UCSB Audit and Advisory Services

Internal Audit Report

UCPath
Limited Scope Project Progress Review

July 26, 2017

Performed by:
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Approved by:
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Report No. 08-17-0017
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July 26, 2017

To: Matt Erickson, Associate Director of Program Management and Communications  
   Maria Ayllon, UCPATH Project Manager  
   Enterprise Technology Services  
   Distribution

Re: UCPATH: Limited Scope Project Progress Review  
    Audit Report No. 08-17-0017

As part of the 2016-17 audit services plan, Audit and Advisory Services has completed a review of the University of California, Santa Barbara (UCSB) UCPATH project. This audit was a limited scope progress review, performed as part of a series of audits and advisory service projects designed to support UCPATH efforts.

The purpose of this audit included assessing the status of issues, reported in our previous UCPATH Limited Scope Project Progress Review report, dated May 16, 2016 and updating a detailed risk assessment from our previous audit, at the current stage of the project.

Based on the results of the other work performed, there has been significant progress on the issues addressed in our previous review, including UCPATH governance, project requirements, project documentation, and adequacy of resources. The results of our work also indicate that potential enhancements should be considered to help ensure that the campus successfully implements UCPATH as scheduled, including improving the communication and project budget strategy, and a closer coordination with the Central PMO.

Detailed observations and management corrective actions are included in the following sections of the report. The management corrective actions provided indicate that each audit observation was given thoughtful consideration and that positive measures have been taken or planned to implement the management corrective actions.

We sincerely appreciate the cooperation and assistance provided by Enterprise Technology Services personnel during the review. If you have any questions, please feel free to contact me.

Respectfully submitted,

Jessie Masek  
Acting Director  
Audit and Advisory Services
Enclosure

Distribution:

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cc: Chancellor Henry Yang
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UCSB Audit Committee
Interim Senior Vice President and Chief Compliance and Audit Officer John Lohse
PURPOSE

The purpose of this audit included assessing the status of issues, reported in our previous UCPath Limited Scope Project Progress Review report, dated May 16, 2016 and updating the detailed risk assessment from our previous audit. This audit is part of our fiscal year 2016-17 audit services plan and is one of a series of audits and advisory service projects designed to support UCPath efforts.

SCOPE, OBJECTIVES, AND METHODOLOGY

The scope of this audit was limited to the evaluation of UCPath activities and documentation available through April 2017.

Our audit objectives included the following:

- Assess and document the implementation status of management corrective action plans included in our previous UCPath Limited Scope Project Progress Review report, dated May 16, 2016.

- Evaluate the current progress of UCSB UCPath project to update the UCPath risk assessment we performed as part of our fiscal 2015-16 audit to provide a better understanding of the current status of the project.

To accomplish our objectives, our work included interviews, direct observations, review of documentation, and other steps. We:


- Obtained and reviewed UCPath documentation available as of April 2017.

- Gained and documented an understanding of the project’s status through detailed interviews with Enterprise IT Project Management Office (PMO) personnel.

- Monitored project progress through participation in the UCPath/E-Timekeeping Strategic Advisory Committee, and through ongoing consultations with the UCPath Project Manager and other project personnel.

- Updated the risk assessment we completed for the fiscal year 2015-16 audit, based on the result of our interviews, review of project documentation, and other work.

- Assessed the implementation progress of management corrective action plans to address fiscal year 2015-16 audit findings related to governance, communication strategy, project budget and funding strategy, project requirements, project documentation, and adequacy of resources.

This advisory service was conducted in conformance with the International Standards for the Professional Practice of Internal Auditing.
BACKGROUND¹

Project Management

The UCOP Project Management Office (Central PMO) is responsible for overall project definition, planning, coordination, and execution, while each campus and medical center is responsible for local implementation efforts. This tiered project management approach requires ongoing communication between the Central PMO and campus PMOs, with local organizations dependent upon the Central PMO for essential input and information, including timelines, planning documentation, technical designs/architecture, and process planning. In turn, the Central PMO depends on the campuses to organize effectively, provide local planning data, and execute their local transition to the new system(s).²

The following groups constitute the governance setup at UCSB:

- UCPath executive sponsors serve as local project sponsors.
- The UCPath Steering Committee includes functional owners and technical leaders, and is responsible for overall local project oversight, operational decision-making, and direction to the UCSB UCPath Project Manager throughout the project.
- UCPath project leads participate in the design of new business processes.
- UCPath Strategy Advisory Committee serves as a conduit of information between campus departments, the UCSB UCPath Project Manager, and the UCPath Steering Committee, and evaluates and makes recommendations in areas such as the Future Stage Operating Model, discussed below.

