Vanderbilt University
IT Service Management Program

IT Knowledge Management Strategy

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1 Introduction

1.1 Audience

This document should be published and discussed with the various ITIL process owners as well as the following groups for either approval or guidance on organization strategies:

- Enterprise Steering Committee (Proposed)
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- Process Design Team (Proposed)
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  - Kim Mallory
  - Scott McConnell or representative
  - Jason Pattee
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- Process Mirror Team (Proposed)
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  - Mike Harris
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  - Jane Mandeville
  - Jason Pattee
  - Steve Timmons
  - Chris Wright

1.2 Maintenance of this document

As Knowledge Management Process Owner, Cheryl Graves owns this document and is responsible for the maintenance and upkeep thereof. A copy of this document can be found on the ITSM website http://www.mc.vanderbilt.edu/itsm.

2 Definitions

2.1 Knowledge Management

"The purpose of the knowledge management process is to share perspectives, ideas, experience and information; to ensure that these are available in the right place at the right time to enable informed decisions; and to improve efficiency by reducing the need to rediscover knowledge."[1]

2.2 Knowledge Centered Support (KCS)

"A set of best practices for knowledge management that results in enhanced quality of service, improved efficiencies, and higher customer and employee satisfaction." [2]

2.3 Related Definitions

For other relevant definitions related to IT Knowledge Management and ITSM, consult the ITSM website http://www.mc.vanderbilt.edu/itsm.

3 Background

Knowledge Management was initially introduced in 2005 as a searchable knowledgebase add-on to a vendor provided service desk tool. Due to licensing constraints, this knowledgebase was used and maintained exclusively by the VUMC Help Desk. With the introduction of new ITSM Service Management tools, the knowledgebase became available to all service providers using the new tools, but the data continued to be maintained exclusively by VUMC Help Desk staff.

Given the continuous growth in IT support responsibilities, a more robust IT Knowledge Management System is now required. The anticipated inclusion of multiple IT service providers from across the enterprise will ensure an IT Knowledge Management System that is used, augmented, and updated in a consistent and timely manner.

This document is being written to document the purpose, objectives, and high-level plan for an Enterprise IT Knowledge Management System for IT service providers and IT end-users.

4 Goals of Knowledge Management

The purpose of IT Knowledge Management is to provide a "…method for individuals and teams to share data, information, and knowledge about all facets of an IT Service."[3]

"The objectives of knowledge management are to:

- Improve the quality of management decision-making by ensuring that reliable and secure knowledge, information and data is available throughout the service lifecycle

[1] ITIL Service Transition, 4.7.1 (Knowledge Management – Purposes and Objectives)
[2] Knowledge Management Foundations: KCS Principles , version 4.2 (Unit One 1-1)
[3] ITIL Service Transition, 4.7.3 (Knowledge Management – Values to Business)

- Enable the service provider to be more efficient and improve quality of service, increase satisfaction and reduce the cost of service by reducing the need to rediscover knowledge
- Ensure that staff have a clear and common understanding of the value that their services provide to customers and the ways in which benefits are realized from the use of those services
- Maintain a service knowledge management system (SKMS) that provides controlled access to knowledge, information and data that is appropriate for each audience
- Gather, analyze, store, share, use and maintain knowledge, information and data throughout the service provider organization."[4]

5 Scope

IT Knowledge Management will facilitate the expedient resolution of IT issues. It will be designed for IT service providers and IT end-users. Knowledge about non-IT operations are not considered to be in scope for purposes of this document.

Vision

To add and update IT knowledge as part of the IT workflow process, and to efficiently deliver applicable IT knowledge precisely when needed, nothing more.

6 Benefits of IT Knowledge Management

The benefits of an IT Knowledge Management System include:

- *Improved IT Service Quality.* IT Knowledge Management facilitates consistent and timely resolutions to incidents and end-user questions.
- *Decreased IT Support Costs.* IT Knowledge Management facilitates higher first call resolution rates, thereby reducing IT support costs as more incidents are resolved at the lowest and least expensive support tier.
- *Increased Productivity of IT Service Providers and End-Users.* IT Knowledge Management maximizes productivity of IT service providers who can reuse existing knowledge to resolve IT issues. It also minimizes contact and resolution time, improving productivity for both IT service providers and end-users.
- *Self Help.* IT Knowledge Management lays the foundation for an end-user self help system that can be utilized before contacting an IT service provider.

7 IT Knowledge Management Process, Inputs, and Outputs

The following is an overview of a general IT Knowledge Management process, and a review of the interfaces that IT Knowledge Management might have with other IT Service Management processes.

[4] ITIL Service Transition, 4.7.1 (Knowledge Management – Purposes and Objectives)

7.1 Process

The basic IT Knowledge Management process can be described as follows:

- *Establish data, information, and knowledge requirements.*
- *Define the information architecture, including tools needed to collect and process data. (Specific examples would include tools needed to discover, collect, protect, share, audit, and archive data, and tools needed to convert information into useful knowledge, including query and analysis tools, reporting tools, performance management, and monitoring and alerting tools.)*
- *Capture knowledge from diverse sources and adapting it to the Knowledge Management System.*
- *Review stored knowledge for relevance and accuracy.*[5]
- Integrate knowledge as a standard part of the IT service provider workflow, including the consistent use of, revision of, and addition to knowledge in the IT Knowledge Management System.
- Publish vetted IT knowledge to end-users for self help.

