Changing For Excellence
Business Case Goal Completion Report

Research Administration

Report Date
August 2016

Context
- The number of sponsored awards dollars per research administration FTE is low compared to peer institutions.
- Current research administration business processes at KU do not always fully leverage local expertise or authority.
- Research processes at KU underutilize technology and as a result many are overly manual, lack transparency, and are difficult to evaluate from an efficiency perspective.
- Generally, central (the Office of Research) pre--award processes are functioning better than post--award processes, although potential gains in efficiency exist in both areas.

Goals
For each goal answer the following: What percent is this goal complete? If the goal has been met, please describe how it was met. If the goal has not been met, how will you be completing this goal or why will it not be complete?

- Seek to better utilize strong local expertise to alleviate central workload and potentially provide a higher level of service to customers.
    - 100% completed - Even though this goal is officially designated as complete this is an area that will always be explored for future improvements. The Office of Research is working with Shared Service Centers (SSCs), Research centers, and department staff to improve localized expertise in key research administration-related areas, especially post-award and human resources-related functions. The Office of Research has provided training sessions specific to SSC staff, in addition to training and online resources available to all KU employees involved with research administration activities. The Office of Research will continue to collaborate with SSCs, Research centers, and departments to improve efficiency in research administration operations, and also work to develop better documentation to help all parties understand the underlying functions. ImageNow (IN) resources have been developed to provide access to SSCs for budget summaries, as well as other key documents.
- Strengthen the Office of Research operations, processes, and overall effectiveness (particularly on the Post-Award side).
    - 100% complete –Even though this goal is officially designated as complete, this is an area that will always be explored for future improvements.
    - Process mapping in 2012 by Huron to identify areas in need of improvement/streamlining. Areas under review included the Pre-Award, Post-Award and Contract Negotiations units, as well as some components of the Office of Research Fiscal Affairs area.
    - Restructured some areas for improved efficiencies including the development of an Award Processing Services team. A position was created in the Research Integrity unit to review all incoming awards for completeness, including compliance checks, documentation, and system records, prior to award set up. IN workflow has been developed to provide key performance indicators and metrics to facilitate increasingly efficient award set-up processes.
- Pursue system improvements that allow administrators to work more efficiently.
    - 90% complete
    - Implemented the Accounts Receivable & Billing system to replace a manual, labor intensive process.
    - Implemented Click COI and IRB in conjunction with KUMC.

- Adopted ImageNow (IN) for the following processes: award set ups, budget summary approvals, retroactive funding adjustments, A-133 audit verification, provisional award requests, and communication management to streamline research administration emails. This allows transparency, workflow, and time metrics that were unavailable previously. Future IN projects include pre-award processing and close letters for award closeout.
- Implemented ecrt® for electronic certification of effort. The Office of Research worked with Central IT, Payroll, Internal Audit, and other various stakeholders to implement the Huron-supported system for go-live in July 2016.
- Developed a Research Toolbox on myKU, in conjunction with Central IT. Office of Research is participating in ongoing development to add more utility and resources for administrators and investigators in the toolbox.
- Developed Tableau dashboard to assist with project billing and closeout. We are currently collecting requirements and setting standards for other proposed dashboards to provide process transparency and efficiency.
- Currently participating in Oracle Financials in the Cloud (FITC) implementation as part of Executive, Leadership, Core, and Functional groups. As a part of this implementation, Office of Research is currently seeking a Pre-Award Grants system to integrate with Oracle FITC and provide Pre-Award functionality. The Office of Research is working with Information Technology to identify viable electronic solutions to improve administrative efficiency and workflow. A workgroup has been established, a project manager from central IT has been dedicated to the project, and meetings have been scheduled to establish priorities and electronic solutions for any shortfalls in the current systems.
- Developing a database for administrative staff to use for Institutional Animal Care and Use data management including tracking congruence for animal use on sponsored projects; implementation is anticipated by October.
- Utilizing Wellspring to provide University leadership with data on intellectual property and licensing agreements; final deployment is planned for November 2016.
- Developing and implementing new procedures for sub-recipient payments to streamline processes. Process will include direct communication from KU Office of Research with the PI for faster payment to sub-recipients while including transparent communication with Post-award and SSCs.
- Implementation of new online submission of BSA and other contractual agreements process within Fiscal Affairs for contractual review and approval.
- Development of p-card training online with KU Human Resources new resource development system. Online training will allow both Lawrence based and outside of Lawrence campus ability to receive training within their schedules and faster access to utilize their KUCR p-card.

