THE UNIVERSITY OF TEXAS SYSTEM AUDIT OFFICE
Governance and Management of Shared Systems, Services and Infrastructure Audit
Fiscal Year 2020

SUMMARY

OBJECTIVE: Assess the design and test the effectiveness of governance and management structures designed to ensure alignment of shared systems hosted and managed by Shared Information Services (SIS) with participating institutions' operations and strategic priorities.

CONCLUSION

The governance structure is appropriate for the services currently provided to participating institutions. Challenges related to unique institution attributes, complexity of operating relationships and evolving business needs can result in inefficiency or ineffectiveness of the current structure.

Communication and stakeholder participation are critical to effectively operate within the current governance framework. Governance participation among institutions is inconsistent, and institutions are not fully informed of the level of services to be expected and their role in ensuring those services meet their needs. Standardization and consistency in reporting, and improved communication of expectations and minimum requirements, will improve the effectiveness of the governance model by ensuring clear expectations and full participation.

OBSERVATIONS

1	Governance committees require clear and reliable data to effectively make informed business decisions. Inconsistent tracking and reporting on resource use and project status across the shared systems pillars limits stakeholders' visibility to ensure ongoing alignment with operational priorities and campus resource availability when needed.
2	Clearly communicated service and support responsibilities for all parties, which include the service provider and all participants, contribute to ensuring participants' needs and expectations are met. The OLA establishes "baseline" service expectations but does not specify the responsibilities of all parties relative to governance participation and testing of changes or enhancements.

Management developed phased action plans to address these observations and anticipates implementation of all phases to be complete by September 1, 2021.

OBSERVATION RATINGS

Priority
High
Medium
Low

There is one High rated audit observation.

The engagement methodology can be found at the end of this report.

This engagement was performed on our behalf by Postlethwaite & Netterville, APAC.

THE UNIVERSITY OF TEXAS SYSTEM AUDIT OFFICE
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Fiscal Year 2020

OBSERVATION 1
HIGH

Resource and Project Management Reporting

> Governance committees require clear and reliable data to effectively make informed business decisions. Inconsistent tracking and reporting on resource use and project status across the shared systems pillars limits stakeholders' visibility to ensure ongoing alignment with operational priorities and campus resource availability when needed.

Incomplete reporting on resource use may impair governance committees' ability to establish achievable priorities to be carried out by SIS. Stakeholder visibility into SIS resource capacity is critical for enabling prioritization of requests and ensuring the optimal allocation of staff resources on each project.

SIS Pillar Leads (Finance, Human Resources and Campus Solutions) are each responsible for tracking resource capacity and communicating back to applicable governance committees. The current mechanisms for tracking resources vary between pillars and are manual, using Excel spreadsheets. This informal process leads to inconsistent documentation and reporting on how SIS resources are allocated to ensure campus needs are being addressed proportionate to priorities established by the governance structure.

Project status documentation and reporting is also inconsistent across SIS pillars. This affects the ability to effectively manage and report on past resource use and future resource needs for each project, and to provide the visibility necessary to maintain alignment with campus needs and ensure institutions are prepared to contribute information or effort when needed. The metrics used for project status do not consistently provide the ongoing visibility needed to ensure alignment and collaboration between project stakeholders. For example, a centralized repository for project data and metrics would allow stakeholders to customize reports and gather information based on their individual needs.

<u>MANAGEMENT ACTION PLAN</u>
SIS acknowledges internal processes to better track SIS resourcing, communicate current capacity levels and fine tune the data repository for future project planning purposes should be improved. Starting in July 2020, SIS began to investigate different solutions to assist with establishing a consistent resourcing and project tracking process across the PeopleSoft modules to provide better visibility into currently slated initiatives. The tools currently under review are Microsoft Project Online, Cherwell Project and Portfolio Management (PPM), and Cherwell Release Management. Since initiation, SIS has begun to internally pilot Microsoft Project Online. SIS will continue to test each product to find the most comprehensive tool or set of tools to aid in the resourcing and project tracking effort. Once the tool set is defined, SIS will implement the chosen tool(s) and refine internal processes accordingly. Once implemented, the tool(s) will be used to provide current project and resource status and compile data in a central repository that SIS, governance committees, and institutions can utilize for planning purposes.

