Office of Institutional Research and Effectiveness
and Effectiveness
UNIVERSITY OF COLORADO
DENVER | ANSCHUTZ MEDICAL CAMPUS

Office of Institutional Research and Effectiveness (OIRE): Strategic Plan FY 2014 – FY 2016

Updated April 1, 2015

I. **Enhance OIRE staff and resources so that we are better positioned to respond to our constituents**

    A. Continue and augment staff crosstraining (skills, process, practice, policy)

        1. Ensure a physical office structure that facilitates collegial and frequent communication, proximity that promotes the generation of new ideas/processes [CSB]

            a) Jumpstart the scanning project – Outside vendor hired, no data files received as of yet (6-25-15) [JLF] - data files and physical files expected back in OIRE offices the week of December 14th; Jeff is coordinating with the vendor.

        2. Update current matrix of crosstraining/development opportunities (discontinue use of the MS-Excel workbook for updates - instead use the data table in the Data Warehouse [tbl1000000401_CrosstrainingTasks]) to be sure to also include processes, practices, and policies [HD] 20130066

            a) Link in the How To guides folder with the cross training document. 7/25/2013.

            b) Hailey has been coordinating the effort to update the crosstraining matrix. Good headway has been made in the documentation as well as the actual crosstraining efforts/plans.

            c) Consider staff members' busy/slow times to schedule crosstraining sessions

            d) Need to update the document because of staff turnover – CSB to take initial whack, then set up meeting to confirm.

            e) ALL staff to review tbl1000000401_CrosstrainingTasks – Jan 4

            f) Improve functionality of the matrix: create a data table [tbl1000000401_CrosstrainingTasks] so that we can query it (to get lists of responsibilities, etc.) [JLF]

        3. Develop formal and informal strategies to gain and maintain traction in achieving identified crosstraining/development (e.g., standing meeting/collaboration times) [HD + ALL]

            a) Summer – Fall 2013: Standing meetings have been scheduled between Paula and Dave to work on the SIS-ISIS conversion.

            b) Summer 2013 – 2015: Meetings between Paula, Dave and Christine have been scheduled and held to move forward on the grad/retention infrastructure.

            c) FY2014 – Data Dictionary meetings with Keeley, Dave and Paula

            d) Fall 2013: Initial crosstraining begun for new CDHE/CU Performance Measures – successfully completed

            e) Winter/Spring 2014: Christine conducted crosstraining sessions with Amanda, Hailey, and Marlon on strategic planning; 2015 – Paula involved in strategic planning; Dave has interest as well.

            f) Interactions with OIT [JLF] - Jeff is regularly attending webinar, discussion groups and planning meetings with various OIT groups (UWS, RSS, LAN Admins, etc.)

            g) Distributed maintenance of datamarts – develop these skills – NEED AN ACTION PLAN FOR THIS – Jeff/Dave

            h) Data cleanup and audit streamlining – develop these skills – NEED AN ACTION PLAN FOR THIS – Jeff/Dave

        4. Set up clear expectations of both mentee/learner and mentor/teacher

a) How to accomplish this has been outlined in P:\2013\20130066_IRStrategicPlanFY14\OIRE Crosstraining -- Setting Expectations.docx

b) Crosstrainer develops brief set of procedures that is then augmented by crosstrainee OR does the pair discuss this first, then decide how this works out??

B. Continuous improvement/enhancement/tweaking of internal data infrastructure (e.g., New PT website, integration of various HR-related data (e.g., HR datamart, eFRPA, teaching load), SIS-ISIS conversion [JF]

1. Develop a timetable chart for milestones for each of OIRE's major data infrastructure (to include tangible/specific project outcomes) -- [JF] (Waiting on additional OIT infrastructure changes to be announced in mid-December 2015 to finish this task.)

