain and improve the procedures as appropriate. (knw07)

b. Document the procedures for tracking and controlling changes to the technology infrastructure. Documentation includes the following Activities:

1. Identify the types of technology infrastructure changes that need to be tracked and controlled.

> → Technology infrastructure changes include any changes to the hardware, software applications, tools, upgrades, communication applications, and tools.

2. Select and document methods used for tracking and controlling the identified types of changes.

3. Create an inventory for the technology infrastructure.

   a) Create guidelines for assigning identifiers to the various components of the technology infrastructure.

   > → Identification is assigned by using suitable naming or numbering conventions. Verify that changes are appropriately reflected in the assigned identification.

   b) Assign a unique identifier to all components of the technology infrastructure based on the guidelines.

4. Maintain documentation on changes to the technology infrastructure.

c. Implement technology infrastructure tracking and change control, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed according to the procedures. (prf02)

tch03

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tch04   Technology Integration
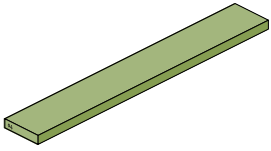
Technology Management

Ongoing

Level 2

Procedure

Establish and implement procedures to manage integration of the organization's technology infrastructure.

Manage integration of the organization's technology infrastructure with that of the client, suppliers, and partners, in order to help ensure its optimal use. The integration can range in scope from integrating with a single client to more complex cases of integrating with suppliers or partners to support multiple clients.

The need for the integration of technology infrastructure may be identified during the process of gathering client requirements, or it may be proposed by the organization. Technology infrastructure includes physical components (e.g., servers, network couplers and database bridges) and functional components (e.g., extranets, databases, enterprise software applications, and web sites).

Activities

a. Provide support for creating and maintaining the procedures for managing integration of the technology infrastructure.

1. Provide sponsorship and resources for creating the procedures. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02)

3. Maintain and improve the procedures as appropriate. (knw07)

b. Document the procedures for managing integration of the technology infrastructure. Documentation includes the following Activities:

1. Create a plan for integrating the technology infrastructure.

> → The technology deployment plan should include integration of the technology infrastructure. Accounting for security is particularly important when integrating the technology infrastructure.

2. Identify contact personnel from the client, suppliers, and partners who will be involved in the integration.

3. Identify and analyze technology components required for technology integration.

> → This includes examining the combined assets for redundancy. Establish guidelines for examining redundant assets for redeployment, lease, sale, etc. Consider using redundancies to accomplish disaster recovery objectives.

4. Integrate the organization's technology infrastructure according to the work products and tasks for deploying technology.

5. Track status and progress against the plan.

   a) Determine actions to take when progress deviates from the plan.

   b) Take actions and track them to closure.

6. Review the performance of the integrated technology with respect to the expected performance, taking action as appropriate.

> → Examples of performance reviews include dry runs, simulation, and overload tests.

7. Obtain approval from the affected client, suppliers, and partners for the technology integration.

8. Identify the end-users of the integrated technology and provide them with access to the technology.

9. Track and maintain the integrated technology infrastructure, taking action when appropriate.

10. Prepare for technology separation.

> → Technology separation typically happens during the completion of the contract with the client, suppliers, and partners. Actions required for separation can vary significantly depending on the degree of integration that has taken place. For instance, if infrastructure redundancies were reduced, additional infrastructure will need to be procured and deployed prior to separation.

   a) Create a technology separation plan.

   b) Identify and analyze technology components required for technology separation, including examining combined assets for procurement requirements.

   c) Obtain approval from the affected client, suppliers, and partners for the technology separation.

   d) Track status and progress against the technology separation plan, when separation occurs, taking action as appropriate.

c. Manage integration of the technology infrastructure, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

> → As technology changes, training on how to effectively manage the integration of technology will need to be maintained.
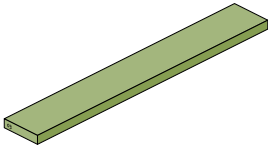
3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed according to the procedures. (prf02)

tch04

❷

tch05   Optimize Technology
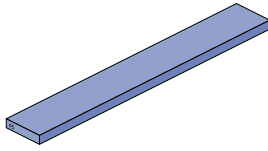
Optimize the overall performance of the technology infrastructure needed to deliver all services.

Manage the technology infrastructure's performance in order to enhance the organization's overall performance effectiveness. Load balancing enables the organization to meet peak loads in one service while maintaining other services with the existing technology infrastructure. The organization does not need to have 100% efficiency in its infrastructure, nor does it need to optimize the performance of every part of the technology infrastructure. Optimizing the infrastructure's overall performance implies that suboptimal performance in one part of the infrastructure, such as slack, balances demands in another part. In addition, optimizing involves contingency planning for infrastructure failures. Optimizing may occur across engagements or within a single engagement.

Technology Management

Ongoing

Level 3

Activities

a. Provide support for creating and maintaining the work products and tasks for optimizing the technology infrastructure.

1. Provide sponsorship and resources for creating the work products and tasks for optimizing the technology infrastructure. (knw04, prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving work products and tasks as appropriate. (knw02, rel05)

3. Maintain and improve work products and tasks as appropriate. (knw04, knw07)

b. Document work products and tasks required for optimizing the technology infrastructure. Documentation includes the following Activities:

1. Identify the technology infrastructure requirements for all engagements.

> → This includes identifying technology that is shared across engagements versus that used in a single engagement.

2. Determine measures to track performance of the technology infrastructure.

    a) Determine the attributes to measure to determine the performance of the technology infrastructure.

> → Examples of attributes to measure include availability, response time, utilization, security, recoverability, and backups.

    b) Determine the performance measures for the attributes.

> → Examples of measures include percentage of uptime for specific areas, percentage of uptime for technology infrastructure, seek and response time for specific queries, percentage utilization of the CPU, time to repair, and time to restore.

    c) Determine the analyses and indicators to be used to understand and make decisions about technology infrastructure performance.

3. Determine optimization targets for identified technology infrastructure.

4. Analyze whether the existing technology meets optimization targets.

5. Create a plan for optimizing the technology infrastructure.

> → The optimization plan may include the acquisition or disposal of technology.

a) Identify opportunities to optimize the technology infrastructure.

> → One way to optimize technology infrastructure is to balance the technology load across the organization's engagements by using excess capacity to fill demand from different time zones. For example, establishing a shift schedule at one site to accommodate demand from multiple time zones.

b) Prioritize opportunities based on organizational objectives.

c) Determine opportunities to pursue based on priorities.

6. Collect data on performance of the technology infrastructure.

7. Track status and progress against the optimization plan.

a) Determine actions to take when progress deviates from the plan.

b) Take actions and track them to closure.

8. Create a plan for maintaining desired optimization targets.

9. Track status and progress against the maintenance plan.

a) Determine actions to take when progress deviates from the plan.

> → Actions may include upgrading or replacing hardware, software, or network equipment.

b) Take actions and track them to closure.

c. Optimize the performance of the technology infrastructure, using the documented work products and tasks.

1. Communicate the tasks and the availability and location of work products to relevant stakeholders. (knw02, knw03)

2. Provide resources to effectively perform the work. (knw02, knw03, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl05, ppl07, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02, knw03)

5. Verify that the work is consistently and effectively performed across the organization. (knw04, prf02)

tch06

Proactively Introduce Technology
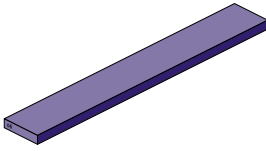
Technology Management

Ongoing

Level 4

Procedure

Establish and implement procedures to proactively identify and introduce appropriate technology.

Identify and introduce appropriate technology with minimal disruption in order to help improve organizational performance and achieve long-term objectives. In order to remain competitive and meet clients' needs and expectations, an organization not only needs to keep pace with technology changes, but also needs to create new capabilities with up-to-date technologies.

This Practice is related to prf11, "Deploy innovations," tch01, "Acquire technology," and tch03, "Control technology." When making changes to technology, the organization needs to acquire and deploy the technology (tch01 and prf11) and control the change (tch03).

Activities

a. Provide support for creating and maintaining the procedures for identifying and introducing technology across the organization.

1. Provide sponsorship and resources for creating the procedures. (knw04, prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02, rel05)

3. Maintain and improve the procedures as appropriate. (knw04, knw07)

b. Document the procedures for identifying and introducing technology. Documentation includes the following Activities:

1. Establish methods for proactively identifying and analyzing technology innovations within the organization and industry.

      a) Identify sources of technology information to be analyzed.

      b) Determine frequency of analysis.

2. Identify opportunities based on the analyses.

3. Identify potential impact of identified opportunities.

      a) Create a business case for each opportunity.

      → The business case should be based on a cost-benefit analysis, feedback from organizations using similar technology, feedback on the experience of end-users, trials and demonstrations, analysis of operation and maintenance costs, and an analysis of obsolescence and economic life span. The business case should take into consideration organizational objectives, business and market strategies, problems faced in operations, new contractual commitments, and changes in the business environment.

      → The business case should include an impact analysis of the changes required, including changes to the systems and infrastructure of clients and partners. Financial considerations, such as set-up costs, integration costs, training costs, back-up costs, and the retirement of existing systems and parts, should also be considered. Positive impacts, such as improved performance, greater efficiencies, or new capabilities, may balance the effects of adverse impacts.

      b) Prioritize opportunities based on the business case and organizational objectives.

c) Determine opportunities to pursue based on the priorities.

4. Obtain agreement with the relevant stakeholders on potential changes to service, or service levels to be pursued, based on identified opportunities.

5. Modify services, or service levels, based on agreed opportunities.

> → Changes to the service should include the creation of a deployment plan.

6. Deploy appropriate technology.

c. Implement actions to identify and introduce technology, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02, knw03)

2. Provide resources to effectively perform the work. (knw02, knw03, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl05, ppl07, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02, knw03)

5. Verify that the work is consistently and effectively performed according to the procedures across the organization. (knw04, prf02)

tch06

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thr

Threat Management Practices

Threat Management Practices focus on identifying and actively managing threats to the organization's ability to meet its objectives and the requirements of the client. They focus on active risk management, paying particular attention to risks associated with security, confidentiality, infrastructure, and disasters that may disrupt service or fail to meet the requirements of the client. All Threat Management Practices are Ongoing. They cover the following:

- Demonstrating management's commitment to risk management through formal policies.

- Identifying, assessing, and controlling risks.

- Managing security, confidentiality, and intellectual property threats.

- Preparing for, and managing, recovery from disasters.

- Monitoring statutes and regulations to ensure compliance.

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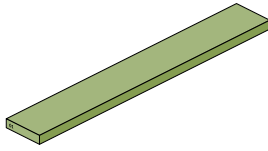
Threat Management

Ongoing

Level 2

Policy

Risk Management

Establish and implement a policy on risk management.

Demonstrate management's commitment to proactively identifying, assessing, and managing risks in order to improve the ability of the organization to provide appropriate levels of service despite the occurrence of threats. A documented policy helps to demonstrate management commitment and provides an approach for how the organization should manage risks. It is also the first step in demonstrating compliance with statutory and regulatory requirements. A risk management policy also provides direction to internal stakeholders in their proactive risk management efforts.

Activities

a. Provide support for creating and maintaining the policy for managing risk.

1. Provide sponsorship and resources for creating the policy. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the policy as appropriate. (knw02)

> → Reviews should address whether the policy is consistent with current engagement and organizational objectives, and should resolve any conflicts.

3. Maintain and improve the policy as appropriate. (knw07)

b. Document the policy for managing risk. Documentation includes the following Activities:

1. Communicate the purpose of risk management.

2. Identify types of potential risks to the organization.

> → The potential risks typically include known weaknesses in the organization's procedures, insufficient resources (including personnel, technology, or infrastructure), inadequate skill availability, inadequate security coverage, obsolescence of technology, client merger or acquisition, and client's non-payment of invoices. Risk exposure is typically quantified as the probability of the risk occurring, multiplied by the estimated impact of the risk.

3. Communicate how risk exposure will be assessed for the organization.

> → Risk exposure is the probability of the risk occurring multiplied by the estimated impact of the risk.

4. Verify that the disaster recovery procedures address identified risks.

5. Clearly articulate the organization's tolerance for risk.

c. Implement risk management, according to the policy.

1. Communicate the availability and location of the policy to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed according to the policy. (prf02)

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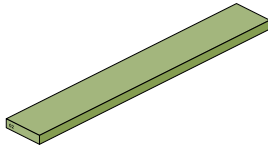
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thr02

Threat Management

Ongoing

Level 2

Engagement Risk

Identify, assess, and manage risks specific to the client engagement.

Manage risks in order to reduce their impact and increase clients' confidence in the organization's ability to maintain desired service levels. Effectively identifying and assessing risks enables the organization to take mitigating actions to prevent the risk's occurrence, to lower its likelihood of occurring, or to reduce its impact, should it occur. These actions improve the organization's ability to provide an appropriate level of service despite the occurrence of problems.

Effective risk management is particularly critical in the early stages of an engagement, where requirements are being analyzed and service is being designed to meet those requirements. Problems encountered here can impact the success of the service delivery throughout the engagement.

Activities

a. Provide support for creating and maintaining the work products and activities for identifying, assessing, and managing engagement-specific risks.

1. Provide sponsorship and resources for creating the work products and tasks for identifying, assessing, and managing engagement-specific risks. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving work products and tasks as appropriate. (knw02)

3. Maintain and improve work products and tasks as appropriate. (knw07)

b. Identify work products and activities required to identify, assess, and manage engagement-specific risks. Documentation includes the following Activities:

1. Identify risks for each engagement, including types of risks identified in the risk policy.

   → The engagement-specific risks may include reliability and suitability of technology, adequacy of skill pool and security, failure of a client to meet responsibilities, accuracy of delivery schedule estimates, and sufficiency of resources (e.g., personnel).

2. Assess risk exposure for the organization.

   → Risk exposure may be on qualitative and/or quantitative criteria.

   a) Analyze the probability of a risk occurring.

   b) Analyze the potential impact of risks on the success of the engagement.

3. Prioritize and determine how to respond to the risks identified in the risk assessment.

   → From the risk assessment, the organization can prioritize risks and determine whether to eliminate or mitigate the risk (e.g., through training, upgrading technology) or to accept the risk (e.g., when the risk effect on the outcome of the engagement is within tolerances specified in the risk policy).

   → Eliminating a risk is removing the probability of encountering an adverse event by predicting the event and implementing preventive actions.

   → Mitigating a risk includes reducing the degree of impact on future events that may jeopardize the success of an engagement, or the achievement of a goal, by using alternative approaches and buffers in schedules, or by providing stand-by resources.

→ Accepting a risk is acknowledging that an identified risk is inevitable, or low cost, and including its occurrence in the planning process for the engagement. An example of accepting a risk is extending the credit period for a prospective client during negotiations, because obtaining that client is key to the organization's business objectives.

→ Contingency plans are used based on previously identified events; they cover actions to take in case of the occurrence of the identified risk.

4. Document the risk responses.

→ Risk responses may be documented in plans for risk management, security, integration of the technology infrastructure, disaster recovery, and business continuity.

5. Verify that risk responses are aligned with engagement objectives.

6. Track risk responses, taking action as appropriate.

7. Maintain the risk assessment.

→ Risk levels change over time as new threats and vulnerabilities are identified or risk responses are invoked. Procedures should be developed to monitor these changes and take appropriate action.

c. Identify, assess, and manage engagement-specific risks, using identified work products and activities.

1. Communicate the tasks and the availability and location of work products to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed. (prf02)

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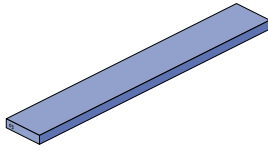
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thr03   Risk Across Engagements

Threat Management

Ongoing

Level 3

Procedure

Establish and implement procedures to manage risks across client engagements.

Establish an approach for managing risks in order to reduce their impact and provide clients with confidence in the organization's ability to maintain desired service levels. Effective identification and assessment of risks enables the organization to take mitigating actions to prevent the risk from occurring, or to lower the impact should it occur. These efforts improve the ability of the organization to provide an appropriate level of service despite the occurrence of problems. Effective risk management improves the client's confidence in the organization's ability to maintain needed services and service levels. Through effective risk management, the organization can balance risks across multiple engagements.

This Practice expands on the risk management tasks performed in thr02, "Engagement risk," which focuses more narrowly on management of the risks that impact a specific engagement. The focus of this Practice is broadened to cover management of risks across multiple client engagements, along with an added requirement that risk management tasks be formally documented in a procedure.

Activities

a. Provide support for creating and maintaining the procedures for managing risks across client engagements.

1. Provide sponsorship and resources for creating the procedures. (knw04, prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02, rel05)

3. Maintain and improve the procedures as appropriate. (knw04, knw07)

b. Document the procedures for managing risks across client engagements. Documentation includes the following Activities:

1. Identify the risks for the portfolio of engagements, including types of risks identified in the risk policy.

→ Types of risks in the portfolio may be associated with markets, services, or clients.

2. Assess the risks for the portfolio of engagements for their impact on the organization.

a) Analyze how likely the risks are to occur.

b) Determine how vulnerable each engagement is to the identified risks.

c) Calculate the cost of exposure to the risk, the cost of mitigating the risk, and the cost of the mitigated risk.

→ Mitigation of the risk should occur only if the costs of mitigating the risk are less than, or equal to, the cost of exposure to that risk.

3. Prioritize and determine how to respond to the identified risks in the risk assessment.

→ One strategy to mitigate risks across the organization is to have a portfolio of engagements with a mix of different risk attributes and probabilities. A risk that may be acceptable in the context of a single engagement may be unacceptable if it is a common risk that spans engagements, even if the probability of occurrence is relatively low.

4. Document the risk responses.

5. Verify that risk responses are aligned with organizational objectives.

6. Track risk responses, taking action as appropriate.

7. Maintain the risk assessment.

c. Implement risk management across engagements, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02, knw03)

2. Provide resources to effectively perform the work. (knw02, knw03, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl05, ppl07, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02, knw03)

5. Verify that the work is consistently and effectively performed according to the procedures across the organization. (knw04, prf02)

thr03
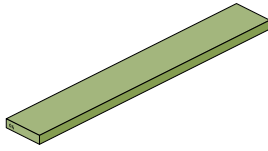
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thr04   Security

Threat Management

Ongoing

Level 2

Procedure

Establish and implement procedures to meet security requirements.

Meet or exceed stakeholders' requirements for security in order to foster successful client relationships and increase their level of trust. Breakdowns, such as security breaches, can impact the organization's ability to provide adequate service, thereby damaging the relationship and making the involved parties vulnerable to legal action. Effective security is essential for meeting privacy requirements and protecting intellectual property (thr05, "Intellectual property"). Security requirements may come from the client or statutes and regulations governing the service. Security management should cover the security of people, technology, work environment, and information.

As used in this Practice, security provides four types of control: confidentiality, integrity, availability, and accountability. Confidentiality means that only authorized users can access information. Integrity means that the accuracy and completeness of information is maintained and not changed without authorization. Availability means that the service or information is available to authorized users when needed. Accountability is the ability to trace the source of changes in controlled resources.

Activities

a. Provide support for creating and maintaining the procedures for meeting security requirements.

1. Provide sponsorship and resources for creating the procedures. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02)

> → The organization should have a formalized security policy that is used to provide direction for creating the security procedures.

> → Reviews should verify that security requirements for all organizational resources are addressed. Organizational resources subject to security management may include personnel; technology, such as networks, hardware or software applications; client-supplied information; and intellectual property.

3. Maintain and improve the procedures as appropriate. (knw07)

b. Document the procedures for meeting security requirements. Documentation includes the following Activities:

1. Identify confidentiality, integrity, and availability requirements.

2. Identify access control, authentication, and accountability requirements.

3. Identify physical security requirements.

> → Security requirements result in procedures for access to networks, data backup, and restrictions to physical access.

4. Identify data and software security requirements.

> → Requirements may include new software for authentication of users, new encryption software and tools, configuration of network and communication protocols, additional hardware and operating systems, and additional or new variants of anti-virus software.

Behavioral controls help ensure that personnel maintain security and include training, policy statements, and separation of duties.

5. Identify behavioral requirements.

→ Authorized users may engage in behavior that compromises security (e.g., by holding the door for an unknown visitor, taping passwords to computer monitors). Breaches that deal with human behavior are referred to as social engineering. Social engineering controls help ensure that personnel maintain security, and include training, policy statements, and separation of duties.

6. Identify privacy requirements.

→ Privacy requirements may come from the client, or from statutes and regulations governing the service (e.g., privacy of patient data in the health care industry).

7. Identify and analyze potential threats to the organization's assets (e.g., information, infrastructure, including technology, and systems).

→ Potential security threats can be physical, electronic, or social. Examples include undetected intrusions, and virus attacks. Internal threats may arise from accidental or malicious actions of authorized insiders. External threats may arise from vandals (e.g., hackers and crackers), competitors (e.g., industrial espionage), or extremist groups.

→ Identification of potential threats is done by reviewing prior experiences of the organization or of similar organizations, conducting security audits, and obtaining client feedback. An assessment of organization assets includes an analysis of the impact on operational capability due to loss of confidentiality, vulnerabilities that could be exploited, existing threats that could exploit the vulnerabilities, and the likelihood that a threat might occur.

8. Determine which assets to protect, and document the rationale for the decision.

→ These assets may be tangible (e.g., facilities and communication links), or intangible (e.g., information or behaviors).

9. Create security solutions based on the identified requirements and threats.

→ Some solutions may include securing internal computing resources (e.g., network servers, workstations, local area network, software, applications, and communication infrastructure), securing access to public servers such as web servers, using well configured firewalls in appropriate network locations, using intrusion detection systems, and creating responses to intrusions. Solutions may be implemented by installing new software for authentication of users, installing new encryption software or tools, configuration of network and communication protocols, separate hardware and operating systems, and virus scanners.

10. Track threats to the organization's assets, taking action as appropriate.

→ Threats may change over time. The organization should monitor for unexpected activity that may indicate a breach.