The UCSB UCPath Project Manager leads the local implementation team and coordinates the strategy alignment with the Central PMO.

Future State

- Future State Process Design (FSPD) - The FSPD process is the part of the project focused on identifying and documenting campus processes in the scope of the project. The FSPD is considered the most important functional part of UCPath. UCSB has identified 126 relevant functional processes.
- Future State Operating Model (FSOM) - The Future State Operating Model (FSOM) process has been created to determine the strategy for future processes. It is a high level vision and rationale for assigning roles and responsibilities in support of operational processes. The overall objective is to arrive at a consensus among campus departments on the preferred degree of centralization of the human resources and payroll-related processes that will remain at the campus level when implementation is complete, and after certain transactional processes have been transitioned to the UCPath Center.

¹ Source: Campus PMO website, project documentation, and interviews with the UCPath Project Manager.
² Adapted from information from UCPath Scope Document, dated August 10, 2015.
Table 1: UCP at UCSB Project Milestones

<table>
<thead>
<tr>
<th>Description</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future State Process Design</td>
<td>September 2017</td>
</tr>
<tr>
<td>Tier I Integration</td>
<td>September 2017</td>
</tr>
<tr>
<td>Tier II Integration</td>
<td>November 2017</td>
</tr>
<tr>
<td>Testing</td>
<td>September 2017 – March 2018</td>
</tr>
<tr>
<td>Training</td>
<td>April 2018 – May 2018</td>
</tr>
<tr>
<td>Go-Live</td>
<td>Spring 2018</td>
</tr>
</tbody>
</table>

Source: UCP at UCSB Project Manager, Enterprise Technology Services.

**IT Delivery**

The IT Delivery component of the project includes developing and configuring the technical platform that supports UCP at UCSB operations. IT Delivery includes the following work streams:

- **Application Development.** Integrating local applications with the UCP at UCSB system, including interfaces with campus systems such as Identity Management, Electronic Timekeeping (Kronos), Campus Financial System, Parking (T2), Student Information Systems, Data Warehouse, and others.

- **Technical Architecture.** Establishing the strategy and approach for technical platforms that support UCP at UCSB processes.

- **Operational Data Store.** Focuses on the analysis, architecture, design, coding, testing, initial deployment, ongoing maintenance, and oversight for the technical infrastructure for data.

- **Identity Management.** Includes planning, design, development, testing, and implementation of local and systemwide identity management systems for the purpose of authentication of users of the UCP at UCSB system.

- **Data Warehouse and Local Reporting.** Providing analysis, architecture, design, coding, testing, initial deployment, ongoing maintenance, and oversight for the technical infrastructure of UCP at UCSB data in the campus data warehouse. The focus is on the development of local reporting.

**Relevant Policies**

We considered policy IS-10 to be most relevant to the scope of this audit, most notably the provisions regarding effective project management, which address the importance of having approved and updated project documentation.
SUMMARY OBSERVATIONS

Since our last audit, there has been significant progress on the issues addressed in our previous review, including UCPath governance, project requirements, project documentation, and adequacy of resources. The results of our work also indicate that potential enhancements should be considered to help ensure that the campus successfully implements UCPath as scheduled, including:

- Continued improvements to the project’s communication strategy.
- Continued formalization of project documentation, such as the project budget and functional deliverables.
- Closer coordination with the Central PMO.

Detailed observations and management corrective actions are detailed in the remainder of the report.
A summary version of our risk assessment results is included as an appendix to this report.

A. Status of Issues Addressed in Prior UCPath Review

Our previous UCPath Limited Scope Project Progress Review report, dated May 16, 2016 included two comprehensive recommendations with eight action measures related to governance, communication strategy, project budget and funding strategy, project requirements, project documentation, and adequacy of resources. The Enterprise IT PMO committed to actions plans, or management corrective actions, within reasonable timeframes in all cases.