SIS recognizes that there are additional efforts that can be done in parallel with the tool evaluation in order to create better project and resource visibility and communication to the institutions. SIS has outlined the current Requirement and Enhancement Development (RED) process and are continuing to document the roles and responsibilities of SIS, Functional Committees, the Operating Committee, and the Executive Committee in the RED process. SIS will work with the different governance committees to approve these definitions. (See Observation 2 Management Action Plan for additional information on this effort.) Also, SIS is now using a tool for long term, centralized and consistent roadmap planning. SIS will begin to present these roadmaps to the governance committees so they will see the current SIS Project Roadmap.

We anticipate all planned actions will be completed or in place in this phased approach:
1. Already in place and will present during the October/November 2020 Governance Committee meetings – roadmaps.

THE UNIVERSITY OF TEXAS SYSTEM AUDIT OFFICE
Governance and Management of Shared Systems, Services and Infrastructure Audit
Fiscal Year 2020

OBSERVATION 1
CONTINUED

2. On or before February 1, 2021 - SIS will select which tool(s) to deploy for SIS resource and project tracking.
3. On or before May 31, 2021 - SIS will complete the deployment of the chosen resource and project tracking tool(s).
4. Beginning June 1, 2021 - The resource tracking tool(s) will start to collect data.
5. By September 1, 2021 - Three (3) months of historical data will be complied for Institutional use for planning purposes. SIS will present that data to the Institutional community during the September 2021 committee meetings so that they know how to access the data when needed.

THE UNIVERSITY OF TEXAS SYSTEM AUDIT OFFICE
Governance and Management of Shared Systems,
Services and Infrastructure Audit
Fiscal Year 2020

OBSERVATION 2
MEDIUM

Communication of Operating Level Agreement
Responsibilities and Expectations

Clearly communicated service and support responsibilities for all parties, which include the service provider and all participants, contribute to ensuring participants' needs and expectations are met. The OLA establishes "baseline" service expectations but does not specify the responsibilities of all parties relative to governance participation and testing of changes or enhancements.

Participating institution involvement is critical for ensuring the ability to collaborate, consolidate redundant information technology (IT) services, and meet functional needs. A mutual understanding of roles and responsibilities between SIS and the participating institutions is critical for ensuring successful project outcomes. The Operating Level Agreement (OLA) defines the "baseline services" offered by SIS, maintenance and customer support procedures, service expectations, and responsibilities of participating institutions. Agreement of stakeholders to uphold the terms of the OLA is documented by signature of the SIS Chief Information Officer, Operating Committee chair, and Executive Committee chair. Participating institutions do not separately confirm their awareness of, or agreement to, the OLA.

To ensure effective collaboration between SIS and participating institutions, a mutual understanding and support of SIS' primary objective must exist and be clearly documented, which is to provide value and cost reduction through consolidation of redundant IT services. A significant factor in achieving that strategy is to stabilize services being offered so that expectations of all stakeholders are consistent.

The OLA does not specify the responsibilities of all parties relative to governance participation and testing of changes or enhancements. Involvement of each participating institution is critical to ensure the functional needs of the individual campuses are met. The governance structure is designed such that business requirements for significant changes or enhancements are established at the Functional Committee level, reviewed by the Operating Committee, then recommended for approval by the Executive Committee. However, Functional Committee involvement has been inconsistent among campuses, resulting in individual campus needs not necessarily communicated for consideration if the institution did not participate in relevant discussions.

