

# **UCSB Audit and Advisory Services**

## Presentation



**UCPath Risk Assessment**

January 12, 2017

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# Objective

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The objective of this seminar is to provide a brief description of:

- The UCPATH Project.
- The Risk Assessment Methodology.
- The results of the UCPATH Risk Assessment.



# The UCPath Project

# UCPath Project

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Launched in January 2010, the UCPath Project is a coordinated effort between UCOP and each of the UC campuses and medical centers.

The goal of the project is to deploy a single payroll system and a single human resources system across all ten campuses and five medical centers that meets the core needs of each location, while capturing the efficiencies, improved data, and cost savings associated with unified systems.

# UCPath Quick Facts



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UCPath is the University of California's program to implement a single payroll, benefits, human resources and academic personnel solution for all UC employees.

## UCPATH QUICK FACTS

### BENEFITS OF UCPATH

Consistent, quality data  
Efficient, accurate payroll  
Lowered risk  
Reliable, first-rate service

UNIVERSITY  
OF  
CALIFORNIA

UC President Janet Napolitano:  
"UCPATH IS A PRIORITY FOR  
THE UNIVERSITY OF CALIFORNIA."

### UCPATH LOCATIONS

#### 10 UC CAMPUSES

Berkeley      Riverside  
Davis          San Diego  
Irvine          San Francisco  
Los Angeles   Santa Barbara  
Merced        Santa Cruz

#### 5 UC HEALTH SYSTEMS

Davis  
Irvine  
Los Angeles  
San Diego  
San Francisco

#### PLUS 5

Agriculture & Natural Resources (ANR)  
ASUCLA  
Hastings College of the Law  
Lawrence Berkeley National Laboratory (LBNL)  
UC Office of the President (UCOP)

## BUSINESS TRANSFORMATION

UCPath will create efficiencies that support the University of California's **CORE MISSION** of teaching, research and public service.

### TECHNOLOGY UPGRADE



PeopleSoft, an **INDUSTRY STANDARD** tool.  
The **idea** for replacing our current system came from **CAMPUS** controllers, chief human resource officers and academic personnel directors.

### STANDARDIZED PROCESSES

Experts from throughout **THE UC SYSTEM WORKED TOGETHER** to standardize approximately

**100 UC-WIDE PROCESSES**

### SHARED SERVICES

To support the UC system, the **UCPATH CENTER** will likely employ about **415 PEOPLE**



The **UCPath Center** in **RIVERSIDE, CA**, has been set up in a **LEED GOLD CERTIFIED** building

## UCPATH WILL SUPPORT

an active payroll of approximately **190,000 UC EMPLOYEES**

- 80,000 faculty
- 130,000 staff (~40% of whom are covered by collective bargaining agreements)
- Yielding ~250,000 W-2s annually



CURRENT as of 01/12/15

UNIVERSITY  
OF  
CALIFORNIA

UCPath

UCPATH = UC PAYROLL, ACADEMIC PERSONNEL, TIMEKEEPING & HR

# UCPath Project

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UCPath will require numerous new and modified human resources and payroll-related business processes, as well as the implementation of a new information system. The project encompasses three main areas:

