IPRO 338: The IPRO Knowledge Management System

Improving the Effectiveness of IPRO Teams
IPRO Real-World Issues

• Knowledge Carryover
  • 80% “attrition” rate of students across semesters
  • Transfer of knowledge across semesters paper based

• Lack of Process Knowledge
  • How to carry out project tasks?
  • Who has required expert knowledge?
What Do IPRO Teams Need?
Introducing iKNOW

- Retrieve information from previous IPROs
- Find Experts to help you in your IPRO tasks
- Learn Processes Required by your IPRO work
IPRO 338 History

Defined Problem  
First Functional Requirements  
System Design  
iKNOW Alpha Build  
iKNOW 0.9  
Pilot Test Begins  
iKNOW 2.0 System Design

Fall 2003  
Spring 2004  
Summer 2004  
Fall 2004  
Spring 2005

26.08.2004  
iKNOW 1.0  
iKNOW 1.1  
Usability Test Begins  
iKNOW 1.2  
17.12.2004

Today

20.01.2004 - 14.05.2004
07.06.2004 - ... - 17.12.2004
08.11.2004
17.12.2004
01.11.2004
17.12.2004
01.11.2004
17.12.2004

iKNOW v1.1

• Completed First Working Version of iKNOW
• Fall 2004 Progress
  • v1.0
    • Corrected known bugs
    • Completed functional requirements
  • v1.1
    • Installed full text search via Advanced Information Retrieval Engine (AIRE)
      • Provided by IIT Information Retrieval Laboratory
• Documentation
  • Started User Manual
  • Completed Developer Manual
iKNOW v1.1

- iKNOW Features
  - Insertion of documents and descriptive information
  - Full-text search
  - Browsing of experts
  - Snapshots of IPRO projects

- Demo: iKNOW v1.1
iKNOW v1.1

• Testing of v1.1
  • Functional
    • Does the software do what we want it to?
    • Team performed tests on all iKNOW system functions
    • 20 bugs found and fixed

• Performance
  • How many people can the system handle?
  • System handled 40 simultaneous users without fault

• Usability
  • Will people be able to actually use the system?
  • Tests were performed on five subjects to show the usability of the system
Rolling Out iKNOW

• Why spend so much time on roll-out?
  • iKNOW will be of little use if no one uses it
  • Requires high quality system that people will want to use

• Building IPRO Knowledge Base
  • High quality database
  • Extensive document storage

• Implementing Marketing Program for iKNOW
  • Advertisements
    • Email, Radio, Posters, etc.
  • Training
    • IPRO briefings, user manual, instructional websites
Developing iKNOW v1.2/2.0

- **Objectives for Building v1.2**
  - Make the system easier to use
    - User interface modifications
    - Enhanced search
  - Provide access to process knowledge
    - Personal Pro self-help websites viewable within iKNOW
  - Provide additional administrative functionality
    - Interface for importing data from Project Reporting System
    - Event logging

- **Work for v2.0**
  - Identification of potential software requirements
  - Requirement selection and prioritization
Improving Process Knowledge

• What is Process Knowledge?
• Who has it?
• Promoting Process Knowledge
• Managing Process Knowledge with PersonalPro
  • Create self-help websites with Topiary Communications software
Improving Process Knowledge

- Self-help website using PersonalPro
  - Collaboration with IPRO 339
    - Teamwork content
    - Framing
  - Teamwork self-help website within iKNOW

- Demo: [Teamwork self-help website](#)
An Interprofessional Project

• Technology is not the focus
• Interdisciplinary issues:
  • Change management
  • Advertising
  • Training
  • Administration
• Why move forward?
Challenges for the Future

• Support and improve iKNOW v1.1/1.2
• Conduct training for iKNOW
  – In conjunction with IPRO 339
• Start pilot study in Spring 2005
  • 10 IPRO teams
  • Provide team liaison
  • Investigate process changes and acceptance
  • Extended usability testing
  • Gain valuable input for iKNOW v2.0 design process
• Begin work on iKNOW v2.0
  – Integrate iKNOW with PersonalPro
The IPRO Knowledge Management System

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