7.2 Inputs

Inputs to the IT Knowledge Management process include "all knowledge, information, and data used by the IT service provider."[6] Inputs can include but are not limited to:

- IT knowledge accumulated through the processes and workflows of IT service providers
- IT knowledge accessed from outside sources
- IT knowledge compiled from existing databases and websites
- IT knowledge generated from other ITIL processes

7.3 Outputs

Outputs from the IT Knowledge Management process can include but are not limited to:

- New IT knowledge entries
- Flagged IT knowledge entries for revision or archive
- Vetted IT knowledge entries for self help

8 IT Knowledge Management Implementation Strategy

8.1 Phase 1 – Implementation (Strategy, Design, Build)

The first stage of implementing IT Knowledge Management is to author, vet, and gain approval for this strategy document. After all comments and suggestions on the strategy document are considered and finalized, several working sessions will be convened. (See list of participants and stakeholders in section 1.1.)

[5] ITIL Service Transition, 4.7.5 (Knowledge Management – Process Activities, Methods and Techniques)
[6] ITIL Service Transition, 4.7.6.2 (Knowledge Management – Inputs)

A Design Session will be scheduled and conducted, during which the Design team will document the following:

- Process flows
- Required process inputs and outputs
- Business rules
- Roles and responsibilities.

The output of the Design Session will be an IT Knowledge Management Process Specification document, which will be distributed for comment to groups listed in section 1.1

After all comments have been considered and finalized, the Build Session will begin. The IT Knowledge Management Process Specification will serve as the primary input for the Build Session, which will include discussions on how to create or modify any required toolsets. Output from the Build Sessions will detail requirements from which tools can be created and test cases can be built. The requirements can be reviewed with any interested party or group prior to development.

Development will begin after requirements are finalized, followed by testing and acceptance. Development, testing, and acceptance will follow the normal procedures for ITSM tools.

8.2 Phase 2 – Initial Rollout and Early Life

Once acceptance is complete, a date will be chosen for migration to the new IT Knowledge Management process and updated toolset. Training and communication materials will be developed based on the final toolset. Communications will occur both in person and through online announcements; training will be available online. Classroom training is not anticipated, but it will be provided if requested by IT service providers. The stakeholders identified in section 1.1 will be consulted for comments and suggestions throughout this phase.

After Go-Live, the IT Knowledge Process will continue to be reviewed for improvements.

8.3 Phase 3 – Continual Service Improvement

In accordance with the principles laid out by ITIL, the IT Knowledge Management process and toolset will be reviewed on a regular basis to verify and validate its effectiveness. This will include periodic reviews of process metrics and mesasurables, and feedback from IT service providers and end-users submitted to the Service Management Organization (SMO).

Issues that surface with respect to the IT Knowledge Management process or related toolset must be addressed. Minor improvements can and should be made as issues become known and can be addressed as part of normal operations and software updates. Major issues may require a process review and refresh, with guidance from the SMO. IT Knowledge Management will ensure that the lines

of communication with stakeholders, IT service providers, and IT end-users remain open, and that proper vetting occurs for all updates and improvements to the IT Knowledge Management System.

9 Critical Success Factors

9.1 Executive Buy-In

While always a requirement for new initiatives, executive buy-in is essential for an enterprise IT Knowledge Management System. Participation by all IT service providers is required to ensure the success of this project; executive buy-in helps to guarantee enterprise support of the initiative.

9.2 Enterprise Utilization of IT Knowledge Management Process

A successful IT Knowledge Management process must be utilized in order to be effective. Thus, a critical factor in the effectiveness of the process will be adoption across the enterprise, with a corresponding enterprise culture change to define IT knowledge as everyone's responsibility: all IT service providers are both consumers of and contributors to IT knowledge. The adoption of the IT Knowledge Management Process will include a workflow change for all IT service providers to ensure consistent use and maintenance of the IT Knowledge Management System. It also relies on the assignment of "coaches" within IT support departments to encourage and reinforce the new IT Knowledge Management process.

The level of utilization of the process can be measured by:

- Number of communications and incidents resolved by existing knowledge entries.
- Number of new knowledge entries added.
- Number of IT service providers and departments adding or revising knowledge entries.
- Number of incidents escalated to higher level support tiers without knowledge entries.

9.3 IT Knowledge Management Process Assessment and Measurement

Measurement of the effectiveness of the IT Knowledge Management process is crucial to assessing the success of the effort. A number of measurements can be used to indicate whether the IT Knowledge Management process is having the desired effect, including but not limited to:

- Increased First Contact Resolution Rates.
- Reduced number of escalations to higher level support tiers.
- Improved satisfaction with IT tools and support as reported by IT service providers and IT end-users.