March 13, 2023

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Subject: ***Financial Information System Implementation
Report 2022-02***

The final report for Financial Information System Implementation, Report 2022-02, is attached. We would like to thank all University personnel for their cooperation and assistance during the review.

UC wide policy requires that all draft reports be destroyed after the final report is issued. We also request that draft reports not be photocopied or otherwise redistributed.

Christa Perkins
Director
Audit & Management Advisory Services

Attachment

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UC San Diego

AUDIT & MANAGEMENT ADVISORY SERVICES

Financial Information System (FIS) Post-Implementation Review
Report No. 2022-02
March 2023

FINAL REPORT

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I. EXECUTIVE SUMMARY

Audit & Management Advisory Services (AMAS) has completed a review of Financial Information System (FIS) Post-Implementation as part of the approved audit plan for Fiscal Year 2021-22. The objective of our review was to conduct a post-implementation review of the FIS implementation, including implementation and deployment strategies and timing, to identify successes, challenges, and lessons learned from the implementation to help the organization for future initiatives. This is a retrospective review to identify gaps in the implementation approach and planning that led to some of the implementation issues post go-live, but is not intended to be a comprehensive review of all issues experienced post go-live.

Based on our review, we identified successes, challenges, and opportunities for improvement that impacted the various phases of implementation prior to go-live and post go-live. The challenges experienced post go-live caused significant end user dissatisfaction and frustration in many sectors of the campus community and raised questions regarding the system implementation approach, its capabilities, and post go-live support and stabilization strategies.

We noted several positive outcomes of the FIS implementation. UC San Diego (UCSD) went live with a functional financial system which brings together financial activity and reporting for the Campus, Health System, and Foundation and utilizes the new UCOP mandated Common Chart of Accounts (CCOA) on a modern cloud-based system. A dedicated project team worked together collaboratively to achieve implementation on the target date, despite an aggressive timeline due to critical dependency on UCPath, resource limitations, and in the face of an unprecedented global pandemic. The implementation and stabilization process has helped develop good working relationships with Health and Foundation and ultimately regular communication channels with academic and finance leadership.

We found that the project sponsors were engaged for Go/No-Go decisions at multiple points throughout the implementation. The decision to go-live during the pandemic was a joint leadership decision weighed against maintaining dual COAs due to the critical dependency between Oracle Financial Cloud (OFC) and UCPath that had launched a month before, project resources, and the anticipated impacts of further extending the implementation timeline. Given the anticipated resources and complexities of maintaining dual COA, running the new FIS in parallel was not considered feasible, except for the Foundation. FIS Project Sponsors were aware of these risks, and carefully weighed these factors in making the final Go/No-Go decision.

However, the system launched at go-live did not satisfactorily meet end user needs for Campus. Overall, the implementation planning efforts did not ensure organizational readiness for a change of this magnitude so that end users had the knowledge and tools necessary to effectively perform their administrative and fiscal responsibilities. The new processes, systems, and controls have profoundly impacted staff with fiscal oversight in terms of significant learning curve, in part due to increased complexity in performing tasks and fiscal responsibilities. In addition, limited reports that did not meet end user needs caused a lack of visibility into business performance and resulted in end users' inability to perform their administrative and fiscal functions effectively, disrupting business processes. Further, post-implementation support to timely resolve issues was ineffective in meeting end user needs, and the extended transition from Hypercare to Stabilization frustrated end users.

In general, Health System and Foundation fared better than Campus in the initial period after go-live. Health System had separately budgeted additional resources for its implementation efforts, including resources to map OFC data to their reporting system EPSi. This ensured that financial reporting would be consistent with what end-users were familiar with. In addition, Health System has a more centralized organizational structure

for core accounting functions, which facilitated adoption of the new system. Foundation had its own financial accounting system prior to OFC implementation, which enabled them to run in parallel after go-live and allowing additional time to reconcile data and develop necessary management reports.

The impact of FIS challenges and especially financial reporting requirements was felt severely in the areas of sponsored research and grant accounting. The lack of reporting capabilities hindered faculty and administration visibility into grant balances, and the ability of end users to perform their administrative and fiscal functions effectively. In addition, the FIS implementation introduced some controls, for example, default accounts[1], which were not fully understood by end users in terms of the impact, and created uncertainty amongst the fiscal community on the completeness and accuracy of fund balances. This, coupled with limited visibility due to lack of reporting, created a significant backlog of financial transactions that required review and correction as appropriate.

Several of these key pain points are the result of issues during the implementation which impacted oversight, accountability, planning, and overall organizational readiness. Opportunities for improvement in future initiatives were identified in the following areas:

- **Project Oversight and Governance**: There were differing perspectives on accountability for the FIS system from various stakeholders, which is in part the result of lack of clearly defined, communicated, and documented responsibility and expectations. The lack of clearly articulated accountability and responsibilities appears to have been a factor in overall operational readiness, as departments were generally reliant on those driving the implementation, and the change management structure created for the FIS project, to support operational readiness. Further, the Project Governance function did not fully identify, prioritize, and mitigate risks and key issues which were felt after go-live.

- **Budget Planning**: The original budget did not plan for FIS-project related costs other than recurring software subscription after go-live. Accountability and budgeting for Hypercare and Sustainment costs were unclear, until close to go-live.

- **Project Approach**: The extent and timing of change, critical path dependency for the FIS project, and certain project decisions, added challenges for successful adoption of the system. Also, end users may not have fully understood the reasoning for leadership decision to go-live given the challenges during that time. The MVP criteria were in some cases vague and not well understood by project team participants or end users, and not fully met.

- **Organization Change Management**: Change network, communications, and training were not effective in facilitating the extent of change needed for the system scope. Organizational readiness was a significant gap that was not fully assessed or understood until after go-live, contributing to the difficulties in adopting the new system.

- **Project Resources**: There were resourcing concerns with the project team in relation to Business Intelligence, design teams, and change management.

- **Reporting**: The FIS project underestimated the eco-system of custom reports for end users and the envisioned reporting strategy was not effective at go-live.

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[1] Charges would redirect to default accounts (chart strings) if certain conditions were present (funding errors/system controls).

- **Testing and Quality Assurance (QA)**: A Quality Assurance function was not established timely to support testing strategy and plans, and prioritization and tracking of tests. Several testers expressed that they did not find testing to be effective and adequately supported.

- **Hypercare and Sustainment**: Hypercare support was not effective in meeting end user needs, and extended hypercare to steady state transition frustrated end users.

Since implementation, there have been several initiatives to identify and alleviate the post-implementation issues, and implement a sustainable oversight and governance structure. Over time, and as the focus shifts from stabilization to optimization, it is expected that the campus will experience continuous improvement of the system performance and business processes to better meet end user needs.

For future initiatives, EISC leadership will ensure that project implementation teams consider the challenges and lessons learned from the FIS implementation described in this report, and review steps to mitigate reoccurrence to ensure greater organizational readiness.

Additional discussion on challenges, and lessons learned, and opportunities for improvement for future initiatives from the FIS implementation can be found in Section V of this report.

II. BACKGROUND

Audit & Management Advisory Services (AMAS) has completed a review of Financial Information Systems (FIS) Post-Implementation as part of the approved audit plan for Fiscal Year 2021-22. This report summarizes the results of our review.

Prior to July 2020, UCSD utilized a mainframe financial system developed in the 1990s which was antiquated and no longer met the University's needs. To achieve modern efficiencies and streamline reporting needs, UCSD implemented a new Financial Information System (FIS), including Oracle Financials Cloud (OFC) and Concur, on July 1, 2020 under the Enterprise Systems Renewal (ESR) program. The ESR Program is a comprehensive, campus-wide approach to renewing multiple key systems and optimizing business practices to address business process and technology needs in key areas such as Finance and Analytics as well as Academic, Research and Student Administration. The ESR Program is sponsored by the Vice Chancellor and Chief Financial Officer (VC CFO) and Chief Information Officer (CIO), and governed by the Enterprise Information Services Governance Committee (EISC) which provides leadership and oversight to ensure enterprise-wide alignment of business and administrative systems to the mission of UCSD.

The Financial Information System (FIS) project provided a new information system for the general ledger, expense and revenue management, financial reporting and budget governance, and Travel & Expense (Concur) for the general Campus, UCSD Health, and UCSD Foundation. The FIS project was implemented based on certain guiding principles, such as leading with internal resources with external guidance from an implementation partner; minimizing customizations to the software and cloning of current processes; having UCSD Health and Foundation in a common financial system, and meeting user needs in the context of what is best for the institution as a whole. FIS was also launched with a Minimal Viable Product (MVP) approach which was planned to support those business processes, third-party integrations, and financial reporting deemed necessary for go- live, with enhancements planned after go-live and into optimization.

The FIS implementation was impacted by two University of California (UC) systemwide initiatives which required additional planning during the implementation:

- UCPath – On June 1, 2020, UCSD went live with UCPath, UC's system-wide human resources (HR) and payroll system, replacing the nearly 40-year old Payroll and Personnel System (PPS). UCPath introduced new technology to unify and standardize payroll, benefits, and human resources for all UC employees. The UCPath launch was planned in a sequence of deployments to conclude by June 2020, as required by UCPath governance, and UCSD was one of the last campuses on the UCPath deployment schedule. The launch of UCPath prior to FIS required reverse mapping of the new CCOA to legacy COA for May and June 2020 payroll postings to the general ledger.

- Common Chart of Accounts (CCOA) – UC adopted a new CCOA and all campuses are expected to align with the new structure. Migration to the new CCOA allows UCSD to resolve financial reporting challenges across multiple entities (Campus, Health, and Foundation) and enhances UC systemwide reporting, budgeting, and financial management. However, this required additional planning and created a critical dependency with the OFC configuration and process design, and represented a significant change for users accustomed to the legacy chart of accounts.

The FIS project sponsors were the VC CFO, and the UCSD Health Chief Financial Officer (CFO). In addition, the project had a Governance Committee (FIS Governance)[2] to provide leadership on strategic decisions and actions, and an Escalations Team to respond to or resolve escalated conflicts and issues. The FIS Core Project team consisted of the Project Manager, Health Project Manager, Change Leads, Change Practitioner, Business Process Lead, Business Intelligence Lead, and Solution Architect.

In addition to the Core Project team, business process design teams were created by the following process areas, with a Design Lead for each module:

- CCOA
- Procurement
- Accounts Payable
- Controls and Compliance

- Budget and Planning
- Cash and Banking (AR)
- Accounts Receivable
- Reporting and Business Intelligence

- General Ledger (GL)
- Post Award and Project Module (PPM)
- Travel and Expense (Concur)

Design teams received technical, configuration, and conversion support from Information Technology Services (ITS) team members. Design Leads were generally staff backfilled from relevant central offices, and design teams comprised primarily of staff from central offices, and some from departments. The Design Leads, under general direction of the business process lead, via leadership and facilitation, led functional area work to meet requirements. They were responsible for determining whether delivered functionality met compliance and regulatory needs and configuration met business needs. Design Leads were generally empowered to meet with the design teams as they deemed necessary, and make design decisions for their business area/modules.

Stakeholder engagement was coordinated through a change network of leadership, supervisors, or staff within units/departments under each VC area and the medical center. This structure was intended to provide a local support structure to facilitate two-way communications between those impacted by the project. Communications, besides content routed through the change network, included ESR news, announcements, and FIS Newsletters.

