

# MISQ Archivist

## Capability Development through Just-in-Time Access to Knowledge in Document Repositories: A Longitudinal Examination of Technical Problem Solving

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### Abstract

With knowledge and expertise increasingly being recognized as important, firms have made significant investments in document repositories as part of their knowledge management initiatives. Document repositories are intended to enhance the ability to access codified knowledge and help improve task performance through knowledge reuse. However, it is not clear what effects they have on how knowledge workers perform their tasks. Using longitudinal data on repository accesses and calls to technical support by field technicians in an engineering firm, we examine how just-in-time access to codified knowledge affects patterns of help-seeking from technical support. We find evidence that greater access of codified knowledge reduces calls for help to technical support. The type of codified knowledge accessed from the repository affects field technicians' calling behavior. Accessing general knowledge reduces calls to support for low-complexity problems, while accessing procedural knowledge reduces calls related to high-complexity problems. Further, accessing procedural knowledge is significantly associated with promotion, suggesting that the use of document repositories can help individuals build firm-specific human capital. Building on the insights of cognitive load theory, this study suggests that making information available just-in-time through document repositories reduces the cognitive load involved for task performance and enables learning. This work contributes to a greater understanding of the value of knowledge management systems and suggests that beyond the efficiencies gained from knowledge reuse, just-in-time access to knowledge repositories builds problem-solving capabilities and contributes to human capital development.

**Keywords:** Codified knowledge, cognitive load theory (CLT), document repositories, just-in-time access, just-in-time information, help seeking, human capital development, knowledge management systems, promotion, internalization, socialization, technical problem solving