Developing an Enterprise-wide Knowledge Management System

Barbara Silcox
Jo Ann Remshard
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Context

Organizational Structure:
- NIST Research Library
- Electronic Information & Publications Group
- Museum and History Program

Strategic Direction (aligned with NIST):
Develop mechanisms to improve and enhance the access and exchange of NIST data & information, and improve knowledge dissemination to support research, innovation, and discovery.
Project Vision

To capture, organize, and make available NIST’s knowledge assets in the form of documents and digital objects.
Objectives & Guiding Principles

• To develop & implement an easy-to-use system to support the editorial review process and NIST’s publishing activities

• To make it easy to locate & retrieve information about NIST’s knowledge output

• To make use of systems & applications already in place
Translating Vision into Action

- Defined skill sets needed; emphasized professional growth
- Gathered customer requirements
- Examined the applications in use within some of the labs
- Segmented project into phases & components
- Wrote business requirements
NIKE Model Overview
Submission System

- Role-based authorization by authentication
- User entry and update of metadata
- Authority control for author names and serial names
- Manuscript uploaded to file server
- Manuscript tracking
- Search and retrieval
- Generation of bibliographic and statistical reports
- Crosswalk of metadata from database to online catalog
- Published document to digital library
Submission System (con’t)

- Building internally versus purchasing an Application Services Provider (ASP)
First Steps Towards a New Enterprise-Wide Knowledge Management System

Manuscript Submission
Submit your manuscript to the Washington Editorial Review Board (WERB) electronically using the NIST 114 Manuscript Review and Approval form. Notify WERB that your paper has been published using the NIST 266 form. Instructions for submitting manuscripts.

NIKE Next Steps
NIKE, a soon-to-be released knowledge management system, will streamline NIST's complex manuscript submission workflow. Eventually a digital library of NIST publications will be available.

How do I... Get manuscripts?
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## Sample Record

**Demonstration of a Low-noise Near-Infrared Photon Counter with Multiphoton Discrimination**

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### MARC Record

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099  NIKE0204-0869
245  00 Demonstration of a Low-noise Near-Infrared Photon Counter with Multiphoton Discrimination / [D A Hite, S E Russak, D P Pappas].
260  1 July 2003.
340  Print
550  Sponsored by NIST Electromagnetic Technology Division.
610  7 Physics,limitscc
640  7 Journal article,local
700  1 Hite, D. A. (NIST, Electronics and Electrical Engineering Laboratory, Magnetic Technology Division).
700  1 Russak, S. E. (NIST, Electronics and Electrical Engineering Laboratory, Magnetic Technology Division).
700  1 Pappas, D. P. (NIST, Electronics and Electrical Engineering Laboratory, Magnetic Technology Division).
710  2 National Institute of Standards and Technology, in Electronics and Electrical Engineering Laboratory, Magnetic Technology Division, [sponsoring organization]
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### OPAC

- **Record 1 of 1 for search title "Demonstration of a low-noise"**
- Title: *Demonstration of a Low-noise Near-Infrared Photon Counter with Multiphoton Discrimination* / [D A Hite, S E Russak, D P Pappas]
- Publication date: July 2003.
- Medium: Print
- Funding information: Sponsored by NIST Electromagnetic Technology Division.
- Also held by: NIST
- Subject: Physics.
- Genre/Format: Journal article.
- Personal author: Hite, D. A. (NIST, Electronics and Electrical Engineering Laboratory, Magnetic Technology Division).
- Personal author: Russak, S. E. (NIST, Electronics and Electrical Engineering Laboratory, Magnetic Technology Division).
- Personal author: Pappas, D. P. (NIST, Electronics and Electrical Engineering Laboratory, Electromagnetic Technology Division).
- Corporate author: National Institute of Standards and Technology, Electronics and Electrical Engineering Laboratory, Electromagnetic Technology Division, [sponsoring organization]
Digital Library and Institutional Repository

• Digital Library Contents:
  – NIST Series Publications
  – Journal articles
  – Conference papers
  – Photographs
  – Artifacts

• Institutional Repository Contents:
  – NIST Archival Materials
  – Unpublished manuscripts
Search Component

- Online catalog - Sirsi
Dealing with Change

- Usability Testing
- Marketing
- Training

Attention NIST Authors

Will you be writing and submitting manuscripts for publication in scholarly journals, conference proceedings, books, technical reports? Are you planning on publishing in NIST Journal of Research or in a NIST Technical publications series? Then, let the Information Services Division (ISD) help you.

Important

All "official" writing on results of NIST technical programs must have editorial review and approval by the NIST Washington Editorial Review Board (WERB).

Find Out

- How to submit your manuscript to WERB for review.
- How to notify ISD that your manuscript has been published.
- Learn more about the NIST Integrated Knowledge FIrnekalNet (NIKE)

We are happy to supply you with the information you need at a division or group meeting. Or, you can attend one of ISD's regularly scheduled sessions.

Contact ISD to get the information you need to submit a manuscript into the editorial review and approval process.

For more information, please contact Jo Ann Remshard at 301-975-4 or e-mail joann.renshard@nist.gov
Impacts

Professional Growth:
• Talents emerged – e.g., leadership, project management, analysis
• Staff is writing, publishing, and presenting

Measures:
• Use
• Customer satisfaction
• Effectiveness/value
Next Steps

- Migration of legacy data to new database.
- Continue exploring options for building digital library.
- Continue to acquire needed skill sets through training and recruitment.
- Expand digital library to include museum objects.
- Assessment
Listening

• Knowledge speaks, but wisdom listens.
  --Jimi Hendrix