This audit found that Campus PMO has made significant progress in the implementation of the 2015-16 audit recommendations. However, currently two of the eight action measures have not been fully addressed.

<table>
<thead>
<tr>
<th>Table 2</th>
<th>Status of Management Corrective Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finding title</td>
<td>Status</td>
</tr>
<tr>
<td>Identify Principal Sponsor</td>
<td>Implemented</td>
</tr>
<tr>
<td>Composition Steering Committee</td>
<td>Implemented</td>
</tr>
<tr>
<td>Authority Steering Committee</td>
<td>Implemented</td>
</tr>
<tr>
<td>Communication Strategy</td>
<td>In Progress</td>
</tr>
<tr>
<td>Project Budget and UCPath Funding Strategy</td>
<td>In Progress</td>
</tr>
<tr>
<td>Complete Project Requirements</td>
<td>Implemented</td>
</tr>
<tr>
<td>Update and Formalize Project Documentation</td>
<td>Implemented</td>
</tr>
<tr>
<td>Adequacy of Resources</td>
<td>Implemented</td>
</tr>
</tbody>
</table>

Source: Auditor Analysis.

Communication Strategy

The Campus PMO plans to wait until the majority of functional processes are documented and approved before launching the socialization of the UCPath project this summer. The preliminary timeline is the following:

- September 2017: All processes are approved.
- August 2017: Kickoff meeting for business officers.
- September 2017: A series of high level presentations of future state to the business officers.
While the campus has a better understanding of the UCPath project since our 2015-16 audit, there remains a need for the Campus PMO to complete the communication plan in order to improve the campus perception of UCPath efficiencies and advantages, which include streamlining payroll and HR processes. Campus PMO will assess how successful the communication plan was by sending out surveys.

Project Budget and UCPath Funding Strategy

Each local campus is responsible for funding their own UCPath implementation. UCOP funding has always been limited primarily for travel expenses. The temporary funding plan for the UCSB UCPath project involved sole reliance on the Common Good Fee.\(^3\)

An approved budget and clear funding strategy are considered essential from a project management perspective. However, there are some concerns if the current funding strategy is sustainable.

B. Governance and Communication

Strategic Alignment

The Campus PMO is open to closer coordination with the Central PMO in order to obtain better guidance and visibility of the project. Closer coordination and collaboration can help improve the efficiency of communication, especially if there are unanticipated risks or issues identified at other campuses. This information is valuable and will allow for the Campus PMO to better strategize to keep our campus in a more favorable position and avoid reactive management.

C. Project Plan Execution and Organizational Readiness

Adequacy of Resources

Enterprise Technology Services (ETS) has been hiring new resources based on the resource plan presented to the CIO last year. Obtaining new resources has been a challenging process and time consuming. There is a need for a more efficient hiring process plan to anticipate additional resource needs. There are also some concerns regarding the loss of key resources due to functional staff expecting to retire soon.

Competing Priorities

There is a better understanding of UCPath project timeline on campus. While IT leaders are highly committed to this project, they face the challenge of frequent scope change. The Central PMO has recently delegated some of their original responsibilities to the Campus PMO. A better clarification between Central PMO and Campus PMO regarding these changes in responsibility and scope of activities may help achieve the project plan timeline.

Change Management

Campus departments are aware that UCPath will modify current business processes. UCSB UCPath implementation requires each department to provide its own level of support. This raises new concerns regarding the ability of the campus to quickly address issues and changes. Some

\(^3\) The Common Good Fee was established, effective fiscal year 2014-15, to fund shared or common services and projects.
departments are in a better positions than others. Based on this plan, preliminary control points should be at the highest senior management level.

The UCPath/E-Timekeeping Strategic Advisory Committee is working to define a formal plan to address potential additional support needed by some departments. Campus PMO deliverables for change management are in progress at this moment.

Transition plans for some departments will need more effort than some departments have available and may require central office\(^4\) support than what is available.

**D. Project Implementation**

The UCPath will be heavily customized. Pilot implementation in other campus will serve as a reference to determine if the system needs additional changes. If part of the customization needs to be modified, this could affect readiness and project timeline. The Campus PMO does not expect major changes.

**E. Delivery and Support**

The UCPath Help Desk responsibility is shared between Central PMO and Campus PMO. At the campus level, responsibilities among ETS and central offices are defined, and resources for service desk are identified.