→ Tracking internal security may be done using software tools, designated teams, security audits, mock tests, and simulations, and deliberate attempts to break into the information infrastructure. Monitoring the external environment may be done through coordination with specialists, suppliers, and partners. Tracking should include audits of proposed changes to the technology infrastructure to verify that security is not compromised with the introduction of new elements or components.

thr04

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Security cont'd

c. Implement security requirements, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed according to the procedures. (prf02)

> → Adherence reviews are typically implemented through security audits, usage of tracking tools, and reports on resources accessed and the frequency of access. Effectiveness reviews are typically implemented through usage of tracking tools, security audits, and analysis of security incidents and their root causes.

thr05   Intellectual Property
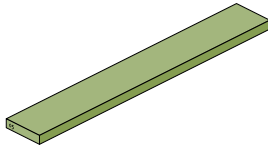
Threat Management

Ongoing

Level 2

Procedure

Establish and implement procedures to protect the intellectual property of stakeholders.

Meet or exceed stakeholders' requirements for the protection of intellectual property to increase levels of trust, in order to foster successful relationships. Inappropriate use or disclosure of intellectual property can damage the relationship with stakeholders and make the organization vulnerable to disputes or legal action.

This Practice is related to thr04, "Security," because security procedures should assure that intellectual property is appropriately protected.

Activities

a. Provide support for creating and maintaining the procedures for protecting the intellectual property of stakeholders.

1. Provide sponsorship and resources for creating the procedures. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02)

   → The organization should have a formalized policy on the protection of intellectual property that is used to provide direction for creating the procedures on protection of intellectual property.

   → Protection of intellectual property policies typically cover access and use policies, installation policy, configuration policy on information infrastructure, encryption, and information privacy.

3. Maintain and improve the procedures as appropriate. (knw07)

b. Document the procedures for protecting the intellectual property of stakeholders. Documentation includes the following Activities:

1. Identify existing intellectual property and ownership for relevant stakeholders.

   → Intellectual property may include proprietary software, hardware, designs, methodologies, service-related documents, data, training, trademarks, copyrights, drawings, layouts, processes, procedures, policies, and other proprietary technology or materials. Stakeholders may be the client, partners, suppliers, or the organization, as well as employees of any of these organizations. Use of intellectual property may include royalties or payments for use or transfer of services.

   a) Identify and document rights, responsibilities, and ownership of current intellectual property.

   → These rights, responsibilities and ownership may be outlined in contracts with the client, suppliers, or partners.

   b) Identify and document rights, responsibilities, and ownership of future intellectual property.

   → Future intellectual property is any intellectual property purchased, transferred, or created while engaged in a sourcing relationship.

   c) Determine the disposition of current and future intellectual property during Completion.

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2. Identify and analyze potential threats to intellectual property.

→ Identification of potential threats is done by reviewing prior experiences of the organization, or of similar organizations, conducting security audits, and obtaining client feedback. Potential threats to intellectual property can be electronic (e.g., virus attacks), or physical (e.g., theft).

→ Careful consideration must be given to the different definitions of intellectual property in multinational engagements to ensure that these resources are given the level of protection expected by the stakeholders.

3. Review the rights, responsibilities, and ownership of intellectual property.

4. Obtain approval of the identified rights, responsibilities, and ownership of intellectual property from the relevant stakeholders.

5. Communicate the rights, responsibilities, and ownership of current and future intellectual property.

6. Track the use of the identified intellectual property and changes in rights, responsibilities, and ownership, taking action when appropriate.

7. Obtain approval of changes in rights, responsibilities, and ownership of intellectual property from the relevant stakeholders, as appropriate.

c. Implement protection of intellectual property, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed according to the procedures. (prf02)

thr05

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thr06

Threat Management

Ongoing

Level 2

Procedure

Statutory & Regulatory Compliance

Establish and implement procedures to comply with statutory and regulatory requirements.

Comply with statutes and regulations that impact the organization's service capability in order to meet client requirements and to avoid client dissatisfaction. Compliance is crucial in international sourcing relationships that are under the jurisdiction of multiple legal systems. Compliance with statutory and regulatory requirements is also necessary to uphold the organization's ethical standards and to protect it from disputes or legal action.

Activities

a. Provide support for creating and maintaining the procedures for statutory and regulatory compliance.

1. Provide sponsorship and resources for creating the procedures. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02)

3. Maintain and improve the procedures as appropriate. (knw07)

b. Document the procedures for statutory and regulatory compliance. Documentation includes the following Activities:

1. Identify statutes and regulations applicable for the markets, geographical regions, and specific services provided by the organization.

   → Statutes and regulations may be personnel-related (e.g., working hours, wages, time off, and the physical work environment), technology-related (e.g., those governing encryption, data transmission and confidentiality), market-related (e.g., those governing services permitted to be outsourced, restrictions on government contracts and minimum performance standards), service-related (e.g., those governing service levels, and restrictions on contract value and duration), and privacy- and security-related (e.g., access to, and control of, information, and controls over the release of information).

   → Careful attention must be paid to the organization's adherence to export and import restrictions in the cross-border transfer of information and technology.

2. Identify additional statutes and regulations applicable to meeting identified client requirements.

   → Client-specific statutes and regulations may include regulations stipulated by the government of the client's country. In addition, the client may specifically request some of the requirements, however it is the responsibility of the organization to verify that statutory and legal requirements are understood and met.

3. Analyze the impact of statutes and regulations on the organization, including processes, personnel, infrastructure, and technology.

4. Determine actions necessary to bring the organization into compliance with the identified statutes and regulations.

   → Actions taken to comply with regulations include modifying technological infrastructure, creating and submitting reports required by statutes, and obtaining required approvals.

5. Take actions and track them to closure.

6. Track compliance with, and changes to, the applicable statutes and regulations, taking action when appropriate.

→ Compliance tracking is typically done through audits or legal reviews.

7. Maintain information on statutes and regulations, and modify the organization's procedures and infrastructure, as appropriate.

→ This includes new statutes and regulations, as well as changes to existing statutes and regulations.

8. Negotiate contract amendments to make changes necessary to bring contract terms into compliance with applicable statutes and regulations, as appropriate.

c. Comply with statutory and regulatory requirements, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed according to the procedures. (prf02)

thr06

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thr07   Disaster Recovery

Threat Management

Ongoing

Level 2

Procedure

Establish and implement disaster recovery procedures.

Prepare for possible disasters in order to minimize their impact on the organization's ability to deliver its services. By following its disaster recovery procedures during significant failures of infrastructure or facilities, the organization is able to continue to provide acceptable service. Preparation covers service delivery, security, the protection of intellectual property, crisis management, and the safety of personnel, and promotes confidence in the organization's ability to react effectively to adverse situations.

Activities

a. Provide support for creating and maintaining the procedures for disaster recovery.

1. Provide sponsorship and resources for creating the procedures. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02)

> → Reviews of the disaster recovery procedures should include risk, security, and protection of intellectual property.

3. Maintain and improve the procedures as appropriate. (knw07)

b. Document the procedures for disaster recovery. Documentation includes the following Activities:

1. Collect input from the relevant stakeholders to identify potential disasters.

2. Classify and prioritize identified disasters based on an analysis of risk exposure.

> → Identified disasters are typically classified as external (e.g., natural, infrastructure, political, sabotage) or internal (e.g., technological, accidents, and intentionally carried out disruptions such as strikes or other labor actions).

> → The identified disasters may be prioritized based on systematic analyses, including calculating the cost of outage, the impact on personnel morale and confidence, the legal implications, the impact on corporate image, and the impact on credibility with clients and investors.

3. Create a disaster recovery plan for the organization's response to potential disasters.

> → An organization's plan will typically be documented in the form of a disaster recovery or business continuity plan. This plan includes identified events that have an adverse impact on the service design, deployment, and delivery tasks; the planned response in case the event occurs; the personnel responsible; additional resources to be made available; and a communication and coordination plan.

> → The organization's plan should identify the key client, supplier, and partner contacts who have the authority to make timely decisions. Alternatives should be selected if key people cannot respond. The plan should also coordinate with the plans of critical suppliers and partners.

a) Determine methods to reduce the effects of the identified disasters.

> → Examples of methods include establishing redundancies in technology infrastructure, including power and communications; provisioning alternate sites to ensure continuity of operations in case of failure of the primary site; providing fire-fighting equipment, regular back-ups, and off-site storage; installing fire alarms; and cross-training personnel.

b) Identify and document actions to take when a disaster occurs.

→ Actions to be carried out include clearly identifying the possible disruptions to service, determining a time frame for recovery, reviving the critical functions of the organization, and communicating with relevant stakeholders. Indicate the time and effort required for each action.

→ When planning, prioritize the identified disasters and the organizational functions to be targeted for recovery, in case of a disaster. Responses should maintain an effective work environment and continue to provide resources for critical service-related and support tasks.

4. Test the effectiveness of the disaster recovery plan at scheduled intervals, taking corrective action as appropriate.

→ Appropriate testing intervals can vary based on the criticality of the service being delivered and the potential impact of a disaster. Disaster recovery drills typically take place no more frequently than quarterly and no less than annually.

5. Track status and progress against the plan in the event of a disaster.

a) Determine actions to take when progress deviates from the plan.

b) Take corrective actions and tracking them to closure.

c. Implement disaster recovery, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

→ It is important to identify the key people within the organization who have the authority to make timely decisions. Alternatives should be selected if key people cannot respond.

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed according to the procedures. (prf02)

thr07

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cnt

Contracting Practices

Contracting Practices focus on effectively managing the process of gathering client requirements, analyzing them, and negotiating a formal agreement that describes how the organization will meet those requirements. All Contracting Practices fall within Initiation. A critical component to contracting is understanding client expectations and needs, and agreeing with the client on how they will be met. They cover the following:

- Preparing for negotiation by having an organizational position on pricing and other topics that need to be negotiated.

- Understanding the client's requirements by gathering information about the client and their stated and unstated needs.

- Analyzing the organization's ability to meet the client's requirements and defining an approach for positioning the organization's capabilities. Using the defined approach as the basis for responding to the client.

- Working with the client to confirm assumptions that impact commitments.

- Establishing a formal agreement with the client that clearly articulates the organization's and client's responsibilities and commitments.

cnt01   Negotiations

Establish and implement guidelines for negotiations with current or prospective clients.
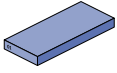
Contracting

Initiation

Level 3

Guideline

Establish negotiation guidelines in order to aid internal coordination and to help ensure that an agreement is reached that supports the organization's and client's business objectives. Formal negotiation guidelines support the organization's ability to consistently and effectively negotiate with clients. Having these guidelines provides a structured approach to negotiation, which can improve the client's confidence in the organization. Guidelines also help protect the organization from legal or performance issues by verifying that the necessary aspects of negotiations are covered.

This Practice is related to cnt05, "Plan negotiations." Planning is covered in this Practice, but its main focus is on providing consistency in negotiations across clients and within the organization's services.

Activities

a. Provide support for establishing and implementing the guidelines for negotiations with current or prospective clients across the organization.

1. Provide sponsorship and resources for creating the guidelines. (knw04, prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the guidelines as appropriate. (knw02, rel05)

3. Maintain and improve the guidelines as appropriate. (knw04, knw07)

b. Document the guidelines for negotiations with current or prospective clients. Documentation includes the following Activities:

1. Determine the decision-making rules to be used during negotiations.

   a) Determine the negotiation approach to take for each type of service.

   → Negotiation approaches may vary considerably between services and industries. Some services may have few negotiation issues, with service options and prices being predefined. Other services may be very complicated and be able to be tailored considerably to meet client needs. A defined approach helps negotiators be consistent and have negotiation topics for each service prepared in advance.

   b) Determine the constraints of the negotiation team.

   → The negotiation team should have clear rules for how decisions will be made and approved, and what negotiation parameters exist. For instance, if the organization has strict margin requirements, these should be clearly understood and used as the basis for negotiation decisions. Negotiation parameters should include guidance on which issues the team has more flexibility to negotiate, and on what decisions the team can make on their own without having to get approval.

2. Identify a set of negotiation topics for each type of service.

   → Negotiation topics can be based on prior negotiations; existing organizational guidelines, policies, and procedures; organizational objectives; marketing information about services being offered (e.g., market sector and service); and information known about the client.

3. Determine the organization's position on the identified topics.

4. Create a negotiation plan.

5. Track the status and progress with respect to the negotiation plan.

> → Progress on decisions made about the organization's position, on agreements made with the client, and on issues raised related to each negotiation topic should be tracked.

> a) Determine actions to take when progress deviates from the plan.

> b) Take corrective actions and track them to closure.

> → Actions taken include updating negotiation topics and the organization's position on the topics.

c. Implement negotiations with current or prospective clients, according to the guidelines.

1. Communicate the availability and location of the guidelines to relevant stakeholders. (knw02, knw03)

2. Provide resources to effectively perform the work. (knw02, knw03, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl05, ppl07, ppl08)

> → The makeup of the negotiation team may vary based on the type and stage of negotiations. Skills to consider include commercial negotiation (e.g., pricing), technical negotiations (e.g., service levels and operational details), and legal negotiations (e.g., contract terms and conditions).

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02, knw03)

5. Verify that the work is consistently and effectively performed according to the guidelines across the organization. (knw04, prf02)

cnt02   Pricing

Establish and implement guidelines for pricing services.
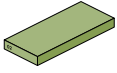
Contracting
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Initiation
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Level 2
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Guideline
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Establish pricing guidelines in order to help the organization determine pricing for services in a consistent manner. Formal guidelines for pricing, when based on business and engagement objectives, contribute to effective and rapid responses to proposal requests. Pricing guidelines allow the organization to identify and address trade-offs between cost and service levels while working with the client to understand their requirements. Pricing of services is tailored to each engagement, based on the pricing guidelines.

Activities

a. Provide support for establishing and implementing the guidelines for pricing services.

1. Provide sponsorship and resources for creating the guidelines. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the guidelines as appropriate. (knw02)

> → Reviews of organizational pricing guidelines can occur in response to changes in the existing business environment, changes in the consumer price index, new taxation rules, inflation, changes in business objectives, and reviews of resources consumed in prior engagements.

3. Maintain and improve the guidelines as appropriate. (knw07)

b. Document the guidelines for pricing services. Documentation includes the following Activities:

1. Determine and document the organization's pricing guidelines based on business objectives and market trends.

> → Business objectives that are related to pricing address issues including competitive positioning, cost and quality expectations, technology used, and desired profit margins.

2. Create pricing models for different types of services.

> → Typical pricing models include fixed price, cost-plus, management fee, hourly fee, profit sharing, value-based, and performance-based pricing. Services may be priced for a task, a project, or a complete set of services.

3. Determine criteria for reviewing and modifying charges for services.

> → Review of charges could occur due to changes in the nature of the service, or an increase or decrease in the quantity of the service and service levels.

4. Determine and document how to use the pricing guidelines.

> a) Determine criteria for the applicability of the pricing models.

> → Criteria include duration of the service, one-time vs. repetitive delivery, skills of the personnel required for delivering the service, criticality of the service, and similar experience with the same or other clients.

> b) Provide guidance on creating estimates of charges for service delivery.

→ Guidance should cover the selection of appropriate pricing models, methods for estimating resource requirements, and methods for estimating changes to pricing if the client requests service changes. Service level commitments should be taken into account when estimating charges, as should charges associated with design and deployment tasks.

c) Provide guidance on creating estimates of the charges for transition and termination of the services.

→ Transition pricing can include charges for installation, integration, testing or piloting, and training. Charges related to termination can include costs for the transfer of assets and penalties.

c. Price services, according to the guidelines.

1. Communicate the availability and location of the guidelines to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed according to the guidelines. (prf02)

cnt02

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cnt03   Confirm Existing Conditions

Establish and implement guidelines for confirming existing conditions about potential engagements.

Review and confirm the assumptions that are critical to meeting the client's requirements before committing to them in order to help mitigate risk. This review includes validating the personnel to be transferred and their competencies, as well as confirming the knowledge, assets, and intellectual property to be transferred. Doing this helps mitigate risk by verifying that the organization is making its commitments based on a clear understanding of the current service delivery environment. It also helps to confirm the amount of effort required for service design and deployment tasks, as well as to verify that pricing is decided appropriately.

When planning data collection tasks, the organization should consider that clients are often sensitive to the amount of visibility that the organization's personnel have to client information. Organizations should be particularly attentive to security and intellectual property concerns while confirming existing conditions. Rigorous legal agreements are often not in place during the early stages of the relationship and the organization and client must take extra steps to ensure that information is adequately controlled. Tasks for collecting data and confirming assumptions are often referred to as "due diligence." This term is not used here because of legal implications in some industries.

This Practice is closely related to cnt07, "Review requirements," which describes feasibility analysis to verify that the organization can meet its requirements. This analysis depends upon having accurate assumptions about what will be transferred from the client and what will be required to meet service commitments.

Activities

a. Provide support for establishing and implementing the guidelines for confirming existing conditions.

1. Provide sponsorship and resources for creating the guidelines. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the guidelines as appropriate. (knw02)

3. Maintain and improve the guidelines as appropriate. (knw07)

b. Document the guidelines for confirming existing conditions. Documentation includes the following Activities:

1. Create an approach for collecting data which is aligned with client requirements and business objectives.

> → Clients are often sensitive to issues associated with giving potential service providers full access to data (e.g., full access to data may require involvement of personnel who are not aware that sourcing negotiations are underway). The approach to collecting and validating data needs to consider the sensitivities.

a) Identify and prioritize key assumptions and risks to be validated.

b) Identify sources and classes of information needed to validate each assumption and risk, as appropriate.

2. Confirm assumptions about current service delivery.

  a) Review current policies, procedures, and guidelines in use.

  b) Review current backlog of requests that will be assumed by the organization.

  c) Create estimates of backlog of requests that have not been submitted, but are anticipated.

  d) Review current systems and infrastructure and identify any issues or risks that may impact service delivery.

  e) Review dependencies that may impact service delivery.

  → Dependencies can include groups that are retained by the client, subcontractors that the client is asking the organization to use, and client subsidiaries.

3. Confirm information about resources used in service delivery.

  a) Collect information about personnel to be transferred.

  → Information about personnel includes current job title, salary, exempt/non-exempt status, skill inventory, shift assignments, part-time/full-time status, bonus entitlements, standard hours, work location, and benefits (e.g., vacation benefits). For third-party contractors, copies of contracts and relevant information about their assignment should be obtained. Information should also be collected about local labor laws, unions, and any protected labor categories.

  b) Identify gaps between the personnel competency requirements and the existing competencies of the personnel to be transferred.

  → When identifying existing competencies of the personnel to be transferred, it is important to collect information about their current roles and responsibilities, identified career development needs, and planned career paths. Identifying personnel that have scarce knowledge or are in critical positions is also helpful.

  c) Maintain security of information about personnel.

  d) Confirm staffing and productivity assumptions.

  → It is critical to confirm basic data about current productivity rates, particularly if the organization is committing to productivity levels. This data include information about productive hours per employee, absence hours (e.g., vacation, holiday, sick time, other), and any current productivity measurements.

  e) Confirm assets to be transferred to the organization.

  f) Confirm assumptions about facilities that will be used by the organization.

  → Information about facility requirements includes fire and safety regulations, permits to occupy premises, inspection reports, pending move dates, in-process or planned construction, and upgrades needed.

  g) Confirm assumptions about technology infrastructure that will be used by the organization, or that the organization will need to integrate with its infrastructure.

4. Confirm that services can be delivered according to the required service levels.

cnt03

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Confirm Existing Conditions cont'd

→ When determining whether services can be delivered according to desired service levels, the organization needs to verify that the scope of service is clearly understood, defined, and documented. Confirming the scope of services involves confirming key attributes for each service, including outputs, resource requirements, responsibilities, key personnel currently providing the service, key clients, service level expectations, and schedule requirements. This is a refinement of the feasibility analysis.

5. Confirm costs related to service delivery.

a) Confirm current costs for delivering the service.

→ It is important for the organization to have a clear understanding of the current costs for service delivery and any costs that will become the organization's responsibility. To gain this understanding, the organization needs to get financial data about current operating expenses (e.g., taxes, utilities, maintenance, janitorial services), supplier costs, capital budgets and amortization information, hardware and software expenses, shared services charges (e.g., receptionist, vending, mail, secretarial support), etc.

b) Confirm liabilities to be transferred to the organization.

→ Liabilities include annual licensing fees, and accrued benefits (e.g., vacation, bonus).

6. Confirm contract and legal assumptions.

→ Contract and legal requirements include supplier contracts, leases, software licenses, partners, legislation, etc.

c. Confirm existing conditions about potential engagements, according to the guidelines.

1. Communicate the availability and location of the guidelines to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed according to the guidelines. (prf02)

cnt04

Market Information
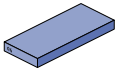
Analyze and use market information about prospective clients.

Analyze information about prospective clients in order to better understand and meet their expectations and needs, and to position the organization's capabilities. This information includes the prospective client's industry market share, customers, and their existing service providers. A prospective client's service needs can also be identified by understanding its competitive environment, including its competitive advantage, business objectives, competitors, threats, and problems.

Contracting

Initiation

Level 3

Activities

a. Provide support for creating and maintaining the work products and tasks for analyzing and using market information about prospective clients.

1. Provide sponsorship and resources for creating the work products and tasks for analyzing and using market information about prospective clients. (knw04, prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving work products and tasks as appropriate. (knw02, rel05)

3. Maintain and improve work products and tasks as appropriate. (knw04, knw07)

b. Document work products and tasks required for analyzing and using market information about prospective clients. Documentation includes the following Activities:

1. Identify the sources and types of market information needed to support organizational objectives.

> a) Identify prospective clients in the appropriate markets.

> b) Identify the types of market information needed for each prospective client.

2. Collect and maintain market information on prospective clients.

3. Analyze the information.

> a) Verify the accuracy of the collected data.

> → Verification of the information may include analyzing the credibility of sources and consistency of information.

> b) Identify opportunities to create new services and enter new markets, and take action as appropriate.

> c) Identify opportunities to establish new client relationships.

4. Use market information about prospective clients.

> → Market information about prospective clients can be used to better understand client needs, establish new client relationships, update the services offered, and identify topics for negotiation.

c. Analyze and use market information about prospective clients, using the documented work products and tasks.