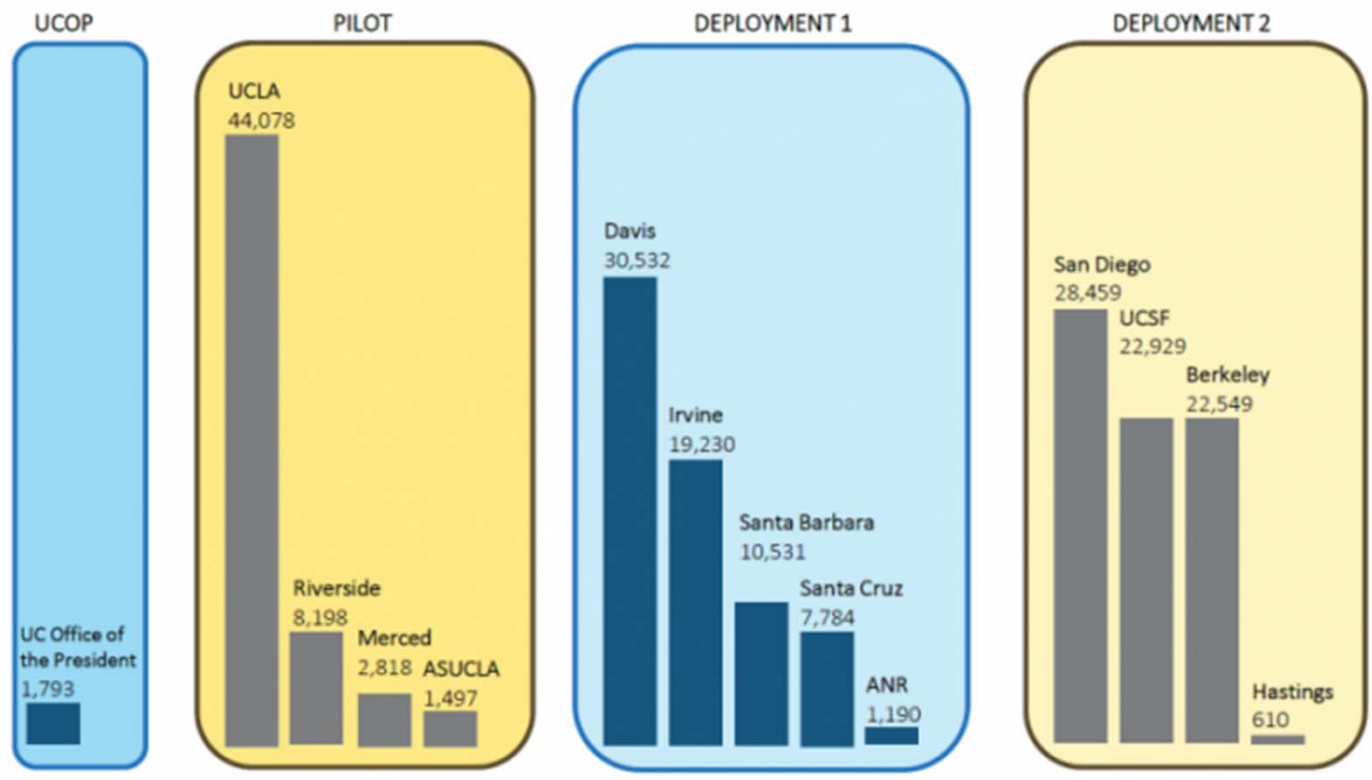
- Implementing Oracle PeopleSoft HCMS 9.2 (UCPath System).
- Streamlining and standardizing business processes.
- Centralizing transactional activities at the new UCPath Center established in Riverside, California.

# UCPath Milestones



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November 2015      August 2017



Source: <http://www.ucpath.ucsb.edu/timeline>

# UCPathMilestones

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On November 30, 2015, UCOP became the first location to deploy UCPath.

The University is targeting August 2017 for the initial campus launch of UCPath at UCLA, UC Riverside, and UC Merced.

This second group includes a highly diverse employee population, including academic and health system employees.

The next locations to implement UCPath will be UC Davis, UC Irvine, UC Santa Barbara, UC Santa Cruz, and UC Agriculture and Natural Resources (ANR).



# Central PMO



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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.

The Central PMO depends on the campuses to organize effectively, provide local planning data, and execute their local transition to the new system(s).

# Local PMO



Local PMO will manage UCPATH in each location. The local UCPATH Project requires:

- Developing new technical and functional business processes in support of transactional human resources, payroll, and benefits services.
- Data cleanup, mapping and migration.
- Development of application integration functionality between UC campuses and UCOP systems.
- Design and development of local applications, tools, and integrations for utilizing UCPATH data on our campus.

# Functional Business Processes

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## 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, and represents an estimated 60-70% of the project. UCSB has identified 137 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.

# IT Delivery

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IT Delivery includes developing and configuring the technical platform that supports UCPATH operations. The development and configuration of the technical platform represents 30-40% of UCPATH. IT Delivery includes the following work streams:

- Application Development.
- Technical Architecture.
- Operational Data Store.
- Identity Management.
- Data Warehouse and Local Reporting.