The table below summarizes the timeline for the FIS project, although the actual completion varied in some phases:

Project Phase	Description	Anticipated Timing
Initiate	Discuss resourcing needs; Finalize statements of work and discuss prioritization of domain implementation	October-November 2018
Plan	Project team engages vendor partners in planning, including for design teams. (Design and Technical Lead involvement begins)	October-January 2019
Design	Design Workshops Conducted (SME involvement begins)	February-July 2019
Configuration & Prototype	Developing and configuring the system and processes	July-October 2019
Validate	Iterative system testing cycles; Validating and testing the system and processes	November-April 2020
Transition	End User training	May-June 2020
Go-Live	New system is launched	July 2020
Realization	Deploying and monitoring the system and processes with vendor support	July-August 2020
Stabilization	After go-live, the stabilization period is typically 3-9 months.	Duration through 2020

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[2] FIS Governance included some members in a non-voting capacity, including AMAS.

The FIS implementation was impacted, although not overall delayed, by the COVID-19 pandemic. University personnel largely transitioned to a remote-work environment in the last months before go-live, in compliance with Campus directives and public health ordinances. The impacts of the pandemic were noted by project team members as they had to adapt to collaborating in a remote environment, created uncertainty with respect to budget planning, resulted in staffing disruption and delays, and significantly altered plans for end user training.

In the months following the FIS system launch on July 1, 2020, central offices and end users struggled to adapt to the new systems. During this time, questions were raised regarding the implementation approach and strategy for the deployment of a core system integral to the University's operations and the decision to go-live during a pandemic. Consequently, this review was included in the AMAS FY2022 Audit Plan to evaluate these issues.[3]

III. AUDIT OBJECTIVE, SCOPE, AND PROCEDURES

The objective of our review was to conduct a post-implementation review of the FIS implementation, including implementation and deployment strategies and timing, to identify successes, challenges, and lessons learned from the implementation to help the organization for future initiatives. This is a retrospective review to identify gaps in the implementation approach and planning that led to some of the implementation issues post go-live, but is not intended to be a comprehensive review of all issues experienced post go-live. In order to achieve our objective, we performed the following:

- Reviewed documentation and notes in FIS project space (Confluence), including FIS Project Charter, Project Plan, ESR Roles and Responsibilities, FIS Team and Roles, Team Meeting Notes, Decision Logs, Risk/Issue Log, Project Status Reports, etc.;
- Discussed perspectives on the FIS implementation (including challenges, lessons learned, and successes) with the following[4]:
    - FIS Project Sponsors (VC CFO, and Health CFO);
    - ESR Program Sponsor, Chief Information Officer (CIO);
    - FIS Escalation Team (Controller, Health Associate CFO (Hospital Operations), Director, Enterprise Systems Renewal & Executive Director, Information Technology Services);
    - Select members from Governance (selected FIS Governance team and EISC members),
    - Project Team: Project Manager, Health Project Manager, FIS Design Team Leads (PPM, Budget, Procurement, Concur, AP, Procurement, AR, GL, and CCOA), Solution Architect, Configuration Lead, Quality Assurance Manager, Business Intelligence Lead, FIS Change Practitioner, Change Leads, Business Intelligence Consultant;
    - Select department design team members,
    - Select Associate/Assistant Deans;
    - Organizational Change Management Director;
    - Select Change Network sponsorship coalition, and Change Champions;
    - Hypercare Support Analyst;
    - Academic Affairs leadership;

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[3] AMAS also participated in an advisory role in various matters related to FIS that arose during and after implementation. Those engagements were conducted separately from this review, and relevant feedback was shared with the stakeholders as applicable.

[4] Consistent with the project objective, interviews included project teams and select end-users we considered knowledgeable to provide the insight on pre-implementation challenges, lessons learned, and successes.

- o   Health (Medical Center) Controller; and
- o   Managing Director, Office of Operational Strategic Initiatives (AVC/Chief of Staff); and
- o   FIS Team Lead, Business Technology Services.
- Obtained and evaluated the FIS Budget;
- Evaluated the representation of members of the FIS Governance Committee, Escalation, and Design Teams from central offices, ITS, and departments;
- Identified documented decisions and updates to FIS Governance, Escalation, and Project Sponsors;
- Assessed selected metrics reported on Go/No-Go checklist (listed below) by comparing them to the change management checklist, training plan, testing strategy/testing scenarios document, Requirements Traceability Matrix (RTM) tracking document, report requirements tracking and completion summary, Hypercare checklist, project communications, and other relevant documentation:
  - o   Participant readiness (change management deliverables checklist, communications strategy, training, Hypercare, and sustain plans),
  - o   Report readiness (# of reports developed – campus and Foundation),
  - o   System readiness (Testing completion, and RTM mapping).

Throughout this review, AMAS also consulted with Baker Tilly for additional perspective on major system implementations, and the deployment of FIS at UCSD.

IV. CONCLUSION

Based on our review, we identified successes, challenges, and opportunities for improvement that impacted the various phases of implementation prior to go-live and post go-live. The challenges experienced post go-live caused significant end user dissatisfaction and frustration in many sectors of the campus community and raised questions regarding the system implementation approach, its capabilities, and post go-live support and stabilization strategies.

We noted several positive outcomes of the FIS implementation. UCSD went live with a functional financial system which brings together financial activity and reporting for the Campus, Health System, and Foundation and utilizes the new UCOP mandated CCOA on a modern cloud-based system. A dedicated project team worked together collaboratively to achieve implementation on the target date, despite an aggressive timeline due to critical dependency on UCPath, resource limitations, and in the face of an unprecedented global pandemic. The implementation and stabilization process has helped develop good working relationships with Health and Foundation and ultimately regular communication channels with academic and finance leadership.

We found that the project sponsors were engaged for Go/No-Go decisions at multiple points throughout the implementation. The decision to go-live during the pandemic was a joint leadership decision weighed against maintaining dual COAs due to the critical dependency between OFC and UCPath that had launched a month before, project resources, and the anticipated impacts of further extending the implementation timeline. Given the anticipated resources and complexities of maintaining dual COA, running the new FIS in parallel was not considered feasible, except for the Foundation. FIS Project Sponsors were aware of these risks, and carefully weighed these factors in making the final Go/No-Go decision.

However, the system launched at go-live did not satisfactorily meet end user needs for Campus. Overall, the implementation planning efforts did not ensure organizational readiness for a change of this magnitude so that end users had the knowledge and tools necessary to effectively perform their administrative and fiscal responsibilities. The new processes, systems, and controls have profoundly impacted staff with fiscal oversight

in terms of significant learning curve, in part due to increased complexity in performing tasks and fiscal responsibilities. In addition, limited reports that did not meet end user needs caused a lack of visibility into business performance and resulted in end users' inability to perform their administrative and fiscal functions effectively, disrupting business processes. Further, post-implementation support to timely resolve issues was ineffective in meeting end user needs, and the extended transition from Hypercare to Stabilization frustrated end users.

In general, Health System and Foundation fared better than Campus in the initial period after go-live. Health System had separately budgeted additional resources for its implementation efforts, including resources to map OFC data to their reporting system EPSi. This ensured that financial reporting would be consistent with what end-users were familiar with. In addition, Health System has a more centralized organizational structure for core accounting functions, which facilitated adoption of the new system. Foundation had its own financial accounting system prior to OFC implementation, which enabled them to run in parallel after go-live and allowing additional time to reconcile data and develop necessary management reports.

The impact of FIS challenges and especially financial reporting requirements was felt severely in the areas of sponsored research and grant accounting. The lack of reporting capabilities hindered faculty and administration visibility into grant balances, and the ability of end users to perform their administrative and fiscal functions effectively. In addition, the FIS implementation introduced some controls, for example, default accounts[5], which were not fully understood by end users in terms of the impact, and created uncertainty amongst the fiscal community on the completeness and accuracy of fund balances. This, coupled with limited visibility due to lack of reporting, created a significant backlog of financial transactions that required review and correction as appropriate.

Several of these key pain points are the result of issues during the implementation which impacted oversight, accountability, planning, and overall organizational readiness. Key observations are summarized below:

- **Project Oversight and Governance**: There were differing perspectives on accountability for the FIS system from various stakeholders, which is in part the result of lack of clearly defined, communicated, and documented responsibility and expectations. The lack of clearly articulated accountability and responsibilities appears to have been a factor in overall operational readiness, as departments were generally reliant on those driving the implementation, and the change management structure created for the FIS project, to support operational readiness. Further, the Project Governance function did not fully identify, prioritize, and mitigate risks and key issues which were felt after go-live.

- **Budget Planning**: The original budget did not plan for FIS-project related costs other than recurring software subscription after go-live. Accountability and budgeting for Hypercare and Sustainment costs were unclear, until close to go-live.

- **Project Approach**: The extent and timing of change, critical path dependency for the FIS project, and certain project decisions, added challenges for successful adoption of the system. Also, end users may not have fully understood the reasoning for leadership decision to go-live given the challenges during that time. The MVP criteria were in some cases vague and not well understood by project team participants or end users, and not fully met.

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- **Project Resources**: There were resourcing concerns with the project team in relation to Business Intelligence, design teams, and change management.

- **Reporting**: The FIS project underestimated the eco-system of custom reports for end users and the envisioned reporting strategy was not effective at go-live.

- **Testing and Quality Assurance (QA)**: A Quality Assurance function was not established timely to support testing strategy and plans, and prioritization and tracking of tests. Several testers expressed that they did not find testing to be effective and adequately supported.

- **Hypercare and Sustainment**: Hypercare support was not effective in meeting end user needs, and extended hypercare to steady state transition frustrated end users.

Since implementation, there have been several initiatives to identify and alleviate the post-implementation issues, and implement a sustainable oversight and governance structure. Over time, and as the focus shifts from stabilization to optimization, it is expected that the campus will experience continuous improvement of the system performance and business processes to better meet end user needs.

For future initiatives, EISC leadership will ensure that project implementation teams consider the challenges and lessons learned from the FIS implementation described in this report, and review steps to mitigate reoccurrence to ensure greater organizational readiness. Additional discussion on challenges, and lessons learned, and opportunities for improvement for future initiatives from the FIS implementation can be found in Section V of this report.

V. OBSERVATIONS

A.	Project Oversight and Governance

There were differing perspectives on accountability for the FIS system, which is in part the result of lack of clearly defined, communicated, and documented responsibility and expectations. The lack of clearly articulated accountability and responsibilities appears to have been a factor in overall operational readiness, as departments were generally reliant on those driving the implementation, and the change management structure created for the FIS project to support operational readiness. Further, the Project Governance function did not fully identify, prioritize, and mitigate risks and key issues which were felt after go- live.

Impact / Effect

Vague or undefined responsibilities can result in lack of ownership, accountability, and buy-in from relevant stakeholders for successful adoption of the system. An ineffective governance model can result in lack of identification, prioritization, and resolution of key issues, and disconnect with the business needs and design strategy.