- Strengthen the caliber of research administration at KU by increasing skills and retaining top performers.
    - 100% complete- Even though this goal is officially designated as complete this is an area that will always be explored for future improvements.
    - Education/training: Thursday Research Topics (TRT) conducted monthly; Research Finance Officers meeting monthly; Grant Coordinators meeting quarterly; Research Administration 101 (RA101) offered in the fall semester annually; SSC training as requested/needed; professional development opportunities external to KU as appropriate.
    - Federal agency weekly e-mail to announce changes at the federal level as they arise.
    - Managing Federal Grants publication made available as a resource.
    - Award Processing Services training conducted by Huron in conjunction with developing desk references and other job aids.
    - Developed performance and quality metrics.
    - Blackboard site contains resources for the campus research administration community.

Overall, how did goals change during Changing For Excellence and what goals were added or removed:

- System Improvements:
    - Electronic system improvements continue to be a challenge (as they tend to be nationally). Major system changes require expertise (within KU and outside of KU) and are costly. The Office of Research is partnering with central IT to identify the most expedient and cost-effective approaches to electronic oversight of research administration functions (especially as some of these are becoming more decentralized with the growth of the Shared Service Centers); with the decision to implement FITC, the full-suite research administration system plans were modified to focus on a Pre-Award system to integrate with the FITC. Manual effort certification processes were determined to be inefficient and insufficient, a new electronic effort certifications system was implemented.
- Strengthen Caliber of Research Administration:
    - Through this process, opportunities to develop a certification program at KU for research administrators have been explored. In the discovery phase, an in-depth look at the Research Administrators Certification Council program was performed. During this process one of the Post-Award staff took the course and test. The Office of Research Post-Award Services now has a certified research administrator. Communication has been distributed to research administrators across campus to make them aware of this certification process and the benefits associated with the knowledge to be gained is being developed.

Challenges

- Effective change management is a major factor in successfully implementing the recommendations posed in the business case.
- Within the Office of Research fear exists regarding holding local units more accountable for compliance as local support currently has variable skill sets and conflicted reporting relationships.
- The requirement of a high level of cross-functional collaboration to implement potentially the most impactful recommendations presents a major challenge.
- Elements such as a defined leader, clear executive support, financial resources, and a clear and defined implementation plan pose significant challenges to successful implementation.

Describe if these challenges were encountered during Changing for Excellence and what unanticipated challenges occurred during the process:

All of the above will, we believe, continue to be ongoing challenges, but the Office of Research has developed documentation and conducted extensive training so we believe that these challenges will eventually become less "challenging." Better electronic systems will improve our ability to share centrally-held information with units outside of the central office and should help address staying in front of any applicable compliance issues. The extent of resistance to change was not obvious until significant changes were implemented; leadership is continuing to working with key stakeholders to mitigate and manage any resistance to change and to provide clear executive support, communication and adequate resources to support these changes.

Opportunities

The expected benefits of implementing research administration improvements are process-related and are achievable through:

- Increased effectiveness in serving KU's research customers both at a local and central level
- Better utilization of technology leading to more efficient and transparent services to customers
- Minimal compliance risk to the University
- Potentially reduced overall cost of the research administration enterprise at KU with minimal disruption to customer service.

