Documenting Institutional Knowledge Through a TRAC Self-Audit: A Case Study

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Digital Collections Served by UNT Digital Libraries

• **The Portal to Texas History**: hosts nearly 1 million objects relating to Texas History. Objects include newspapers, photographs, journals, personal papers, and maps.

• **The UNT Digital Library**: serves as the digital repository for campus research production.

• **The Gateway to Oklahoma History**: is hosted in partnership with the Oklahoma Historical Society and houses over 1 million Oklahoma newspaper pages and over 400,000 photographs from the Oklahoma Publishing Company.
Overview

• Purpose
• Concept
• Implementation
• Results
• Take-Aways

“[UNT Campus Aerial, 1950]”
Contributing Partner: UNT Libraries Special Collections
Purpose

TRAC=Trusted Repository Audit and Certification

The TRAC process involves gathering and examining internal and external knowledge within an organization to verify the long-term sustainability of all aspects of a digital repository infrastructure.

• In 2014-2015, UNT Libraries’ Digital Libraries division conducted a self-audit based on the TRAC evaluation checklist with the goal of documenting how UNT Libraries’ digital repositories fulfill the requirements of a trusted repository.

• A secondary goal was that this documentation would serve as a template for other institutions interested in conducting a similar trusted repository self-audit.
Concept: KM and the Trusted Repository

• TRAC centers on infrastructure and processes that support digital preservation, auditing an organization on Organizational Infrastructure, Digital Object Management, and Technical Infrastructure.

• Inherent steps in Knowledge Management as identified by Bouthillier and Shearer (2002) emphasize
  • Discovery of existing knowledge
  • Acquisition
  • Creation
  • Storage
  • Organization
  • Sharing
  • Use and application of knowledge
Contextual dimensions “characterize the whole organization, describe the organizational setting and influences, and shapes the structural dimensions” and can be used to identify critical success factors, motivations, and obstacles (Jafari et. al, 2008).
Implementation

• Classified types of knowledge gathered during the TRAC audit into Bouthillier and Shearer’s steps as **contextual dimensions**.

• Mapped the TRAC self-audit sections to Jafari et. al.’s **critical success factors**.

• Identified **motivations, challenges, and successes** within the TRAC process.

“Farm Implements at the Deaf Smith County Museum”
**Contributing Partner:** Deaf Smith County Library
<table>
<thead>
<tr>
<th>Dimension</th>
<th>Bouthillier &amp; Shearer Application</th>
<th>UNT Local Definition</th>
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</thead>
<tbody>
<tr>
<td>Discovery of existing knowledge</td>
<td>• Locating internal knowledge</td>
<td>• Division-level knowledge, easy to identify</td>
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<tr>
<td></td>
<td>• Helpful when organization is spread out and knowledge is situated in multiple, distinct areas</td>
<td>• Implicit, explicit, and intangible knowledge</td>
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<tr>
<td>Acquisition of existing knowledge</td>
<td>• Obtaining knowledge from sources external to the working department</td>
<td>• External to Division</td>
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<tr>
<td></td>
<td></td>
<td>• Implicit, explicit, and intangible knowledge</td>
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<tr>
<td>Creation of new institutional knowledge</td>
<td>• Combining different types of internal knowledge to form new knowledge</td>
<td>• Creating knowledge for identified gaps</td>
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<tr>
<td></td>
<td></td>
<td>• Implicit and explicit knowledge</td>
</tr>
<tr>
<td>Storage of existing knowledge</td>
<td>• Application of specific storage structure to prepare knowledge for organization and sharing</td>
<td>• Moving implicit information to written documentation</td>
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<td></td>
<td>• Intermediate to organization and sharing</td>
<td>• Explicit knowledge</td>
</tr>
<tr>
<td>Organization of knowledge, new and old</td>
<td>• Arrangement process for making knowledge usable</td>
<td>• Final documentation, policies, appendices</td>
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<td></td>
<td></td>
<td>• Explicit knowledge</td>
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<tr>
<td>Sharing, use, and application of knowledge</td>
<td>• Transfer of knowledge between people</td>
<td>• Website and formal external documents</td>
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<td>• To be useful, knowledge must be shared with the community.</td>
<td>• Institutional presentations</td>
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<td>• Schedule for auditing documentation and division of responsibilities</td>
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<td>• Explicit knowledge</td>
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Results: Motivations

- **Knowledge Creation**: To identify where we created documentation and policies through the TRAC process that filled knowledge gaps.
- **Knowledge Discovery**: To reveal where we identified practices and policies.
- **Knowledge Acquisition**: To show where we obtained extant knowledge from other departments and how we used it.
- **Knowledge Organization**: To document and arrange knowledge created, discovered, and acquired during the TRAC self-audit.
Results: Challenges

• Lack of Available Field Knowledge

• Inter-departmental knowledge gaps, particularly related to budget and IT infrastructural practices
Results: Successes

• Cohesive set of documentation: useful for replication in other institutions
• New policies within the Digital Libraries Division of UNT Libraries, shared and maintained
• UNT Libraries’ Digital Libraries Division will utilize the documentation to seek additional repository certifications
Take-Aways

• Analyzing the TRAC process through the lens of KM offers us better understanding of:
  • How to proceed in future document evaluations and revisions for the TRAC self-audit.
  • The role developing new Digital Libraries’ policies played in filling knowledge gaps.
  • How other institutions can organize development of new knowledge through a TRAC self-audit using the organization this analysis provided.
Questions?

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