1. Communicate the tasks and the availability and location of work products to relevant stakeholders. (knw02, knw03)

2. Provide resources to effectively perform the work. (knw02, knw03, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl05, ppl07, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02, knw03)

5. Verify that the work is consistently and effectively performed across the organization. (knw04, prf02)

cnt05

Plan Negotiations
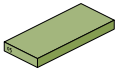
Plan and track negotiations with current or prospective clients.

Contracting

Initiation

Level 2

Plan

Plan and track negotiations in order to identify and monitor the key topics that require agreement. Effectively tracking the progress of client negotiations helps the organization to systematically ensure that all of the important issues are addressed during the negotiations. In addition, planning for the negotiation and clearly identifying the key topics reflects a degree of preparation that enhances a client's trust in the capabilities of the organization, which aids in establishing positive relationships.

Organizations should be particularly wary of security and intellectual property concerns during negotiation. Rigorous legal agreements are often not in place during the early stages of negotiation, and the organization and client must take extra steps to ensure that information is adequately controlled.

Activities

a. Provide support for creating and maintaining the work products and tasks for planning and tracking client negotiations.

1. Provide sponsorship and resources for creating the work products and tasks for planning and tracking client negotiations. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving work products and tasks as appropriate. (knw02)

3. Maintain and improve work products and tasks as appropriate. (knw07)

b. Document work products and tasks required for planning and tracking client negotiations. Documentation includes the following Activities:

1. Identify an initial set of topics to negotiate, based on existing organizational guidelines, policies, procedures, and information known about the client requirements.

> → Topics to be negotiated may include scope of service, performance standards, pricing, factors for designing and deploying the service, management and control issues, billing and payment terms, termination provisions, security, warranties and indemnities, limitation of liability, use of subcontractors, licensing, contract amendment mechanisms, communication channels, technology modification or upgrading, and issues during transfer of service. Initial identification of topics may come from previous contact with the client, Requests for Information (RFIs), market information collected about the client, etc.

2. Determine the organization's position on the identified topics.

3. Create a negotiation plan.

> a) Document the initial set of topics to negotiate, and the organization's position on the topics.

> b) Create a schedule of milestones and progress reviews.

> c) Review the negotiation plan.

4. Communicate the initial set of topics to the client.

→ Negotiation is an iterative and often lengthy process. The organization should document and communicate the initial set of negotiation topics early in the process and as an input into formal negotiations. This communication is typically done as part of a proposal process.

5. During negotiations with the client, maintain the topics requiring client agreement.

→ Collecting requirements and modifying topics is an iterative process. Identification of a new requirement may result in a modification of topics to negotiate, and modifying negotiation topics may lead to a change in requirements.

6. Track the status and progress against the plan.

→ Status on decisions made about the organization's position, agreements made with the client, and issues raised related to each negotiation topic should be tracked.

a) Determine actions to take when progress deviates from the plan.

b) Take actions and track them to closure.

c. Plan and track client negotiations, using the documented work products and tasks.

1. Communicate the tasks and the availability and location of work products to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed. (prf02)

cnt05

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cnt06   Gather Requirements

Establish and implement procedures to gather a client's requirements.

Initiation

Level 2

Procedure

Document and analyze the client's requirements accurately in order to enable the design, deployment, and delivery of a service that comprehensively meets client expectations. Client requirements may be poorly expressed at the beginning of the engagement, or they may evolve over time, so requirements elicitation and gathering is an on-going process. Requirements are gathered during initial client discussions, or with the receipt of a Request for Information (RFI) or Request for Proposal (RFP), and continue to be gathered through the formal collection of requirements during negotiation. This is an iterative process where identification of a new requirement may result in modifications to the negotiation topics, which in turn may lead to additional changes to the requirements. The organization verifies that it can meet client requirements in cnt07, "Review requirements," and responds to prospective client requirements in cnt08, "Respond to requirements."

Organizations should be particularly attentive to security and intellectual property concerns during requirements gathering. Rigorous legal agreements are often not in place during the early stages of the relationship and the organization and client must take extra steps to ensure that information is adequately controlled.

Activities

a. Provide support for creating and maintaining the procedures for gathering requirements.

1. Provide sponsorship and resources for creating the procedures. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02)

3. Maintain and improve the procedures as appropriate. (knw07)

b. Document the procedures for gathering requirements. Documentation includes the following Activities:

1. Determine duration, methods, and media for gathering client requirements.

   → Methods for gathering client requirements include obtaining documents related to the service (e.g., client or end-user manuals, specifications, samples), interviewing client personnel and end-users, administering standard questionnaires, and collecting artifacts.

2. Gather and document client requirements, and identify client needs that are implied or unstated.

   → Client requirements include services to be delivered, service characteristics, performance criteria, service levels, relationships with other service providers, disposition of assets (personnel, technology, licenses, etc.), and facilities. These requirements may be quantitative or qualitative in nature.

   → Where applicable, the requirements should state the context (i.e., user environment) in which the service will be deployed. Other inputs required from the client include delivery milestones; resources required, including specific skills needed to deliver the service; reports, including the format, media, and frequency; media of service delivery (such as tapes, floppies, compact discs); method of delivery, whether by courier or via the Internet; returnable and non-returnable client supplied material; and any specific cultural issues to be addressed.

3. Obtain clarification from the client on incomplete or unclear requirements or information.

4. Obtain client approval of the gathered requirements, to verify the accuracy of understanding.

5. Obtain and document client acceptance of decisions related to the requirements, as appropriate.

6. Modify requirements documentation, as appropriate, and track the changes.

c. Implement requirements gathering, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

> → Training can include interviewing techniques and how to effectively gather and document client requirements.

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed according to the procedures. (prf02)

cnt06

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cnt07　　　Review Requirements
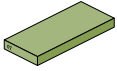
Contracting

Initiation

Level 2

Prior to committing to the prospective client, review requirements and verify that the organization can meet them.

Review the feasibility of meeting client requirements before making commitments in order to determine the needed capabilities. Feasibility reviews also enable the organization to proactively understand, plan, and manage the client's expectations. Before committing to prospective clients and developing, or acquiring, the identified capabilities, the organization should determine if these capabilities are in line with its business objectives.

This Practice is closely related to cnt03, "Confirm existing conditions," cnt06, "Gather requirements," and cnt08, "Respond to requirements." Requirements are gathered in cnt06; they form the basis for the feasibility analysis in this Practice. The analysis is dependent upon accurate assumptions from cnt03 about what will be transferred from the client, and what will be required to meet the service commitments. In cnt08, the feasibility analysis is a key input into decisions about the organization's response.

Activities

a. Provide support for creating and maintaining the work products and tasks for reviewing requirements and verifying the organization can meet them.

1. Provide sponsorship and resources for creating the work products and tasks for reviewing requirements and verifying the organization can meet them. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving work products and tasks as appropriate. (knw02)

3. Maintain and improve work products and tasks as appropriate. (knw07)

b. Document work products and tasks required for reviewing requirements and verifying that the organization can meet them. Documentation includes the following Activities:

1. Identify and document the client requirements that should be reviewed.

> → Client requirements that should be reviewed can be in the form of a Request for Proposal (RFP), a Request for Information (RFI), or a Request for Quotation (RFQ).

2. Collect input from personnel with service delivery experience on the ability to meet identified requirements.

3. Create a feasibility analysis of the ability to meet requirements before responding to any client requirements.

> → Use organizational data on performance capabilities and client feedback from prior engagements for the feasibility analysis. The analysis includes consideration of current skills and available personnel and facilities, as well as consideration of resource consumption on similar engagements.

> → Verify that the feasibility analysis covers client requirements including service expectations, technology infrastructure, service delivery schedule, and effort.

4. Identify inabilities to meet client requirements, taking appropriate actions, and track them to closure.

→ An appropriate action may be telling the client that you cannot meet the requirements, especially if meeting them is not aligned with the organization's business objectives. Other actions may include arranging with a supplier or partner to help deliver those requirements, or building the organization's capabilities so that it can meet those requirements itself.

5. Use the results of the analysis in responding to client requirements.

c. Review requirements and verify the organization can meet them, using the documented work products and tasks.

1. Communicate the tasks and the availability and location of work products to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

→ Information needed to review the requirements includes technology infrastructure requirements, delivery milestones, estimates of resources, service levels, and service specifications. Other client information required for review includes policies and procedures to follow, status reports, security requirements, cultural attributes, and definitions and documentation of roles and responsibilities.

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed. (prf02)

cnt07

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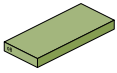
cnt08   Respond to Requirements

Establish and implement procedures to respond to the requirements of a prospective client.

Provide comprehensive and timely responses to a prospective client's inquiries, requests, and requirements, in order to support consistent and responsive interactions with the client. Documenting and communicating the client's responses about its requirements enables the organization to clarify its concerns and provide responses of acceptable quality.

This Practice is closely related to cnt06, "Gather requirements," and cnt07, "Review requirements." Requirements are gathered in cnt06 and form the basis for the feasibility analysis in cnt07. In this Practice, the feasibility analysis is a key input into decisions about the organization's response.

Activities

a. Provide support for creating and maintaining the procedures for responding to requirements.

1. Provide sponsorship and resources for creating the procedures. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02)

3. Maintain and improve the procedures as appropriate. (knw07)

b. Document the procedures for responding to requirements. Documentation includes the following Activities:

1. Identify and document client requirements that need a response.

2. Obtain clarifications from the client, as appropriate.

3. Create a documented response to each identified client requirement based on the feasibility analysis.

> → An organization's response may be in the form of a proposal. The proposal may include sections on the organization's track record, management, client referrals, service to be delivered, pricing, service levels, and the responsibilities of the client and organization.

4. Communicate the response to the client.

5. Provide clarifications to the client, as appropriate.

6. Track the progress of responses to client requirements, taking action when appropriate.

> → Tracking responses includes checking the quality of the response, tracking the effort in terms of cost and time, tracking client feedback, and taking necessary follow-up action.

c. Implement actions to respond to the requirements of a prospective client, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

> → Personnel responding to requirements can include those from service design, deployment and delivery, commercial, legal, and human resources.

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed according to the procedures. (prf02)

cnt08

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cnt09   Contract Roles
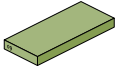
Contracting

Initiation

Level 2

Define the roles and responsibilities of the organization and the client with respect to the proposed contract.

Agree with the client on the roles and responsibilities of each party in order to consistently and successfully execute the contract and deliver the service. Having clearly defined and understood roles and responsibilities helps to guard against mismatched expectations that may result in service delivery issues.

Activities

a. Provide support for creating and maintaining the work products and tasks for defining the roles and responsibilities of the organization and client.

1. Provide sponsorship and resources for creating the work products and tasks for defining the roles and responsibilities of the organization and client. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving work products and tasks as appropriate. (knw02)

3. Maintain and improve work products and tasks as appropriate. (knw07)

b. Document work products and tasks required for defining the roles and responsibilities of the organization and client. Documentation includes the following Activities:

1. Identify and document the roles and responsibilities of the organization, client, and relevant stakeholders during execution of the proposed contract.

> → An organization identifies roles and responsibilities based on the tasks to be performed in the sourcing relationship, and on inputs from the client. Stakeholders may include suppliers and partners, if they have been selected prior to signing the contract with the client.

> → The responsibilities of the client during delivery may include providing the inputs for requirements as required; studying and obtaining approval of service designs; supplying the inputs required for performing the service including data, documents, and information at designated intervals; providing feedback and making payments at predefined intervals; establishing change control mechanisms; answering queries within a specified period; identifying points of contacts for various tasks such as general clarifications, technical queries, and queries relating to account, billing, or payment; designating personnel authorized to track the progress of the contract, to provide feedback, and to answer queries; and approval of milestones met.

> → Responsibilities of the organization may include identifying contact personnel, sending service design and service delivery plans for approvals, meeting milestones, achieving service levels, maintaining continuity of service in case of contract completion, and training of clients and end-users.

2. Determine and document remedial actions to take when the identified responsibilities are not met.

3. Obtain acceptance from the relevant stakeholders on the identified roles and responsibilities.

c. Define roles and responsibilities of the organization and client, using the documented work products and tasks.

1. Communicate the tasks and the availability and location of work products to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed. (prf02)

cnt09

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cnt10   Create Contracts

Establish and implement procedures to create contracts.

Consistently and effectively create legal agreements in order to enable all the parties to have a clear understanding of what services will be delivered and at what level of quality. Given the long-term nature of most sourcing engagements, implementing procedures for contracts and flexibility in the relationship between the client and the organization are critical to success. Contracts should clearly address the services required, service levels, terms, conditions, and responsibilities of the client and the organization.

This Practice is closely related to cnt11, "Amend contracts," which covers procedures for making contract amendments. While there are similar Activities in both Practices, the focus of this Practice is on the creation of an initial contract; the focus of cnt11 is on managing amendments to the initial contract and deploying those changes into the current service delivery.

Activities

a. Provide support for creating and maintaining the procedures for creating contracts.

1. Provide sponsorship and resources for creating the procedures. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02)

3. Maintain and improve the procedures as appropriate. (knw07)

b. Document the procedures for creating contracts. Documentation includes the following Activities:

1. Identify the required inputs for the contract.

> a) Identify agreed-upon client requirements, including client objectives and policies that may impact contract provisions.

> → Client requirements that have been agreed upon in negotiation form the basis for ensuring the contract satisfactorily addresses client needs.

> b) Identify organizational requirements, including engagement objectives and policies that may impact contract provisions.

> c) Identify statutory and regulatory requirements.

> d) Identify licensing requirements.

> e) Identify intellectual property requirements.

2. Create the contract, based on the identified requirements.

> → The contract is a legally binding agreement that describes the agreed-upon requirements and how those requirements are to be satisfied. It should include the following:

> - A clear description of the scope of services and performance standards for delivery of those services (e.g., Service Level Agreements, milestones, performance measures).
> - Management and control provisions, including operational decision-making, long-term direction setting, and work allocation.
> - Transition provisions, including time-frames and performance during the transition period.
> - Terms and conditions (e.g., billing and payment terms, termination provisions).

3. Address pricing for the service in the contract, based on the pricing guidelines.

> → Prices for services may differ from the guidelines, based on unique requirements and negotiations with the client. Pricing schedules should include personnel, infrastructure, tools, technology, software, and supplier and partner provisions. Pricing terms typically include cost of living adjustments and currency fluctuations.

4. Identify and select the partners and suppliers needed to deliver the service being contracted, as appropriate.

> → Use of partners and suppliers may be stated in the contract (e.g., for alliances). Depending on the nature of the agreement, the organization may be taking over client contracts with partners and suppliers.

5. Determine the conditions that require contract amendments and include amendment provisions in the contract.

> → Contract amendment provisions typically include volume changes, service level changes, scope changes, regulatory changes, and structural changes (e.g., mergers and acquisitions).

6. Review and obtain approval of the contract by the client, organization, suppliers, and partners, as appropriate.

a) Verify that the contract commitments meet identified requirements.

b) Identify and assess risks that impact the ability of the organization to meet the proposed contractual commitments.

c) Identify and track changes to contract provisions during negotiations.

c. Implement actions to create contracts, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed according to the procedures. (prf02)

cnt10

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cnt11   Amend Contracts

Contracting

Initiation

Level 2

Procedure

Establish and implement procedures to amend contracts.

Modify legal agreements with clients when business conditions change in order to enable all parties to have a clear understanding of the changes to the delivery of service. Given the long-term nature of most sourcing engagements, implementing procedures for contract amendments and flexibility in the relationship between the client and the organization are critical to success.

This Practice is closely related to cnt10, "Create contracts," which covers procedures for contract creation. While there are similar Activities in both Practices, the focus of cnt10 is on the creation of an initial contract; the focus of this Practice is on managing amendments to the initial contract and deploying those changes into current service delivery.

This Practice is also closely related to del07, "Service modifications." Service modifications represent the control over any change to the service, no matter the size. It is important for organizations to be able to analyze these changes and to determine which are small, which are large, and which require a formal amendment to the contract. This determination varies by contract, but typically, small changes will only require a service modification and will not require significant work to deploy the change into the service delivery. Larger changes will typically require a contract amendment. Whether or not a change requires a contract amendment, the change should be analyzed to determine if the Initiation Practices need to be re-implemented (e.g., the service specification may need to be modified, service changes may need to be designed and deployed).

Activities

a. Provide support for creating and maintaining the procedures for amending contracts.

1. Provide sponsorship and resources for creating the procedures. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02)

3. Maintain and improve the procedures as appropriate. (knw07)

b. Document the procedures for amending contracts. Documentation includes the following Activities:

1. Identify conditions that require contract amendments.

> → Changed conditions include changes to applicable statutes and regulations, requests for additional or more limited services, and modifications to existing services. Modifications to services may require a new round of analysis and negotiation with the client, possibly leading to an amendment of the contract.

2. Identify the required inputs for the contract amendment.

     a) Identify changes in client requirements, including client objectives and policies that may impact contract provisions.

     b) Identify changes in organizational requirements, including engagement objectives and policies that may impact contract provisions.

     c) Identify changes in statutory and regulatory requirements.

d) Identify changes in licensing requirements.

e) Identify changes in intellectual property requirements.

3. Analyze the impact of any proposed changes and communicate them to relevant stakeholders.

4. Create the contract amendment, based on the identified requirements.

→ The amendment can take different forms, depending on the terms and conditions of the contract. Some contracts will call for the publication of a modified contract document, reflecting the agreed-upon amendment. Other contracts may require that the original signed contract not be altered, and that amendments be maintained and published as addenda to the contract.

5. Reassess pricing for service for the proposed amendment, based on the pricing guidelines.

→ Prices for services may differ from the guidelines based on unique requirements and negotiations with the client. Pricing schedules may include personnel, infrastructure, tools, technology, software, and subcontracting. Pricing terms typically include cost of living adjustments and currency fluctuations.

6. Identify and select the partners and suppliers that will be needed in order to deliver the amended services, as appropriate.

7. Review the contract amendment.

8. Obtain approval of the contract amendment from the client, organization, suppliers, and partners, as appropriate.

a) Verify that the amendment meets identified requirements.

b) Identify and assess risks that impact the ability of the organization to meet the amended commitments.

c) Identify and track changes to contract provisions during the amendment process.

c. Implement actions to amend contracts, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed according to the procedures. (prf02)

cnt11

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sdd

Service Design & Deployment Practices

Service Design & Deployment Practices focus on the process of translating the client requirements and contract language of what will be provided into a detailed design for how it will be provided, and for effectively deploying that design. This is closely related to the Contracting Capability Area. All Service Design & Deployment Practices are in Initiation. They cover the following:

- Clearly articulating the services being contracted in a service specification. Using the service specification as the foundation for the service design and deployment.

- Obtaining and using feedback on the service design to ensure that the services are meeting the client requirements and the agreed-upon commitments.

- Effectively managing the service design and deployment.

pps

sdd01   Communicate Requirements
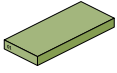
Establish and implement procedures to communicate the client's requirements to the service design and deployment team.

Service Design & Deployment

Initiation

Level 2

Procedure

Verify that the service design and deployment team has an accurate understanding of the client's requirements before the service design is started in order to help ensure that the service meets those requirements. The client interaction team should ensure that the service design and deployment team clearly understands the client's requirements and the commitments that were made to the client. This understanding can be documented in minutes of meetings, sign-offs on interactions, and responses to clarifications.

Activities

a. Provide support for creating and maintaining the procedures for communicating requirements.

1. Provide sponsorship and resources for creating the procedures. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02)

3. Maintain and improve the procedures as appropriate. (knw07)

b. Document the procedures for communicating requirements. Documentation includes the following Activities:

1. Select methods and media for communicating requirements.

> → Communication methods include usage of standard templates, forms, and structured meetings. Structured meetings typically have an agenda, mechanisms for handling conflicts and reaching conclusions, and records of what transpired. Factors considered in choosing specific methods include location, personnel, type of information exchanged, extent of details communicated, and understandability of terms.

2. Determine sources and content of information to be communicated regarding requirements.

3. Determine methods for seeking and obtaining clarification.

4. Maintain documentation on the communication and acceptance by the service design and deployment team.

> → Communication of requirements is typically performed by the client interaction team, since it is likely to have the most detailed knowledge about the client requirements.

c. Implement actions to communicate requirements, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

→ Training may include methods and media of communication to verify that the collected client requirements are transferred clearly and precisely.

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed according to the procedures. (prf02)

sdd01

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sdd02   Design & Deploy Service
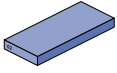
Establish and implement procedures to design and deploy the service to meet client requirements.

Service Design & Deployment

Initiation

Level 3

Procedure

Establish a service delivery framework in order to effectively meet the client's requirements according to the agreed-upon service levels. An established procedure for design and deployment supports consistency and predictability when creating designs for high quality services, deploying services, and managing design and deployment tasks. The objective is to create service designs that meet the client's requirements within agreed upon time frames.

This Practice expands on sdd03, "Plan design & deployment," sdd05, "Service design," and sdd08, "Deploy service." At Level 3, this Practice expands on these by requiring documented procedures and organizational consistency. Many of the Activities shown in this Practice intentionally overlap with Activities in sdd03, sdd05, and sdd08; these Practices should be considered when implementing this Practice.

Activities

a. Provide support for creating and maintaining the procedures for designing and deploying the service across the organization.

1. Provide sponsorship and resources for creating the procedures. (knw04, prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02, rel05)

3. Maintain and improve the procedures as appropriate. (knw04, knw07)

b. Document the procedures for designing and deploying the service. Documentation includes the following Activities:

1. Create a service design plan.

> → Planning includes analyzing the requirements, creating estimates of the resource requirements, allocating resources to meet those requirements, creating schedules of progress reviews, and determining tracking methods.

> → Personnel are typically involved in reviewing estimates and plans for reasonability, and verifying tasks can be performed as described in the plans.

2. Create a service deployment plan.

> → Deployment plans include plans for deploying the physical environment, technology infrastructure, personnel structure, processes, procedures, and policies. Deployment may including transferring or acquiring resources needed for service delivery.

3. Create the service design.

   a) Select opportunities to reuse work products.

   b) Identify cultural attributes that impact service.

   c) Identify existing and potential problems that need to be addressed by the service design.

   d) Create a design for the work environment.

   e) Create a design for the personnel structure to be used in service delivery.

f) Create a design for the technology infrastructure.

