Implementing Electronic Research Administration Systems – What Are The Things That Matter?

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AGENDA:

• System Drivers
• The RFP Process
• Project Planning
• University of Hawaii Experience
• Stanford Experience
SYSTEM DRIVERS

• Home grown system is outdated
• System to System (S2S) submissions
• Global expansion
• Any-time Any-where
• Science driven not data driven
• Electronic files (no more paper files)
THE RFP PROCESS

• Identify Stakeholders – Who will be impacted?
• Define Requirements
  • Should be start of implementation plan
  • Begins the structure based on general/specific requirements
• Compile and Publish
  • Selection criteria and order of importance
  • Should only be as specific and detailed as required
  • Partner with central technology office
    • Infrastructure
    • Access to data (HR, Financial, etc.)
    • Host at Institution or Outsource (security, service level agreement)
THE RFP PROCESS continued...

- Review proposals
  - Submitted
  - Demos
  - Implementation Services
  - Cost
- Vendor Selection
PROJECT PLANNING

- Project manager-who should it be
- Map out your project in incremental steps
- Form committees and work groups to work on these steps
- Consider what areas need to be prioritized first
- Set goals and deadlines
OUTLIERS THAT NEED TO BE CONSIDERED

• Training
  – How fast
  – How many

• Reports
  – Canned reports
  – Open-field reports

• Version updates and testing
BACKGROUND

• University of Hawaii (UH) System has ten (10) campuses across the Hawaiian islands (Kauai, Oahu, Maui, Hawaii Island)

• UH is a Land Grant, Sea Grant and Space Grant Institution

• Annual sponsored program awards total $490 M

• Prior system - infoEd Proposal Tracking (PT) module for proposal and award tracking and reporting at the central office
BACKGROUND

• Institutional questionnaire for approvals are routed via paper forms for proposal submissions before the implementation

• Major Federal sponsor agencies – ( NIH, NSF, NASA, NOAA, USDA, DoEd, DoE, DHS)
REASONS FOR USING FREEWARE

• Kuali Consortium is partnering with universities/colleges to build and sustain open-source software for higher education, by higher education members. Currently, consist of 57 major research institutions

• Members are helping with the design

• Shares best practice and insight that reduces costs and gets systems that better fit our needs beyond purchased software
REASONS FOR USING FREEWARE

- Kuali Coeus (KC) is based on the MIT’s proven Coeus system for research administration.
- As a member, UH shares similar experiences and concerns with research institutions across the nation and is able to address issues collectively and more efficiently.
- Ability to integrate S2S in between Kuali Financial System (KFS) and KC.
- Integration with Kuali research compliance modules (i.e. IRB, ICAUC, COI) built in KC.
IMPLEMENTATION OBJECTIVE

• Streamline and convert the current paper-based grant proposal submission and approval process into a S2S submission and electronic approval routing process

• Implement KC system close to baseline as possible and keep customizations to a minimum to facilitate future upgrades by adding custom fields

• Implement KC 3.1 Proposal Development and Award (PD/AW) module across UH’s ten (10) campuses

• Enhance proposals and awards tracking for reporting and management
IMPLEMENTATION OBJECTIVE

• Cut over from current infoEd (PT) to KC 3.1 (PD/AW) on November 1, 2011 at the central office

• Effective November 1, 2011, KC 3.1 Proposal Development phased-in across ten (10) campuses with mandatory conversion on Feb 16, 2012

• Using existing resources with the addition of two new developers

• Future integration with Kuali Financial System (KFS) after UH “go-live” date of July 2012
MAJOR STEPS

• Define Technical and Functional teams
• Establish the testing environment; install and configure the sand box
• Build User profile for testing
• Build Internal tracking system in Sponsored Program Office for reporting issues/bugs and fixes (i.e. JIRA)
• Test KC functionality and install the fixes including focus group testing (specific time and place)
MAJOR STEPS

• Assess and evaluate UH proposal submission process and reporting needs
• Map UH process/needs with KC features; determine KC functions to keep/modify/not use
• Adjust UH current process and review proposal submission policy as needed
• Determine sources of UH customized data required i.e. sponsors, organization hierarchy, performance sites, personnel data etc.
• Set up KC development environment to expand to larger group testing
STEPS UH TOOK

• As early as possible - Communication to the research community (informational sessions, newsletter, announcement, web site) – ensure no one left out and no surprises!!