Training is a responsibly shared among Central PMO, ETS, central offices, and campus departments.

- Central PMO has to provide materials and some resources.
- ETS is responsible to develop the training program
- Central Offices have to provide the training.
- Department personnel have to attend to the training.

Additional work need to be done to assure adequate training for end-users will be completed before implementation.

**F. Security**

There have been some discussions regarding security and access control, which will be addressed in future planning discussions.

We recommend Campus PMO continue to address issues and areas of concern, including:

- Continue working with the communication strategy to improve the appreciation of the potential efficiencies and advantages of this project for the campus.
- Updating the project budget based on project timeline and resource plan to ensure that the UCPath funding strategy is clear to the campus.

\(^4\) Business and Financial Services, Human Resources, and Academic Personnel.
Management Corrective Actions

Campus PMO will:

- Continue working with the communication strategy to improve the appreciation of the potential efficiencies and advantages of this project for the campus.

- Updating the project budget based on project timeline and resource plan to ensure that the UCPath funding strategy is clear to the campus.

Audit and Advisory Services will follow up on the status of these issues by October 30, 2017.
APPENDIX
UCPath Project Risk Assessment
Summary of Results
## UCPATH Project Risk Assessment – Summary of Results

<table>
<thead>
<tr>
<th>Risk Scenarios</th>
<th>Description</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Governance</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strategic Alignment</td>
<td>The Campus PMO is open to closer coordination with the Central PMO in order to obtain better guidance and visibility of the project.</td>
<td>M</td>
</tr>
<tr>
<td>Communication</td>
<td>The project team is working to prepare the socialization of this project this summer.</td>
<td>H</td>
</tr>
<tr>
<td>Project Economics</td>
<td>There are opportunities to improve the current strategy for funding UCPath.</td>
<td>H</td>
</tr>
<tr>
<td><strong>Project Execution &amp; Organizational Readiness</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability of Resources</td>
<td>There is a need for a more efficient hiring process.</td>
<td>M</td>
</tr>
<tr>
<td>Competing Priorities</td>
<td>A better clarification between Central PMO and Campus PMO regarding responsibilities and priorities would help to prioritize the project plan.</td>
<td>M</td>
</tr>
<tr>
<td>Change Management</td>
<td>UCSB UCPATH implementation requires each department to provide its own level of support. Transition plans for some departments will need more effort than some departments have available.</td>
<td>M</td>
</tr>
<tr>
<td><strong>Project Implementation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Software Implementation</td>
<td>The system will be heavily customized. Pilot implementation in other campus will be a reference to determine if the application needs additional changes. If part of the customization needs to be modified, this could affect readiness and project timeline. The PMO does not expect major changes.</td>
<td>M</td>
</tr>
<tr>
<td>Project Quality</td>
<td>There is not a formal quality assurance plan. There are several iterations to review deliverables and the project team has develop checkpoints to evaluate and improve the quality of project deliverables. However, this review is done by members of the project development team and no independent entity will review the project deliverables.</td>
<td>M</td>
</tr>
<tr>
<td><strong>Deliverable and Support</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>User Help Desk</td>
<td>This task is shared between Central PMO and Campus PMO. The campus has defined clear responsibilities among ETS and central offices. Resources for service desk are identified.</td>
<td>L</td>
</tr>
<tr>
<td>Training</td>
<td>IT personnel have adequate training and expertise. Additional work needs to be done to assure adequate training for end-users. This is a responsibly shared among Central PMO, ETS, campus central offices, and campus departments.</td>
<td>L</td>
</tr>
<tr>
<td><strong>Security</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>System Security</td>
<td>Security will be addressed in the following months.</td>
<td>L</td>
</tr>
<tr>
<td>Access Control</td>
<td>Access Control will be addressed in the following months.</td>
<td>L</td>
</tr>
<tr>
<td><strong>Compliance</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regulatory Compliance</td>
<td>The project team has to define a clear strategy to manage SSN and other PII information.</td>
<td>L</td>
</tr>
</tbody>
</table>

Source: Auditor Analysis.

H: Processes in this category may contribute to a critical adverse impact on the project timeline.

M: Processes in this category may contribute to a serious adverse impact on the project timeline.

L: Processes in this category may contribute to a limited adverse impact on the project timeline, given the current stage of the project.