→ Technology infrastructure design includes accounting for technology integration with clients, suppliers, and partners, as appropriate.

g) Create a design for the process assets used to deliver the service.

h) Coordinate the design creation tasks, verifying that the service design is integrated with, and based on, the service specification.

i) Review the service design.

j) Obtain and analyze stakeholder feedback during service design.

4. Track status and progress with respect to the design plan.

a) Determine actions to take when progress deviates from the plan.

b) Take actions and track them to closure.

5. Deploy the service.

→ Service deployment often involves some development tasks (e.g., creating applications, configuring tools, etc.).

a) Deploy the physical environment.

b) Deploy the personnel structure.

c) Deploy the technology infrastructure.

d) Deploy the process assets.

e) Coordinate the deployment, verifying that service delivery is integrated and based on the service design.

f) Obtain and analyze stakeholder feedback during service deployment.

6. Track status and progress against the deployment plan.

a) Determine actions to take when progress deviates from the plan.

b) Take actions and track them to closure.

c. Implement service design and deployment, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02, knw03)

2. Provide resources to effectively perform the work. (knw02, knw03, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl05, ppl07, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02, knw03)

5. Verify that the work is consistently and effectively performed according to the procedures across the organization. (knw04, prf02)

sdd03   Plan Design & Deployment
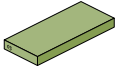
Service Design & Deployment

Initiation

Level 2

Plan

Plan and track the design and deployment of the service.

Effectively manage the service design and deployment tasks in order to deliver a service that meets the client's requirements. Planning is critical for establishing expectations for the client and organization, and forms the basis for tracking and reviewing the service design and deployment tasks.

This Practice is closely related to sdd05, "Service design," sdd08, "Deploy service," and knw08, "Resource consumption." This Practice plans for and tracks the service design (sdd05) and deployment (sdd08) tasks. Resource consumption data (knw08) is fundamental to tracking performance against plans.

Activities

a. Provide support for creating and maintaining the work products and tasks for planning and tracking the design and deployment.

1. Provide sponsorship and resources for creating the work products and tasks for planning and tracking the design and deployment. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving work products and tasks as appropriate. (knw02)

3. Maintain and improve work products and tasks as appropriate. (knw07)

b. Document work products and tasks required for planning and tracking design and deployment. Documentation includes the following Activities:

1. Create estimates of design and deployment effort.

    a) Identify client requirements and commitments that will impact design and deployment.

    → The client requirements and commitments include engagement deliverables, milestones, and client-supplied resources. If created prior to the plan, the service specification may help identify client requirements and commitments.

    b) Analyze requirements to identify design and deployment tasks.

    c) Create estimates of the resources required for designing and deploying the service, including the effort and time frame required for each task.

    → Resources include monetary resources, personnel, training, technology, and facilities infrastructure. Estimates of resources are based on details of similar engagements executed by the organization, availability of personnel and skills, lead times required for procurement, interdependencies within tasks and resources, risks associated with resources, and capacity of resources including facilities and technology.

2. Create the service design plan.

    a) Create methods for handling changes during creation of the service design.

    b) Create a schedule of service design tasks.

    c) Create a schedule of milestones and progress reviews.

d) Determine personnel and training required to create the service design.

e) Document personnel assignments in the service design plan.

f) Determine additional resources required to create the service design.

g) Determine the attributes of the service design to be tracked.

h) Select and document methods used for tracking the defined attributes.

3. Create the service deployment plan.

a) Create a deployment plan and schedule for the physical environment.

b) Create a deployment plan and schedule for the technological infrastructure.

c) Create a deployment plan and schedule for the personnel structure.

d) Create a deployment plan and schedule for processes, policies, and procedures.

e) Create a schedule of milestones and progress reviews.

f) Determine the attributes of the service deployment to be tracked.

g) Select and document methods used for tracking the defined attributes.

h) Verify readiness for successful deployment.

→ Successful deployment is dependent upon the ability to transfer or start up service delivery with minimal problems. For existing services, it is important to verify service continuity during deployment. Readiness for deployment should verify the following:

- Required communications are in place (e.g., procedures, contact lists, escalation lists).
- Physical environment is adequate (e.g., building access has been provided to personnel, space assignments have been made).
- Technology infrastructure is ready for service delivery (e.g., physical network, wiring, hubs, routers, pbx, workstations, servers, printers, systems software).
- Personnel are prepared to deliver service (e.g., training has been delivered, a compensation and reward structure is in place, roles and responsibilities have been communicated).
- Procedures, policies, and guidelines are in place and have been communicated to personnel.

i) Create a plan for maintaining continuity of service.

→ Different approaches can be taken to maintain continuity of service, such as providing a parallel service, a staged transfer of service, or a straight transfer of service. The approach taken will depend on the associated risks. In some cases, continuity of service may not be critical or necessary. Whether continuity needs to maintained, and if so, what approach will be used, should be negotiated with the client; the agreed-upon approach may be outlined in the contract.

4. Review the service design and deployment plans.

a) Review the service design and deployment plans for correctness, clarity, and adequacy.

b) Obtain approval of the service design and deployment plans from the relevant stakeholders.

c) Provide the service design and deployment plans to relevant stakeholders.

d) Periodically review and maintain the service design and deployment plans.

sdd03

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Plan the Design & Deployment cont'd

→ Design and deployment plans are modified due to changes in client requirements, contract amendments, service modifications, and changes in resource availability.

5. Track status and progress against the service design and deployment plans, according to the defined tracking methods.

→ Information required for tracking includes status reports and engagement milestones.

a) Determine actions to take when progress deviates from the plan.

b) Take defined actions and track them to closure.

c. Plan and track the design and deployment, using the documented work products and tasks.

1. Communicate the tasks and the availability and location of work products to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed. (prf02)

sdd04   Service Specification
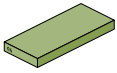
Create the service specification.

Create a service specification that clearly, accurately, and comprehensively describes the services to be provided in order to effectively meet the client's requirements. This service specification is the basis for designing, deploying, and delivering service. It is a comprehensive document that describes the services that the organization provides to the client and describes how end-users request services. It describes the available services, the agreed-upon service levels, if any, and the interfaces between the organization, the clients, and the end-users. As the service evolves over time, the service specification is modified to document the changing expectations of the client and the organization.

This Practice is critical input into the service design (sdd05, "Service design"). Modifications to the service (del07, "Service modifications") may require changes to the service specification.

Service Design & Deployment

Initiation

Level 2

Activities

a. Provide support for creating and maintaining the work products and tasks for creating the service specification.

1. Provide sponsorship and resources for creating the work products and tasks for creating the service specification. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving work products and tasks as appropriate. (knw02)

3. Maintain and improve work products and tasks as appropriate. (knw07)

b. Document work products and tasks required for creating the service specification. Documentation includes the following Activities:

1. Determine and document the services to be provided, based on the client requirements.

    → Definitions of services include availability of each service, service requests, priority of services, functional and performance requirements, business and technical goals and objectives, clear representation of the needs of clients and end-users, and client-imposed constraints (e.g., on standards and security policies).

2. Determine service levels for the defined services.

    → Service levels are determined based on an analysis of the current baselines of services offered, a review of engagement objectives, a review of client expectations, and an analysis of the availability of each service. Analysis of current baselines is typically done through a baseline assessment or an analysis of historical performance. Service levels are generally defined in service level agreements.

    → When creating service level agreements, it may be useful to establish related operation-level agreements. While service-level agreements specify service levels committed to the client, operation-level agreements specify service levels between internal groups involved in delivering the service. For example, a client service level to have an application available 99% of the time may lead to an operation-level agreement between the applications group and the infrastructure group that the infrastructure will need to be available 99.9% of the time.

3. Review the service specification

    a) Review the service specification for clarity, correctness, and adequacy.

b) Verify that the service specification addresses applicable statutes, regulations, and security requirements.

c) Obtain feedback from the relevant stakeholders.

d) Modify the service specification, as appropriate.

→ Changes identified should be analyzed to determine if they represent a change in agreed-upon services and, therefore, need a formal service modification is needed.

4. Obtain client approval for the service specification.

c. Create the service specification, using the documented work products and tasks.

1. Communicate the tasks and the availability and location of work products to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed. (prf02)

sdp04

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sdd05   Service Design

Create the service design based on the service specification.

Ensure that the service design is based on the client's requirements and the set of services speci-
fied in the agreed-upon service specification in order to effectively meet the client's requirements.
The design team uses the service specification to ensure that the service design adequately trans-
lates the client's requirements into the service to be delivered.

The client's requirements are expected to evolve over the life of the engagement. Changes result
in modifications to the service (del07, "Service modifications"), and typically require the service
specification and service design to be updated, and changes in services to be deployed (sdd08,
"Deploy service").

This Practice is closely related to sdd03, "Plan design & deployment," sdd04, "Service specification,"
sdd06, "Design feedback," and sdd08, "Deploy service." The service specification is created in
sdd04 and forms the basis for the service design. Formal review of the service design with the cli-
ent takes place in sdd06 and is used to verify that the service design meets the client requirements
for service delivery. Once approved, the service design is used as the basis for service deployment
in sdd08. Planning for the design and deployment occurs in sdd03.

Activities

**a. Provide support for creating and maintaining the work products and tasks for creating
the service design.**

1. Provide sponsorship and resources for creating the work products and tasks for creating
the service design. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving work products
and tasks as appropriate. (knw02)

3. Maintain and improve work products and tasks as appropriate. (knw07)

**b. Document work products and tasks required for creating the service design. Documentation
includes the following Activities:**

1. Identify the personnel competencies required for the service design team.

   → Competencies to consider when choosing team members include market sector and service
   expertise, communication skills, learning ability, adaptability, crisis management skills, time
   management ability, and work allocation skills.

2. Determine the service design team's roles and responsibilities based on the team members'
personnel competencies.

3. Identify contact personnel that may affect the service design.

   → Contact personnel can come from different organizational functional areas and from external
   sources, and include personnel responsible for coordination, reporting, and escalation.
   Organizational functions that affect the service design include human resources, finance,
   purchasing, commercial, and technology. External participants include client, partners,
   and suppliers.

4. Communicate to the design team the service expectations that were committed to the client.

5. Create the design for the work environment.

6. Create the design for the personnel structure used to deliver the service.

    a) Determine personnel required to deliver the service.

    b) Determine training required to deliver the service.

    c) Determine teams required to deliver the service.

7. Create the design for the technology infrastructure.

    → Technology infrastructure design includes accounting for technology integration with clients, suppliers, and partners, as appropriate.

    a) Identify technology required to deliver the service.

    b) Identify sources of the required technology.

    → Required technology may already exist in the organization and its suppliers and partners, may be transferred from the client, or may be acquired as needed.

8. Create the design for the processes, policies, and procedures used to deliver the service.

    a) Identify the service delivery tasks to be performed and the resources to be provided.

    b) Identify applicable existing processes, policies, procedures, and guidelines, tailoring them to the needs of the engagement as appropriate.

    c) Determine need for new processes, policies, procedures, and guidelines.

    d) Create a process specification for the delivery of service.

    → The process specification may be multiple documents containing the necessary procedures, policies, and guidelines.

    → The process specification should include the following:

- Methods for communicating with client and end-users. Methods include predefined contact personnel, methods of communication, frequency, and media used. Media used can include high-speed data links, e-mails, FTP site, telephone, and fax. Points of contact and formats will include contact points, service requests, status reports, exception reports, and client escalation.
- Defined steps for receipt and delivery of service requested. Steps include acknowledgement, review for comprehensiveness and clarity, and registering the request. The steps identified for receipt and delivery of service are typically defined in the form of "scripts" for various scenarios, work instructions, and standard operating procedures.
- Resources required to deliver service, including personnel, skills, tools, and techniques.
- A clear description of the service delivery attributes that directly affect service performance. Attributes include service accessibility and availability, service safety, security, reliability, service delay, duration, delivery times, service capacity, size of service delivery facilities, and quantity and types of service-related supplies and materials.
- A standard of acceptability for each service delivery attribute.
- Methods for coordinating with the suppliers and partners required for the delivery of service.

    e) Create a quality specification to track the quality of the service delivered.

    → Service Level targets are often associated with the volume of service delivered, the quality of service delivered, and client and end-user satisfaction. The quality specification can be multiple documents containing quality standards and service levels.

    → The quality specification should include the following:

Service Design cont'd

- Service attributes that impact the quality of the service delivered, including achievement of service levels, response time, and attitude of personnel interacting with client and end-user.
- Measures of service characteristics required for controlling the quality of service delivered. Characteristics are identified from an analysis of the key steps in service delivery that have a significant influence on client and end-user satisfaction
- Schedules, methods, personnel, and tools for tracking the identified characteristics.
- Methods for documenting the results of tracking and the identification of personnel responsible for analysis of results.
- Actions to take based on the analysis of the results of tracking the service quality.

9. Review and obtain approval of the service design by the relevant stakeholders.

→ The service design should be reviewed for correctness, clarity, and adequacy. Reviews with stakeholders are done to verify that the service design meets identified requirements before proceeding with deployment. Formal review of the service design by the client is covered in sdd06, "Design feedback."

10. Periodically review the personnel competencies required for the service design team and changing team composition depending on changes in required personnel competencies.

→ The organization should periodically review the competencies required for the service design team; changing team composition depending on changes in required competencies.

c. Create the service design, using the documented work products and tasks.

1. Communicate the tasks and the availability and location of work products to relevant stakeholders. (knw02)

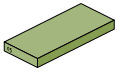2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed. (prf02)

sdd06   Design Feedback
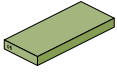
Establish and implement procedures to obtain feedback from the client on the designed service, and to incorporate necessary changes.

Service Design & Deployment

Initiation

Level 2

Procedure

Establish procedures for client reviews in order to prevent the occurrence of problems in the service performance. Feedback from the client can be used to identify and resolve problems in the service design before the service is deployed, thereby improving client and end-user satisfaction.

This Practice is closely related to sdd05, "Service design," where the service design is created. The client's involvement in reviewing the service design is covered in this Practice.

Activities

a. Provide support for creating and maintaining the procedures for obtaining service design feedback.

1. Provide sponsorship and resources for creating the procedures. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02)

3. Maintain and improve the procedures as appropriate. (knw07)

b. Document the procedures for obtaining service design feedback. Documentation includes the following Activities:

1. Identify contacts in the client's organization that are responsible for providing feedback on the service design.

   → Designated client contacts include individuals or teams responsible for coordinating, reporting, and escalating problems and issues.

2. Provide the client with the required service design information on which feedback is required.

   → The information provided to the client is based on inputs from the service design team and representatives of the client. Feedback may be obtained on suitability of the service design to requirements, accessibility of the key organizational interfaces, cultural fit, efficiency, reliability, and the ability to meet service levels.

3. Provide methods for the client to provide feedback on the service design.

   → The client may review service design information and provide feedback during face-to-face meetings, by e-mail, or by electronic file transfer (e.g., as part of a help desk system that supports problem tracking and reporting). This may result in changes to the requirements.

4. Collect client feedback.

5. Analyze feedback and identify any changes required to the service design.

6. Determine actions required to implement the identified changes.

   → Actions arising from client feedback include making changes required to the service specification, planned infrastructure, process and quality specifications; and retraining of personnel.

7. Document the changes and corresponding actions, and track the actions to closure.

c. Implement actions to obtain feedback, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

> → Personnel responsible for obtaining client feedback include project managers and client interaction personnel.

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed according to the procedures. (prf02)

sdd07   Verify Design
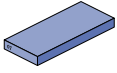
Establish and implement procedures to review and verify the service design.

Service Design & Deployment

Initiation

Level 3

Procedure

Identify and resolve potential problems with the service design before the service is deployed in order to help ensure that the organization can meet the service level commitments. Removing defects early prevents problems during service deployment and enables the organization to satisfy the client's requirements and meet the service level commitments. The client's involvement also improves client and end-user satisfaction and helps ensure the service design will meet the client requirements.

This Practice establishes a more in-depth and rigorous review of the service design than sdd06, "Design feedback." It provides reviews of service design, including an external verification of the service design. Service design reviews typically include reviews and audits by management—or designated personnel—within the organization. Verification expands on this internal review by involving the client's personnel to verify that the service design meets their requirements. The organization can then objectively verify its ability to satisfy those requirements and meet its commitments to service levels. Client feedback can be used to efficiently identify and resolve problems in the service design before the service is deployed.

Activities

a. Provide support for creating and maintaining the procedures for service design review and verification across the organization.

1. Provide sponsorship and resources for creating the procedures. (knw04, prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02, rel05)

3. Maintain and improve the procedures as appropriate. (knw04, knw07)

b. Document the procedures for service design review and verification. Documentation includes the following Activities:

1. Determine and document methods to review the service design.

> → Methods for conducting reviews include peer review of documentation, walkthroughs, simulations, demonstrations, scenario generators, and testing interfaces with other systems.

2. Create guidelines on applying the service design review methods.

3. Plan reviews of service design prior to deployment.

> → Reviews are conducted at specific milestones or defined intervals.

4. Address reviews of the service design in the plan.

5. Review the service design for correctness, clarity, and adequacy.

6. Determine and document methods to verify the service design with the client.

7. Create guidelines on applying the service design verification methods.

8. Plan reviews of the verification prior to deployment.

9. Address verification of the service design in the plan.

10. Verify the service design with the client.

11. Determine actions to take based on the results of the reviews and verification.

> → Depending on the extent of the changes needed, it may be necessary to conduct additional reviews and verifications before submitting the service design for approval.

12. Take defined actions, and track to closure.

c. Implement design review and verification, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02, knw03)

2. Provide resources to effectively perform the work. (knw02, knw03, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl05, ppl07, ppl08)

> → Members of the review and verification team include members of the service design team, personnel from functions involved in implementing the service design, client personnel, suppliers and partners, and others, as specified in the contract.

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02, knw03)

5. Verify that the work is consistently and effectively performed according to the procedures across the organization. (knw04, prf02)

sdd08   Deploy Service
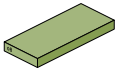
Deploy the service based on the service design.

Service Design & Deployment

Initiation

Level 2

Effectively deploy the service according to the service design in order to ensure successful service delivery. The deployment team uses the service design as the basis for deployment to help ensure that all aspects of the service design are adequately handled. Deployment involves putting the service design and the associated infrastructure and support in place so that service delivery can begin.

This Practice is closely related to sdd03, "Plan design & deployment," sdd05, "Service design," and del03, "Deliver service." The service design (sdd05), is used as the basis for the service deployment in this Practice. Deployment is planned and tracked in sdd03. Once the service is deployed, service delivery can begin in del03.

Activities

a. Provide support for creating and maintaining the work products and tasks for deploying the service.

1. Provide sponsorship and resources for creating the work products and tasks for deploying the service. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving work products and tasks as appropriate. (knw02)

3. Maintain and improve work products and tasks as appropriate. (knw07)

b. Document work products and tasks required for deploying the service. Documentation includes the following Activities:

1. Identify the personnel competencies required for the deployment team.

> → Competencies to consider for choosing team members include market sector and service expertise, communication skills, learning ability, adaptability, crisis management skills, time management ability, and work allocation skills.

2. Determine deployment team roles and responsibilities based on the team members' personnel competencies.

3. Identify and document contact personnel from different organizational functions, or from external sources, that affect the service deployment.

> → Contact personnel include the personnel responsible for coordination, reporting, and escalation. Organizational functions that affect the service design and deployment include human resources, finance, purchasing, commercial, and technology. External participants include client, partners, and suppliers.

4. Communicate to the deployment teams the service expectations that were committed to the client.

5. Deploy the physical environment.

6. Deploy the personnel structure.

   a) Assign and train personnel and teams to deliver the service based on the service design.

b) Train and integrate transferred personnel, as appropriate.

→ Training needs to cover client personnel who are now the organization's employees, and personnel who remain employees of the client. It also needs to cover any supplier and partner personnel involved in service delivery.

c) Reconfigure the client interaction team based on service design, as appropriate.

7. Deploy the technology infrastructure.

a) Obtain technology as appropriate.

b) Configure and deploy the required technology.

c) Verify the configuration and deployment.

8. Deploy the processes, policies, and procedures.

a) Provide materials on processes, policies, and procedures to relevant stakeholders.

b) Train relevant stakeholders on processes, policies, and procedures.

→ Training may be provided to clients, end-users, suppliers, and partners.

9. Maintain continuity of service.

→ Different approaches can be taken to maintain continuity of service, such as providing a parallel service, a staged transfer of service, or a straight transfer of service. The approach taken will depend on the associated risks. In some cases, continuity of service may not be critical or necessary. Whether continuity needs to be maintained and, if so, what approach will be used, should be negotiated with the client; the agreed-upon approach may be outlined in the contract.

10. Verify that service deployment is integrated and based on the service design.

11. Obtain and analyze stakeholder feedback during service deployment.

12. Periodically review the personnel competencies required for the deployment team, and change the team's composition accordingly.

→ The organization should periodically review the competencies required for the deployment team, changing the team composition depending on changes in the required attributes. Long-term existence, or reconstitution, of the deployment team may be necessary to address changes and enhancements in the service, as well as in the initial deployment.

c. Deploy service, using the documented work products and tasks.

1. Communicate the tasks and the availability and location of work products to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed. (prf02)

80pps

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del

Service Delivery Practices

Service Delivery Practices focus on the continued delivery of service according to the commitments made to the client and based on the service design. They include planning and tracking of service delivery activities. All Service Delivery Practices are in Delivery. They cover the following:

- Planning and tracking service delivery activities.

- Delivering services according to the agreed-upon commitments.

- Providing adequate training to clients and end-users to enable them to effectively use the services being delivered.

- Managing the finances associated with the service delivery.

- Identifying and controlling modifications to the services being provided or to the associated service commitments.

- Identifying problems that impact the service delivery, and taking preventive and corrective actions.

del01   Plan Service Delivery
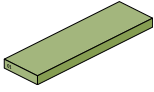
Plan and track the service delivery according to the service design.

Use the service design and a defined planning process in order to help verify that tasks are assigned to the appropriate personnel and that the required resources are provided to meet the service commitments. Planning is ongoing throughout service delivery. Plans are typically modified based on service releases or budgeting cycles (e.g., semi-annually or annually). Service delivery is typically planned and tracked at several levels of detail. High-level plans are used to document the overall service commitments, such as effort, cost, and schedule, for the services being provided. These are supplemented by service level agreements and quality specifications that describe the service-level commitments. Detailed delivery plans are used to manage the delivery of individual service components and often take the form of a team or project work plan that lists specific tasks, work assignments, effort, due dates, milestones, deliverables, risks, etc.

