FACULTY INFORMATION SYSTEM
IMPLEMENTATION PLAN

Plan for the implementation of a secure, web-based, university-wide platform of integrated data on faculty for generating actionable metrics for strategic planning, reporting, and establishing a hub for internal and external collaboration.

April, 2018
GOALS AND OBJECTIVES

The main goal of this project is to utilize the existing School of Medicine faculty information system structure to build an expanded customized platform that will serve as the master record of data about all full- and part-time faculty activity and characteristics at CWRU. The following will be included in the system:

- Rank and tenure information
- Degrees earned
- Appointment and compensation history
- Instructional assignments
- Other appointments (administrative, secondary, professorships, etc.)
- Academic assignments (professional activities, scholarship, public and university service)
- Committee participation
- Demographic information (gender, race/ethnicity, citizenship, campus location, email address, etc.)
- Unit/school-level role and object-based access and security for all administrative workflow events
- Integration with SIS, HCM, SPARTA, and other external data providers needed to populate/complete the faculty member record.
- Approval workflows for individual events, and batch transactions, all based on role.

The project will require a minimum of the following resources:

<table>
<thead>
<tr>
<th>Project Manager</th>
<th>Architect</th>
<th>Trainer / Technical Writer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Analyst</td>
<td>Designer / Developer(s)</td>
<td>Records Coordinator</td>
</tr>
</tbody>
</table>

The FIS implementation consists of three planned phases. Each phase will proceed using an “agile” development approach where requirements are deployed in releases. This approach aligns development processes with stakeholder expectations and goals. Other benefits of agile development include:

- Transparency
- Early and Predictable Delivery
- Predictable Costs and Schedule
- Flexibility
- Improved Quality

**Phase I:** Expand the School of Medicine’s FIS platform to create an enterprise-wide solution. Release 1 (targeted for fall 2018) will incorporate the following functionality:

- Basic search
- View records
- Simple report generation
Additional releases are planned for Phase I, with specific functionality to be determined.

**Phase II:** Fill in missing administrative components (e.g., workflows, recruiting and hiring, auditing, etc.)

**Phase III:** Enhance the Faculty Activity Reporting and collaboration components

This software will meet or exceed university software standards and additional requirements established in the initiative charter, and make the end user’s interaction with the FIS as simple and efficient as possible for accomplishing each task. The scope of this project also includes completion of all documentation, manuals, and training aids to be used in conjunction with the system.

**PHASE I: RELEASE 1**

Phase I implementation began in July of 2017, and focuses on providing search, view, and simple report generation access based on existing faculty data migrated from the Provost’s Office and School of Medicine databases. This process consists of the following:

- System requirements and business process validation
- System design and testing
- Training and documentation

**RELEASE 1 - MILESTONE TARGET COMPLETION TABLE**

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Description</th>
<th>Begin</th>
<th>End</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiate and Launch</td>
<td>High-level activities surrounding requirements gathering, process mapping, system source identification. All requirements are documented to ensure the future application reflects those requirements and meets FLI specifications.</td>
<td>07/2017</td>
<td>03/2018</td>
</tr>
<tr>
<td>System Plan / Design</td>
<td>This is the theoretical design for the system and its functionality, and determines how the system will meet all specified requirements.</td>
<td>08/2017</td>
<td>03/2018</td>
</tr>
<tr>
<td>System Development</td>
<td>The actual construction phase of the FIS.</td>
<td>03/2018</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Development Testing</td>
<td>All functionality tested and all identified errors corrected</td>
<td>04/2018</td>
<td>Ongoing</td>
</tr>
<tr>
<td>End User Testing</td>
<td>End users evaluate whether the system has complied with all of the outlined requirements and to see that it meets Quality Standards.</td>
<td>Summer 2018</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Training and Documentation</td>
<td>Define the needs, design and layout, content of the training, schedule, and end-user documentation materials</td>
<td>Fall 2018</td>
<td>TBD</td>
</tr>
<tr>
<td>Release 1 Deployment</td>
<td>The system is ready to be deployed and accessible to end users</td>
<td>Fall 2018</td>
<td>TBD</td>
</tr>
<tr>
<td>Institute Communications</td>
<td>Launch campus-wide communications regarding the FIS implementation</td>
<td>Fall 2018</td>
<td>Ongoing</td>
</tr>
</tbody>
</table>
MILESTONES

1) Initiate and Launch
   - Submit Project Initiation Form to initiate UTECH process
   - Obtain funding approval for implementation
   - Validate business requirements and business process flows
   - Identify and engage key stakeholders

2) System Plan / Design
   - Identify specific designs, databases and workflows related to the FIS
   - Determine system data model
   - Identify what tools and software will be used to create the application
   - Outline system roles
   - Identify integration requirements
   - Develop the Entity Relationship Diagram
   - Build the database

3) System Development
   - Integrate into AWS Cloud
   - Data map and import existing data
     - Provost Database and School of Medicine current system
   - Resolve multi-data source conflicts/duplicates
   - Integrate with data sources
     - Faculty Information Sources - Sparta (Grants), HCM (Demographics, Visa, Address, etc.),
       SIS (Courses)
     - Publication Sources (PubMed, Scopus, etc.)
   - User Experience / User Interface Development
     - Development of the process and/or information flow of the system
     - Create a prototype of the developed design
     - Conduct a usability inspection of the prototype to evaluate the design
     - Design the final graphical user interface based on the outcomes of the prototype
       evaluation and testing