Describe if these opportunities occurred during Changing for Excellence and what unanticipated opportunities were realized during the process:

- Increased effectiveness in serving KU's research customers both at a local and central level
  - The SSC implementation has just been completed in July 2016, but we believe that once we have developed both local and centralized expertise in key research topic areas this arrangement will prove to be a great benefit to the researchers as well as to the university at large. Office of Research continues to work with SSC leadership to develop comprehensive research administration training materials, including instructional videos, and work with the SSCs to ensure that roles and responsibilities are clearly defined to ensure exceptional service with no overlap in duties. Training for the last SSC, ETE, on basic research administration concepts is being performed by Office of Research staff.
- Better utilization of technology leading to more efficient and transparent services to customers
  - The Office of Research has adopted improved interfaces in conflict of interest reporting and the human subjects committee interface and has also benefitted from the university-wide accounts-receivable/ billing implementation. A web-based grants management system, focusing on Pre-Award functionality, would significantly improve the efficiency of the research enterprise. Electronic effort certification is more efficient and, although only implemented in July 2016, is already providing greater compliance for effort certification.
- Minimal compliance risk to the University
  - With some of the compliance risk spread to SSCs and research centers, the necessity for shared technological (online) interfaces to administer information becomes a more important goal. This is a work in progress, but steps (detailed above) are being made to share resources.
- Potentially reduced overall cost of the research administration enterprise at KU with minimal disruption to customer service.
  - Better electronic systems will improve the efficiency for all sides—both the end-users and the Office of Research. These improved electronic resources will also benefit the research community as a whole in allowing the transparency and structure necessary for systematic monitoring the every-increasing compliance regulations that are put in place at federal, state, and agency levels. This is a work in progress.

Changing For Excellence Summary
Summarize the process to date and lessons learned. Provide specific future direction, next steps, and strategy for this business case. Indicate what metrics will be used to measure success:

Lessons learned:

- The comprehensive lessons learned document developed for the Accounts Receivable/Billing project is included below*.
- Ensure that current state business processes are documented.
- Assign owners of business practices and documentation.
- Communicate clearly and repeatedly at all phases of change/project.
- Change is difficult; must manage change, and ensure staff and stakeholder buy-in.
- Monitor sustainability of change or current state business processes through metrics. For example, dashboards to track key AR/BI elements including billing, receivable balances, award closeout, and PAS Award monitoring have been developed. Quality Assurance queries around AR/BI elements are reviewed on a weekly basis by staff, and on a monthly basis by leadership.
- Ongoing training is critical to the success of an organization.
- Transparency is vital for effective management, informed business decisions, and the overall success of the organization.

Future directions, next steps, and strategies

In Process

- Short, informative training videos are being created to share central knowledge with SSCs, departments, and research centers around research administration topics. Future videos are planned for investigator audience.

These videos will be hosted online and usage statistics will be collected to measure success. This is still a work in progress; although several videos have been created and posted for the research administration staff to utilize.

- In addition to working with SSCs, departments, and research centers to utilize strong local expertise, the KU-L research enterprise is continuing to work with colleagues at KU Medical Center Research Institute to leverage their expertise and share our own. This relationship has grown over the past year and will continue to develop so that shared resources, processes, and policies can be developed. Workgroups have been developed around key research areas that have both KU-L and KUMC-RI staff to further this process. Success will be based on the development of these shared materials and the strengthening of the relationship between the two organizations.
- Current initiatives are continuing to ensure each unit in the Office of Research has business process documentation, as well as a central online repository for these processes. Each unit will have an individual tasked with keeping these processes current in the repository. Success, measured by units' documentation completeness, will be measured during the yearly inventory of documentation repository. This is an ongoing goal, especially important as we look at changes in business practice to implement FITC successfully.