Oversight

There were differing perspectives on the issue of accountability regarding the FIS system, likely because of the lack of clearly defined, communicated, and documented accountability and expectations. The FIS Charter (**Attachment A**) was approved by FIS Governance in September 2018 and identified, among other key Charter elements, selected groups as resources (i.e., EISC, Sponsors, Governance, Core Team, project teams, and consultants) with specific commitments to the project. Per the FIS Charter, the Project Sponsors were expected to deliver major project announcements, ensure presence at key events, respond to escalated conflicts, and provide executive decision making. The ESR program roles and responsibilities defined the Project Sponsors role was to ensure project success through leadership support. However, the FIS project artifacts did not identify an overall owner or owners for the project, which appeared to have contributed to a lack of clarity on roles and expectations from stakeholders. The project sponsors may have been considered de facto "owners" given the scope, however many in the campus community perceived the implementation to be led by ITS.

The VC CFO indicated reliance on the CIO and Controller to provide oversight over the project and inform the Sponsors of any concerns requiring their intervention. Additionally, the VC CFO indicated that although his position could be considered an owner of the FIS project (and was a co-project sponsor), in hindsight, a joint ownership structure and expectation should have been documented and thoroughly communicated with academic units. For example, the CFO may expect to provide the system and tools, but academic units might be expected to ensure operational readiness of their users, and learn and adapt to the new system and processes. However, this expectation was not articulated in the project artifacts, and either was not communicated to VC areas, or the communication was not effective for the VC areas to proactively prepare for the system implementation.

The ITS team viewed their role as the project management function (providing technical support, controlling the pace/workflow), with business process design teams making decisions on accounting processes, configuration needs, internal controls, etc. However, interviewees indicated their perception was that ITS was leading the project implementation overall, not just the project management and technical components. This

could be in part because ITS oversaw the FIS budget, and interviewees stated that ITS had taken a vital leadership role based on prior related experience in large-enterprise system implementation at a similar institution of higher education, and ITS was therefore relied on for expertise.

The role of central Finance included providing subject matter expertise for process review and design; reviewing functional requirements; participating in user acceptance testing; partnering with technical teams on configuration and conversion validation, and partnering with Change Leader and Practitioner to influence and approve changes to existing processes, policies and procedure. There was central office representation in the Business Process Design Teams (i.e., several functional Design Leads), FIS Governance (both central campus and Health System), and FIS Escalation (e.g., the Controller was part of the escalations team for decisions/change requests escalated from FIS Governance). In hindsight, Finance leadership acknowledged that there should have been more engagement in overseeing the composition of the project teams to ensure there was adequate authority and skill set to lead the teams, and question risks being identified during implementation (through the Go/No-Go checklist metrics) and actively discuss resolution or progress, particularly risks related to reporting since that has been the main pain point faced by end users.

The FIS project artifacts also did not appear to specify the expectations or role of departments/end users or the intermediaries between the project team and end users. Department end users interviewed felt that their needs were not considered in the system implementation, and that the system primarily was designed to meet central office and ITS needs. Departments expressed that they were not given sufficient tools and reports to meet their business needs, and that project leadership was initially dismissive or deflecting of concerns raised, and were not taking ownership for management of system issues.

The lack of a clearly articulated accountability and responsibilities model in the project appears to have been a factor in overall operational readiness, as the departments appeared to be generally reliant on those driving the implementation and the change management structure created for the FIS project to support operational readiness. However, some within the project leadership articulated that operational readiness is a known department responsibility that does not need to be reinforced through the project, and that the reallocation of resources to adapt to the system implementation is within the scope of a department's operational responsibility, and should not be part of the project scope or artifacts. The lack of clearly defined accountability and responsibilities, differing expectations for departments readiness, and ineffective change management manifested itself in issues post go-live. As post-implementation issues arose, department personnel held central offices accountable for tasks that were within the departments' scope of responsibility. An example of this is the clean-up of default accounts which accumulated a large number of transactions due to new FIS system controls that prevented charges from posting to sponsored research awards after the project end date recorded in OFC. During the post-implementation timeframe, some time and effort were spent diffusing tensions between units on campus regarding responsibility for what were perceived to be "system issues," which in some cases hampered issue identification and resolution efforts.

We noted that the FIS could have benefitted from a RACI matrix. RACI is an acronym for "Responsible, Accountable, Consulted, and Informed." Performing a collaborative RACI matrix exercise with all stakeholders could have helped bring structure and clarity on the roles of key stakeholder groups and assist with reducing confusion on expectations, with clear documentation to support the organization's responsibilities and accountable persons for key elements of the implementation.

Governance

The ESR Program was designed to have a Governance committee (EISC) to provide leadership and oversight to ensure enterprise-wide alignment of business and administrative systems to the mission of UCSD. Each

individual ESR project, including FIS, also had a project specific governance committee. In general, project artifacts described the FIS governance as a resource to steer the project by making decisions impacting strategy and scope, and providing final acceptance and approval on project deliverables, while EISC's role was to approve changes related to timeline and budget (see ***Attachment B*** for EISC Roles and Responsibilities). Neither of these key groups were explicitly tasked with evaluation and mitigation of risks. Several interviewees noted that issues were minimized in communication (particularly to EISC), and/or FIS governance did not proactively scrutinize project risks. We did not see indication that the most significant issues felt after go-live were discussed as key risks during these sessions. Based on this, it appeared that the governance model was not effective in actively identifying and evaluating risk issues. Additional comments on the governance committees are provided below.

- *EISC*: The FIS charter described EISC as a resource to approve changes related to timeline and budget. Our review of selected EISC meeting notes identified discussions around the Oracle Procurement Tool and Travel and Expense module, and evaluation of UCPath/FIS timeline cross-impact, which is consistent with their role as defined in the FIS Charter. Interviews with some EISC members indicated that project team updates presented an optimistic picture of the FIS project, and either did not raise any issues, or presented in such a way that issues were being actively managed and did not require intervention from leadership. Based on reviews of a sample of presentations at the EISC, there were discussions around UCPath, but we did not identify any significant FIS issues (for example, end user reporting) being raised to EISC as part of active discussions prior to go-live, although project executive dashboards and status reports were added as reference materials to the presentation. Some interviewed felt this might explain the initial resistance/lack of empathy from leadership as post-implementation issues emerged since they felt blindsided given the optimistic outlook.

- *FIS Governance Committee*: The FIS Charter identified Governance as a resource for steering the project by making decisions impacting strategy and scope, and providing final acceptance and approval on project deliverables, provide or refer subject matter expertise as needed, resolve and/or escalate conflicts, and support the changes in words, behaviors, and actions. Our review of project meetings and interviews with Governance members showed that this group engaged in limited key OFC system implementation and design decisions (for example, three-way match, reverse mapping for UCPath, approving scope changes (i.e., Concur, Procurement). This level of participation was by design to expedite decisions due to the compressed timeline and pace of implementation. Governance was also presented FIS monthly project status reports that, at times, identified past due decisions, open risks, and issues, but it does not appear that Governance actively discussed resolution or progress. Several members expressed that they felt that Governance meetings were mostly informative than interactive. However, it did not seem that the FIS charter specified Governance role in terms of a body to monitor risks, and evaluate mitigation strategies.

End User Perspective / Involvement of Academic Areas

One of the important parts in the system development life cycle is the users of the system, who use the system on a regular basis to perform their functional responsibilities. Although end users typically do not have in-depth knowledge of the technical system details, they can provide valuable input on functional needs for a system.

Involving end users in the project team helps encourage end user adoption, and increase user accountability for the system's design resulting in work force commitment. Although central offices are also users of the system, in this section, we are referring to the end users in the academic units (in Academic Affairs, Health Sciences, and SIO).

Academic Department Representation in Governance: We noted that there was limited representation on the Governance team from departments from each VC area. For example, only one academic department was represented (SIO), and Academic Affairs was represented by the Vice Chancellor Academic Affairs (VCAA) Director of Finance. The imbalance of central office to academic department representation is inconsistent with the shared accountability that was envisioned by the project sponsors, and contributed to the perception amongst department stakeholders that the implementation was designed to meet central office needs. The expectation by project team leadership was that Governance team members would conduct outreach through their extensive network (e.g., FinLink groups) to share feedback, but this expectation or role was not explicitly listed in the Governance team responsibilities. We also noted gaps in representation from Health Sciences departments, and Resource Management and Planning.

FIS Governance Representation

	Central Office	ITS	Department
Voting Members	12	0	2
Non-Voting Members	2	4	2
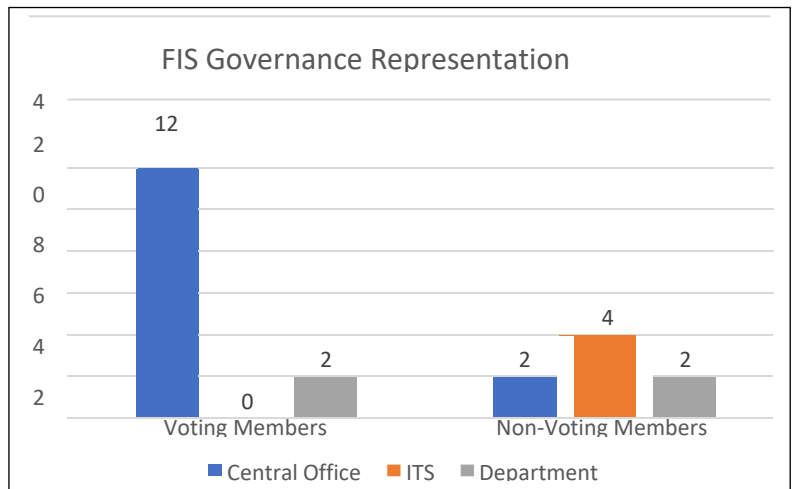
Design Team Involvement: Design teams consisted of a functional Design Lead from a central office, other central office staff, and for some FIS modules, department representatives. Under general direction of the Design Lead, design team members were responsible for determining whether all configuration values were captured, all real-life testing scenarios documented, the configured environment meets business process needs, and how to map current data to Oracle Cloud. However, discussions with some of the design team members from departments indicated that their involvement was primarily in testing, and they were not actively engaged in business process mapping/analysis, data mapping and conversion validation, and configuration. It did not appear that departments were consulted on design decisions that impacted their business processes. One department design team member indicated that they could have pointed out some dependencies in billing processes that could have been evaluated for design. Additionally, it would have been helpful to better understand end user data and specific system needs to ensure that they are included early in design decisions even if the implementation strategy was MVP.

The FIS project technical leadership indicated that they relied on central offices/Design Leads to have a deeper understanding of the department-level tasks, but it was realized after go-live that central office understanding of department business processes was not as deep as expected. The key consideration is to ensure that there is adequate department representation – such that the right people are represented across all VC areas, with the right levels of accountability and understanding of processes. Processes may vary across campus units depending on the unique nature of their operations or needs, or past practices.

Lessons Learned / Opportunities for Improvement

1. Ensure Project Charters clearly articulate and communicate ownership, accountability, and roles of all stakeholders in a shared governance environment.
2. Utilize a RACI matrix to ensure clarity on accountability and responsibility.
3. Ensure Project leadership structures updates to governance groups to facilitate discussion of risks and encourage more professional skepticism by team members.
4. Engage VC leadership to discuss their representation on the project team to ensure that

> it reflects a representative group of individuals at the right levels and who are knowledgeable on the processes within the respective VC areas.