MANAGEMENT ACTION PLAN
SIS agrees that better defining roles and responsibilities of both SIS and the governance participation will enhance the overall effectiveness of the OLA. SIS began in July 2020 documenting the RED process, defining each of the steps and detailing the interplay of each of the different governance tiers in the process. In conjunction with the governance committees, SIS will continue to define the roles and responsibilities of each governance tier in the RED process. SIS will work directly with the different governance bodies to then agree to the overall definitions, roles, responsibilities, and process. Once all parties agree to the documented responsibilities and process, SIS will add an appendix to the OLA that will contain the agreed upon details. In addition to the RED process, additional updates to the OLA will be made to further define SIS services. After updating the OLA with these changes, each institution will sign off on the updated OLA, a change from the past procedure of governance body sign off. SIS will need the governance committees and institutions to prioritize this effort in conjunction SIS to cure this observation.

We anticipate all planned actions will be completed or in place in the phased approach (contingent upon Governance commitment):
1. On or before December 1, 2020 – Present the draft RED outline, including roles and responsibilities of all parties, to the governance committees for refinement.

THE UNIVERSITY OF TEXAS SYSTEM AUDIT OFFICE
Governance and Management of Shared Systems,
Services and Infrastructure Audit
Fiscal Year 2020

OBSERVATION 2
CONTINUED

2. On or before March 1, 2021 - Have governance committees in agreement to defined RED outline process.
3. On or before May 1, 2021 - Obtain campus signoffs of the updated OLA document including the agreed RED process outline and additions detailed above.

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METHODOLOGY

This engagement was conducted in accordance with the guidelines set forth in the Institute of Internal Auditors' *International Standards for the Professional Practice of Internal Auditing*.

BACKGROUND

UT System Administration hosts several critical information systems shared by multiple academic institutions, including PeopleSoft human resources, finance, and student information systems, and other integrated application systems, and recently assumed management of one of three UT System shared data centers. These shared systems, services and infrastructure are managed by Shared Information Services (SIS), a UT Dallas department that is fully funded by System Administration. A shared governance model involving all participating institutions and System Administration is in place. However, during annual internal audit risk assessments performed over the years since shared systems were implemented, some institutions expressed frustration with the governance model and ability of shared systems to meet their needs.

This engagement is part of the Fiscal Year 2020 Annual Audit Plan and was selected based on the risk that shared services do not meet institution needs due to outdated service offerings, resource limitations, inability to gain consensus on or adoption of provided services, or misalignment with participating institutions' strategic and operational priorities.

SCOPE AND PROCEDURES

The scope of the engagement included governance structures and processes in place at the time of the audit for shared systems, services and infrastructure managed by SIS. Procedures performed included walkthrough discussions with key stakeholders (SIS, participating institutions and System Administration), review of available documentation, and limited testing of governance and control practices. The COBIT 2019 Framework was used in the evaluation of the governance structure to facilitate understanding of key control processes related to the governance and management of enterprise IT managed by SIS. Audit procedures were conducted in June and July 2020 by Postlethwaite & Netterville, APAC, on behalf of the UT System Audit Office.

We will follow up on management action plans in this report to determine their implementation status. Any requests for extension to the implementation dates require approval from the System Administration Internal Audit Committee. This process will help enhance accountability and ensure that timely action is taken to address the observations.

OBSERVATION RATINGS

Priority	An issue that, if not addressed timely, has a high probability to directly impact achievement of a strategic or important operational objective of System Administration or the UT System as a whole.
High	An issue considered to have a medium to high probability of adverse effects to a significant office or business process or to System Administration as a whole.
Medium	An issue considered to have a low to medium probability of adverse effects to an office or business process or to System Administration as a whole.
Low	An issue considered to have minimal probability of adverse effects to an office or business process or to System Administration as a whole.

CRITERIA

- Office of Shared Information Services Operating Level Agreement, version 1.53D, March 9, 2020
- COBIT 2019 Framework, Information Systems Audit and Control Association (ISACA), 2018

REPORT DATE

September 22, 2020

REPORT DISTRIBUTION

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UT System Administration Internal Audit Committee
External Agencies (Offices of the Governor, State Auditor, and Legislative Budget Board)