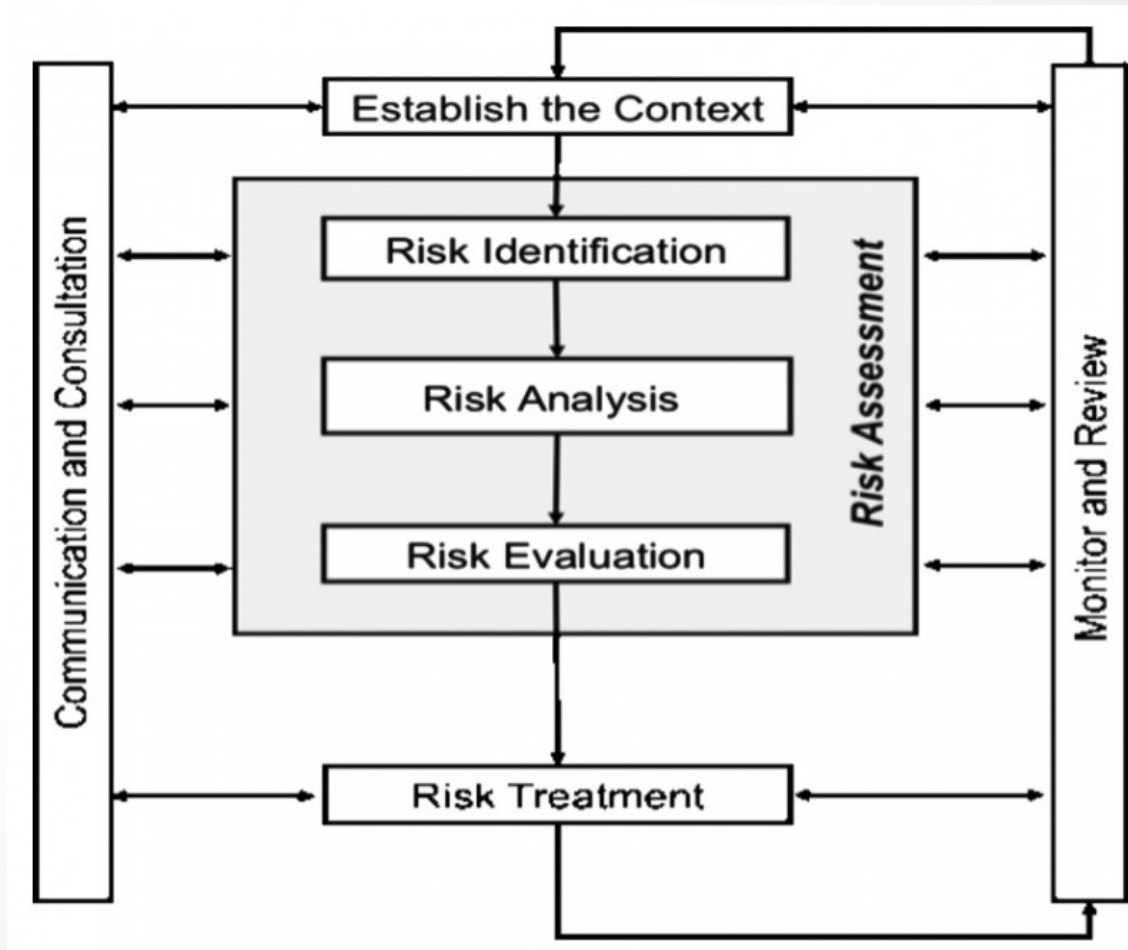


# Risk Assessment Methodology

# Risk Assessment Process



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# Risks

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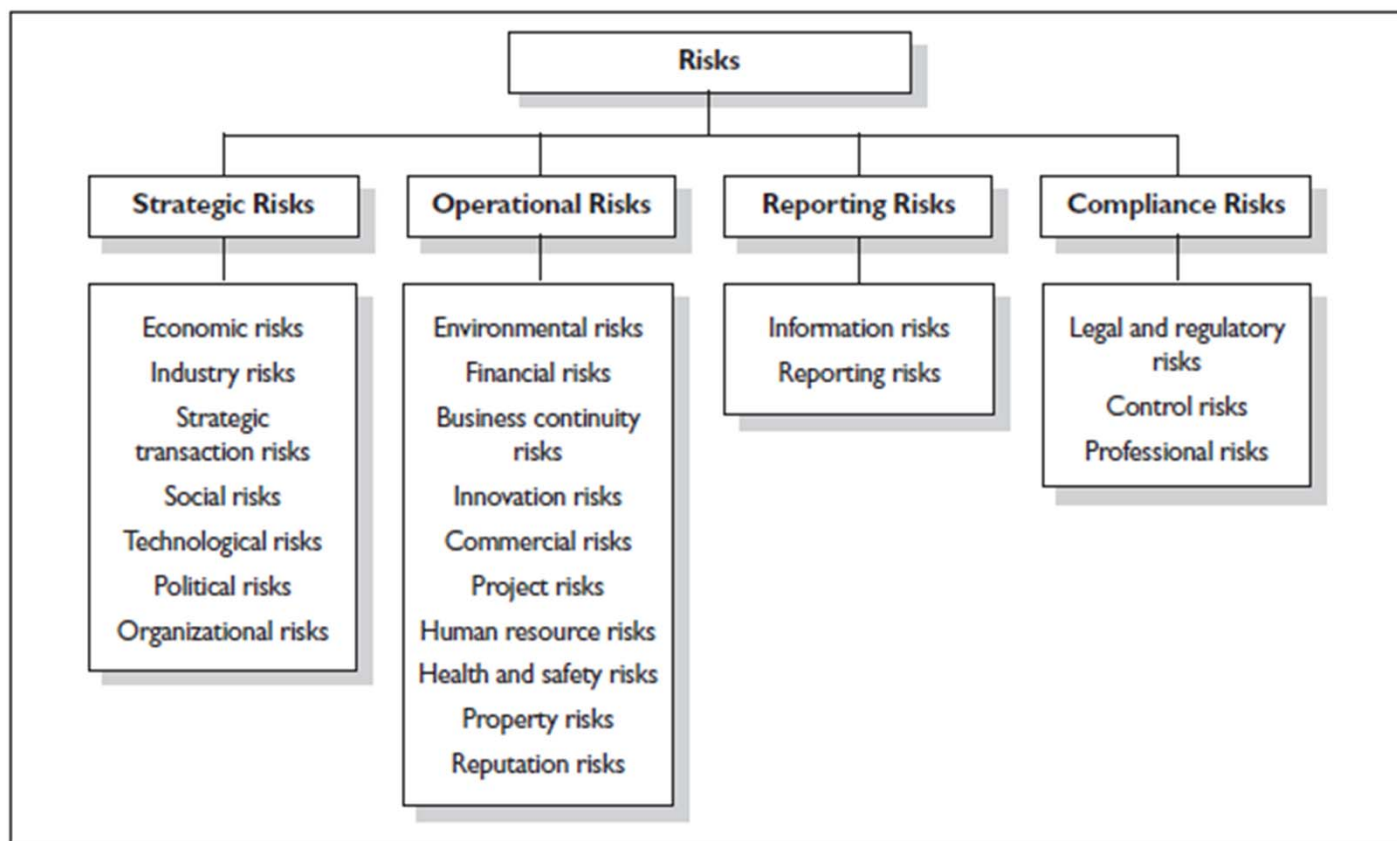
Risk is generally defined as the combination of the probability of an event and its consequence (ISO Guide 73).

Consequences are that enterprise objectives are not met. COBIT 5 for Risk defines IT risk as business risk, specifically, the business risk associated with the use, ownership, operation, involvement, influence and adoption of IT within an enterprise.

# Example of Risk Classification



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Source: *Managing Opportunities and Risks*, Published by The Society of Management Accountants of Canada, the American Institute of Certified Public Accountants and The Chartered Institute of Management Accountants.



# ERM Standards & Frameworks

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- COSO(Committee of Sponsoring Organizations of the Treadway Commission).
- **COBIT 5 for Risks.**
- ISO/IEC 31000 Risk Management.
- ISO/IEC 20000 IT Service Management.
- ISO/IEC 27000, Information Security.
- ISO 21500 Guidance on Project Management.
- PMBOK (Project Management Body of Knowledge).

# COBIT 5 for Risk



The COBIT 5 for Risk guide provides:

- Guidance on how to use the COBIT 5 framework to establish the risk governance and management functions for the organization.
- Guidance and a structured approach on how to use the COBIT 5 principles to govern and manage IT risk.
- A clear understanding of the alignment of COBIT 5 for Risk with other relevant standards.