4) Testing
   - Develop a test plan strategy
   - Develop test cases and scripts
   - Perform system and load tests
   - Utilize the FIS Review Board in usability testing to evaluate the experience
   - Conduct user feedback sessions with faculty to evaluate the prototype design
   - Design the final graphical user interface based on the outcomes of the prototype evaluation and
     testing
5) Training and Documentation
   • Develop a training schedule for each functional and technical area and make sure it is published in the community.
   • Test training materials for accuracy.
   • Test training database to ensure it is working and includes all customizations.
   • Train instructors so they are comfortable with the material and the training database.
   • Make sure instructors have a script to run all processes.
   • Produce accurate numbers of training documents and materials.
   • Deliver training to the end users.
   • Create additional training as necessary based on the needs and feedback received while training is in progress.
   • Design and develop an end-user training manual that provides functional and technical system support information and includes navigation paths and report generation assistance.

6) Phase I Deployment

The system is ready to be deployed and accessible to end users when institutional test environments and testing practices are concluded, and the following has occurred:
   • Develop a rollout plan
   • Accomplish production release activities
   • Complete end user training
   • Adopt Faculty Lifecycle Initiative Data Principles

7) Communications

A communications plan will be instituted in fall 2018 and will guide communications throughout the life of the implementation. The plan will be updated as communication requirements change. The plan will include the following:
   • FIS project team members’ roles and responsibilities as they pertain to communications
   • A communications matrix which maps the communication requirements of this project
   • A project team directory of contact information for all stakeholders directly involved in the project
   • An FIS Implementation website
Release 1 Timeline: Basic System View

- **Jul-17**
  - Submitted Project Initiation Form to UTECH

- **Oct-17**
  - Established the FIS Review Board and Steering Committee
  - FIS Implementation Kick-off
  - Obtained funding approval for implementation

- **Jan-18**
  - Completed System Design Phase
  - System User Role Workshop

- **Apr-18**
  - Completed validation of business requirements and business process flows
  - Begin Data Migration and Mapping Process

- **Aug-18**
  - Migrate existing faculty data from Provost’s and SOM systems
  - Finalize Roll-out plan

- **Nov-18**
  - Gather and evaluate testing feedback
  - Launch Communications Plan
  - Finalize Communication Plan
  - Proposed Fall 2018 Release 1 Deployment
IMPLEMENTATION LEADERSHIP

The FIS Project Leadership Team manages the project scope, strategies and plan, resource allocations, and budgets, supports the vision and goals of the project, provides guidance for policy issues that arise, and communicates information related to the project to the CWRU community. Members include:

Leslie Czeck, Project Director, [U]TECH
Jean Gubbins, Director, Institutional Research
Anita Gupta, Application Developer, School of Medicine, [U]TECH
Lois Langell, Special Assistant to the Provost
Nassif Nassif, Applications Architect, [U]TECH
David Pilasky, Assistant Dean for Information Technology - School of Medicine, [U]TECH
Lynice Willis, Program Manager, Planning and Institutional Research

FIS Steering Committee - Members serve as ambassadors and advocates for the FIS with school and university-level end-users and other stakeholders, encourage the development of a governance framework for the FIS platform, and provide “wise counsel” on system implementation issues related to the application platform, integration, or technology support. The initial steering committee meeting was held on March 12, 2018. Members include:

FIS Project leadership team members listed above
Stephanie Endy, Associate Vice President for Research
Amy Hammett, University Registrar and Director of Student Information Systems and Services
Arnold Hirshon, Associate Provost and University Librarian
James Ryan, Human Resources Director
Faculty representative, to be named
**FIS Review Board** - composed of key individuals from the schools and departments within the university, these individuals will act as subject matter experts as well as project champions for their relevant schools/ departments. Members include:

- Kathy Beal, Metrohealth Medical Center, School of Medicine
- Donna Davis Reddix, Faculty Diversity Officer, Office for Inclusion, Diversity and Equal Opportunity
- Sheryl Dugard, Manager, Academic Administration, Case School of Engineering
- Jean Farah, Executive Aide to the Dean, School of Dental Medicine
- Cynthia Hill-Graham, Academic Deans' Office, School of Law
- Cena Hilliard, Assistant Dean, Case School of Engineering
- Timerra Jung, Manager of Facilities and Administration, School of Law
- Christine Kehoe, Administrator, Department of Pathology, School of Medicine
- Maureen Kendel, Assistant to the Dean for Special Projects and Faculty Administration, Frances Payne Bolton School of Nursing
- Cheryl Lauderdale, Executive Aide to the Deans, School of Law
- Ana Merdita, Executive Aide to the Dean, Weatherhead School of Management
- Meagan Rodgers, Manager, Operations and Strategic Initiatives, College of Arts and Sciences
- Michelle Shaylor, Faculty Affairs Administrator, School of Medicine
- Angelica Szakacs, Academic Team Leader, Case School of Engineering
- Doreen Thibodeau, Executive Aide, Office of Student Affairs
- Patricia Urbon, Director, Faculty Affairs, School of Medicine
- Molly Watkins, Executive Director of International Affairs
- Zoe Breen Wood, Assistant Professor, Mandel School of Applied Social Sciences (Faculty Representative)
- Roger Zender, Associate Director, Creation and Curation Services, Kelvin Smith Library
- MSASS, TBD