B.	Budget and Resources Planning

The original budget did not plan for FIS-project related costs other than recurring software subscription after go-live. Accountability and budgeting for Hypercare and Sustainment costs were unclear, until close to go-live.

Impact / Effect

A lack of comprehensive planning for costs post-implementation impacts crucial end user support for system and process issues.

The FIS budget was part of a larger ESR program budget and scope, presented by the CIO and CFO as part of the campus budget process. The budget, once approved, was shared with relevant governance committees and leaders, and high-level budget summaries by ESR program areas were provided regularly through EISC governance meetings. The original budget for FIS was developed in 2017, with projected costs of $23.6M, but excluding the Procurement module, Concur, Foundation, and Medical Center (which were scope increases absorbed later into the FIS budget). The budget was comprised of software/software maintenance costs (72%), consulting costs (14%), functional and technical staffing augmentation/configuration costs (11%), and training (2%). The training budget was considered by ITS to be one-time, and in many cases, where provided via backfill, captured in the functional staffing augmentation. Separately, there were costs included within the overall ESR program budget for WalkMe[6] and change management scaffolding (newsletter, website, etc.) that were shared across all projects. We were informed that the software projection reflected current commitments, and additional post go-live enhancements were not in scope for the ESR program budget. If new software was needed, it was to be budgeted as part of the annual budget process.

Although the FIS budget did not receive a recurring budget (except software costs), one-time costs justified as project expenses, even if they were not originally budgeted, were absorbed by the program budget. We were informed that when the ESR program was formed, there was only a high-level view of what was in scope, and the scope evolved over time. Since future-state business processes were unknown, the expectation was that the budget would be updated periodically as more was learned about the projects and their specific needs. For example, the FIS budget absorbed costs for legacy data warehouse change costs for finance, streaming finance integration architecture and platform for building and maintaining data/system integration, impacts of UCPath and the new CCOA on ESR costs. The FIS budget also supported stabilization costs post-implementation through functional backfill (including partial staffing support for Hypercare and Sustain, data visualization/report development), technical backfill (configuration and Oracle Service request support), and stabilization/enhancements (e.g., custom commitment tracking module) for the Budget module and finance system implementation faculty support fund post-implementation. Consequently, the FIS budget supported $4.8M in post-implementation costs for FY2021 (post go-live) which had not been included in the original budget.

We noted there were no costs budgeted post go-live, except for software subscription costs, and units were expected to repurpose from existing resources, or make requests through the annual budget process for unit-

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[6] Digital Adoption Platform for helping users understand online applications.

specific costs after go-live. It was added that there were no departments[7] outside of ITS committed to a return on investment (reclaim) and that contributed to the ESR budget (with the exception of the Chancellor).

However, it was indicated that during initial discussions at the initiation of the ESR program between academic units and the Chancellor, it was agreed not to have the units commit to a projected savings plan (from efficiencies of the ESR program), nor contribute to the ESR budget. In return, the units were to reallocate resources from their projected savings as needed to adapt to the new systems.

As a result of this budget model, the budget appeared primarily focused on IT costs related to the implementation, and excluded Hypercare and Sustainment funding. However, for a project scope of this magnitude, a more holistic approach to plan and budget for post-implementation support would have ensured greater understanding from all stakeholders of what costs were included in the budget and which were not. It also appeared that the development of the FIS budget did not consider input from the Campus Controller and Health System CFO, even though they were key stakeholders in the project execution and Sustainment structure.

Hypercare support could have been an evident cost that should have been considered at the onset as part of the initial budget. A more comprehensive approach in planning and execution initiated earlier to budget for resources to get from Hypercare to a steady state, identify responsible units, and how costs would be absorbed, either in the FIS budget or through other units, would have ensured clarity on resources and responsibly for these costs. However, ITS project management's perspective was that Hypercare budgeting should have been planned by the responsible offices as part of the operational readiness for this system implementation. Although the project team had engaged the Office of Strategic Initiatives (OSI) to draft a Sustainment plan which outlined a detailed reallocation model for Business and Financial Services (BFS), there did not appear to be a similar engagement for Hypercare funding/planning.

We noted that the Health System had a separate budget for the system implementation to augment their specific needs (particularly reporting). On the other hand, BFS leadership acknowledged that the Sustainment structure took some time to establish because they had not budgeted for these costs. The elongated Sustainment period has been a contributing factor in the pain point felt by end users as it took several months before a governance and management structure could be established to define FIS road map, support enhancements after go-live, and partner with campus stakeholders to prioritize work. Planning for these costs could have facilitated the Sustainment model.

Lesson Learned / Opportunity for Improvement
For a system implementation of this scope and impact, conduct planning and budget processes to include all phases of FIS implementation, including Hypercare and Sustainment costs.

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[7] We noted that BFS had hired and funded two positions, the Change Practitioner, and BI Lead, in anticipation of the FIS project needs, and these roles were not supported from the FIS budget.

C.	Project Approach

The extent and timing of change, critical path dependency for the FIS project, and certain project decisions, added challenges for successful adoption of the system. Also, end users did not fully understand the reasoning for leadership's decision to go-live given the challenges during that time. The MVP criteria were, in some cases, vague and not well understood by project team participants or end users, and not fully met.

Impact / Effect

Lack of communication on project deliverables and key decisions results in a disconnect with end user expectations. Also, the magnitude of change led to end user fatigue.

Scope and Pace of Implementation

The overall ESR program scope was large, and involved implementing several projects (UCPath, Kuali Research, etc.) with little time gap between projects, creating an environment of continuous process and system changes, and learning fatigue for end users spanning multiple functional areas. UCPath was deployed on June 1, 2020, requiring reverse mapping for the legacy chart of accounts (COA) until FIS went live in July, creating a critical dependency for payroll costs. The FIS scope itself spanned multiple areas (sponsored research/grant accounting, new COA, budget, purchasing, etc.), requiring users to adapt to new systems and processes in all functional aspects. The new CCOA was a significant functional and accounting shift for end users, creating additional dependency for the successful adoption of the FIS system.

A campus notice that OFC was selected as the FIS awardee was sent in November 2018, with a planned launch in July 2020. Several Design Leads and project team members expressed that the development timeline was too aggressive, and at times pressured design teams to make decisions without adequate outreach to departments, negatively impacting the system's quality and end user testing.

New Chart of Accounts (CCOA)

The new CCOA was a critical path dependency for the FIS project. The FIS technical team was under the impression that the CCOA was complete prior to implementation, however, although the CCOA structure was defined (in terms of what the chart string would include), the elements had not been fully defined (segment values, length, attributes, number of levels, department hierarchies, etc.) or mapped prior to implementation. The new CCOA design was approved by Campus and Foundation leadership in March 2019, and by Medical Center leadership in April 2019, and index mapping continued through to November 2019. There were also CCOA baseline changes/additions to accounts/funds/FinUs/other elements after index mapping was completed through May 2020, that had to be uploaded to Oracle by the ITS team for conversion. The overall delay in CCOA finalization had a snowball effect, impacting configuration, conversion mapping, and integration. The delay of CCOA design was brought up to FIS Governance repeatedly as a risk in status reports till March 2019, but the communication back to the project team was to do the best with the available information (since some pieces of it were complete) – but this was not efficient as CCOA changes had to then be continually accommodated in the configuration, conversion mapping and integrations by the technical team, requiring additional time and resources.

Key Business Processes for Current State

Early on in the implementation, a decision was made to conduct the project without current state documentation. Consequently, Design Leads were developing future state processes based on their

knowledge, experience, and "how Oracle works" but with little input from departments (as time was a hindering factor).

Leadership rationale was that documenting current state was an inefficient use of time and resources and the project teams should focus on developing future state based on best practices. In addition, existing processes were considered tied to antiquated systems, thus assuming that historical processes would not reflect what would be needed in the future.

Given the timeline of the project, a full process mapping exercise was not feasible, however performing limited process walk-throughs with end user representatives could have helped better understand some of the current process gaps, inconsistencies, and dependencies across a decentralized campus that needed to be addressed in future state, and created a more comprehensive business requirements model. Fully avoiding current state analysis is attributed to challenges in organization readiness and change management. Design Leads did not always have the perspective to fully understand department business processes, pain points and needs, or the cross-disciplinary nature of academic work. For example, there were issues aligning projects/tasks for Health Sciences after implementation, and challenges in billing for sponsored projects that might have been mitigated with better understanding of the process at design. Also, the process of understanding current state could have allowed an opportunity to engage with end users in regard to the system implementation to understand department business processes and challenges in more depth, facilitated participant readiness, and helped identify department stakeholders to include in the project team as SMEs, and other individuals for effective representation on the change network mitigating the perception that department needs were not considered during the implementation.

We also noted varying decisions in relation to use of PPM for recharges by campus and Health System, that resulted in Health System recharges not being reflected at the project level. Campus made the decision to run campus generated charges through PPM as projects in June 2019, but at that point Health had already proceeded through design for integrations whereby all Health System recharges would flow to the GL. Therefore project information was not captured by Health System, resulting in discrepancies in GL and PPM data post go-live for Health System recharges to distribute expenses to the appropriate research projects/tasks.

MVP

MVP criteria included having certain toolsets and reporting, which were not met on go-live. The MVP outline was high level and vague in some respects, and it was unclear what specifically was required or intended in terms of the final deliverable on go-live. For example, financial reporting of faculty balances, PPM sponsored research sponsor reporting, key personnel reporting, department level detail, were listed on MVP requirements, but it was not clear what this meant for the go-live product. Also, the mapping of the MVP elements to the requirements traceability matrix (RTM) for tracking design specifications and testing was not clear. The requirements were mapped to design documents, test cases, and completion metrics reported on the Go/No-Go checklist.

Department leadership felt that there was inconsistency in the definition of the project deliverable/end-product from a technical standpoint, and departments expectation. Although a functional system was implemented, it was felt that it did not meet the needs of the end users to conduct their business effectively. For example, some noted that the Conference Room Pilot (CRP) by OFC representatives during vendor selection phase, which were intended to demonstrate the system capabilities and allow end users to have hands on experience, assured that all requirements would be met. However, the level of functionality demonstrated was not consistent with the MVP that was launched at go-live.

Although it was communicated that MVP would have its limitations, the plan for enhancements was to occur within 3-6 months post go-live, but this did not occur. The project artifacts included a future enhancements timeline and priority list, but it did not appear that enhancement planned after go-live were communicated to end users, which created angst and confusion on system capabilities.

Go-Live Decision During Pandemic

Another factor that added to the complexity of change was launching the FIS during the COVID-19 pandemic. Although this was an external uncontrollable element, the uncertainty and challenges at the time impacted the ability to provide in-person support/training, facilitate learning through peer-to-peer interaction, and forced budget cuts and hiring freezes, which negatively impacted departmental administration/staffing support.

The project sponsors were engaged and signed off on Go/No-Go decision at multiple points through the implementation. The decision to go-live during the pandemic (with risks associated with remote training, change management, and go-live support) was a joint leadership decision discussed at the EISC, and weighed against other factors of maintaining and reconciling two CCOAs, and costs of delaying implementation (see Impact Analysis, Figure 2). The UCPath/FIS timeline impact was discussed at an EISC meeting in April 2020, and even today, EISC members interviewed agreed that going live was the best approach, and stood behind that decision considering the difficulties in the two years since implementation.