Future Directions

- Utilize AR/BI lessons learned for the FITC implementation.
- Continue to work towards a Research Administration Certification Program, based on past and current accomplishments in this area, to build KU research administrator caliber.
- After FITC implementation, develop AR/BI cross-training between Post-Award teams, billers, Fiscal Affairs, and SSC staff to promote learning and ensure staff have a comprehensive understanding of the system. The AR/BI dashboards, and the metrics contained therein, will then be used to monitor progress and successes around billing, receivables, collections, award, and overall management. Increased staff self-sufficiency in carrying out system tasks will demonstrate success of this initiative and of the FITC implementation.
- Develop and implement change management training to ensure those who are enacting changes/leading projects are aware of the stakeholder needs and barriers before implementation. Use experience from the successful implementation of ecrt and the ongoing implementation of FITC to provide examples and lessons learned for future projects.
- Metrics that are used to measure performance will be analyzed, and refined as necessary, to ensure that the metrics that are being reviewed support the key performance metrics that have been established to build the success for the Research enterprise.

*Accounts Receivable/Billing Lessoned Learned:

- Project Objectives:
  - Build Efficiencies – Reduce dual data entry and reliance on manual processes.
  - Improve Data Quality – Issue standard processes to be used across teams for the creation of reports and reconciliations.
  - Enhance Reporting – Create a foundation and standard reports specific to billing and accounts receivable. Reduce manual processes for operational and sponsor reporting.
  - Manage Billing and Accounts Receivable – Enable transparency of invoicing, aging and collection activities. Eliminate manual processes and current shadow databases.
  - Increase Communication and Efficiency – Facilitate more efficient issue resolution between Post-Award and Financial Services.
  - Increase Internal Controls – Strengthen BI-AR internal controls in Financial Services and Post-Award.
  - Cash Flow Tracking and Control – Increased transparency to expected and uncollectable cash, and cash management.
- Impact
  - **Transform Culture**

        - Understanding and appreciation of end-to-end business process and downstream impacts
        - Need for communication across previously disparate groups
        - Clarification and documentation of standard processes and practices, in and out of system
        - Recognition of need to maintain integrated environment (PS, DEMIS, BUDCAST)
    - **Understanding of having an Integrated System**
        - Data inconsistencies are highlighted
        - Budget errors, correcting transactions must be resolved real-time
        - Setup errors must be resolved real-time
        - Clear definition of data elements in the system
        - Reconciliation of modules and need to be in sync continuously
        - FMS System support onsite in the Office of Research (Michelle S)
- Project Planning and Initiation
    - <u>Repeatable Items</u>
        - Perform business area data clean-up and identify outstanding issues prior to Planning.
        - Conduct dedicated project planning, addressing scope, schedule, and resources.
        - Engage action-oriented and constructive campus SMEs.
    - Actionable Items
        - Insist on broad representation from director and manager-level leaders in FMS, IT, and business area (the Office of Research).
            - Expected result: Ensure buy-in at all levels prior to project design start.
        - Assign full-time business area SME with access to authority by core team. Employees will be fulfilling two roles throughout the process so it is necessary to backfill the positions.
            - Expected result: Enable more timely and accurate analysis and decisions, create superusers in business area, ease process owner transition from FMS to business, and shorten stabilization period. If there's a change in SME the new SME should receive orientation to bring them to current state.
        - Ensure project team roles are clearly defined and filled with team members with the appropriate skillset.
            - Expected result: Achieve desired defined project objectives.
        - Assign business area leader to confirm organization readiness.
            - Expected result: Expose risk areas, confirm project buy-in and ability to absorb responsibilities. Increase internal communication.
        - Identify current sate business processes and bring users into alignment through ad hoc training prior to project start.
            - Expected result: Solidify planned business processes prior to designing into new system. Reduce scope creep and shorten stabilization period.
        - Conduct PeopleSoft module and related skills training for all core team members (including IT) during Planning
            - Expected result: Accelerate productivity of KU contributors.
        - Dedicate IT system architect during Planning. Continue architect involvement throughout development cycle.
            - Expected result: Validate estimates, facilitate transition to detailed estimates.
        - Clarify ongoing support model and required FTEs early. Include new resources in project staffing approach. (FMS, IT, departmental)
            - Expected result: Onboard production support FTEs earlier to accelerate their training/knowledge transfer and create productive team members that can be leveraged on the project.