This Practice is closely related to knw08, "Resource consumption," sdd05, "Service design," and del03, "Deliver service." Delivery plans are created based on the service design (sdd05). Resource consumption data (knw08) is fundamental to tracking performance against plans. The service is delivered (del03) according to the plans.

Activities

a. Provide support for creating and maintaining the work products and tasks for planning and tracking the service delivery.

1. Provide sponsorship and resources for creating the work products and tasks for planning and tracking the service delivery. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving work products and tasks as appropriate. (knw02)

3. Maintain and improve work products and tasks as appropriate. (knw07)

b. Document work products and tasks required for planning and tracking service delivery. Documentation includes the following Activities:

1. Create estimates of the service delivery based on the service design.

    a) Identify required deliverables.

    b) Identify client-supplied resources.

    → Identify the client-supplied resources used in service delivery that are to be transferred, as well as those managed by the client.

    c) Create estimates of the resources required to deliver the service, including the effort and time frame required.

    → Resource estimates are used as the basis for capacity and demand management.

2. Create service delivery plans, based on the service design.

    → The service design includes process and quality requirements.

    a) Create a plan for managing service delivery.

→ Service delivery plans, including capacity and demand management plans, are used as the basis for allocating resources to meet day-to-day client requests while meeting the agreed-upon service levels and other commitments.

b) Create a plan for managing the physical environment.

c) Create a plan for managing the technology infrastructure.

d) Create a plan for managing the personnel structure and competencies required of service delivery.

→ The plan includes managing competencies and defining personnel and team targets based on service delivery commitments. Individual and team targets should be aligned with delivery commitments.

e) Create a plan for managing processes, policies, and procedures.

f) Create schedules of milestones and progress reviews.

g) Determine the attributes of the service delivery to be tracked.

h) Select and document methods used for tracking the defined attributes.

3. Review the plans.

→ Service delivery plans are living documents that are updated over the course of the engagement. Service modifications based on changing business conditions will result in updates to the plans. Other changes may occur due to resource changes, changing client priorities, delivery improvements, etc.

a) Review the plans for correctness, clarity, and adequacy.

b) Obtain approval of the plans from the relevant stakeholders.

4. Track status and progress against the service delivery plans, according to the defined tracking methods.

→ Information required for tracking includes status reports, engagement milestones, technology, service-level tracking logs, and penalties or bonuses associated with whether service delivery targets are achieved.

a) Determine actions to take when progress deviates from the plan.

b) Take actions and track them to closure.

c. Plan and track the service delivery, using the documented work products and tasks.

1. Communicate the tasks and the availability and location of work products to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed. (prf02)

del01

2

del02   Train Clients
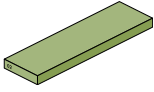
Service Delivery

Delivery

Level 2

Procedure

Establish and implement procedures to train clients and end-users.

Provide training for clients and end-users in order to support the effective deployment and use of the delivered service. Enabling clients and end-users to more effectively take advantage of the delivered service improves the level of client satisfaction.

Training includes basic orientation about how to effectively use the service being provided (e.g., hours of operation, points of contact, how to request service). It may also include more formal training that may be considered a service in itself (e.g., classroom training on how to use the applications being developed for the client); requirements for formal training are typically defined in the contract. While delivering formal training may not be within scope of every engagement, every engagement must enable the clients and end-users to understand and use the services being provided.

Activities

a. Provide support for creating and maintaining the procedures for training clients and end-users.

1. Provide sponsorship and resources for creating the procedures. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02)

3. Maintain and improve the procedures as appropriate. (knw07)

b. Document the procedures for training clients and end-users. Documentation includes the following Activities:

1. Identify the type, content, and format of training to be delivered to clients and end-users.

> → Training may be classroom-based; self-taught with supporting course materials, including electronic materials; or web-based.

2. Obtain acceptance from clients and end-users on the identified training.

3. Communicate the availability and conditions of training to clients and end-users.

4. Maintain records of the training provided, as well as the trainers and trainees.

5. Obtain feedback from clients and end-users on the training.

6. Review and make improvements to the training based on feedback from clients and end-users.

c. Implement client and end-user training, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

> → Resources needed to provide training may include audio/visual equipment, classroom facilities, training material, video-conferencing system, and broadband connectivity. The training can be delivered on the premises of the client or the organization, or remotely.

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed according to the procedures. (prf02)

del02

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del03   Deliver Service
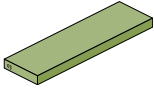
Service Delivery

Delivery

Level 2

Deliver service according to the service delivery plans.

Use the service delivery plans in order to help manage the consistency of delivery and the achievement of the committed service levels. Track the progress of the service delivery tasks to enable the organization to take corrective action in case of deviations. Tracking aids in meeting schedules and keeping commitments made to the client.

This Practice is closely related to del01, "Plan service delivery" and sdd08, "Deploy service." del01 covers planning and tracking of service delivery tasks to be performed in this Practice. Deployment of the service is covered in sdd08.

Activities

a. Provide support for creating and maintaining the work products and tasks for delivering service.

1. Provide sponsorship and resources for creating the work products and tasks for delivering service. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving work products and tasks as appropriate. (knw02)

3. Maintain and improve work products and tasks as appropriate. (knw07)

b. Document work products and tasks required for delivering service. Documentation includes the following Activities:

1. Deliver service according to the service delivery plans.

   → Service delivery tasks vary considerably depending on market sector, type of service provided (e.g., help desk, application management, data center, human resources, finance and account), and the agreement with the client. Since the eSCM-SP is intended to be applicable across a broad audience, details of specific service delivery tasks are not appropriate here. However, in all cases the organization should have adequate service delivery plans which outline the tasks necessary for service delivery, and should deliver service according to those plans.

2. Manage requests for service received by the organization.

   → Service delivery will typically include a service request process and/or a tool which allows an end-user or client to contact the organization and request one of the services that has been contracted. This request processing is often handled by a help desk or service center which then routes the request to the appropriate part of the organization for fulfillment.

3. Obtain and analyze stakeholder feedback during service delivery.

4. Modify service delivery based on modifications to services.

   → As client requirements change, modifications to the services may be requested. Service delivery should be adjusted to reflect the current service specification and the client requirements.

c. Deliver service, using the documented work products and tasks.

1. Communicate the tasks and the availability and location of work products to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed. (prf02)

> → Delivery is verified against the service delivery plan, as well as the service level agreements, the process specification, and the quality specification.

del04   Verify Service Commitments
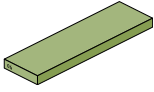
Establish and implement procedures to measure and verify that service commitments are being met.

Verify that the organization's commitments are being met and take appropriate action when commitments are in jeopardy of being missed in order to meet service commitments and increase the client's satisfaction. Use the current performance measurements to evaluate whether the commitments are being satisfied, and identify the problems for which corrective action is needed.

This Practice is related to prf01, "Engagement objectives," and del05, "Correct problems." Engagement objectives and the associated performance measures are defined in prf01. While service commitments should be consistent with the engagement objectives, the focus of this Practice is on the commitments made to the client. The correction of service delivery problems that may cause the organization to miss service commitments is covered in del05.

Service Delivery

Delivery

Level 2

Procedure

Activities

a. Provide support for creating and maintaining the procedures for verifying service commitments.

1. Provide sponsorship and resources for creating the procedures. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02)

3. Maintain and improve the procedures as appropriate. (knw07)

b. Document the procedures for verifying service commitments. Documentation includes the following Activities:

1. Determine measures to track service performance.

> → The quality specification is one source for determining commitments that need to be measured, since it should indicate quality commitments.

a) Determine the attributes to measure to determine if service commitments are being met.

> → Attributes to measure include status and progress of work, effectiveness of service delivery, and performance against service level agreements.

b) Determine the performance measures for the attributes.

> → One source of attributes to track is the quality specification, created as part of the service design, which describes quality attributes to track and the service levels agreed to for each of those attributes.

c) Determine the analyses and indicators that support understanding and decision-making based on service performance.

> → For service levels, the criteria for acceptable performance may be specified in service-level agreements with the client. Acceptable performance for attributes affecting service levels may be internally specified by the organization whether explicit process commitments have been made to the client or not.

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→ Actions to take may include reporting to the clients; defining an action plan, including responsible personnel, time frames, and resources required; and verifying implementation of the planned actions. The action may be specified in the contract, service specification, or quality specification.

2. Collect data on service performance.

3. Analyze the data and compare current values and trends to the defined ranges for acceptable performance.

4. Identify gaps between the actual (or predicted) and the planned performance.

5. Take actions, as appropriate, when there are gaps.

6. Maintain the data and analyses for future use.

→ Possible future uses may include cross-engagement analyses and process improvement efforts.

**c. Implement service commitment verification, according to the procedures.**

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed according to the procedures. (prf02)

del04

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del05

Correct Problems

Establish and implement procedures to correct problems.

Prepare the organization to quickly correct service delivery problems as they occur in order to meet service commitments and increase client satisfaction. Problem correction attempts to eliminate or minimize the impact of a problem that is currently occurring by making use of temporary fixes and work-arounds, as well as more substantial repairs.

Problems occur in every organization. Effectively preparing to correct problems will help the organization to respond quickly and efficiently to problems as they occur, thereby meeting service commitments (del04, "Verify service commitments") and improving client and end-user satisfaction. As used here, "problem" is broadly defined as a state of difficulty that needs to be resolved [Wordnet]. Problems can range from simple human errors to system-wide failures.

Activities

a. Provide support for creating and maintaining the procedures for correcting problems.

1. Provide sponsorship and resources for creating the procedures. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02)

3. Maintain and improve the procedures as appropriate. (knw07)

b. Document the procedures for correcting problems. Documentation includes the following Activities:

1. Identify and document service delivery problems that may need to be corrected.

> → Predicting the problems that may need to be corrected is typically done by reviewing known problems that are not being prevented (e.g., because the cost of prevention outweighs the benefit). Risk management plans will also identify potential problems.

2. Classify identified problems based on an analysis of probable impacts.

3. Determine candidate responses and corrections for the identified problems.

> → Responses will typically include a work-around or alternate service for the duration of the problem. Responses will also include a set of steps to take when the problem occurs, such as communication, training, modifying delivery plans, adjusting resources, negotiating changes to commitments or service levels, and identifying alternate services for the duration of a problem.

4. Document a set of actions to take to correct the identified problems when they occur.

> → The document is created for use in the future and may include work-arounds or steps to address the problem. This document should be maintained in locations that will be accessible when the problems occur. For instance, instructions on how to respond to server failures should not be maintained on the server that will potentially be failing.

a) Determine appropriate correction for each identified problem, based on the impact analysis and available solutions.

b) Determine acceptable time-frames for taking identified actions.

5. Take identified actions when problems occur, and track them to closure.

> → The predefined set of actions should be used as the basis for responding to problems. There may be cases when a problem does not have a set of actions that are predefined and documented. In these cases, the organization will typically resolve the problems on a best efforts basis and then update the predefined set of actions to account for this problem, if appropriate.

c. Implement actions to correct problems, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed according to the procedures. (prf02)

del05

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del06

Prevent Known Problems
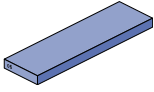
Service Delivery

Delivery

Level 3

Procedure

Establish and implement procedures to take preventive action for known problems.

Analyze previously encountered problems and take action to prevent their recurrence or to minimize their impact when they recur, as appropriate, in order to improve service delivery. Preventive actions will typically attempt to eliminate the root cause of problems to prevent them from recurring. However, it may not always be cost effective to completely prevent some problems. In these cases, preventive actions will attempt to minimize the potential impact of these problems when they recur.

Problems occur in every organization. Effectively analyzing the known problems and taking action to prevent their recurrence is critical for controlling and improving organizational performance, which leads to an improvement in the client's and end-users' satisfaction. Root cause analysis of known problems identifies the opportunity for preventive action. As used here, "problem" is broadly defined as a state of difficulty that needs to be resolved [Wordnet]. Problems can range from simple human errors to system-wide failures.

This Practice is related to del05, "Correct problems," which covers preparing for problems and correcting them as they occur. The focus of this Practice is preventing these problems from recurring in the future.

Activities

a. Provide support for creating and maintaining the procedures for preventive action for known problems across the organization.

1. Provide sponsorship and resources for creating the procedures. (knw04, prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02, rel05)

3. Maintain and improve the procedures as appropriate. (knw04, knw07)

b. Document the procedures for preventive action for known problems. Documentation includes the following Activities:

1. Identify and document service delivery problems that require preventive action.

→ Problems that may impact delivery of service include hardware failure, brief power outages, absence of personnel, and breaks in the supply chain. They are typically identified by reviewing known problems that are not currently being effectively prevented.

a) Collect input from the relevant stakeholders in order to identify problems that require preventive action.

b) Verify that the identified problems include those identified through risk management assessment.

2. Analyze the root causes of identified problems.

→ Tools and techniques such as fishbone diagrams and 5-whys are useful for root cause analysis.

3. Classify identified problems based on an analysis of impacts.

4. Determine candidate preventive actions for the identified problems.

> → Preventive actions typically include modifying or replacing processes and systems for delivering services. They may also include adding processes and systems to address gaps and deficiencies.

5. Create a plan for taking preventive actions.

    a) Determine appropriate preventive action for each identified problem, based on the impact analysis and available solutions.

    b) Determine acceptable time-frames for taking identified preventive actions.

6. Track status and progress against the preventive action plan.

    a) Determine actions to take when progress deviates from the plan.

    b) Take actions and track them to closure.

c. Implement preventive actions for known problems, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02, knw03)

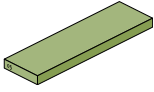2. Provide resources to effectively perform the work. (knw02, knw03, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl05, ppl07, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02, knw03)

5. Verify that the work is consistently and effectively performed according to the procedures across the organization. (knw04, prf02)

del06
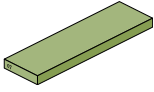
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del07 Service Modifications

Establish and implement procedures to make modifications to services.

Service Delivery

Delivery

Level 2

Procedure

Modify the services in a controlled manner in order to minimize the impact on their delivery. Formal control of changes helps to verify that the organization, the client, and any other impacted stakeholders have a common agreement concerning the services and service levels to be provided. This agreement reduces a potential source of dispute and improves the client's and end-users' satisfaction by helping to verify that the provided services match their current needs.

This Practice is closely related to cnt11, "Amend contracts." Service modifications represent the control of any change to the service, no matter the size. It is important for organizations to be able to analyze these changes and determine which are small, which are large, and which require a formal amendment to the contract. This decision varies by contract, but typically, small changes will only require a service modification and will not require significant work to deploy the change into the service delivery. Larger changes will typically also require a contract amendment. Whether or not it requires a contract amendment, any change should be analyzed to decide whether the Initiation Practices need to be re-implemented. For example, the service specification may need to be modified (sdd04, "Service specification"), service changes may need to be designed (sdd05, "Service design") and deployed (sdd08, "Deploy service"), etc.

Activities

a. Provide support for creating and maintaining the procedures for modifying services.

1. Provide sponsorship and resources for creating the procedures. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02)

3. Maintain and improve the procedures as appropriate. (knw07)

b. Document the procedures for modifying services. Documentation includes the following Activities:

1. Create guidelines to control modifications to the service design or delivery.

   → The services being delivered are formally defined as part of the service specification and are based on the client's requirements and the contract between the organization and the client. Any or all of these may need to be modified as part of a modification to services. Formal guidelines will help identify which of these need to be modified, and will outline a process to request service modifications.

2. Identify and track requests for service modification.

   → In many types of sourcing, the services being provided may include a modification to service (e.g., application management sourcing typically will include modifications to applications as a service being offered). It is important to differentiate between this modification service, which is itself defined in the service specification, and the process for modifying the set of services being provided, which would involve changing the service specification.

3. Analyze proposed modifications before making any changes.

   a) Determine whether the proposed modification is within the scope of the current contract or whether it requires a contract amendment.

→ The contract may make provisions for certain types of service changes to be made without the need for a contract amendment (e.g., changes which may not require a contract amendment if the impact is low). These changes can be managed through modifications to the service specification. More significant changes may trigger the contract amendment process.

b) Analyze the impact of proposed modifications to the services being delivered.

→ Potential impacts include pricing and service levels.

4. Obtain approval for the proposed modifications by the client.

5. Modify the services offered.

→ Examples of modifications to services include changes to service levels, contract terms and conditions, and scope of work. Modifying the services often includes changing the processes or technology as well as training the personnel.

6. Maintain documentation for modifications made to the services.

→ Modifications will typically require modifying the service specification. They may also require modifying the service level agreement, contract documentation, processes, job aids, etc.

7. Track and control the modifications made.

c. Implement service modification, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed according to the procedures. (prf02)

del08   Financial Management
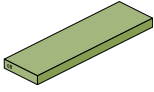
Service Delivery

Delivery

Level 2

Procedure

Establish and implement procedures for financial management of the engagement.

Have financial controls in place that segregate and track payroll, facilities, equipment, and other costs for that engagement, in order to help ensure a successful engagement. These procedures allow the organization to bill the client, provide status reports to the client, clearly understand costs, understand profit or loss status, and identify the areas where costs can be reduced or profits increased.

Financial controls and objectives can vary considerably based on the nature of the engagement and how it is billed. For example, engagements billed on a "cost plus" basis (that is, the client is charged for actual costs plus an agreed-upon profit) may require that the client be given access to detailed information about the engagement's costs, but in this case the organization may not have a strong incentive to have controls in place to reduce costs. Engagements billed on a "fixed cost" basis (that is, the charge is agreed to in advance and does not change based on the actual costs incurred) may require very little financial reporting to the client, but they may have rigorous controls in place to minimize costs.

Activities

a. Provide support for creating and maintaining the procedures for financial management of the engagement.

1. Provide sponsorship and resources for creating the procedures. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02)

→ Legal and security issues are particularly important for financial management. Compliance with the relevant requirements should be verified.

3. Maintain and improve the procedures as appropriate. (knw07)

b. Document the procedures for the financial management of the engagement. Documentation includes the following Activities:

1. Determine financial management scope and objectives for the engagement.

2. Determine the financial attributes to be controlled.

→ An example of a common financial attribute is cost of labor. Drivers for this cost include salary, number of employees, turnover, training costs, benefits, etc. Each of these can, in turn, have drivers of their own (e.g., transaction volume will impact the number of employees needed; employee satisfaction may impact turnover rates).

a) Identify the types and sources of financial attributes to be controlled.

b) Identify the drivers for variance for each type and source of financial attribute.

c) Determine ranges of acceptable performance for each identified financial attribute.

3. Select and document methods used for tracking the defined attributes.

> → Methods should include analysis of the reasons for variance.

4. Create and manage the engagement budget.

> → The financial management process includes establishing budget review cycles, billing, and cost audits.

5. Manage the assets of the engagement.

> → Asset management includes tracking inventories and values of software, equipment, supplies, facilities, and other assets in use by the engagement. This includes an understanding of depreciation rates, consumption rates, expected life of assets, and replacement costs. It may also include procurement processes and systems.

6. Identify the requirements for financial management and reporting.

> → Requirements should take into account the needs of the engagement (e.g., cash flow to cover payroll and other expenses), as well as the needs of the client (e.g., charge-backs, reporting, integrating with client financial systems). Requirements may include maintaining costing/ budget factors, analyzing cash flow, arranging supplemental funding, processing miscellaneous transactions, creating journal entries, establishing and executing controls to verify the accuracy and completeness of financial information, and conducing analyses of costs/revenues.

7. Create financial management reports based on the identified requirements.

8. Determine the financial tools and data sources required for financial management of the engagement.

> → Extensive financial systems may be needed to support financial management of the engagement Types of systems include systems for reporting and transaction processing (e.g., purchasing, payroll, and asset tracking). Applications within the financial system may be provided by the client, procured from a supplier, custom developed, etc.

9. Determine appropriate actions to take when the engagement is over or under budget.

10. Audit the engagement finances.

> → Financial audits include validation that accounting rules are being accurately followed and that costs are aligned with the engagement and client objectives.

11. Review and obtain approval of the financial management processes by the relevant stakeholders.

12. Track financial attributes, according to the defined tracking methods.

> a) Collect data on actual costs incurred.

> b) Determine actions to take when results deviate from acceptable performance.

> c) Take actions and track them to closure.

c. Implement financial management of the engagement, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02)

del08

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Financial Management cont'd

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed according to the procedures. (prf02)

tfr

Service Transfer Practices
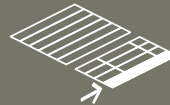
Service Transfer Practices focus on transferring resources between the organization and the client or another service provider. In Initiation the resources are transferred to the organization as it takes responsibility for service delivery. This transfer includes the people, processes, technology, and knowledge needed to effectively perform that service delivery. In Completion, the organization transfers resources to the new service provider (either the client or an external service provider) in a manner that ensures continued service to the client during the transition period. These Practices cover the following:

- Managing the effective transfer of resources needed for the service delivery, including personnel, technology infrastructure, and work environment.

- Managing the effective transfer of resources to the new service provider, whether the client or another service provider. This may include the transfer of people, technology infrastructure, and work environment.

- Ensuring continuity of service during the transfer of the service provision responsibilities.

- Identifying and transferring the knowledge capital needed for the delivery of service.

tfr01   Resources Transferred In

Establish and implement procedures to verify and account for resources transferred to the organization.

Service Transfer
....
Initiation
....
Level 2
....
Procedure

Track and manage resource transfers in order to facilitate a smooth transfer of responsibilities prior to service delivery. Effective resource tracking enables the organization to verify the transfer of the required resources and to facilitate handling any disputes regarding disposition of resources that might arise at Completion. Resources are typically transferred to the organization during Initiation, but transfer may occur during Delivery or Completion as well.