		ORACLE FINANCE		**Figure 2: Impact Analysis**	
		July 1, 2020	Before July 24, 2020	Before September 1, 2020	After September 1, 2020
UC PATH	May 1, 2020	No change COVID-19 remote work risk	Go live with UC Path first **1** Extend FIS data entry blackout COVID-19 remote work risk	Go live with UC Path first **2** +FIS $1.5M / month Dual COA maintenance overhead Audit and reconciliation risk COVID-19 remote work risk	Go live with UC Path first **3** +FIS $18M (FY22) or +$1.5M / month Dual COA maintenance overhead Key staff retirement or burnout risk Audit and reconciliation risk, if mid FY
	July 1, 2020	Go live together +Path $800k / month +Unknown UC Path Center costs July's 1st Bi-weekly come from PPS COVID-19 remote work risk	Go live with UC Path first +Path $800k / month +Unknown UC Path Center costs Extend FIS data entry blackout COVID-19 remote work risk	Go live with UC Path first +FIS $1.5M / month +Path $800k / month +Unknown UC Path Center costs Dual COA maintenance overhead Audit and reconciliation risk COVID-19 remote work risk	Go live with UC Path first +FIS $18M (FY22) or +$1.5M / month +Path $800k / month +Unknown UC Path Center costs Dual COA maintenance overhead Key staff retirement or burnout risk Audit and reconciliation risk, if mid FY
	Before September 1, 2020			Go live together +FIS $1.5M / month +Path $800k / month +Unknown UC Path Center costs Audit and reconciliation risk COVID-19 remote work risk	Go live with UC Path first +FIS $18M (FY22) or +$1.5M / month +Path $800k / month +Unknown UC Path Center costs Dual COA maintenance overhead Key staff retirement or burnout risk Audit and reconciliation risk, if mid FY
	After September 1, 2020			Go live with Oracle first +FIS $1.5M / month +Path $800k / month +Unknown UC Path Center costs Dual COA maintenance overhead Audit and reconciliation risk Integrate OFC with PPS COVID-19 remote work risk	Go live together +FIS $18M (FY22) or +$1.5M / month +Path $800k / month +Unknown UC Path Center costs Key staff retirement or burnout risk Audit and reconciliation risk, if mid FY

The decision to not run systems in parallel following implementation was also unclear to many in campus leadership. Generally, parallel running was not considered feasible (except for Foundation) given the resources and complexities of maintaining two charts of accounts and the need for accuracy in mapping legacy chart elements to the new CCOA. Parallel running was considered to be labor intensive, riskier, and would divert resources from post-implementation support. However, this reasoning was not adequately communicated to end users, and added to the frustration as they were trying to gain confidence in the accuracy of data in the new systems. Consequently, our interviewees noted that some end users expressed that they were not provided with a clear reason why running in parallel was not feasible and because, based on their experience, they see major systems implementation run in parallel to ensure the stability of the new system, as errors with the new systems are managed and enable the users to become comfortable with the new processes, and to develop confidence leading to complete switch over.

Lessons Learned / Opportunities for Improvement
1. Clearly define and communicate go-live deliverable for end users and how achievement of each of those deliverables would be met.
2. At minimum, perform a limited current state review to better understand business requirements, and engage the end users.
3. Periodically assess these deliverables against the user requirements (matrix) as the system implementation proceeds.
4. Clearly communicate and planned enhancements and timing for better understanding of the system rollout, and manage expectations.
5. Clearly communicate implementation strategy, challenges, and risks. For example, why risk mitigation strategy such as running in parallel might not be a feasible option.

D.	Organizational Change Management (OCM)
Change network, communications, and training were not effective in facilitating the extent of change needed for the system scope. Organizational readiness was a significant gap that was not fully assessed or understood until after go-live contributing to the difficulties in adopting the new system.	
Impact / Effect	
Lack of buy-in and readiness from stakeholders and end users impeded a successful adoption of the system.	

Change Network and Communications

The ESR program had a Strategic Organizational Change Management (SOCM) team to provide a framework, structure and guidance for all ESR projects to consistently introduce, manage and reinforce change. Each ESR project (including FIS) had a designated change team, change leaders and practitioners, who worked closely with the project manager and SOCM to strategically integrate OCM into their project. The change management strategy was built on the Prosci Best Practices model and depended on communications through a comprehensive change network with representation from units within each VC area on campus, including Health System. The goal was to develop a local support structure on the premise that communications would be more effective for end users when information from the project team was received through department leaders and/or direct supervisors to the end users in the units. However, several change network representatives, and project leadership acknowledged that change management execution was ineffective.

Below are some of the common gaps mentioned:

- o Communications did not contain substantive information. For example, it would have been helpful to have system demos, information on the impact of key accounting changes (sub-ledger concept), new controls (e.g., default accounts and impact on units), and the process change to address them. Training also faced similar challenges described above. However, the FIS Change Leads, Change Network, Design Leads and their teams, and Training Coordinators could only distribute information as it was available to them, and therefore struggled to provide more substantive information as this was still in development.
- o Communications were not considered "two-way," and information flowed from the project team to change network representatives and end users, rather than listening and learning approach.
- o Communications and change network targeted the administrative staff, but did not focus on the research faculty and lab personnel to understand their needs and prepare them for the change. Although it was indicated that Academic Affairs did regularly inform faculty on the FIS project, it was felt that faculty did not comprehend the system issues and controls and relied on information from fund managers and department administration, creating pressure on the administrative staff to continue to meet their reporting expectations. Another group that was not focused on were the lab personnel, particularly those with purchasing functions, who may not have comprehended the impact of the CCOA on charge capture.
- o Change network representatives did not feel they had the necessary tools or knowledge to address questions being raised by their respective areas post go-live. This could also be attributed to challenges in directing questions to the right area (SMEs) and some felt having a helpdesk would have been beneficial.
- o There were no OCM assessments (metrics) to measure the effectiveness of change network communications. The change management deliverables checklist referenced routinely conducting change assessments and updating change management activities accordingly, but it does not appear this occurred. There could have also been regular audience assessments performed to ensure that all groups impacted by the change are identified and contact information listed and follow up to address change management activities gaps. Some interviewed indicated that there were doubts whether the system would go-live at the scheduled date and stronger change management techniques could have enforced the go-live timeline.
- o The change management network depended on communication from the change leads to the change network representatives, and communication channeled from the change network to the departments. It is unclear whether the information being directed to the departments was effective. There were no measures to ensure that these communications were being passed down to all the relevant parties, and that information was being absorbed.
- o Communications in relation to the ESR program were confusing as they represented that the ESR program would make the systems more efficient, and did not set realistic expectations and effectively communicate to the campus users on when such efficiencies may be realized. Efficiencies are not immediate, and it may take a few years to achieve as the learning curve and stabilization mature.
- o Several interviewed mentioned communication channel overload and saturation. There were multiple communication channels (change network, newsletters by ESR program areas, announcements, ESR news, etc.), and some newsletters included several updates/topics which were not always easy to read, which may have contributed to the overload. However, each end user may absorb information differently, and there was no assessment to measure communication effectiveness and how to make it more effective.

Organizational Readiness Assessments

Organizational readiness was a significant gap that was not fully assessed or understood until after go-live, contributing to the difficulties in adopting the new system. For instance, the FIS implementation was considered by several departments to be a major catalyst/contributor to fund manager turnover after go-live (as a result of the post-implementation issues, and some seasoned end users retiring in lieu of learning a new system). In hindsight, it was realized that departments and central offices could have prepared for changes in advance regarding anticipated administrative staff vacancies (particularly known retirements), equity assessments, classification, skills assessment, etc. It did not seem that these aspects were considered to be a potential issue pre-implementation, and therefore there was no direction/guidance on this department readiness check prior to go-live as part of the FIS project. Project sponsors felt this should have been done by academic areas, but academic areas did not understand the magnitude of the change to fully consider the impact on system users.

There was a lack of information (e.g., through system demos, available reporting, process changes, etc.) to fully understand the complexity of the system, the extent of change, and the additional resources that would be needed to adapt to the change. There were no central change resources within project leadership to facilitate readiness assessment, and it was left to the VC areas and units to manage their operational readiness.

We were informed Academic Affairs leadership had ongoing discussions for efficiencies through organizational realignment prior to go-live, but in the context of efficiencies and possible budget reduction planning for the COVID pandemic. In hindsight, Academic Affairs leadership articulated this was a missed opportunity to also support the need for organization realignment so as to align staffing infrastructure with new, refined business processes in anticipation of the launch of ESR, possibly since the operational impact was not fully understood at that time.

It was noted, though, that certain areas were already organizationally set up to be better prepared for the system implementation. For example, in the Health enterprise, the centralization of the finance function and having skilled technical accounting/finance team allowed for a more effective change management and communication structure.

Training

Due to the Covid-19 pandemic, training was primarily offered through virtual sessions from May – June 2020. There was training on Oracle (PPM: awards, capital projects, general projects, project billing, general project recharges; Concur: travel, meeting and entertainment; Chart of Accounts; Accounts Receivable; Procurement: buying and paying; BI Tools: for report consumers and BI modelers; etc.). However, most departments considered training lacking in terms of hands-on training and system demos, minimal materials, and felt that it was high-level and did not address department level processes/questions. In addition, reports were not available for users to see the change in output from the system (e.g., the impact of sub-ledger concept and default accounts), to be trained for how the change would impact their job. Several felt that having more focused role-based training customized for the different categories of end users would have been more effective. The initial OFC training was light, as the trainers could only share what they understood about the system then. With all the new systems being rolled out as part of the ESR program and their inter-relations, an enterprise-level/comprehensive training program was thought to be lacking for the campus to facilitate more effective training.

Knowledge-Based Articles (KBAs) were developed to address some of the standard processes or questions. However, they were expressed to be outdated or not well written to comprehend, and there are mixed perceptions regarding their effectiveness.

Lessons Learned / Opportunities for Improvement
1. Conduct regular change management and audience assessments to target specific user groups, identify gaps such as communication, specific training needs, resistance, etc., and mitigate timely. 2. Ensure that organization readiness assessments are started early, assessed periodically, and gaps remediated timely. 3. Prioritize role-based training and assessment of training effectiveness in addressing department level processes/questions.

E.	Project Resources

There were resourcing gaps with the project team in relation to Business Intelligence, design teams, and change management.
Impact / Effect
Inadequate resourcing in a major enterprise system implementation increases the risk of project delays, missed dependencies, and key activities lacking ownership, and potentially a system with limited functionalities that do not meet end users' needs on go-live.

There were multiple resourcing concerns raised during interviews, and we noted that BI resourcing and design team burnout were identified as risks in project artifacts and status reports:

System Design and Configuration

- o Design Leads felt overloaded and often asked to go beyond their skill set. The implementation heavily depended on the Design Leads, and they had no backups. They were tasked to learn the Oracle tool, prepare test scripts, prepare technical documentation, and draft communications for the Communication and Training Lead, etc. The Design Leads were given training on Oracle but did not feel they had adequate knowledge or experience to effectively perform their role.
- o Design Leads backfills were not considered effective, as some Design Leads were often still pulled into their day jobs.
- o Some interviewed felt the project could have benefited from additional Business Systems Analysts (BSAs) to help document requirements, prepare system specifications, system design, etc.
- o Some key members of the project technical team also lacked experience with a system implementation of this scope.
- o UCSD chose to implement the FIS system using internal employees with only selective use of external consulting services. Although the UCSD employees were SMEs in University processes, they lacked experience in implementing a cloud solution such as OFC.