• Develop Training modules (classroom and on-line)
  – Module 1 – Proposal Development/Creation
  – Module 2 – Approvers
  – Module 3 – Budget Development
  – Module 4 – Award
  – Module 5 – Post award – Accounting - KFS
STEPS UH TOOK

• Develop the current and KC comparison of proposal process for end user quick guide

• Phase In Approach –
  – November 1, 2011 KC went Live; option to submit proposal through KC; all awards recorded in system
  – December 1, 2011 Grants.gov System to System (S2S) proposal mandatory, optional for other submissions
  – February 16, 2012 mandatory for all proposals (i.e. Non S2S Grants.gov, all others)
STEPS UH TOOK

- Develop Frequently Asked Questions (FAQs) publicized in newsletter and on-line
- Develop Current and New Proposal process comparisons - in four categories – (S2S, None S2S Grants.Gov, None Grants.Gov, and all others) for quick references
- Branding UH KC system – *myGRANT*
- Enhance Helpline functions - 4 phone lines, extend service hours and remote desktop access
CHALLENGES

• Institution needs to fully test to verify how the system will behave and what fixes were included - application may not be fully tested or well documented before the release

• Each unit/campus has its own levels of workflow, develop systematic workflow to fit it all

• Manage level of expectations with Grants.Gov and non Grants.Gov submissions
CHALLENGES

• Key personnel outside of UH for proposal submission, since access is limited to employees within the UH community
• Phased-in approach with field requires temporary/interim processes be constructed for remaining old systems
• Limited Resources
KEYS TO SUCCESS

• Communication
• Listen, Compromise, Adjust, Communication again!
• Training options of on-line, classroom and just in time to meet diverse populations and physical locations
• Manage expectations
• Develop work-around if future releases will have the required “fix” for a particular functionality
KEYS TO SUCCESS

• Keep central office and field staff informed of the current and new process
• Use Kuali resources and functional and technical supporting groups
• Find Faculty Champions to help “buy-in” the system
• Post Implementation- Helpline support
STANFORD EXPERIENCE
Define your business needs: What are the current state issues that need to be addressed?

• Transparency
• Stand-alone systems requiring redundant data entry
• Inconsistent data elements requiring manual reconciliation across systems
• Inconsistent processes across multiple offices
• Processing delays
KEY DECISION-MAKING DRIVERS

• Does the system capture process metrics?
  • Increase efficiency through evaluating metrics
  • Continuous process improvements over time to adjust to business needs

• Can the system integrate with existing systems?
• Is there a willingness to change business processes to fit a new system?
• Is there key stakeholder consensus?
• Will system support and enhancement/upgrades be adequate for your institution?
BUILDING A SYSTEM: REQUIREMENTS FOR SUCCESS

• Strong institutional commitment
  • Time, money, resources, vision, flexibility

• Stakeholder buy-in and commitment to participate
  • Shared institution-wide vision
  • Significant time required from business users

• Business leadership
  • Politically savvy, knowledgeable across business processes, good communicator

• Clear expectations
  • Define Priorities: Meeting dates or addressing business needs
REQUIREMENTS FOR SUCCESS, cont.

• Commitment to system maintenance
  • system management
  • ongoing analysis and enhancement
  • client support

• Good project management

• Experienced technical resources
IMPLEMENTATION

• Identify high-level scope
• Start with current-state business processes mapping and analysis
• Identify the pain points and improvement opportunities
  • Process re-design
  • Technical solutions
MODULES TO ADDRESS KEY PAIN POINTS

Electronic Proposal Routing
- paper-based proposal data collection and routing form
- manual routing of up to 7 different signatures
- no tracking

Proposal & Award Transaction Processing
- need to replace old mainframe technology (1983)
- duplicate data entry
- no transparency

Account Set-Up
- non-integrated web-based account configuration form
- non-integrated financial system
- duplicate data entry and no transparency

Subawards & Subrecipient Monitoring
- non-integrated transaction database + monitoring spreadsheets
- duplicate data entry
- no transparency

Project Reporting & Closeout Management
- non-integrated closeout database
- duplicate data entry
- manual closeout notification process
• Set realistic & flexible timelines
  • Account for complicated business logic
    • Variations on transaction types require different data sets
      • Clinical trials
      • Program project grants
      • All proposal types
    • Opportunities to build in electronic sub-processes
      • Export control review and approval
      • F&A waiver
  • Expect delays and budget for them
IMPLEMENTATION, cont.

• Dedicate Subject Matter Experts
  • Needed through all phases of the project
  • Understanding business processes key to identifying intuitive system flow

• Identify governance and decision making bodies

• Ensure the business participates in a walk-through of the functional specifications
IMPLEMENTATION, cont.

- Keep in constant contact with stakeholders
  - Have feedback and status check sessions
  - Avoid last minute rejection
  - Set expectations
    - Not top end system out of the gate
    - Improvements will be made over time
- Commit time and resources for User Acceptance Testing
  - Agree to sign off on the product only when the system works and does what you need it to do
QUESTIONS?