This Practice is closely related to tfr02, "Personnel transferred in." While the focus of tfr02 is on managing the transfer of personnel, this Practice is an overarching Initiation Practice that covers accounting for the transfer of all resources, including personnel. Personnel transfer is critical and has a high risk of failure if it is not done well, so tfr02 is defined as a separate Practice. Planning for the transfer of resources is covered in sdd03, "Plan design & deployment," and managing the deployment of resources is covered in sdd08, "Deploy service."

Activities

a. Provide support for creating and maintaining the procedures for verifying and accounting for resources transferred to the organization.

1. Provide sponsorship and resources for creating the procedures. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02)

3. Maintain and improve the procedures as appropriate. (knw07)

b. Document the procedures for verifying and accounting for resources transferred to the organization. Documentation includes the following Activities:

1. Identify resources to be transferred to the organization.

2. Identify communication channels, including contact personnel for all organizations involved in the transfer.

> → Contact personnel include those responsible for coordination, reporting, and escalation.

3. Determine the criteria for acceptance of resources being transferred to the organization.

> → Criteria for accepting resources include suitability of the resources to the identified requirements, contractual requirements, quantity received, and quality of resources.

4. Verify the resources before acceptance, according to the defined criteria.

5. Maintain records of resources transferred to the organization.

> → Records maintained for resources include details on date of receipt, condition of the resources, modifications done to the received resources, approvals on the modifications, and performance of the resources.

6. Obtain approval for resources transferred to the organization.

> → Approval indicates that the resources transferred are the resources expected to be received by the organization. Typically the approval criteria is specified in the contract.

c. Implement resource verification, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed according to the procedures. (prf02)

tfr02   Personnel Transferred In

Establish and implement procedures to manage the transfer of personnel to the organization.

Transfer the necessary personnel, and ensure that the necessary personnel competencies are in place in order to enable the organization to effectively deliver service. Transferring the personnel and personnel competencies enables the organization to provide continuity of service and to meet the client's requirements.

Sourcing frequently involves the transfer of personnel who have been previously responsible for service delivery. The transfer of knowledgeable personnel helps the organization build the work-force competencies it needs to deliver the service. In cases where personnel are not transferred, or the transferred personnel do not have all of the needed personnel competencies, the organization needs to ensure that the necessary competencies are developed.

This Practice is closely related to tfr01, "Resources transferred in." While the focus of this Practice is on the transfer of personnel, tfr01 is an overarching Initiation Practice that covers accounting for transfer of all resources, including personnel. This Practice is defined as a separate Practice because personnel transfer is critical and has a high risk of failure if it is not done well. Meeting personnel competency needs is addressed in ppl04, "Assign responsibilities," and ppl08, "Meet competency needs." Planning for the transfer of personnel is covered in sdd03, "Plan design & deployment." Managing the deployment of personnel is also addressed in sdd08, "Deploy service."

Activities

a. Provide support for creating and maintaining the procedures for managing the transfer of personnel to the organization.

1. Provide sponsorship and resources for creating the procedures. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02)

3. Maintain and improve the procedures as appropriate. (knw07)

b. Document the procedures for managing the transfer of personnel to the organization. Documentation includes the following Activities:

1. Identify personnel to be transferred to the organization.

> → This information may be specified in the contract or contract amendments in full or in part. Further detail may be agreed to in other documentation, such as the service specification.

2. Collect information about the current conditions related to the personnel available for transfer.

> → Information to be collected includes current level of benefits and compensation, resources available, personnel skills, job titles, reporting structure, and cultural attributes (e.g., casual dress, decision style, communication style). Information should also be collected about local labor laws, unions, and any protected labor categories (e.g., age, race).

3. Analyze collected information about the conditions at the organizations involved in the transfer.

4. Establish a transfer approach based on the analysis.

→ Transfer approach should address equalization of benefits and compensation, offers (e.g., are all affected personnel being given offers, or just some), deficiencies in skills, and management of risk (e.g., if key personnel do not take the transfer offer).

5. Make offers to the identified personnel.

6. Transfer the personnel who accepted offers.

> a) Provide orientation to transferred personnel.
>
> → Orientation should include information on cultural attributes and norms that are unique to the organization or different from the client. The organization should be prepared to address any cultural gaps that continue to be an issue over time.
>
> b) Provide training to transferred personnel.
>
> c) Provide resources to transferred personnel.
>
> → Resources may include information on reporting structures, procedures and policies, and access to corporate infrastructure (e.g., security passes, business cards, e-mail accounts, equipment).

7. Establish outplacement services for personnel who are not transferred, as appropriate.

> → The need for outplacement services is typically specified in the contract. The client may take responsibility for personnel not transferred or may require the organization to take that responsibility.

8. Identify gaps in personnel and workforce competencies based on the transfer of personnel.

> → Gaps may exist in the workforce competencies because key personnel have not been transferred to the organization. Gaps may exist in personnel competencies because the transferred personnel are missing skills needed to meet the agreed-upon service delivery commitments.

9. Take actions needed to address gaps in personnel and workforce competencies, and track them to closure.

10. Obtain approval for the personnel transferred to the organization.

> → Approval indicates that the personnel transferred are the personnel expected to be received by the organization. Typically the approval criteria is specified in the contract.

c. Implement actions to manage the transfer of personnel, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed according to the procedures. (prf02)

tfr03   Service Continuity

Establish and implement procedures to ensure the continuity of service during Completion.

Maintain service continuity as service is transferred to the client—or to another service provider—in order to improve client satisfaction. Facilitating the transfer of service helps ensure that the client's business is not disrupted, thereby establishing a basis for future relationships with the client.

Different approaches can be taken to maintain continuous service, such as providing a parallel service, a staged transfer of service, or a straight transfer of service. The approach taken will depend on the associated risks. In some cases, continuity of service may not be critical, or necessary. Whether continuity needs to maintained, and if so, what approach will be used, should be negotiated with the client; the agreed-upon approach may be outlined in the contract. For instance, if service delivery is vital to the client's survival, then an approach providing parallel service or a staged transfer is most appropriate.

Activities

a. Provide support for creating and maintaining the procedures for ensuring continuity of service across the organization.

1. Provide sponsorship and resources for creating the procedures. (knw04, prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02, rel05)

3. Maintain and improve the procedures as appropriate. (knw04, knw07)

b. Document the procedures for ensuring continuity of service. Documentation includes the following Activities:

1. Assess readiness for the client, or designee, to provide the service.

2. Identify the role of suppliers and partners in maintaining continuity of service.

3. Create a plan for maintaining continuity of service.

> → The service continuity plan should include the approach taken to maintain continuous service (e.g., parallel service or staged transfer).

a) Create a schedule for maintaining continuity of service.

b) Test the release of service.

> → The release test should verify that the client (or designee) is fully prepared to begin delivery. Personnel responsible for the service delivery should participate in the release test and have an opportunity to voice concerns. Release testing includes creating business scenarios (e.g., service requests, problem events, and escalations) and testing the service delivery within these scenarios.

c) Address any issues uncovered in the release testing.

d) Create contingency plans in the event of failure of service.

e) Communicate lessons learned from delivering the service to the client.

f) Identify and provide any training needed for personnel taking over the service.

4. Review and obtain approval of the service continuity plan by the relevant stakeholders.

5. Track status and progress against the plan for maintaining continuity of service.

a) Determine actions to take when progress deviates from the plan.

b) Take actions and track them to closure.

6. Obtain client approval on the transfer of service.

→ Typically the approval criteria are specified in the contract.

c. Implement actions to ensure continuity of service, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02, knw03)

2. Provide resources to effectively perform the work. (knw02, knw03, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl05, ppl07, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02, knw03)

5. Verify that the work is consistently and effectively performed according to the procedures across the organization. (knw04, prf02)

tfr04   Resources Transferred Out

Establish and implement procedures to transfer resources from the organization.

Manage the transfer of resources in order to help ensure a smooth hand-over and improve the client's satisfaction, thereby establishing a basis for future relationships with the client. Resources are typically transferred from the organization during Completion, but may happen during Initiation or Delivery as well.

Resources to be transferred can include service-related documents, software, hardware, licenses, facilities, and personnel. Resources can also include contextual knowledge gained during the client engagement (such as the techniques and methods created), information needed to carry out the tasks, lessons learned, and troubleshooting methods.

This Practice is closely related to tfr05, "Personnel transferred out." While the focus of tfr05 is on the transfer of personnel, this Practice is an overarching Completion Practice that covers the effective transfer of all resources, including personnel. Personnel transfer is critical and has a high risk of failure if it is not done well, so tfr05 is defined as a separate Practice.

Activities

a. Provide support for creating and maintaining the procedures for transferring resources.

1. Provide sponsorship and resources for creating the procedures. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02)

3. Maintain and improve the procedures as appropriate. (knw07)

b. Document the procedures for transferring resources. Documentation includes the following Activities:

1. Identify transfer requirements, especially those covered in the contract.

 → Transfer requirements may include withdrawing personnel from the client site, packing and transporting resources, and installing technology at the client site.

2. Create estimates of the resources required, including the effort and time frame for transfers.

3. Create resource transfer plans.

 → Initial service design and deployment plans may be used to help identify transition plan tasks. For details on what may be involved in these tasks, see Practice sdd03.

 a) Create a transfer plan and schedule for the physical environment.

 b) Create a transfer plan and schedule for the technological infrastructure.

 c) Create a transfer plan and schedule for the personnel structure.

 d) Create a transfer plan and schedule for processes, policies, and procedures.

4. Transfer resources based on the transfer plans.

> a) Transfer the physical environment.

> b) Transfer the personnel structure.

> c) Transfer the technology infrastructure.

> d) Transfer the processes, policies, and procedures.

5. Verify continuity of service during transfer.

6. Account for transferred resources.

7. Track status and progress against the transfer resource plans.

> a) Determine actions to take when progress deviates from the plans.

> b) Take actions and track them to closure.

8. Obtain approval for resources transferred from the organization.

> → Approval indicates that the resources transferred from the organization are the resources expected to be received. Typically the approval criteria is specified in the contract.

c. Implement actions to transfer resources, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed according to the procedures. (prf02)

tfr05   Personnel Transferred Out

Establish and implement procedures to manage the transfer of personnel from the organization.

Service Transfer

Completion

Level 2

Procedure

Smoothly transfer personnel from the organization in order to fulfill contractual obligations and preserve or enhance client relationships. Addressing the gaps opened by the loss of those personnel and personnel competencies supports the organization in maintaining the workforce competencies it needs for future engagements. The effective transfer of personnel and personnel competencies enables the client to maintain its service continuity. The transfer of personnel from the organization typically occurs during Completion, but may happen during Initiation or Delivery as well.

This Practice is closely related to tfr04, "Resources transferred out." While the focus of this Practice is on the transfer of personnel, tfr04 is an overarching Completion Practice that covers the effective transfer of all resources, including personnel. Personnel transfer is critical and has a high risk of failure if it is not done well, so this Practice is defined as a separate Practice.

Activities

a. Provide support for creating and maintaining the procedures for managing the transfer of personnel from the organization.

1. Provide sponsorship and resources for creating the procedures. (prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02)

3. Maintain and improve the procedures as appropriate. (knw07)

b. Document the procedures for managing the transfer of personnel from the organization. Documentation includes the following Activities:

1. Identify the personnel to be transferred from the organization.

   → This information may be specified in the contract or contract amendments in full or in part. Further detail may be agreed upon in other documentation, such as the service specification.

2. Identify and address any issues related to the transfer.

   → Issues that arise may include disparities in benefits and relocation provisions.

3. Create exit procedures for transferred personnel.

   → This may include exit interviews, revoking of security and access privileges, and return of the organization's proprietary materials. Exit procedures may be based on existing termination processes or procedures.

4. Transfer the identified personnel and personnel competencies from the organization.

5. Document the personnel and personnel competencies transferred.

6. Identify gaps in workforce competencies that result from the transfer of personnel.

7. Take actions needed to address gaps in workforce competencies, and track them to closure.

→ An analysis of the personnel transferred will help determine the impact of the loss of workforce competencies on the organization's performance, as well as the number and profile of the personnel needed to replace the personnel transferred. Actions may include training existing personnel.

8. Obtain approval for personnel transferred from the organization.

→ Approval indicates that the personnel or personnel competencies transferred from the organization are the personnel or personnel competencies expected to be received. Typically the approval criteria is specified in the contract.

c. Implement actions to manage the transfer of personnel from the organization, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02)

2. Provide resources to effectively perform the work. (knw02, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02)

5. Verify that the work is consistently and effectively performed according to the procedures. (prf02)

tfr06   Knowledge Transferred Out

Establish and implement procedures to transfer to the client, during Completion, the knowledge gained from the specific client engagement.

Service Transfer
Completion
Level 4
Procedure

Transfer the knowledge needed by the client or their designee during Completion in order to enable the client to understand important information about the service delivery. This knowledge transfer improves the client's efficiency and provides a basis for future relationships. An established procedure is essential for the organization to be fully prepared to execute Completion should the need arise.

Knowledge gained during the engagement may represent the organization's or the client's intellectual property. For this reason, unlike other Service Transfer Practices that cover potential transfers to or from the client's designee, this Practice limits the requirement to the transfer of knowledge between the organization and the client. Depending on the intellectual property agreements made between the organization and the client, it may not be appropriate to transfer knowledge to another service provider.

Activities

a. Provide support for creating and maintaining the procedures for transferring knowledge to the client during Completion.

1. Provide sponsorship and resources for creating the procedures. (knw04, prf03)

2. Involve relevant stakeholders in creating, improving, reviewing, and approving the procedures as appropriate. (knw02, rel05)

3. Maintain and improve the procedures as appropriate. (knw04, knw07)

b. Document the procedures for transferring knowledge to the client during Completion. Documentation includes the following Activities:

1. Identify knowledge gained during the specific engagement that may be transferred to the client.

> → The knowledge gained may include business and technical requirements of clients and end-users, key problems and issues identified during requirement specification, service specifications created from client requirements, work instructions prepared for providing the service, quality specifications created based on client requirements of service level expectations, identified security requirements, identified engagement-specific risks, identified engagement-specific regulatory and statutory requirements, identified cultural attributes, identified personnel competencies needed for a specific engagement, corrective and preventive actions that include client involvement, and a summary of client feedback. Ensure that the knowledge will aid in reducing the learning cycle for the client.

2. Identify, from the contract and other client agreements, types of knowledge to be transferred.

3. Determine, from the identified knowledge types, the specific knowledge to transfer.

> → This may include knowledge useful to the client in maintaining the transferred service at the desired service level, but not specifically outlined in the contract. The organization may choose to transfer knowledge based on a strategic decision to improve the value delivered to the client.

4. Determine whether the identified knowledge is the organization's intellectual property, and take action as appropriate.

→ It is important to recognize that much of the knowledge capital to be transferred may be considered intellectual property and may have competitive value for the organization. Intellectual property ownership, as defined in agreements with the client, will help identify which knowledge the organization is obligated to provide to the client at Completion. Any other knowledge should be analyzed to determine its appropriateness to be provided; this is particularly a concern when service is being transferred to a competitor. However, the organization should verify that any knowledge critical to service delivery is being transferred. It is inappropriate for the organization to "hold hostage" any knowledge, on competitive or other grounds, that is needed for service delivery. Arrangements may be made for buying or renting the intellectual property.

5. Create a knowledge transfer plan.

a) Identify knowledge transfer tasks, especially tasks covered in the contract.

b) Create estimates of the resources required, including the effort and time frame for each task.

6. Account for knowledge transferred.

7. Track status and progress against the plan.

a) Determine actions to take when progress deviates from the plan.

b) Take actions and track them to closure.

8. Obtain client approval for the knowledge transferred.

→ Approval indicates that the knowledge transferred to the client is the knowledge expected to be received. Typically the approval criteria is specified in the contract.

c. Implement knowledge transfer, according to the procedures.

1. Communicate the availability and location of the procedures to relevant stakeholders. (knw02, knw03)

2. Provide resources to effectively perform the work. (knw02, knw03, ppl03, prf03, tch01)

3. Assign qualified personnel the responsibility, authority, and accountability to perform the work. (ppl04, ppl05, ppl07, ppl08)

4. Communicate planned actions and their outcomes to relevant stakeholders. (knw02, knw03)

5. Verify that the work is consistently and effectively performed according to the procedures across the organization. (knw04, prf02)

Glossary

Activity	One of the steps taken to implement a Practice. Activities are labeled with a number or letter within the text of the Practice details (a, a1, a2, b, etc.). See also Major Activity, Sub-activity, Required Activity, and Recommended Activity.
Artifact	A document that is generated as a result of performing the activities of the organization. Artifacts include records, reports, and work products. Most artifacts are linked to a guidance document that describes how that artifact is to be created and used.
Benchmark	(1) To measure or compare an entity to a reference standard. (2) A reference standard used for comparison.
Best practice	An accepted and customary way of doing something that is expected to significantly improve the ability to meet objectives, typically expressed in terms of improved productivity, costs, schedule, quality, user satisfaction, or predictability.
Business case	A structured proposal for business improvement that functions as a decision package for organizational decision makers. A business case includes an analysis of business process performance and the associated needs or problems, proposed alternative solutions, assumptions, constraints, and a risk-adjusted cost-benefit analysis [GAO].
Business objectives	An informal set of business goals that are used to set long-term direction. Business objectives are similar to organizational objectives, but they are typically not formally stated and may not be quantified. For example, an organizational objective may be to increase market share by 2%, and a business objective may be to increase market share.
Business Process Outsourcing (BPO)	The delegation of one or more IT-intensive business processes to an external provider that, in turn, owns, administers, and manages the selected processes, based upon defined and measurable performance metrics [Gartner 2000].
Capability Area	One of ten logical groupings of eSCM-SP Practices that represent critical sourcing functions.
Capability Determination	A set of four methods (Full Evaluation, Full Self-Appraisal, Mini Evaluation, Mini Self-Appraisal) used to determine the compliance of an organization with the eSCM-SP.
Capability baseline	A statistical description of the capability of a process at a point in time. It is derived from the analysis of measures of performance used by the organization in order to provide a measurement benchmark.

Capability Level	One of the five Capability Levels of the eSCM-SP that describes an improvement path for a service provider : Level 1–Providing services; Level 2–Consistently meeting requirements; Level 3–Managing organizational performance; Level 4–Proactively enhancing value; Level 5–Sustaining excellence.
Change control	Making changes to selected work products by evaluating proposed changes, coordinating with relevant stakeholders, approving or disapproving the proposals, and implementing the approved changes.
Client	A person or organization who obtains sourcing services from a service provider.
Client interaction team	A team of personnel from the service provider, ideally representing multiple functions, established to interact with the client. The client interaction team may be formed before a formal relationship with the client exists and will remain in existence as long as the relationship with the client or potential client exists. The client interaction team may be only one of the teams interacting with the client (for example, the design team may interact with the client during design reviews), but the client interaction team is responsible for verifying that interaction is managed when it takes place.
Commitment	A pact that is freely assumed, visible, and expected to be kept by all parties [Paulk 1995].
Competency	The combination of experience, knowledge, and skills required to perform a task or role. Personnel competency is the competency of an individual employee. Workforce competency is the set of personnel competencies that exist in the organization.
Completion	The phase of the Sourcing Life-cycle that focuses on ending the engagement. Completion occurs after the fulfillment of the contract obligations, at the end of the contract period, or upon termination (for cause or convenience) before the planned contract completion date.
Confidentiality	(1) Assurance that information is not disclosed to unauthorized persons, processes, or devices. (2) The protection of sensitive information from unauthorized disclosure and sensitive facilities from physical, technical or electronic penetration or exploitation. [CIAO]
Contracting Capability Area (cnt)	The group of eSCM-SP Practices that focuses on the effective management of collection and analysis of client requirements, and the negotiation of a formal agreement that describes how the organization will meet those requirements.
Cultural attributes	Characteristics of the clients, end-users, suppliers, and partners that can impact the quality and acceptance of the service being delivered. Cultural attributes can be either national or corporate, such as ethnicity, language, and behavioral norms.
Cultural fit	The extent of the cultural compatibility between the client and the service provider. Similarities and differences influence how effectively the provider can deliver service according to agreed-upon service levels.

Delivery

The phase of the Sourcing Life-cycle that focuses on service delivery capabilities. The Practices in this phase cover ongoing management of service delivery, verification that commitments are being met, and management of finances associated with service provision.

Dimensions

The eSCM-SP has three dimensions: Sourcing Life-cycle, Capability Areas, and Capability Levels. All eSCM-SP Practices have a value along each of these dimensions.

Document

Any lasting information used by the organization. It can be in either physical (i.e., hard copy) or electronic (i.e., soft copy) form. There are two types of documents: guidance documents and artifacts.

eSourcing

A type of sourcing that uses information technology in the processing and delivery of the service. These services are delivered through a telecommunications or data network or other electronic media.

End-user

The ultimate consumer of services provided by the service provider or client. For example, in the case of a software company sourcing its customer service call center, end-users are the customers who call into the call center run by the service provider. End-users may be part of the client organization, or may be customers of the client.

Engagement

The relationship between the service provider and a current or prospective client that spans the entire Sourcing Life-cycle.

Engagement objectives

A set of goals that are used to set direction in the sourcing engagement. Engagement objectives should be measurable so that progress against them can be tracked. They are typically based on client relationship factors (for example, increase client satisfaction by x%) or on operational factors (for example, improve productivity by y%).

Establish and implement

To define, document, train personnel, provide resources, and put to use a procedure, policy, or guideline, with an aim of achieving intended outcomes.

Framework

A general term including models, standards, and award criteria.

Guidance document

A lasting record that provides guidance on how work should be performed. These include policies, procedures, guidelines, job aids, templates, and checklists. They can be electronic (e.g., soft copy, software) or paper (e.g., printed, bound).

Guideline

A rule or principle that provides guidance to appropriate behavior. [Wordnet]

Initiation

The phase of the Sourcing Life-cycle that focuses on the capabilities needed to effectively prepare for service delivery. The Practices in this phase cover requirements gathering, negotiation, contracting, and service design and deployment.