Business Intelligence and Reporting

The Business Intelligence workstream was under-resourced (discussed further in the Reporting section). This was identified as project risk, particularly for the PPM module in the project status report for November 2019, and offshore report writers were hired but were not considered effective. Another strategy was to train end users on Oracle report writing, and a six-week session was held with 40 campus users. However, only five or six of those trained decided to assist with report writing, significantly less than anticipated. Business Intelligence and ensuring adequate reporting to meet end user needs continued to be an issue well after go-live, and continues to be a work in progress.

Change Management

The Change Management team was under-resourced for a system implementation of this scope. The team included one change practitioner and two change leads (that were allocated 50% in this role). Change team members role were to be project spokesperson, who established and oversaw the execution of strategy for OCM. As such, they were responsible for preparing FIS communications strategies for central campus, central offices, including Health System, Clinical Practice Organization and Foundation; proactively engaging project sponsors, FIS Governance, and the financial community and target audience to provide financial system information; and executing project OCM plans and assessments; and coordinating training. Other tasks the team carried out include actively participating in index mapping, role and access mapping, and Hypercare support and could have been more effective with additional dedicated resources.

Lessons Learned / Opportunities for Improvement
1. Ensure the project team consists of the appropriate resources, with the knowledge of the business process and software solution (e.g., evaluate the correct balance between internal SMEs and consultants and adjust strategy as needed), to effectively plan and implement the project.
2. Monitor resources during project execution to ensure adequate coverage of essential processes during implementation, and assess and address resource concerns identified by the project team.

F.	Reporting
The FIS project underestimated the eco-system of custom reports for end users and the envisioned reporting strategy was not effective at go-live.	
Impact / Effect	
A lack of visibility into business performance and the inability of end users to perform their administrative and fiscal functions effectively disrupting business processes.	

The lack of reporting capabilities was the most significant pain point for end users post-implementation. There was a lack of useful department-level reports (particularly with PI portfolio of funds), performance issues with running reports, and/or confidence in the accuracy of balances in the reports (for example, considering the impact of default accounts from system controls and other data errors). Reports available at go-live were focused more on central office needs and included Trial Balances, Monthly Close, Net Position, Letter of Credit Reconciliation, Payments by Receipt Class, etc. However, Expanded Budget Summary and Fund Summary

reports which would have addressed decentralized department needs, were not available at go-live. Several reports and dashboards were developed after go-live, and communicated in November and December 2020 to the campus community, including the Project Balances with Expenditures Details, General Ledger Details, Net Operating Results and Fund Balances, Expanded Budget Summary. Reports continued to be developed thereafter, but end users still struggled with performance issues in running reports, and found reports did not fully meet their needs.

The Business Intelligence strategy was based on custom reporting through Activity Hubs (a separate ESR project), which are central repositories from UCSD enterprise systems that would allow users the ability to pull information from enterprise systems and blended data for reporting and analysis, but this was not realized as all the data from the different modules was not captured in the Activity Hubs on go-live. Also, the approach to have department end users build their own reports from Cognos/Tableau (Activity Hubs) was a functional shift, as historically ITS had developed reports for end users based on their needs, and required enhanced data literacy from end users.

In light of this approach to having end users build reports from the Activity Hubs, the Reporting Core Group (RCG) was charged by the VCs in Academic Affairs, Health Sciences, and Marine Sciences to help prioritize and build reports for FIS. The RCG workgroup included the BI Lead, and representation from VCAA, SIO, Campus Budget Office, Health Sciences School of Medicine (HS SOM), Health Sciences Research Service Core (HS RSC), and Communities of Practice. The RCG conducted extensive research regarding reporting through the Activity Hubs in Jan-June 2020 period and shared their report with the three VCs in July 2020, which highlighted significant gaps in meeting the reporting needs of the campus community (and it was indicated that the results were communicated prior to the report date). However, although the reporting concerns were shared, the RCG did not get adequate support to facilitate development of campus reports, and it was indicated the group was dissolved in the governance structure established months after go-live. The perception was that despite the time and effort invested by this group, no action was taken in response to these recommendations, leaving participants to feel that end user needs were not prioritized, and the departments voices were not heard.

The stabilization period took longer than expected, and the Finance Governance structure to provide leadership, guidance, and decision-making on our financial systems was delayed (established in February 2021). A Reporting sub-group had governance over financial report quality and data control, and to ensure that reporting solutions met the financial needs of the campus community, but it took several months for reports to be streamlined to meet end-user needs.

OFC Reports

The Go/No-Go matrix identified reporting as a risk on go-live since only 52% of critical campus reports had been developed. For Foundation, mitigating factors were assumed to be put in place to manage the risk (by having Foundation run in parallel because they had their own financial accounting system and hiring a dedicated report writer and focusing on compliance reports development). Health System had its own discretionary budget and planned for extra resources for report writing to meet its unique reporting needs. However, looking back, FIS leadership acknowledges this risk was underestimated and not thoroughly evaluated in terms of the reports that were not ready for go-live and potential impact/importance for end users.

Report building during implementation was challenging and some of the reasons include the following:
- Lack of a strong BI team with adequate resources and experience building OFC reports. A consultant was hired in late June 2020 to assist (just before go-live).
- There were constantly changing configuration requirements and defining report output data.

- The reporting template to capture report requirements was cumbersome and technical, and some Design Leads struggled to complete this document.
- Need for better control over the presentation layer for OFC. Too many administrators with access to the "presentation layer" in OFC resulted in report integrity issues if changes were made incorrectly by any of the administrators.
- The report build timeline was not considered feasible given the reports' complexities, dependencies, and need for validation.
- There were language barriers and time zone challenges with the offshore consultants as some were based overseas, and it was difficult for them to comprehend UCSD's accounting reporting needs fully.

Lessons Learned / Opportunities for Improvement
Ensure that: 1. Critical end user reporting needs are either met, or mitigation strategies effectively communicated for acceptance prior to go-live.   2. The project team has reviewed and validated the overall strategy, architecture, tool or technologies being implemented for reporting to ensure they will meet business needs upon go-live but most importantly future business needs.   3. A formal governance program is established timely to sustain the BI environment.

G.	Testing and QA
A Quality Assurance function was not established timely to support testing strategy and plans, and prioritization and tracking of tests. Several testers expressed concerns with that they did not find testing to be effective and adequately supported.	
Impact / Effect	
Effective testing strategies and plans help verify the system's functionalities and provide assurance that requirements are validated and that the system meets the technical and business parameters.	

FIS test phases for functional and technical requirements encompassed Unit Testing, Functional Testing, Business Process Testing, Data Conversion Testing, User/Role Access, Integration Testing, System Integration Testing, and User Acceptance Testing.

The FIS Quality Assurance (QA) team was not a dedicated team to the project and acted in an advisory capacity. The QA lead was hired late in Jan 2020, with limited team members (1-2 team members). The late onboarding of the QA team and the time crunch to go-live prevented them from having a more active role in the QA life cycle, including validating the testing strategy and plans, planning, designing, writing test cases (based on business requirements/system specifications), and reviewing test cases. The test cases are supposed to be written based on the business requirements/system specifications, but it was indicated the business requirements had gaps, and therefore the QA team's role was to provide some education to Design Leads to write them. It was noted that the QA process verifies that configuration meets business requirements, but QA cannot resolve issues if there are gaps in the business requirements. Some test cases were written by Design Leads, which was outside their skill set (ideally, this should be the QA team). The QA team could also not do their own testing in a holistic approach (so that different test case scenarios are captured). In hindsight, there was an over-reliance on business experts to conduct the quality assurance function.

Department representatives in the design team who participated in testing indicated that they struggled to follow test steps. Some project team members interviewed indicated that the depth and breadth of user testing could have been broader with more real-world scenarios, and testing should have considered business process gaps, rather than just validating what Design Leads had already built. Testing was time-constrained, and they did not have time to evaluate all test scenarios. The Design Leads did not have adequate test cases to test out the different types of chart strings and how they would function through the process (e.g., cross-validation rules on certain accounts/CCOA, etc., would behave differently). Some Design Leads mentioned that legacy data was not available for early testing (particularly project information) as data conversions were delayed due to CCOA design delays, and dummy data had to be used in some cases.

Test Metrics and Defects Resolution

A fully functional and experienced QA Team could have helped monitor test metrics, and tracked defects and resolution. Testing was tracked through google sheets, and testing metrics were captured at multiple points through the implementation for the Go/No-Go checklist. The metrics were calculated on the status of tests for multiple testing areas, and it was noted that one test area was excluded in the metric calculation for business process tests (although it would not have significantly impacted the completion percentages). We were also unable to validate the integration test metrics.

Test scenarios that were blocked/not started/failed in one cycle would carry forward to the next cycle, and a defect link was to be created for blocked/failed tests to track resolution. However, we identified some test cases that were not carried forward to the next cycle, and there was no defect link (through JIRA tickets) created to track the resolution of the test cases, but we were not able to determine if these test cases were associated with any defects in production. We were informed that testing involved a wide audience group with testers across design teams, and although they were educated to create defect links for all failed/blocked tests, actual compliance with this requirement could vary by the individual testing.

Lessons Learned / Opportunities for Improvement
1. Plan for a QA function for system implementation to assist with all phases of testing strategy, plans and execution (to include designing test cases against business requirements, and monitoring test status, defects, and resolution.) to ensure adequate testing scope and resources.
2. Ensure separation of duties between those designing system configuration and the quality assurance function.

H.	Hypercare and Sustainment

Hypercare support was not effective in meeting end user needs, and the extended transition from Hypercare to stabilization frustrated end users.
Impact / Effect
Hypercare and Sustainment strategy allows for a smooth transition from resources that supported the project implementation, to resources that will be supporting and assuring customer success in adopting the system post go-live.

Hypercare support was provided through daily FIS Hypercare meetings from July-Aug 2020, office hours, Communities of Practice, and the ServiceNow model for reporting and tracking issues. Hypercare consisted of tiered support (Tier 0, 1, 2, 3, and 4), and tickets were to be escalated if it was identified as system fix or tickets were over three days old. In addition, a dashboard was used to monitor tickets by service area, and aging.

Service Now Tickets were to be resolved through the Tier routing, a solution provided to the submitter, and the ticket closed within a set number of days if no further inquiry was raised. However, departments expressed that tickets took weeks to resolve, and felt that sometimes tickets were closed without a response. Other times they would simply receive a reference to a KBA to resolve the ticket which did not feel responsive to end users.
Office hours feedback was mixed; although some found them valuable, others felt more focused/structured discussions, or one-to-one options would have been more helpful. A Help Desk was not available for Hypercare and would have been helpful for live support.

It was acknowledged that a Hypercare model was not established with an effective ticket routing and monitoring mechanism, and it took some time to get that operational. Ticket routing was dictated by the user selecting from a drop-down list which was not always accurate, and tickets would route to service groups that could not resolve the concern. Responsiveness to tickets varied across the service units, which coupled with the lack of monitoring of aging of tickets by each service area, resulted in tickets not being resolved in a timely/consistent timeframe.