- Classroom Utilization and other datamart tasks will be added to the "infrastructure" documents

2. Documentation (data and process metadata) – See IC1b
   a) Organize/document the crosstraining processes
   b) CU System is purchasing Data Cook Book
3. Momentum for OIRE's data infrastructure gained via:
   a) New server
   b) New OIT opportunities – results in more time for Jeff to allocate towards OIRE data systems
   c) Dave's progress: grad/retention, class/instructor datamarts, SURDS process streamlining, SAS downloads, ad hoc performance tuning, automated production of Hailey's reports, student data datamarts, departmental data mapping for student data
   d) Hardware upgrades – personal computers, monitors, etc.
   e) Student Attribute tables in IRDW (outgrowth of our grad/retention infrastructure)
4. Per direction from the Provost, OIRE is responsible for evaluating Activity Insight (an FIS) and CoursEval
5. Qualtrics purchased by OIT (2015) – OIRE leads User Group
6. Elements that still need attention:
   a) SIS/ISIS data mapping on hold – instead, perhaps, the focus should be on key elements (e.g., majors), testing
   b) Instructor workload analyses – lower priority, but still needs done
   c) Elevate (HR upgrade)

C. Develop the process for the documentation/models/templates of metadata (data and process metadata)
1. This element is integral and integrated within many of our specific goals and objectives
2. Need for OIRE to integrate this within our own business processes

D. Utilize opportunities so that OIRE staff members become more exposed to other institutional units (to enhance our own understanding/knowledge) [CSB] (also consider meta data)
1. Develop a comprehensive plan to infiltrate these other units (e.g., targeted brown bags, units' staff meetings) and share that knowledge with other OIRE staff

II. **Provide more (quantity and details) relevant information to our constituents**

A. Augment existing and/or develop new self-service tools for our customers [PJD and DMD]
1. Central administration users (university-level with capacity to drill-down)
   a) Decisions regarding what tool(s) and data sources will be used (and how these decisions impact other business units, e.g., Registrar)
   b) Parameterized reports (scorecards, dashboards, reports, maps) to include graphical elements and more interactivity
      1) Determine data elements, time frames, design elements based upon best practices, articulated needs, etc.
2. Narrow focus for, e.g., departmental details

a) Decisions regarding what tool(s) and data sources will be used (and how these decisions impact other business units, e.g., Registrar)
    1) Fall/Winter 2013: Meetings with UIS to discuss using Cognos
    2) SSRS strategy has been revived – need to make decisions, timelines, etc.
       • Already available to limited set of users
         (i) Delineate existing set of users
         (ii) Delineate existing SSRSs
    3) Excel Power Pivot in SharePoint coming available – KS to provide demo

b) Parameterized reports (scorecards, dashboards, reports) to include graphical elements and more interactivity
    1) Determine data elements, time frames, design elements based upon best practices, articulated needs, etc.
       • Develop a list of recurring reports/audiences that could benefit from SSRS/Tableau reports [All]

c) What content do we want to publish/make available? This will drive what tools we use. Also determined by:
    1) Audience
    2) Level of interactivity
    3) Format of the output

d) Next steps:
    1) ID existing projects where:
       • Time investment in formatting
       • Drilldowns needed
       • Highly detailed or voluminous output
       • Online/offline
       • Suggestions: DBR (one SSRS already exists)
       • What inferential stats are needed/available?

B. Focus more on analytical projects [CSB]
  1. Identify opportunities to develop analytical projects out of already existing recurring requests ("existing gems"), value-added offerings [all]
    a) Ongoing research
    b) Predictive Modeling
    c) Faculty Salary
  2. Augment responses to requests with, e.g., graphs, explanations [all]
    a) This requires a culture shift/process change
    b) Potential metrics: trainings, feedback from IRAG, tweak item within customer satisfaction survey (e.g., "information provided to you had adequate interpretation/meaning")
    c) Use recurring requests/reports as a springboard for identifying products to enhance [all]
    d) Written interpretation of the data [ALL]
       1) Provide 3-5 main messages from the data -- these highlights don't need to be rocket science. Sometimes the obvious is what you need. What should they know? What do you want to tell them about the data? What are you concerned about?
       2) This process may reveal problems/issues before you distribute the data and/or may suggest enhancements to the existing data presentation (data tables, charts)
       3) Ask an IR colleague to review these before you send the info
       4) This takes time -- allow for this in budgeting your time for the project
       5) Keep in mind that you may already be spending this time (e.g., by answering follow up questions, revamping output) and a pre-emptive approach might actually save you time