COBIT (Control Objectives for Information and Related Technologies) is a good-practice framework created by international professional association ISACA for information technology (IT) management and IT governance. COBIT provides an implementable "set of controls over information technology and organizes them around a logical framework of IT-related processes and enablers.

# Risk Scenarios

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Risk Scenarios using COBIT 5 for Risk gives guidance on the development of IT-related risk scenarios.

The publication provides a high level overview of risk concepts, along with over 50 complete risk scenarios covering all 20 categories described in COBIT 5 for Risk.

# UCPath Risk Scenarios



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UCPath Risk Scenarios		
Processes Capabilities	High Level Risk Scenario	Risk Scenario
Plan and Organize	Governance / Oversight	Strategic Alignment
		Senior Management Involved & Investment Decision Making
	Technology	Process Owner Involved & Functional Decision Making
		Integration of IT within Business Processes
Acquire and Implement	Project Plan Execution	Communication
		New Technologies
	Organizational Readiness	Technology Selection
		Business Process Impact Assessment
Delivery and Support	Infrastructure	Project Delivery
		IT Project Economics
	Architecture & Capacity	Availability of Resources
		Competing Priorities
Monitor and Evaluate	Applications	Scope Change Management/ Change Readiness
		State of Infrastructure Technology
	Project Implementation	Ageing of Infrastructural Software
		System Capacity
Monitor and Evaluate	Physical Security	Architectural Agility and Flexibility
		Ageing of Application Software
	Support	Software Implementation
		Project Quality
Monitor and Evaluate	User Training	Infrastructure Theft
		Destruction of Infrastructure
	Data & SW Integrity	Environmental
		User Help Desk
Monitor and Evaluate	Availability & Performance	Infrastructure
		IT Expertise and Skills
	Confidentiality & Security	Software Integrity
		Database Integrity
Monitor and Evaluate	Contracts & Licenses	Software Performance
		Utilities Performance
	Compliance	Operational IT Errors
		Information Media (Backup)
Monitor and Evaluate	Compliance	System Security
		Access Control
	Compliance	Selection/ Performance of Third-Party Suppliers
		Procurement
Monitor and Evaluate	Compliance	Contractual Compliance
		Regulatory Compliance

Source: Risk Scenarios using COBIT 5 for Risk.

# Risk Scenarios Evaluation



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Table 1	Potential Impact		
Risk Scenario	Low	Medium	High
A description of a possible event that, when occurring, will have an uncertain impact on the achievement of the project's objectives. The impact can be positive or negative.	The materialization of a negative event could be expected to have a limited adverse effect on the design and/or implementation of the project.	The materialization of a negative event could be expected to have a serious adverse effect on the design and/or implementation of the project.	The materialization of a negative event could be expected to have a severe or catastrophic adverse effect on the design and/or implementation of the project.

Source: Auditor Analysis & Risk Scenarios Using COBIT 5 For Risk, an ISACA publication,



# The results of the UCPath Risk Assessment

# Scope and Objectives



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The purpose of this project was to assess and document the principal risks of UCPATH at the stage of the project. The risk assessment focused on the following areas:

- **Governance / Oversight.** Adequate processes are operating, including strategic alignment, campus department representation, ownership, business process integration, and communication strategy.
- **Project Plan Execution & Deliverables.** Appropriate practices are in place, including periodic reporting, formal project plan and budget, and alignment with project timeline. Project deliverables comply with UC Policy IS-10.
- **Organizational Readiness.** Organizational readiness initiatives are in progress, including project resources, technology selection and system dependencies, and change management.

# UC Policy IS-10



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UC Policy IS-10 describes standards for developing (or purchasing and installing) and maintaining computer applications for administrative purposes at the ten campuses and at the Office of the President of the University of California.

We used the results of our risk assessment to select areas for more detailed analysis, including a review of compliance with selected provisions of University of California (UC) Business and Financial Bulletin (BFB) IS-10, Systems Development Standards(Policy IS-10).

Given the current stage of the project, our compliance review was limited to determining whether UCPath documentation and deliverables have been formally approved.