Central offices, such as BFS, were not organizationally structured to handle the Hypercare tickets and their day jobs. Design Leads continued to provide support during Hypercare, which was a shift from a central office/accounting function to a customer service model. It was indicated that most Design Leads positions were backfilled till August 2020, but they continued to support fiscal close activity, and participated beyond that time due to the extended transition from Hypercare to a steady state. In hindsight, some stakeholders expressed that it would have helped to have additional resources, e.g., external consultants at go-live to reduce the strain on the project team who were already experiencing burnout. However, this would have required prior planning of how the external resources would have been leveraged, and the FIS implementation strategy generally limited the use of consultants.

Hypercare transitioned into Sustainment as the governance structure was built – several months after go-live (Jan/Feb 2021), as BFS went through an organizational realignment while budgeting for the staffing of the unit. Although a Sustain plan from April 2020 prior to go-live did recommend this restructuring model for BFS, there was a delay in the reorganization of the unit. Finance leadership indicated that the Sustainment plan was not realistic as Finance staff continued to support their day jobs, and support extended Hypercare for FIS. Finance was faced with several challenges with a high turnover, delays in filling vacancies amid the pandemic, budget cuts, and hiring freezes. Repurposing of staff was not realized as some staff took on more responsibilities (for example, greater scope for Accounts Receivable team by adding Health, PCI Compliance etc.)

Lessons Learned / Opportunities for Improvement
1. Hypercare and Sustainment Planning should ensure that the planning process is started early, identifying responsibility/accountability over the support (e.g., via a RACI matrix), and the plan is assessed periodically for readiness, issues tracked and remediated timely, and concerns escalated appropriately for resolution.
2. Assessment of resources should evaluate funding and staffing implications for Hypercare and Sustainment support such as Help Desk, elevated staffing for ticket management, external consultant support, etc. Additional contingency planning for vacancies should be considered.

Charter

Project: ESR Financial Information System (FIS)

Requestor:	EISC
Date of Request:	2017
Sponsor/Stakeholder:	Sponsors: Pierre Ouillet, Lori Donaldson
Charter Status	**APPROVED** FIS Governance 13 Sep 2018

Project Description

Provide a high-level description of the project, what it aims to accomplish and general deliverables.

- The **Enterprise Systems Renewal (ESR)** program is an initiative that will transform and streamline core business and administrative processes. It is the largest technology improvement program ever undertaken at UC San Diego. ESR addresses key goals identified in UC San Diego's Strategic Plan, including creating an agile, sustainable and supportive infrastructure. This work is essential to ensuring that the campus business systems and infrastructure can adequately support our mission as one of the top 15 research universities in the world.
- The **Financial Information Systems (FIS)** project is part of the ESR program. FIS focuses on financial business processes and systems used for the general ledger, expense and revenue management, financial reporting, and budget governance for campus and medical centers. The goals of the FIS project are to reduce difficult and redundant processes and to replace our outdated financial systems with new, more flexible technology and enable integration of data across systems.
  - More information: Scope

Business Case

Briefly outline why the project is needed and expected benefits for students, faculty, staff and/or the university community.

- **Optimizing Business Practices**
  - Inefficient business processes created to use our current, outdated business systems create friction for system users. Their age also makes the systems difficult to scale to support our growing university. The ESR team will work with campus subject matter experts to document and refine business processes, focusing on lean business principles, and implement software solutions that support efficient campus workflow.
- **Delivering Smarter Systems**
  - Our systems are no longer adequate to support our core business functions. While we have been able to absorb the increases in student enrollment and research activities with adjustments to processes and hard work, we won't be able sustain this without upgrading our business systems. Renewing our systems will allow us to make adjustments more quickly to address the ever-changing needs of the university.

Consequences of Not Going Forward

Describe the impact if this project is not done.

- Continued spending on the existing mainframe, data-center, and supporting technical staff
- Time spent on sub-optimum and highly variant processes, and continued gap in needed resources to achieve business deliverables
- Lack of transparent and fast financial information available to users, departments, and executives
- Delayed implementation of new common chart of accounts, and continuation of challenges inherent to existing related to data quality and roll-up reporting
- Likely delays and impacts on subsequent ESR implementations, such as the student system
- Non-student AR will continue to be decentralized

Benefit Type

What are the quantitative benefits or anticipated ROI of doing the project?

- ☑ Cost Savings
- ☑ Cost Avoidance
- ☐ Revenue Generation

☑ Compliance; Cost of non-compliance?:

As outlined above, FIS aims to reduce resourcing costs in both process execution time as well as technical support time via a change in technology and enterprise-wide process improvement. The cloud ERPs being evaluated also offer improved functionality to ensure compliance and more robust monitoring of internal controls.

Urgency

What is the desired project completion date? Is this project deadline driven?

- ☐ Low urgency (anytime in the next calendar year or later)
- ☐ Moderate urgency (within this year)
- ☐ Pressing (this quarter)
- ☑ Extremely urgent (this month, ASAP)

This project is urgently needed, and very deadline-driven. This is important not just for the FIS community, but related and dependent ESR projects that will need to integrate or make updates to reflect the new CCOA. While the entire project will take more than a year to complete, the project will be broken down into milestones with timelines of weeks or months.

Risks/ Dependencies/ Assumptions/ Constraints

What can affect deliverables, success, and completion of the project? State any risks, dependent work, requirement or constraints.

- **Risks**
  - Change management process will be critical to engage stakeholders and create buy-in on standardized business process design, system configurations, and outputs

    - Resistance to change by affected users, decentralized business offices and technical support staff
  - Resourcing challenges and competing priorities

    - Multiple teams must work together on complex tasks
  - Complexity of the current data integrations and IFIS jobs
  - Complexity and variance of current-state business processes
  - Ability of downstream application owners to convert their applications to integrate with the new COA and FIS
  - Other simultaneous ESR implementations of new infrastructure, systems, hierarchies, and tools
  - Delays and re-work ("technical debt") caused by changes to systems that are integrated to FIS (e.g. UC-Path, new identity access management system, Activity Hubs, etc.)
- **Dependencies**
  - Common Chart of Accounts approved by UCOP
  - Sufficient and competent resourcing (functional, technical, project)
  - Integrations with other enterprise solutions; integration platform available (iPaaS) and developers trained on its use
  - Downstream application and data consumer inventory complete with appropriate decision assigned
  - Timely sign-off from governance on scope, design (configs, process, outputs) decisions, as well as timely resolution on conflicts and escalations
- **Assumptions**
  - Strong Governance, Core, and Project teams
  - Scope is stable through project (few change requests or additions midstream)
  - Change champions are embedded at all levels
  - No customizations
  - Necessary data required for cross-platform analytics and reporting will be available from Activity Hubs
  - System configuration will meet UCSD's needs
- **Constraints**

  - Resources
  - Budget
  - Timeline
    - All ESR projects require scope to fit within an 18-month implementation for work effort. However, go live date (work duration) can be determined by the business. Expected go live date and completion of the FIS project is slated for June 30, 2020.
  - Thresholds of configuration for the solution

Level of Impact

Indicate the level of impact this project will have on UC San Diego.

- ☐ Minimal impact (few individuals in one business unit)

☐ Medium impact (many individuals *or* multiple business units)

☐ Significant impact (many individuals *and* many business units)

☑ Critical impact (enterprise wide)

Requires Health Coordination

Select Yes if this project impact Health or requires Health coordination.

☑ Yes
☐ No

Resourcing

What types of resources (subject matter experts, users, funding, etc.) will the business unit commit to this project?

- Enterprise Information Steering Committee
  - Approve changes related to timeline and budget
- Sponsors
  - Deliver major project announcements
  - Ensure presence at key events; communicate changes
  - Proactively learn about and socialize the project
  - Respond to escalated conflicts
  - Provide executive decision-making
  - Engage with employees outside scheduled events
- Governance and Escalation
  - Steer project by making decisions impacting strategy and scope, and providing final acceptance and approval on project deliverables
  - Provide or refer subject matter expertise as needed
  - Resolve and/or escalate conflicts
  - Support the changes in words, behaviors and actions
- Core team
  - Guide the implementation
  - Leads project teams
  - Provide or refer subject matter expertise as needed
  - Support the changes in words, behaviors and actions
- Project teams
  - Experts sourced for project teams, i.e., procurement, change network, design, reporting, security, etc.
- Professional consultants to advise on implementation
- Support from supplier (as part of service agreement)

- More information: Team and Roles
- Backfill funding has been made available by the program to support this resourcing

Funding

Indicate the intended source of funding for both one-time development and acquisition costs and any on-going costs (for staff to maintain the system, and maintenance and/or upgrades of software and hardware). Explain sustainability of the funding.

- The Enterprise Systems Renewal Program budget will cover both one-time implementation and recurring costs associated with solutions deployed as part of this project
- Funding required to increase the scope of the project, accommodate business processes beyond the intended or best practice use of the software as designed, or to customize the vendor solution, must be presented to and approved by the Enterprise Information Services Committee and the Chief Information Officer
- The budget will be administered by IT Services

Special Considerations

State any special requirements or constraints should be stated. For example, if Federal regulations or University policy requires implementation by a certain date, this should be stated.

- Federal and state laws and regulation
- UCOP policies
- GAAP

ESR Roles and Responsibilities

PROCUREMENT	PROGRAM MANAGEMENT	BUSINESS PROCESS IMPROVEMENT		ENTERPRISE ARCHITECTURE
		LEAN BENCH MANAGERS	LEAN BENCH MEMBERS	
ROLE Establishes and leads overall procurement strategy for all ESR acquisitions **RESPONSIBILITIES** • Manages processes and technology platforms for all procurement activities • Liaises to partners for input, devil's advocacy, consultation and negotiations support	**ROLE** Establishes the methodology, framework and technologies to drive program and project management **RESPONSIBILITIES** • Establishes program and project dashboards and metrics • Reviews and curates project updates • Anticipates and manages possible risk/issues /collisions across projects that affect stakeholders	**ROLE** Establishes the framework and defines the process to drive process improvements using Lean Six Sigma (LSS) methodology and community **RESPONSIBILITIES** • Consults with Process Lead to prioritize and plan for process improvement workshops • Manages the roundtrip lifecycle of Lean accreditation, including exception case management • Recruits, train and resource load projects with Lean Bench Member(s) • Applies Lean accreditation and determine which steps (Define, Measure, Analyze, Improve, Control) to complete to those projects • Maintains library of current state process opportunities and dispositions	**ROLE** Facilitates process improvement by measuring and capturing current state opportunities **RESPONSIBILITIES** • 15-30% of their time is dedicated to Lean Bench. Rotates through projects. Members rotate annually. • Defines and measures process current state, and progressively decomposes process views by adding details • Identifies process opportunities and performs deep dives at a level of detail necessary to identify organizational responsibility and role interactions, and variations • Analyzes and documents current state opportunities • In partnership with the Project Manager, Process Lead and Configuration Lead, facilitates process improvement workshops	**ROLE** Leads overall enterprise architecture **RESPONSIBILITIES** • Researches, determines and drafts architecture design documents • Reviews technical architecture design and engages Architecture Review Board for feedback and approval • Designs and implements target technology standards, solutions development lifecycle processes, and enabling toolsets. • Provides guidance to technical leads to design and implement systems integration, user experience, identity management infrastructure and data warehouse