- Project Execution
  - Repeatable Items
    - Continue relationship building among FMS, the Office of Research, and IT.
    - Continue use and enforcement of documentation standards for configuration, test scripts.
    - Maintain robust "gold" configuration documentation.
    - Assign dedicated Conversion Lead early to design conversion approach, coordinate and execute mock conversions, identify data-related clean-up, and track overall progress.
    - Balance conversion scope to manageable volume while addressing business needs.
    - Perform hands-on training with end users. Make available and encourage use of practice environment as early as possible.
    - Conduct formal go/no-go readiness process.
    - Execute readiness checklist prior to go-live to assess likelihood of success and mitigate risk areas.
  - Actionable Items
    - Conduct FIT/GAP that accurately reflects the requirements vs. system functionality – considering current state business during this process.
      - Expected result: More accurate starting point for system design.
    - Designate SME(s) as business area liaison to vet business process issues and options with Leadership.
      - Expected result: Stronger understanding of decisions made along the way, quicker knowledge transfer, and increased system ownership.
    - Create formal transition plan for key team members/representatives due to vacancies and changes in assigned responsibilities.
      - Expected result: Enable continuity of work and risks/tasks to be proactively managed.
    - Require metrics to support reporting requirements.
      - Expected result: More accurate understanding of go-live criticality.
    - Lock in scope early, with departments and modifications. Hold the line during execution with scope change process.
      - Expected result: Transparency to scope creep and changing requirements, formal re-estimation of scope, schedule, and resources.
    - Avoid overlapping roles and responsibilities across the project(s) and production support.
      - Expected result: Clear accountability and increased ability to hit deadlines.
    - Finalize future state system processes and modification development before Test to allow time for script writing.
      - Expected result: Speed script writing process and increase accuracy.
- Project Stabilization
  - Repeatable Items
    - Strong emphasis on sustainability through metrics.
    - Continue to enhance FMS team's capabilities in core PeopleSoft and troubleshooting.
    - Continue collaboration with business process owners to refine and solidify business processes in system.
    - Train across business functions to encourage greater depth of understanding across roles.
  - Actionable Items
    - Transition business process ownership earlier in the implementation through dedicated business area SME(s).
    - Communicate information regarding expected timeline of stabilization period.
- Project Management
  - Repeatable Items

        - Co-locate team. Establish email distribution lists.
        - Maintain weekly joint FMS/IT/consultant PM meeting.
        - Use high-level estimates to balance scope, schedule, and resources. Refine over time to increase accuracy. Utilize milestones.
        - Continue utilizing improvements made to project status reporting and transparency to tasks.
        - Leverage Options and Scope Change templates and processes to weigh pros/cons and increase transparency to Leadership.
        - Dedicate time to task-level project planning with assigned resources and due dates.
        - Utilize IT-assigned project manager to facilitate KU project methodology.
    - Actionable Items
        - Align dedicated project management effort to project size and complexity.
            - Expected result: Increase likelihood of overall project success.
        - Utilize RIS assigned staff to facilitate KU project methodology
            - Expected result: Increase likelihood of meeting overall project deadline
        - Establish a single, transparent issue management system to facilitate collaboration, status tracking, and accountability.
            - Expected result: Reduce status meetings/calls, timely hand-offs, better project management.
        - Establish escalation process at the onset.
            - Expected result: Less status meetings/calls, timely hand-offs, better project management.
        - Redesign the FDD template and development lifecycle to support more collaboration between FMS, IT, and consulting partner. Document final process.
            - Expected result: Underscore accountability in business and project team. Reduce FMS/IT/consultant back and forth.
        - Perform in-depth FDD process and expectations overview for entire core team during Fit-Gap phase.
            - Expected result: Reduce FMS/IT/consultant back and forth.
        - Secure bandwidth to intake consultant knowledge during the project.
            - Expected result: Elevate KU skillsets earlier and reduce dependency on consultant resources. Shorten stabilization support period.
        - Identify a document management tool with versioning capabilities and easy accessibility by business area representatives.
            - Expected result: Reduce burden to store documents on shared drive and increase transparency among the project team. Enable more participation by business representatives.
- Leadership and Sponsors
    - Repeatable
        - Maintain relationships (FMS/Office of Research/IT)
    - Actionable Items
        - Conduct collaborative FIT/GAP sessions, ensuring appropriate team participation.
        - Ensure resources have appropriate skillset before assigning to project team roles.
        - Communication – Ensure key changes to business processes are clearly communicated.
        - Establish realistic timeline based on plan and available resources.
        - Allot time for unanticipated issues.
    - Business Area (the Office of Research)
        - Repeatable
            - Perform business area data clean up and identify outstanding issues prior to the planning phase