Innovation	Innovation implies a major change in the way work is done to improve performance; it is a change major enough to require that it be planned and managed as a program. The change needs to be actively managed because of the learning curve associated with it. In some cases, major changes may be driven by customer or regulatory requirements rather than by innovation.
Insourcing	A sourcing relationship where a group within the client organization is selected to provide service but is largely managed as a separate entity.
Institutionalization	The process of building infrastructure and corporate culture that support an organization's methods and procedures so that they become the standardized way of doing business. Colloquially, institutionalization captures the concept that "this is the way we do business." There are thirteen Support Practices in the eSCM-SP that provide support for the institutionalization of any eSCM-SP Practice.
Intellectual property	Products of the intellect that have commercial value. Intellectual property may include proprietary software, hardware, designs, methodologies, service-related documents, data, training, trademarks, copyrights, drawings, layouts, processes, procedures, policies, and other proprietary technology or materials.
IT-enabled sourcing	See *eSourcing.*
Knowledge Management Capability Area (knw)	The group of eSCM-SP Practices that focuses on the effective management of information and knowledge systems so personnel have easy access to the knowledge needed to effectively perform their work.
Knowledge system	A system that allows the organization to control and maintain relevant information and knowledge and allows personnel to easily locate required information. A knowledge system does not mean that the organization must have a central electronic repository of information but rather that it has a coordinated method for managing and communicating needed information. A system may be implemented through one or more databases, file systems, physical storage media, or other appropriate methods for systematically providing needed access and controlling information.
Lessons learned	The results of an analysis of the positive and negative experiences in engagements or other organizational activities that are used as the basis for learning and improvement in future performance.
Major activity	One of the three labeled Practice Activities at the highest level of the Activity hierarchy. (a, b, c).
Model scope	The eSCM-SP Practices to be analyzed in a Capability Determination.
Organization	As used in the eSCM-SP Practices, an organization is an entity that provides sourcing services to one or more clients. Depending on its size or complexity, a single company may have one or more service provision organizations.

Organizational objectives	A formal set of objective or quantified business goals that are used to set long-term direction. Examples of organizational objectives include increasing client satisfaction by 5% based on feedback forms, maintaining client satisfaction, growing market share by 8%, and improving performance by 12%.
Organizational span	The coverage of the service provider's organizational structure to be analyzed in a Capability Determination.
Outsourcing	The procurement of services, which have historically been provided in-house, from an outside supplier. See also *IT-enabled sourcing, Sourcing.*
Ongoing	A classification of eSCM-SP Practices that are performed throughout the entire Sourcing Life-cycle. The Practices are typically performed on a periodic or as-needed basis, with the frequency being defined by client and organizational needs.
Partner	See *Supplier or partner.*
People Management Capability Area (ppl)	The group of eSCM-SP Practices that focuses on the effective management and motivation of personnel to effectively deliver services. This includes understanding the organization's needs for personnel and skills, filling those needs, and encouraging appropriate behaviors in personnel to effectively deliver services.
Performance Management Capability Area (prf)	The group of eSCM-SP Practices that focuses on the effective management of the organization's performance. Performance is managed to ensure that the client's requirements are being met, that the organization is continually learning from its experience, and that the organization is continually improving. Effective performance management is dependent upon effective capture, analysis, and use of data, including data on the organization's capabilities relative to its competitors.
Personnel	The individuals and teams in an organization.
Personnel competency	The combination of experience, knowledge, and skills an individual possesses, which may be related to performing tasks or roles for the organization. See also Competency, Workforce Competency.
Plan	A formal, approved document used to guide both execution and control. The primary uses of the plan are to document planning assumptions and decisions, to facilitate communication among stakeholders, and to document approved scope, cost, and schedule baselines [PMBOK 2000].
Policy	A guiding principle, typically established by senior management, which is adopted by an organization to influence and determine decisions [Paulk 1995].
Practice	A set of actions that should be performed by an IT-enabled Service Provider to have successful sourcing relationships. The eSCM-SP v2 is composed of 84 Practices that are arranged along each of three dimensions: Sourcing Life-cycle, Capability Area, and Capability Level.
Practice Rating	A Practice Rating indicates the effectiveness of a service provider's implementation and institutionalization of an eSCM-SP Practice. Practice Ratings are determined as part of a Capability Determination.

Privacy	For individuals, freedom from unauthorized intrusion and the ability to limit who has access to personal information. For organizations, privacy involves determining what information is gathered, how it is used, and how customers are informed and involved in this process.
Problem	Problem is broadly defined in the eSCM-SP as a state of difficulty that needs to be resolved [Wordnet]. Problems can range from simple human errors to system-wide failures.
Procedure	A documented description of a course of action to be taken to perform a given task [IEEE-STD-610 1990].
Process	A set of actions that is performed to achieve a given purpose, along with the assets that support that performance, such as tools and other resources.
Process assets	Any guidance documentation (e.g., processes, policies, procedures, guidelines, job aids, templates, checklists), or infrastructure needed to perform the work described in the guidance documentation (e.g., repositories, training, and tools). See also Guidance Document
Process capability	The range of expected results that can be achieved by following a process. The process capability of an organization provides one means of predicting the most likely outcomes to be expected from the next project the organization undertakes [Paulk 1995].
Program	A group of related projects that are managed in a coordinated way, and are described primarily in plans and business cases.
Quality specification	A document created as part of service design that describes the quality attributes to be monitored and the service levels that have been agreed upon for each of those attributes.
Recommended Activity	Any sub-activity two levels below a Major Activity (for example, a2b). While Recommended Activities are not required, it is suggested that the organization implement them. Only Major Activity b contains Recommended Activities.
Relationship Management Capability Area (rel)	The group of eSCM-SP Practices that focuses on the active management of relationships with stakeholders, including the client and suppliers and partners who are integral to the delivery of services to the client.
Required Activity	Any sub-activity one level below a Major Activity (for example, a1, a2). For an Evaluation for Certification there must be positive evidence of all the Required Activities in order for the organization to be compliant with the eSCM-SP.
Requirement	(1) A condition or capability needed by a user to solve a problem or achieve an objective. (2) A condition or capability that must be met or possessed by a product or product component to satisfy a contract, standard, specification, and/or other formally imposed documents. (3) A documented representation of a condition or capability as in (1) or (2) [IEEE-STD-610 1990].

Resources	Resources include all of the following: people, skills, experience, knowledge assets, intellectual property, processes and guidelines, repository, solutions, documents, infrastructure, computers, storage, networks, data, applications, facilities, financial [IEEE-STD-610 1990].
Risk	Exposure to loss, injury, or destruction. Risks are potential problems, which may be associated with security, privacy, confidentiality, protection of intellectual property, or disasters.
Security	Security provides four types of control: confidentiality, integrity, availability, and accountability. Confidentiality means that only authorized users can access information. Integrity means that the accuracy and completeness of information is maintained and not changed without authorization. Availability means that the service or information is available to authorized users when needed. Accountability means being able to trace the source of changes in controlled resources. Security management covers the security of people, technology, work environment, and information.
Service component	Any item that is used in the delivery of service. Components can include specific user interfaces, customized software, data storage mechanisms, work instructions, process specifications, quality specifications, and privacy or security mechanisms. These components can change during the delivery of service. A service component is a type of work product.
Service Delivery Capability Area (del)	The group of eSCM-SP Practices that focuses on ongoing delivery of service according to the commitments made to the client and based on the service design. This includes ongoing planning and tracking of service delivery activities.
Service deployment	The process of putting services or assets and related support infrastructure in place so that service delivery can begin. This includes putting in place an adequate physical environment, personnel structure, training, technology infrastructure, and process assets such as policies, procedures, and guidelines to enable personnel to effectively deliver service.
Service Design & Deployment Capability Area (sdd)	The group of eSCM-SP Practices that focuses on translating the client requirements and contract language of "what" will be provided into a detailed design for "how" it will be provided and for effectively deploying that design. This is closely related to the Contracting Capability Area.
Service levels	The performance values expected by a client for service delivery during an engagement. For example, service levels are often determined for bandwidth availability, response times for routine and ad hoc queries, response time for problem resolution such as network downtime and machine failure, and client satisfaction levels.
Service modification	The controlled change to a service, regardless of the size of the change.

Service provider	An entity that provides IT-enabled sourcing services to a client. The service provider is managed as a separate entity from the client organization.
Service specification	A comprehensive document that describes the services that the organization provides to the client and how end-users request services. It describes all services available, any agreed-upon service levels for those services, and the interfaces between the organization, clients, and end-users.
Service Transfer Capability Area (tfr)	The group of eSCM-SP Practices that focuses on transferring resources between the organization and the client, or its designee.
Sourcing	The procurement of services, which have historically been provided in-house, from another provider. The provider can be external to the organization (i.e., outsourcing), internal (i.e., insourcing), or a combination of the two. See also Outsourcing, Insourcing.
Sourcing Life-cycle	The eSCM-SP dimension that indicates when a Practice is performed. This dimension is divided into Ongoing, Initiation, Delivery, and Completion. Ongoing Practices span the entire Sourcing Life-cycle, while Initiation, Delivery, and Completion occur in specific phases of the life-cycle.
Stakeholders	The group of individuals who are affected by, or are in some way accountable for, the outcome of an undertaking. Stakeholders can include clients, prospective clients, end-users, shareholders, suppliers and partners, and employees of all organizations involved in an engagement.
Sub-activity	Any Practice Activity at a level below a Major Activity (for example, a1, b2c, c1). See also Major Activity, Required Activity, and Recommended Activity.
Supplier or partner	One or more entities that are working with the organization to provide support or to deliver service. This includes subcontractors, vendors, alliances, joint ventures, co-sourcing, multi-sourcing, or combinations of these. Suppliers and partners may become involved at any time during the sourcing process, depending on the relationship between the organization, supplier or partner, and client. The focus of the eSCM-SP is on suppliers or partners that are considered to be critical for the client engagement or contract. For example, under the eSCM-SP, a paper clip supplier is not considered a critical relationship for most service providers whereas a technology infrastructure supplier is likely to be considered critical for most service providers.
Supplemental Information	A section within an eSCM-SP Practice that provides explanatory information that is intended to help convey the intent of the Activities and provide examples of how those Activities could be implemented.
Support Practices	The thirteen Practices in the eSCM-SP that provide support for Practice institutionalization. These Practices are referenced by the Required Activities under Major Activities a and c.
Tailoring	Customizing process assets to meet the needs of a particular group

Technology infrastructure	The technological facilities, services, and installations needed for the functioning of an organization, including email servers, internet access, telecommunications, computers, and local networks.
Technology Management Capability Area (tch)	The group of eSCM-SP Practices that focuses on managing the availability and adequacy of the technology infrastructure used to support delivery of service. This includes control of existing technology, managing changes to that technology, and appropriately integrating the technology infrastructure with the client and suppliers and partners to effectively deliver service.
Technology separation	The process of separating the service provider's technological assets from those of the client and other stakeholders. This usually happens during Completion.
Threat Management Capability Area (thr)	The group of eSCM-SP Practices that focuses on identifying, and actively managing, threats to the organization's ability to meet its objectives and the client's requirements. This includes an active focus on risk management, with a particular focus on risks associated with security, confidentiality, infrastructure, and disasters that may disrupt service or cause the organization to fail to meet the client's requirements.
Transfer	To change responsibility for providing the personnel, and/or other assets, including intellectual property, technology, and other infrastructures from the client, or its designee, to the service provider, or vice versa.
Value creation	An opportunity to increase the business benefit to the client or other stakeholders.
Verification	The process of ensuring that tasks are performed in compliance with the established process, or ensuring that service commitments are being satisfied. Verification typically encompasses review and audits by management or designated personnel.
Version control	An informal level of configuration management in which a work product is changed in a controlled manner and the version of the work product in use at a given time (past or present) is known.
Work environment	The physical and cultural surrounding within which an organization works. The work environment includes issues with workspace as well as corporate culture.
Work product	Any asset produced by performing work, or in order to help perform work. It is either produced as a final work product delivered to the customer (e.g., a software application for an application service provider) or an interim work product that is purely internal (e.g., a software design). Work product most often refers to written documentation, but could also be used to refer to tools and software.
Workforce competency	The set of personnel competencies that the organization has or needs in order to meet organizational objectives.

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Appendices

Appendix A: One–Page Practice Summary

Category	ID		#		Doc type	Practice
KNOWLEDGE MGMT	knw01	o	4		Policy	Share knowledge
	knw02	o	2	⑤		Provide required information
	knw03	o	3	⑤		Knowledge system
	knw04	o	3	⑤		Process assets
	knw05	o	3			Engagement knowledge
	knw06	o	3			Reuse
	knw07	o	2	⑤	Procedure	Version & change control
	knw08	o	2		Procedure	Resource consumption
PEOPLE MGMT	ppl01	o	4		Policy	Encourage innovation
	ppl02	o	3		Policy	Participation in decisions
	ppl03	o	2	⑤		Work environment
	ppl04	o	2	⑤		Assign responsibilities
	ppl05	o	3	⑤		Define roles
	ppl06	o	3			Workforce competencies
	ppl07	o	3	⑤	Procedure	Plan & deliver training
	ppl08	o	2	⑤		Personnel competencies
	ppl09	o	3		Procedure	Performance feedback
	ppl10	o	3		Procedure	Career development
	ppl11	o	3			Rewards
PERFORMANCE MGMT	prf01	o	2			Engagement objectives
	prf02	o	2	⑤	Procedure	Verify processes
	prf03	o	2	⑤		Adequate resources
	prf04	o	3			Organizational objectives
	prf05	o	3		Procedure	Review organizational performance
	prf06	o	3			Make improvements
	prf07	o	4		Program	Achieve organizational objectives
	prf08	o	4			Capability baselines
	prf09	o	4			Benchmark
	prf10	o	4		Program	Prevent potential problems
	prf11	o	4		Program	Deploy innovations
RELATIONSHIP MGMT	rel01	o	2		Procedure	Client interactions
	rel02	o	2		Procedure	Select suppliers & partners
	rel03	o	2			Manage suppliers & partners
	rel04	o	3			Cultural fit
	rel05	o	3	⑤		Stakeholder information
	rel06	o	3		Procedure	Client relationships
	rel07	o	3		Procedure	Supplier & partner relationships
	rel08	o	4			Value creation
TECHNOLOGY MGMT	tch01	o	2	⑤	Procedure	Acquire technology
	tch02	o	2		Procedure	Technology licenses
	tch03	o	2		Procedure	Control technology
	tch04	o	2		Procedure	Technology integration
	tch05	o	3			Optimize technology
	tch06	o	4		Procedure	Proactively introduce technology
THREAT MGMT	thr01	o	2		Policy	Risk management
	thr02	o	2			Engagement risk
	thr03	o	3		Procedure	Risk across engagements
	thr04	o	2		Procedure	Security
	thr05	o	2		Procedure	Intellectual property
	thr06	o	2		Procedure	Statutory & regulatory compliance
	thr07	o	2		Procedure	Disaster recovery

Category	ID		#	Doc type	Practice
CONTRACTING	cnt01	i	3	Guideline	Negotiations
	cnt02	i	2	Guideline	Pricing
	cnt03	i	2	Guideline	Confirm existing conditions
	cnt04	i	3		Market information
	cnt05	i	2	Plan	Plan negotiations
	cnt06	i	2	Procedure	Gather requirements
	cnt07	i	2		Review requirements
	cnt08	i	2	Procedure	Respond to the requirements
	cnt09	i	2		Contract roles
	cnt10	i	2	Procedure	Create contracts
	cnt11	i	2	Procedure	Amend contracts
SERVICE DESIGN & DEPLOYMENT	sdd01	i	2	Procedure	Communicate requirements
	sdd02	i	3	Procedure	Design & deploy services
	sdd03	i	2	Plan	Plan design & deployment
	sdd04	i	2		Service specification
	sdd05	i	2		Service design
	sdd06	i	2	Procedure	Design feedback
	sdd07	i	3	Procedure	Verify design
	sdd08	i	2		Deploy service
SERVICE DELIVERY	del01	d	2	Plan	Plan service delivery
	del02	d	2	Procedure	Train clients
	del03	d	2		Deliver service
	del04	d	2	Procedure	Verify service commitments
	del05	d	2	Procedure	Correct problems
	del06	d	3	Procedure	Prevent known problems
	del07	d	2	Procedure	Service modifications
	del08	d	2	Procedure	Financial management
SERVICE TRANSFER	tfr01	i	2	Procedure	Resources transferred in
	tfr02	i	2	Procedure	Personnel transferred in
	tfr03	c	3	Procedure	Service continuity
	tfr04	c	2	Procedure	Resources transferred out
	tfr05	c	2	Procedure	Personnel transferred out
	tfr06	c	4	Procedure	Knowledge transferred out

KEY

o	= ongoing
i	= initiation
d	= delivery
c	= completion

Appendix B: Practices by Capability Area (CA)

The following table lists the eSCM-SP Practices, grouped by Capability Area. Each Practice is listed with its Practice ID, its associated part of the Sourcing Life-cycle, its Capability Level, its type, its short description, and its Practice statement.

CA	ID	LIFE-CYCLE	L	TYPE	SHORT DESCRIPTION	PRACTICE STATEMENT
KNOWLEDGE MANAGEMENT	knw01	Ongoing	4	Policy	Share knowledge	Establish and implement a policy to share knowledge among stakeholders.
	knw02	Ongoing	2	Ⓢ	Provide required information	Identify, control, and provide the information that personnel need to perform their work.
	knw03	Ongoing	3	Ⓢ	Knowledge system	Establish and maintain a knowledge system to identify, control, and provide information.
	knw04	Ongoing	3	Ⓢ	Process assets	Establish and maintain a set of process assets for use across the organization.
	knw05	Ongoing	3		Engagement knowledge	Analyze and use knowledge gained from client engagements.
	knw06	Ongoing	3		Reuse	Identify and reuse work products.
	knw07	Ongoing	2	Ⓢ Procedure	Version & change control	Establish and implement procedures to apply version control and change control to work products.
	knw08	Ongoing	2	Procedure	Resource consumption	Establish and implement procedures to analyze and use information on resources consumed.
PEOPLE MANAGEMENT	ppl01	Ongoing	4	Policy	Encourage innovation	Establish and implement a policy to encourage and support innovation across the organization.
	ppl02	Ongoing	3	Policy	Participation in decisions	Establish and implement a policy on the participation of personnel in decisions that affect their work commitments.
	ppl03	Ongoing	2	Ⓢ	Work environment	Establish and maintain a work environment that enables personnel to work effectively.
	ppl04	Ongoing	2	Ⓢ	Assign responsibilities	Assign roles and responsibilities to personnel based on appropriate personnel competencies.
	ppl05	Ongoing	3	Ⓢ	Define roles	Define and communicate the roles, responsibilities, and authority of personnel in the organization.
	ppl06	Ongoing	3		Workforce competencies	Develop the workforce competencies needed to achieve organizational objectives.
	ppl07	Ongoing	3	Ⓢ Procedure	Plan & deliver training	Establish and implement procedures to plan and deliver training.
	ppl08	Ongoing	2	Ⓢ	Personnel competencies	Meet identified personnel competency needs by providing training.
	ppl09	Ongoing	3	Procedure	Performance feedback	Establish and implement procedures to provide feedback on performance to personnel.
	ppl10	Ongoing	3	Procedure	Career development	Establish and implement procedures to provide personnel with opportunities for career development.
	ppl11	Ongoing	3		Rewards	Provide rewards and recognition that encourage the achievement of organizational objectives.

CA	ID	LIFE-CYCLE	L		TYPE	SHORT DESCRIPTION	PRACTICE STATEMENT
PERFORMANCE MANAGEMENT	**prf01**	Ongoing	2			Engagement objectives	Define, communicate, and track engagement objectives.
	prf02	Ongoing	2	Ⓢ	Procedure	Verify processes	Establish and implement procedures to verify that processes are consistently performed as defined.
	prf03	Ongoing	2	Ⓢ		Adequate resources	Identify and provide adequate resources that personnel need to perform their work.
	prf04	Ongoing	3			Organizational objectives	Define, communicate, and track organizational objectives.
	prf05	Ongoing	3		Procedure	Review organizational performance	Establish and implement procedures to review organizational performance.
	prf06	Ongoing	3			Make improvements	Make improvements based on reviews of organizational performance.
	prf07	Ongoing	4		Program	Achieve organizational objectives	Establish and implement programs to achieve organizational objectives.
	prf08	Ongoing	4			Capability baselines	Define capability baselines for the organization by analyzing performance data.
	prf09	Ongoing	4			Benchmark	Benchmark organizational performance to identify opportunities for improvement.
	prf10	Ongoing	4		Program	Prevent potential problems	Establish and implement programs to take preventive action on potential problems.
	prf11	Ongoing	4		Program	Deploy innovations	Establish and implement programs to deploy innovations across the organization.
RELATIONSHIP MANAGEMENT	**rel01**	Ongoing	2		Procedure	Client interactions	Establish and implement procedures to manage interactions with clients.
	rel02	Ongoing	2		Procedure	Select suppliers & partners	Establish and implement procedures to select suppliers and partners based on their ability to meet identified requirements.
	rel03	Ongoing	2			Manage suppliers & partners	Manage the performance of suppliers and partners against their commitments.
	rel04	Ongoing	3			Cultural fit	Identify cultural attributes that impact the service, and implement actions to achieve a cultural fit.
	rel05	Ongoing	3	Ⓢ		Stakeholder information	Analyze and use client and other stakeholder information.
	rel06	Ongoing	3		Procedure	Client relationships	Establish and implement procedures to manage client relationships.
	rel07	Ongoing	3		Procedure	Supplier & partner relationships	Establish and implement procedures to manage relationships with suppliers and partners.
	rel08	Ongoing	4			Value creation	Proactively identify value creation opportunities and communicate them to the client.