6) Include interpretation in "attachment" as well as in the email back to the requestor (don't create a separate file) – template(s) to be updated – [HW]

7) If you have a discussion about the "product" -- how do you incorporate the results of that discussion within the original "product"? Update the file with a summary of the discussion and resend out -- augment the original highlights with the new interpretation/discussion pieces.

e) Visual interpretation of data

1) GIS -- mapping, spatial analysis (density of some population vs. density of, e.g., Colorado population), alumni, employees

2) Enrollment reports [DMD] [PJD]

4) Apps/admits/enrolled -- provide conclusions/interpretations? Partner with Carrie? [HW] [MDB] [DMD]

5) Graduation/Retention rate charts [CSB]

f) Identify examples of best practices (e.g., Tufte, IR best practices)

3. Remain attuned to higher education environment and other IR resources to perceive trends that impact these

III. Create a shared understanding across the institution of OIRE's roles

A. Take a leadership role in managing information, guiding information distribution, digesting information and process improvement for the institution

1. Continue to engage in dialogs with our external constituents to guide the development of new required accountability metrics

2. Role in surveying, survey re-education, other tools

a) Summer 2013 – Fall 2014: Christine is collaborating with the Survey Working Group to develop survey resource materials for the institution

b) OIRE Survey webpages: Jeff Christine and Keeley working on Survey webpages for IR including a web calendar of institutional surveys.

c) Qualtrics and User Group

d) NSSE [20120187] [CSB] [KS]

B. Establish role in data collection, management and reporting from supplemental data systems [NES][JLF]

1. Become more knowledgeable about data systems and how they are used (separated out AMC and DC because we thought that we would have different strategies, etc.)

a) General Information and Campus Agnostic Tasks (10004201-02):

b) AMC (perceived need here)

1) AMC Open House: intentional strategies to initiate conversations about AMC needs/data repositories, OIRE's offerings (this dovetails into IE) [MDB]

- Planning group (MDB, PJD, CSB) met 8-25-15

2) HSL's AMC Open Houses [CSB]

c) Denver Campus (Initial efforts made during FY13)

1) Intentional strategies to initiate conversations about Denver Campus needs/data repositories, OIRE's offerings

d) Student data systems

1) Continued partnerships with Registrar and Student Affairs to assess value of external data systems to other institutional constituencies and integration within larger student data system

2) Evaluation of proposed new data systems by other units (e.g., Royall, Visual Zen, CLAS Advisors)

3) Determination of use of Canvas data? Should we be integrating/using these data?

- Summer – Fall 2013: Discussions with CU Online to evaluate feasibility of setting up an ETL from Canvas to the OIRE data warehouse (under the auspices of the LynxLinks project) – Mothballed for now

2. Faculty data systems
    a) Data analytics and reporting to enhance the use and understanding of the data collected/used in these systems (e.g., eFRPA, Teaching Load)
3. Other data systems (e.g., Early Alert, alumni, grants and contracts, Profiles, CU foundation, CoursEval/FCQ, space management, housing, Canvas, SalesForce, veterans)

C. Increase involvement in the institutional and unit strategic planning and processes [CSB]
    1. Understand the strategic planning process for each school/college
        a) Potential vehicles: IRAG, NSSE, AD/ASG, UWG, SWG
    2. Ensure OIRE representation and active participation in the institutional strategic planning process