STRATEGIC ORGANIZATIONAL CHANGE MANAGEMENT	PROGRAM COMMUNICATIONS	EXPERT SOURCING FACILITATION	PROGRAM SPONSORSHIP	PROGRAM GOVERNANCE
ROLE Establishes the overall change management methodology and strategy **RESPONSIBILITIES** • Defines change management framework, tools, dashboards and metrics • In partnership with CL/CPs, designs and executes project OCM • In partnership with Program Manager and CL/CPs, manages risks/issues/collisions across projects that affect the campus community • Identifies and escalates issues to Program and Project Governance and Sponsors • Serves as primary spokesperson, establishes and oversees the execution of OCM strategy for specific audiences by applying methodologies	**ROLE** Establishes and executes a program communication strategy and plan **RESPONSIBILITIES** • Distributes campus-wide and executive-level communications • Ensures the project communication needs are supported adequately. • Ensures appropriate alignment across project communication plans • Designs and implements metrics for measuring marketing channel efficacy • Creates digital and traditional communications artifacts	**ROLE** Oversees expert sourcing strategy and implementation **RESPONSIBILITIES** • Provides and refines review rubric and guidelines • Consults people managers and unit heads on expert sourcing strategy • Reviews and approves timely allocation of backfill /overload funding requests	**ROLE** Initiates, charters, and authorizes the program **RESPONSIBILITIES** • Delivers major program announcements • Is visible and accessible; communicates the changes • Proactively learns about and socializes the program • Responds to escalated program and project conflicts • Provides executive decision-making • Engages with employees outside scheduled events	**ROLE** Endorses overall strategy **RESPONSIBILITIES** • Make decisions regarding program scope, timeline, and budget • Support the changes in words, behaviors and actions

PROJECT SPONSORSHIP	PROJECT GOVERNANCE	PROJECT ESCALATION

ROLE Ensures project success through leadership support RESPONSIBILITIES • Delivers major project announcements • Ensures presence at key events; communicate the changes • Proactively learns about and socialize the project • Responds to escalated conflicts • Provides executive decision-making • Engages with employees outside scheduled events	ROLE Provides leadership on strategic decisions and actions RESPONSIBILITIES • Steers project by making decisions impacting strategy, scope, timeline and budget • Provides or refers subject matter expertise • Resolves and/or escalates conflicts • Supports the changes in words, behaviors and actions	ROLE Responds to or resolves escalated conflicts and issues RESPONSIBILITIES • Provides functional leadership and oversight in resolving process issues and organizational conflicts • Engages VC Offices as needed to facilitate productive resolution of organizational change resistance and conflict • Engages ITS/Health IS as needed to provide technical leadership and insights to inform decision-making • Liaises to Program and Project Governance and Sponsors as appropriate

BUSINESS PROCESS LEAD	**CONFIGURATION LEAD**	**SUBJECT MATTER EXPERT (SME)**	**SOLUTIONS ARCHITECT**
ROLE Leads process review, design, reengineering, oversees solution(s) implementation RESPONSIBILITIES • Provides and identifies appropriate subject matter expertise and stakeholders for process review, design and reengineering • Reviews and approves functional requirements • Participates in and endorses results of user acceptance testing • Partners with Configuration Lead to develop product expertise of selected vended or custom developed solution(s) in preparation for process improvement workshops • Partners with Change Leader and Practitioner to influence and approve changes to existing processes, policies and procedures	ROLE Leads out-of-the-box configuration and define implementation requirements RESPONSIBILITIES • Develops product expertise of selected vended or custom developed solution(s) • Develops functional and integration requirements, and provides configuration expertise to support systems integration • Implements processes and functional requirements leveraging out-of-the box configuration functionality • Participates in and endorses results of functional and integration testing	ROLE Serves as process and subject matter expert RESPONSIBILITIES • Participate in discussion that will inform the recommendation and selection of solution(s) to address business needs • Participates in the documentation, analysis, design and reengineering of current state business processes • Participates in the gathering, reviewing and documenting of functional requirements • Participates, under OCM direction, in the creation of content for project communication and end-user training • Identifies and recommends strategy for closing end-user knowledge, skills and abilities gap(s)	ROLE Leads technical design and implementation of system solution(s) RESPONSIBILITIES • Leads the design, analysis and execution of all systems integration and customizations in alignment with enterprise architecture standards • Leads the review, analysis and testing of all technical deliverables from vendor(s), and provide sign off if applicable • In partnership with the Project Manager, creates work breakdown structures (OTLs) and provides work estimates for all technical deliverables, and resource load if applicable • Develops product expertise of selected vended or custom developed solution(s)

PROJECT MANAGER	**CHANGE LEAD**	**CHANGE PRACTITIONER**	**CHANGE CHAMPION**

ROLE	ROLE	ROLE	ROLE
Manages the overall project from initiation to completion	As the primary project spokesperson, establishes and oversees the execution of strategy for OCM	In partnership with the Change Lead and Project Manager, applies change management methodology	Disseminates and advocates for positive change
RESPONSIBILITIES	**RESPONSIBILITIES**	**RESPONSIBILITIES**	**RESPONSIBILITIES**
• In partnership with project team members, develops project documentation, work breakdown structures (OTLs), tracks progress to completion and provides regular project updates • Negotiates with supervisors and assigns tasks to project resources • Mitigates risks and removes roadblocks, serving as the first point of escalation for project team • In partnership with Change Leader and Practitioner, integrates OCM plans /activities into project plan • In partnership with Lean Bench managers, and Process and Configuration Lead, integrates process review, design and reengineering into project plan as applicable	• Identifies and partners with the Change Practitioner to establish vision and change management strategy • In partnership with the Change Practitioner, develops and executes OCM plans in alignment with program strategy • Proactively engages sponsors, project governance and the campus community to disseminate information and advocates for change • Addresses organizational change resistance • Escalates issues to SOCM	• Develops and executes project OCM plans (communications, training, coaching, resistance management, etc.) • In partnership with Program Communications and Change Lead, creates, refines and directly/indirectly delivers content to target audiences leveraging multiple channels of communication • In partnership with Change Lead, identifies and addresses organizational change resistance • In partnership with Change Lead, identifies and plans for end-user needs to inform change management and end-user training plans • In partnership with Change Lead, escalate issues to SOCM and partner to engage audiences	• Proactively learns about future change • Attends periodic informational sessions • Tailors and delivers project content and socializes change • Establishes two-way communication and feedback loops with local networks • In partnership with project Change Leads and Practitioners, escalates and de-escalates organizational change resistance and conflicts

ADDITIONAL LOCAL ROLES AND RESPONSIBILITIES:

ADDITIONAL: DESIGN ROLES	
DESIGN ARCHITECT	**DESIGN LEAD**
ROLE	ROLE
Under general direction of the business process lead, drive functional area work to meet requirements	Under general direction of the business process lead and design architects, drive functional area work to meet requirements
RESPONSIBILITIES	RESPONSIBILITIES
• Become UC San Diego's internal expert on selected software • Provide oversight and guidance to design leads • Ensure that functionality and business process changes are optimized for all campus stakeholders (Extension, School of Medicine, School of Pharmacy, etc) • Resolve differences in design approach, method, and solution as applied to all campus stakeholders • Collaborate with Enterprise Architect and Solutions Architect to ensure technical designs are meeting core business requirements across all campus stakeholders • Ensure alignment of all campus business processes with design specifications • Build understanding of ideal state business process of selected domain across design teams and stakeholders • Confirm delivered functionality meets compliance, regulatory needs, and business requirements • Verify quality assurance of design standards to configuration • Partner with Change Leads to facilitate organizational changes to business processes • Identify and escalate issues or risks to project governance Additionally, may participate in the following: • Implementation certification courses • Lead design teams • Business process mapping and analysis • Write test cases • Partnership with technical teams • Data mapping and conversion validation • Configuration and testing • Training design and curriculum	• Become UC San Diego's internal expert on selected software • Build understanding of current state business process of selected domain • Confirm delivered functionality meets compliance and regulatory needs • Drive changes to business processes • Determine and configure software to meet business needs • Confirm what data needs to be converted • Identify how individuals' job responsibilities will change • Identify and escalate issues or risks to Design Architects Additionally, may participate in the following: • Implementation certification courses • Lead design teams • Business process mapping and analysis • Write test cases • Partnership with technical teams • Data mapping and conversion validation • Configuration and testing • Training design and curriculum

ADDITIONAL: SPONSORSHIP COALITION		
GENERAL SPONSORSHIP COALITION ROLE	**SPONSORSHIP COALITION LEAD (LEVEL 1)**	**SPONSORSHIP COALITION MEMBERS (LEVEL 2)**
ROLE Serves as extended sponsorship for program and project sponsors RESPONSIBILITIES • Support changes in words, behaviors and actions • Provide leadership guidance to individuals or groups as they recognize the need	ROLE Serves as organizational sponsor (one per Vice Chancellor area), the primary point of contact for the Change Lead and other Sponsorship Coalition members RESPONSIBILITIES • Support changes in words, behaviors and actions • Provide leadership guidance to individuals or groups as they recognize the need • Responsible for disseminating information for a given Vice Chancellor or Central area among Sponsorship Coalition members. • Attends periodic informational sessions or one-on-one meetings with Change Lead • Gathers questions/feedback from the Sponsorship Coalition and remits to Change Lead • In partnership with project Change Leads and Practitioner, escalates and de-escalates organizational change resistance and conflicts.	ROLE Serves as the leader, executor, and communicator for their Division and/or Department RESPONSIBILITIES • Serves as the primary point of contact for Change Champions and staff • Proactively learns and advocates for future changes • Attends periodic informational sessions • Conducts presentations, facilitate meetings to inform Change Champions and staff. • Establishes two-way communication and feedback loops within local networks. • In partnership with project Change Leads and Practitioner, escalates and de-escalates organizational change resistance and conflicts.

ADDITIONAL: OCM ROLES		
CHANGE CHAMPIONS - NARROWER SCOPE	**CHANGE NETWORK**	**PEOPLE MANAGERS**
In the context of Level 1 and 2, this is level 3 of the local sponsorship coalition.	This term is used to refer to the collection of individuals playing change management-related roles.	People managers are also referred to as supervisors.
ROLE Disseminates and advocates for positive change among impacted units and teams RESPONSIBILITIES • Stays informed by checking the website for updates, and reading materials relative to the project received from Sponsorship Coalition. • Disseminates information received from Sponsorship Coalition (either written or in-person) to affected stakeholder groups • Establishes two-way communication and feedback loops with front-line employees • Communicates updates, encourages engagement, and kindles a desire for training among staff • Understands and takes responsibility for mitigating fear of the unknown	CHANGE NETWORK COMPRISES OF: 1. Change Lead 2. Change Practitioner 3. Project Manager 4. Sponsorship Coalition Lead Level 1 5. Sponsorship Coalition Level 2 6. Change Champions – Narrower Scope Level 3	ROLE Provide managerial support and leadership through the project life cycle to successfully implement project and enact changes required of staff. RESPONSIBILITIES CLARC* •Communicator •Liaison •Advocate •Resistance Manager •Coach *information and tools provided in training sessions

SOCM Landing Page