        - Knowledge transfer among team members
        - Relationship building with FMS
        - Pre-conversion data clean up
        - Clean up and closing of old projects
    - Actionable Items
        - Regularly confirm schedules and participation for business area representatives. Establish notification procedure for changes.
        - Use business process documentation for new employee training.
        - Plan for business area data clean-up during the project and hold one person accountable for completion.
        - Define roles of all team members
        - Ensure that there are enough resources to perform clean-up activities while also meeting daily business needs. Backfill positions as needed.
        - Development of QA process to ensure integrity of AR/BI system.

Post-Changing For Excellence Updates (Completed Projects Only)
The CFE business cases, while complete for routine reporting purposes, are never considered done as they are constantly being monitored and grown. ***With this in mind, please provide your detailed strategies on the continued growth and development of these business cases.*** *Information about how units continue to improve and innovate from these business cases should be addressed. Details could include information about refining processes, new projects, measuring success, metrics being reviewed, and other methods for understanding improvements.*

- Seek to better utilize strong local expertise to alleviate central workload and potentially provide a higher level of service to customers.
    - The Office of Research continues to work with Shared Service Centers (SSCs), Research centers, and department staff to improve localized expertise in key research administration-related areas, by presenting ongoing opportunities for professional development and training in the form of grant coordinator meetings, Thursday Research Topic sessions, and specialized training for new SSC staff.
    - A future process on which Office of Research is partnering with Payroll and the SSCs is the streamlining of payroll keying to utilize SSC staff expertise and reduce redundant entry. The pilot for this project is currently being reviewed and will be implemented in Fall 2016.
- Strengthen the Office of Research operations, processes, and overall effectiveness (particularly on the Post-Award side).
    - IN workflow has been developed to provide key performance indicators and metrics to facilitate increasingly efficient award set-up processes and email response time.
    - Office of Research staff is continually working on process improvement. A new project to further increase overall effectiveness is slated for 2016-2017; Office of Research is in the planning stages of implementing the Toyota Production System to streamline the Office's overall operations and processes.
- Strengthen the caliber of research administration at KU by increasing skills and retaining top performers.
    - Ongoing education and training includes
        - Thursday Research Topics (TRT)
        - Monthly Research Finance Officers meetings
        - Quarterly Grant Coordinators meetings
        - Research Administration 101 (RA101) offered annually in the fall
        - SSC training as new SSC is implemented and then as requested/needed
        - Professional development opportunities internal and external to KU, as appropriate.
        - Federal agency weekly e-mail to announce changes at the federal level as they arise.
        - *Managing Federal Grants* publication made available as a resource.

        - Blackboard site is continually updated as a resource for the campus research administration community
        - Research Toolbox development on the myKU portal
    - Future improvements include
        - Additional training and reference videos for research administrators
        - Continual updates on training on Uniform Guidance (since there are still many lessons to be learned and changes in agency implementation and procurement guideline). We hosted a Promising Practices webinar in July 2016 and have a procurement expert slated to give a training in Fall 2016.