# Compliance Review



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- **General Design.** UCPath complies with IS-10 requirements regarding General Design. The project is documenting project design from the technical and functional perspectives:
  - The functional part of the project, including the FSPD and FSOM, will be documented.
  - IT Delivery will include the technical design of the project, including interfaces, operational data store, Identity management, and reporting.
- **Project Planning and Management.** UCPath complies with IS-10 requirements regarding project planning and management. IS-10 requires the following documents: project plan, staff time estimates, a project scope, project status reporting, and employee time reporting.

# Risk Assessment



Appendix UCPATH Project Risk Assessment – Summary of Results			
Risk Scenarios	Description	Risk	
Governance	Strategic Alignment	There have been campus concerns regarding the level of guidance provided by the Central PMO regarding technical information, project product, and project timeline.	Medium
	Senior Management Involvement	UCPath governance structures are adequate. However, some major campus divisions do not have representation on this project. The authority of executive sponsors and the Steering Committee should be discussed.	Low
	Process Owner Involvement	There is a perception of lack of ownership and leadership on UCPATH. All executive sponsors are at the same level on this project, with no defined hierarchy; project ownership could be more clearly defined.	Medium
	Integration of IT with Business Processes	Some decisions have to be made in order to have a final project design. Without this information, it is possible that the PMO will not be able to identify all department requirements.	Low
	Communication	There are concerns that UCPATH communications have provided limited information and inspiration to the campus.	High
Project Plan Execution	Technology Selection	Limited work has been done regarding campus dependencies and primary interfaces. Reporting functionality will require selecting a technological solution. The selection is a campus decision, and it could have performance and cost implications.	Medium
	Business Process Impact Assessment	Critical success factors to achieve project goals have been documented. However, executive sponsors would like to see other alternatives to mitigate identified risks.	Low
	Project Delivery	Project progress lags behind other campuses. If the go-live date is to be achieved, project pace and concurrency have to be increased. The project timeline could be affected by decisions that have to be made to complete project design. As noted under Technology Selection, limited work has been done regarding campus dependencies and primary interfaces.	High
	Project Economics	The project needs additional definition. ETS and executive sponsors have not formalized or properly communicated a complete strategy for funding UCPATH. There are tracking and reporting processes for project costs; however, it is important to remember that a highly customized design could significantly increase project costs.	High
Organizational Readiness	Availability of Resources	There is a high risk of critical delays and potential scope creep. Lessons learned from the Financial System Implementation Project include a fuller understanding that the campus has limited resources with experience in PeopleSoft and a high dependency on external consultants.	High
	Competing Priorities	The project is moving forward. However, ETS has limited control over project timeline and resources.	Medium
	Change Management	Organizational readiness efforts could be completed on time with the existing resources, if there are not unexpected issues.	Medium

Source: Auditor Analysis.

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

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

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

# Conclusions – Governance

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Our review found that the campus implementation of UCPATH has made significant progress during the last year. However, the results of our work suggested that potential enhancements should be considered to help ensure that the campus successfully implements UCPATH on time, including:

- **Evaluating UCPATH governance**, including the composition of the executive sponsor group and the representation of other campus divisions on the Steering Committee.
- **Continuing to work on the project's communication strategy**, possibly aiming for a more inspirational message for the campus.

# Conclusions – Project Management



- **Documenting a more detailed project plan**, and updating and formalizing project documentation, such as the project budget and functional deliverables.
- **Updating the resources** required to complete the project based on the project plan, and presenting them to the Steering Committee and/or sponsors for approval, including alternatives with different timelines based on project budget and resource availability.
- **Enhancing project management practices** by improving the process for approval and update of project documentation.

# Action Plan - Governance

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We recommend evaluating and improving:

- The ownership necessary to help drive campus UCPATH efforts.
- The composition of the Steering Committee.
- The authority of the Steering Committee.
- The communication strategy.
- The project budget and UCPATH funding strategy.

# Action Plan – Project Management



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We recommend updating and formalizing :

- Project documentation and project plan, including segregation of duties, technical implementation, interfaces, and reporting functionalities.
- Required resources to complete this project based on the project plan.
- Components of IT Delivery can be anticipated and completed before the functional design is completed.



# Questions and Discussion