CA	ID	LIFE-CYCLE	L		TYPE	SHORT DESCRIPTION	PRACTICE STATEMENT
TECHNOLOGY MANAGEMENT	**tch01**	Ongoing	2	Ⓢ	Procedure	Acquire technology	Establish and implement procedures to acquire and deploy technology.
	tch02	Ongoing	2		Procedure	Technology licenses	Establish and implement procedures to manage technology licenses.
	tch03	Ongoing	2		Procedure	Control technology	Establish and implement procedures to track and control changes to the technology infrastructure.
	tch04	Ongoing	2		Procedure	Technology integration	Establish and implement procedures to manage integration of the organization's technology infrastructure.
	tch05	Ongoing	3			Optimize technology	Optimize the overall performance of the technology infrastructure needed to deliver all services.
	tch06	Ongoing	4		Procedure	Proactively introduce technology	Establish and implement procedures to proactively identify and introduce appropriate technology.
THREAT MANAGEMENT	**thr01**	Ongoing	2		Policy	Risk management	Establish and implement a policy on risk management.
	thr02	Delivery	2			Engagement risk	Identify, assess, and manage risks specific to the client engagement.
	thr03	Ongoing	3		Procedure	Risk across engagements	Establish and implement procedures to manage risks across client engagements.
	thr04	Ongoing	2		Procedure	Security	Establish and implement procedures to meet security requirements.
	thr05	Ongoing	2		Procedure	Intellectual property	Establish and implement procedures to protect the intellectual property of stakeholders.
	thr06	Ongoing	2		Procedure	Statutory & regulatory compliance	Establish and implement procedures to comply with statutory and regulatory requirements.
	thr07	Ongoing	2		Procedure	Disaster recovery	Establish and implement disaster recovery procedures.
CONTRACTING	**cnt01**	Initiation	3		Guideline	Negotiations	Establish and implement guidelines for negotiations with current or prospective clients.
	cnt02	Initiation	2		Guideline	Pricing	Establish and implement guidelines for pricing services.
	cnt03	Initiation	2		Guideline	Confirm existing conditions	Establish and implement guidelines for confirming existing conditions about potential engagements.
	cnt04	Initiation	3			Market information	Analyze and use market information about prospective clients.
	cnt05	Initiation	2		Plan	Plan negotiations	Plan and track negotiations with current or prospective clients.
	cnt06	Initiation	2		Procedure	Gather requirements	Establish and implement procedures to gather a client's requirements.
	cnt07	Initiation	2			Review requirements	Prior to committing to the prospective client, review requirements and verify that the organization can meet them.
	cnt08	Initiation	2		Procedure	Respond to requirements	Establish and implement procedures to respond to the requirements of a prospective client.
	cnt09	Initiation	2			Contract roles	Define the roles and responsibilities of the organization and the client with respect to the proposed contract.
	cnt10	Initiation	2		Procedure	Create contracts	Establish and implement procedures to create contracts.
	cnt11	Initiation	2		Procedure	Amend contracts	Establish and implement procedures to amend contracts.

CA	ID	LIFE-CYCLE	L	TYPE	SHORT DESCRIPTION	PRACTICE STATEMENT
SERVICE DESIGN & DEPLOYMENT	**sdd01**	Initiation	2	Procedure	Communicate requirements	Establish and implement procedures to communicate the client's requirements to the service design and deployment team.
	sdd02	Initiation	3	Procedure	Design & deploy service	Establish and implement procedures to design and deploy the service to meet client requirements.
	sdd03	Initiation	2	Plan	Plan design & deployment	Plan and track the design and deployment of the service.
	sdd04	Initiation	2		Service specification	Create the service specification.
	sdd05	Initiation	2		Service design	Create the service design based on the service specification.
	sdd06	Initiation	2	Procedure	Design feedback	Establish and implement procedures to obtain feedback from the client on the designed service, and to incorporate necessary changes.
	sdd07	Initiation	3	Procedure	Verify design	Establish and implement procedures to review and verify the service design.
	sdd08	Initiation	2		Deploy service	Deploy the service based on the service design.
SERVICE DELIVERY	**del01**	Delivery	2	Plan	Plan service delivery	Plan and track the service delivery according to the service design.
	del02	Delivery	2	Procedure	Train clients	Establish and implement procedures to train clients and end-users.
	del03	Delivery	2		Deliver service	Deliver service according to the service delivery plans.
	del04	Delivery	2	Procedure	Verify service commitments	Establish and implement procedures to measure and verify that service commitments are being met.
	del05	Delivery	2	Procedure	Correct problems	Establish and implement procedures to correct problems.
	del06	Delivery	3	Procedure	Prevent known problems	Establish and implement procedures to take preventive action for known problems.
	del07	Delivery	2	Procedure	Service modifications	Establish and implement procedures to make modifications to services.
	del08	Delivery	2	Procedure	Financial management	Establish and implement procedures for financial management of the engagement.
SERVICE TRANSFER	**tfr01**	Initiation	2	Procedure	Resources transferred in	Establish and implement procedures to verify and account for resources transferred to the organization.
	tfr02	Initiation	2	Procedure	Personnel transferred in	Establish and implement procedures to manage the transfer of personnel to the organization.
	tfr03	Completion	3	Procedure	Service continuity	Establish and implement procedures to ensure the continuity of service during Completion.
	tfr04	Completion	2	Procedure	Resources transferred out	Establish and implement procedures to transfer resources from the organization.
	tfr05	Completion	2	Procedure	Personnel transferred out	Establish and implement procedures to manage the transfer of personnel from the organization.
	tfr06	Completion	4	Procedure	Knowledge transferred out	Establish and implement procedures to transfer to the client, during Completion, the knowledge gained from the specific client engagement.

Appendix C: Mapping of v2 Practices to v1.1

The following table reflects all changes made to the Model in version 2.
All changes are indicated with a severity rating according indicated by the table below.

TYPE OF CHANGE		
	None	Practice has moved to new template, but v1.2 content is intended to be identical to v1.1; may include minor grammatical or word-choice corrections
	Major change	Practice has new or changed content, or change in focus, that is expected to considerably change interpretation
	Minor change	Practice has wording changes, new activities, or changed activities, that are intended to clarify intent, but is otherwise intended to be identical to v1.1
	Structure change	Practice has changed Organizational Element, Phase, or Level
	New	Practice has been added to the model since v1.1
	Deleted	v1.1 Practice has been removed from the model and its content moved to a merged Practice.
	Merged	Practice content has been merged with a deleted Practice

TYPE OF CHANGE	V1.1 ID	V2 ID	V1.1 WORDING	V2 PRACTICE STATEMENT
Merged (msc02 content added)	org_over_1_3	prf04	Define and communicate organizational objectives.	Define, communicate, and track organizational objectives.
Deleted (content moved to thr04, thr06)	org_over_2_2	msc01	Establish and implement policies on security, confidentiality and protection of intellectual property.	
Minor	org_over_3_2	thr01	Establish and implement a policy on risk management.	Establish and implement a policy on risk management.
Minor	org_over_4_2	prf03	Identify and provide adequate resources for performing service-related and support activities.	Identify and provide adequate resources that personnel need to perform their work.
None	org_over_5_3	ppl05	Define and communicate the roles, responsibilities, and authority of personnel in the organization.	Define and communicate the roles, responsibilities, and authority of personnel in the organization.
Merged (msc03 content added)	org_over_6_4	prf07	Establish and implement programs to achieve organizational objectives.	Establish and implement programs to achieve organizational objectives.
Merged (msc02 content added)	org_over_10_3	prf05	Establish and implement procedures to periodically review the organization's performance.	Establish and implement procedures to review organizational performance.
None	org_over_8_4	prf08	Define capability baselines for the organization by analyzing performance data.	Define capability baselines for the organization by analyzing performance data.
Major	org_over_9_4	prf09	Benchmark organizational performance against comparative data from external and internal sources.	Benchmark organizational performance to identify opportunities for improvement.
Deleted (content moved to prf04 and prf05	org_over_7_3	msc02	Establish and implement procedures to capture and analyze performance measures.	

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TYPE OF CHANGE	V1.1 ID	V2 ID	V1.1 WORDING	V2 PRACTICE STATEMENT
Deleted (content moved to prf07)	org_over_11_4	msc03	Establish and implement procedures to verify whether organizational programs are being executed as planned.	
None	org_over_12_3	rel06	Establish and implement procedures to manage client relationships.	Establish and implement procedures to manage client relationships.
None	org_over_13_2	thr07	Establish and implement disaster recovery procedures.	Establish and implement disaster recovery procedures.
None	org_over_14_3	thr03	Establish and implement procedures to manage risks across client engagements.	Establish and implement procedures to manage risks across client engagements.
None	org_over_15_4	rel08	Proactively identify value creation opportunities and communicate them to the client.	Proactively identify value creation opportunities and communicate them to the client.
None	org_over_16_3	prf06	Make improvements based on reviews of organizational performance.	Make improvements based on reviews of organizational performance.
Major	org_pre_1_3	cnt01	Establish guidelines for negotiations with current or prospective clients.	Establish and implement guidelines for negotiations with current or prospective clients.
Minor	org_pre_2_2	cnt02	Establish guidelines for pricing services.	Establish and implement guidelines for pricing services.
Major (content moved to del02	org_pre_3_2	cnt10	Establish and implement procedures to create and amend contracts.	Establish and implement procedures to create contracts.
New (split from cnt10)	org_pre_3_2	cnt11	Establish and implement procedures to create and amend contracts.	Establish and implement procedures to amend contracts.
Minor; Structure	org_exe_1_2	sdd01	Establish and implement procedures to communicate the client's requirements from the client interaction team to the service design and deployment team.	Establish and implement procedures to communicate the client's requirements to the service design and deployment team.
Structure	org_exe_2_3	rel04	Identify cultural attributes that impact the service, and implement actions to achieve a cultural fit.	Identify cultural attributes that impact the service, and implement actions to achieve a cultural fit.
Minor; Structure	org_exe_3_2	thr02	Identify, assess and manage risks specific to executing the contract.	Identify, assess, and manage risks specific to the client engagement.
Minor	ppl_over_1_4	ppl01	Establish and implement a policy to encourage and support innovation and entrepreneurship across the organization.	Establish and implement a policy to encourage and support innovation across the organization.
Deleted (content moved to ppl06)	ppl_over_2_3	msc04	Identify the workforce competencies needed to achieve organizational objectives.	
Merged (msc04, msc14 content added)	ppl_over_3_3	ppl06	Develop the workforce competencies needed to achieve organizational objectives.	Develop the workforce competencies needed to achieve organizational objectives.
None	ppl_over_4_2	ppl04	Assign roles and responsibilities to personnel based on appropriate personnel competencies.	Assign roles and responsibilities to personnel based on appropriate personnel competencies.
Major (msc06 content added)	ppl_over_5_3	ppl07	Establish and implement procedures to plan and deliver training.	Establish and implement procedures to plan and deliver training.
None	ppl_over_6_2	ppl08	Meet identified personnel competency needs by providing training.	Meet identified personnel competency needs by providing training.

TYPE OF CHANGE	V1.1 ID	V2 ID	V1.1 WORDING	V2 PRACTICE STATEMENT
Major	ppl_over_7_2	ppl03	Establish and maintain a work environment that enables personnel to work effectively.	Establish and maintain a work environment that enables personnel to work effectively.
Major	ppl_over_8_3	ppl10	Establish and implement a policy to provide personnel with opportunities for career development.	Establish and implement procedures to provide personnel with opportunities for career development.
None	ppl_over_9_3	ppl02	Establish and implement a policy on the participation of personnel in decisions that affect their work commitments.	Establish and implement a policy on the participation of personnel in decisions that affect their work commitments.
Major	ppl_over_10_3	ppl09	Establish and implement procedures to appraise individual and team performance.	Establish and implement procedures to provide feedback on performance to personnel.
Minor	ppl_over_11_3	ppl11	Establish and implement a reward program that encourages the achievement of organizational objectives.	Provide rewards and recognition that encourage the achievement of organizational objectives.
Deleted (content moved to rel01)	ppl_over_12_2	msc05	Assign a team to interact with the client.	
Deleted (content moved to ppl07)	ppl_over_13_4	msc06	Analyze the effectiveness of the training in achieving its intended objectives.	
Deleted (content moved to rel01)	ppl_pre_1_3	msc07	Assign a team to understand the prospective client's requirements and position the organization's capabilities.	
Deleted (content moved to rel01)	ppl_pre_2_2	msc08	Assign a team to negotiate with clients.	
Deleted (content moved to sdd05 and sdd08)	ppl_exe_1_2	msc09	Assign a team to design and deploy the service according to client requirements.	
Minor	ppl_exe_2_2	tfr02	Establish and implement procedures to manage the transfer of personnel and skills from the client during transition and contract execution.	Establish and implement procedures to manage the transfer of personnel to the organization.
Minor	ppl_post_1_2	tfr05	Establish and implement procedures to manage the transfer of personnel and skills to the client during contract completion.	Establish and implement procedures to manage the transfer of personnel from the organization.
Minor	ops_over_1_2	prf01	Define and communicate engagement objectives.	Define, communicate, and track engagement objectives.
Major (content split prf02 and del04)	ops_over_2_2	prf02	Establish and implement procedures to measure and verify that process and service commitments are satisfied.	Establish and implement procedures to verify that processes are consistently performed as defined.
Major (content split into prf02 and del04, expanded); **Merged** (msc11 content added)	ops_over_2_2	del04	Establish and implement procedures to measure and verify that process and service commitments are satisfied.	Establish and implement procedures to measure and verify that service commitments are being met.
Major	ops_over_3_2	rel02	Establish and implement procedures to select subcontractors and vendors based on their ability to meet identified requirements.	Establish and implement procedures to select suppliers and partners based on their ability to meet identified requirements.

TYPE OF CHANGE	V1.1 ID	V2 ID	V1.1 WORDING	V2 PRACTICE STATEMENT
Major	ops_over_4_2	rel03	Monitor the performance of subcontractors and vendors against their commitments, and take appropriate action.	Manage the performance of suppliers and partners against their commitments.
Major; Structure; Merged (msc05, msc07, msc08 content added)	ops_over_5_2	rel01	Establish and implement procedures to document interactions with clients.	Establish and implement procedures to manage interactions with clients.
Major	ops_over_6_3	del06	Establish and implement procedures to prevent reoccurrence of identified problems.	Establish and implement procedures to take preventive action for known problems.
Major	ops_over_7_4	prf10	Proactively identify potential problems and implement actions to preclude their occurrence.	Establish and implement programs to take preventive action on potential problems.
Major; Merged (msc01, msc13 content added)	ops_over_8_2	thr04	Establish and implement procedures to meet security and confidentiality requirements.	Establish and implement procedures to meet security requirements.
Merged (msc01 content added)	ops_over_9_2	thr05	Establish and implement procedures to protect the intellectual property of stakeholders, as appropriate.	Establish and implement procedures to protect the intellectual property of stakeholders.
None	ops_over_10_2	thr06	Establish and implement procedures to comply with statutory and regulatory requirements.	Establish and implement procedures to comply with statutory and regulatory requirements.
None	ops_pre_1_2	cnt06	Establish and implement procedures to gather a client's requirements.	Establish and implement procedures to gather a client's requirements.
Minor	ops_pre_2_2	cnt07	Prior to committing to the prospective client, review requirements and ensure that the organization can meet them.	Prior to committing to the prospective client, review requirements and verify that the organization can meet them.
None	ops_pre_3_2	cnt08	Establish and implement procedures to respond to the requirements of a prospective client.	Establish and implement procedures to respond to the requirements of a prospective client.
Major	ops_pre_4_2	cnt05	Prior to and during negotiation, identify topics requiring client agreement.	Plan and track negotiations with current or prospective clients.
None	ops_pre_5_2	cnt09	Define the roles and responsibilities of the organization and the client with respect to the proposed contract.	Define the roles and responsibilities of the organization and the client with respect to the proposed contract.
Minor	ops_exe_1_3	sdd02	Establish and implement procedures to design and deploy the service to meet client requirements.	Establish and implement procedures to design and deploy the service to meet client requirements.
Merged (msc10 content added)	ops_exe_2_2	sdd03	Develop a plan to design and deploy the service.	Plan and track the design and deployment of the service.
Deleted (content moved to sdd03)	ops_exe_3_2	msc10	Track service design and deployment activities against the plan at designated intervals.	
Minor	ops_exe_4_2	sdd04	Develop the service specification.	Create the service specification.
Merged (msc09 content added)	ops_exe_5_2	sdd05	Design the service based on the service specification.	Create the service design based on the service specification.
Major	ops_exe_6_3	del05	Establish and implement procedures to respond to potential failures in the delivery of service.	Establish and implement procedures to correct problems.
None	ops_exe_7_2	sdd06	Establish and implement procedures to obtain feedback from the client on the designed service, and to incorporate necessary changes.	Establish and implement procedures to obtain feedback from the client on the designed service, and to incorporate necessary changes.

TYPE OF CHANGE	V1.1 ID	V2 ID	V1.1 WORDING	V2 PRACTICE STATEMENT
Minor	ops_exe_8_2	tfr01	Establish and implement procedures to verify and account for resources transferred from the client to the organization.	Establish and implement procedures to verify and account for resources transferred to the organization.
Deleted (content moved to del06)	ops_exe_9_2	msc11	Establish and implement procedures to monitor service quality based on the quality specification, and take corrective action as appropriate.	
Major; Structure	ops_exe_10_2	knw07	Establish and implement procedures to apply version control and change control to the service components.	Establish and implement procedures to apply version control and change control to work products.
None	ops_exe_11_2	del07	Establish and implement procedures to make modifications to services.	Establish and implement procedures to make modifications to services.
Minor	ops_exe_12_2	del02	Establish and implement procedures to train clients and end-users, as appropriate.	Establish and implement procedures to train clients and end-users.
None	ops_exe_13_3	sdd07	Establish and implement procedures to review and verify the service design.	Establish and implement procedures to review and verify the service design.
Merged (msc09 content added)	ops_exe_14_2	sdd08	Deploy the service based on the design.	Deploy the service based on the service design.
Major (content moved to and from del03)	ops_exe_15_2	del01	Plan and deliver the service according to the service design.	Plan and track the service delivery according to the service design.
Major (content moved to and from del01)	ops_exe_16_2	del03	Track the service delivery activities against the delivery plan, and take corrective action as appropriate.	Deliver service according to the service delivery plans.
Minor	ops_post_1_2	tfr04	Establish and implement procedures to hand over resources during contract completion.	Establish and implement procedures to transfer resources from the organization.
Minor	ops_post_2_3	tfr03	Establish and implement procedures to ensure the continuity of service during contract completion.	Establish and implement procedures to ensure the continuity of service during Completion.
Deleted (content moved to knw05 and rel05)	ops_post_3_2	msc12	Obtain and analyze client feedback during contract completion.	
Minor	tech_over_1_2	tch01	Establish and implement procedures to acquire, deploy, and upgrade technology.	Establish and implement procedures to acquire and deploy technology.
Deleted (content moved to thr04)	tech_over_2_2	msc13	Establish and implement procedures to manage the security of the technology infrastructure.	
None	tech_over_3_2	tch03	Establish and implement procedures to track and control changes in the technology infrastructure.	Establish and implement procedures to track and control changes to the technology infrastructure.
None	tech_over_4_2	tch02	Establish and implement procedures to manage technology licenses.	Establish and implement procedures to manage technology licenses.
None	tech_over_5_4	tch06	Establish and implement procedures to proactively identify and introduce appropriate technology.	Establish and implement procedures to proactively identify and introduce appropriate technology.
Major; Structure, includes separation	tech_exe_1_2	tch04	Establish and implement procedures to integrate an organization's technology infrastructure with that of the client, as appropriate.	Establish and implement procedures to manage integration of the organization's technology infrastructure.
Structure	tech_exe_2_3	tch05	Optimize the overall performance of the technology infrastructure needed to deliver all services.	Optimize the overall performance of the technology infrastructure needed to deliver all services.

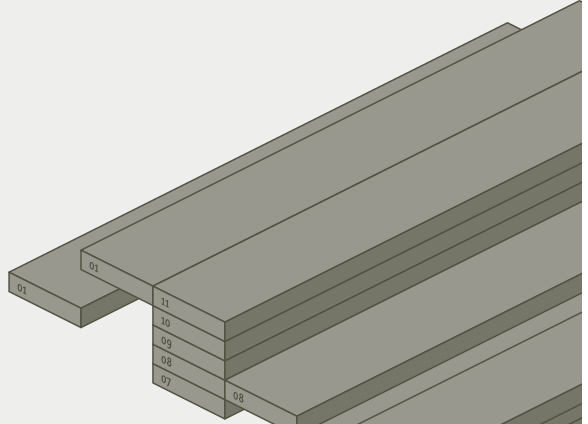| TYPE OF CHANGE	V1.1 ID	V2 ID	V1.1 WORDING	V2 PRACTICE STATEMENT
None	km_over_1_4	knw01	Establish and implement a policy to share knowledge among stakeholders.	Establish and implement a policy to share knowledge among stakeholders.
Minor	km_over_2_2	knw02	Identify, control, and provide the information required to perform service-related and support activities.	Identify, control, and provide the information that personnel need to perform their work.
Minor	km_over_3_3	knw03	Establish and implement a knowledge system to identify, control and disseminate information.	Establish and maintain a knowledge system to identify, control, and provide information.
Merged (msc12 content added)	km_over_4_3	knw05	Analyze and use knowledge gained from client engagements.	Analyze and use knowledge gained from client engagements.
Minor	km_over_5_3	knw06	Identify and reuse work products.	Identify and reuse work products.
Deleted (content moved to ppl06)	km_over_6_3	msc14	Analyze competencies used and developed throughout the sourcing process.	
Major; Merged (msc12, msc15, msc16 content added)	km_over_7_3	rel05	Analyze and use knowledge about clients and end-users.	Analyze and use client and other stakeholder information.
Deleted (content moved to rel05)	km_over_8_3	msc15	Analyze and use feedback from clients and other stakeholders throughout the sourcing process.	
Deleted (content moved to rel05)	km_over_9_3	msc16	Analyze the perceptions that current and prospective clients have about the organization and its services.	
None	km_pre_1_3	cnt04	Analyze and use market information about prospective clients.	Analyze and use market information about prospective clients.
Minor; Structure	km_exe_1_2	knw08	Establish and implement procedures to capture and analyze data on resources consumed during contract execution	Establish and implement procedures to analyze and use information on resources consumed.
Minor	km_post_1_4	tfr06	Establish and implement procedures to transfer to the client, during contract completion, the knowledge gained from the specific client engagement.	Establish and implement procedures to transfer to the client, during Completion, the knowledge gained from the specific client engagement.
New		knw04		Establish and maintain a set of process assets for use across the organization.
New		prf11		Establish and implement programs to deploy innovations across the organization.
New		rel07		Establish and implement procedures to manage relationships with suppliers and partners.
New		cnt03		Establish and implement guidelines for confirming existing conditions about potential engagements.
New		del08		Establish and implement procedures for financial management of the engagement.

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