

Executive Board
UCLA IT Assessment
Table of Contents

Exec Divisional Response - EB Letter to VC-CIO re IT Assessment 2021 Feb 4	1
CDITP Final Response	2
COR Final Response	7
CPB Final Response	9
FWC Final Response	11
GC Final Response	13
Exec UCLA IT Assessment_ GOIT Executive Summary Presentation_ November 19, 2020	14

February 4, 2021

Lucy Avetisyan
Associate Vice Chancellor and CIO

Re: IT Assessment Future State Recommendations

Dear AVC/CIO Avetisyan,

Thank you for the opportunity to comment on the *IT Assessment Future State Recommendations* slide deck dated November 19, 2020. We appreciate that the slide deck does not represent a proposal, but is part of a consultation process designed to inform your office's ultimate proposal, which will receive formal review.

The UCLA Academic Senate recognizes that there is a pressing need to modernize the organization of IT services on campus to position us for improved efficiencies and responsiveness to emerging needs in research, teaching, and administrative activities. Persistent security threats are also an ever-evolving concern and clearly necessitate a campus-wide approach to their mitigation. Some of this reorganization may be straightforward while other parts may be more challenging than the shared portion of the Deloitte report appears to address.

The attached letter from the Committee on Data, Information Technology, and Privacy (CDITP) forms the core of the Senate response. Its bullet-pointed issues and recommendations deserve particular attention: prioritization of the university's mission of innovative and high quality research, creative activity, and instruction at the local level; lessons from the DGIT transformation; broad distribution of customer service; prioritization of the end-user/innovator experience; limitations in the articulation of a hub-and-spoke model; balance of centralization and decentralized autonomy; and reduction of the disruptive wall between the central campus and DGIT infrastructures.

Thank you for your collegiality and commitment to consultation with the Academic Senate. We look forward to reviewing the final proposal as well as to commenting at any interim steps along the way.

Sincerely,



Shane White
Chair, UCLA Academic Senate

Cc: Jody Kreiman, Vice Chair/Chair Elect, UCLA Academic Senate
Michael Meranze, Immediate Past Chair, UCLA Academic Senate
April de Stefano, Executive Director, UCLA Academic Senate

January 28, 2021

To: Lucy Avetisyan
Associate Vice Chancellor, Information Technology Services
Chief Information Officer

Re: **UCLA IT Assessment Future State Recommendations**

The Senate Committee on Data, Information Technology, and Privacy (CDITP) welcomes the opportunity, graciously extended by your office, to provide some of our early thoughts on the proposed revamp of Central IT on campus. While we anticipate discussing these issues further, we are aware that you are seeking input into the current proposal. Committee members carefully read available documents on your website and those shared in earlier meetings. We also discussed the materials via email and in our January meeting. Below is a summary of the comments, concerns, and recommendations arising from this process.

Overall, CDITP agrees that there is a pressing need to modernize the organization of IT services on campus so as to position us for improved efficiencies, security and responsiveness to emerging needs in research, teaching, and administrative activities. Persistent security threats are also an ever-evolving concern and clearly necessitate a campus-wide approach to their mitigation. Some of this reorganization may be fairly straightforward, but other parts are more challenging than the shared portion of the Deloitte report appears to recognize.

As background to our comments, we note that several members of CDITP have engagement in both the central IT architecture of the campus under the purview of yourself as well as the DGIT architecture under the purview of AVC Pfeffer. Hence members of the committee have experience with transitioning from a previous and similarly federated IT model in the health sciences units to the current highly centralized DGIT model and its optimization of IT structures devoted to centralized decision-making, managing security concerns, and enhancing functioning of patient care and administrative components of the health sciences. Given committee members experience with the DGIT transition, we fervently hope that lessons learned there will be used to inform the transformation plan for central campus.

UCLA's current IT infrastructure reflects some of ways in which workforce-driven innovations shape IT services. A need emerges that cannot be addressed by existing structures, money is found, and a new structure is created, sometimes overlapping a less nimble unit that cannot meet the current need. ITS relies on charge backs to support its own budget necessarily keeping it focused on customer service, and as such ITS has a structure that supports listening to the consumer. All of these pressures have resulted in a federated IT landscape, as noted by the Deloitte report, which both facilitates true innovation in the use of technology by the UCLA workforce but can also create inefficiencies if some units are contributing less than optimally to the institutional mission. Portions of this UCLA model are consistent with business models used elsewhere by high performing companies where the need for innovation (their core business purpose) drives changes in the central IT structure. Google, as an example of a business version of a university environment, positions its business requirements for innovation prominently

when deciding on IT strategies and plans IT structures to support the core business need. While Google is no less challenged by security and coordination needs than UCLA, it recognizes that the need for innovation must take priority in designing its IT infrastructure. To that end, they have intentionally built structures to facilitate cross-fertilization across units rather than remaining with formal reporting lines or structures that centralize organizational dictates. Security is maintained by detective and corrective controls rather than a reliance on a principle of centrally mandated restriction, unless absolutely required. UCLA's current approach has similarly built both formal reporting line structures and a highly interwoven network of informal connections where many faculty rely on division- and department-level personal relationships with IT staff and support functions. These relationships are critical to the daily just-in-time activities of teaching and research in which many faculty and staff are engaged. In addition, faculty vary greatly in how much "handholding" is needed to accomplish their tasks.

The CDIPT encourages a similar prioritization of the university's goals of innovative and high quality research, creative activity, and teaching as the fundamental priority of any IT reorganization. Without prioritizing our core mission on campus as a central need to drive resulting IT structures, CDIPT is concerned that problems similar to what has been observed in the DGIT transformation will happen. We note that the consolidation of IT by DGSOM was done several years ago also in response to serious security concerns and a desire to modernize systems, primarily healthcare delivery and administrative systems. These core goals are key to the health sciences mission, of course, but are not entirely overlapping with needs of the research and teaching mission. The DGIT centralization created new administrative positions, centralized decision-making, and moved local IT services, which had been distributed at departmental and unit levels, into a centralized group structure. The promise, like the currently proposed Deloitte model being considered for the rest of campus, was increased cybersecurity and efficiency. However, many faculty have experienced a decline in service levels for their non-clinical activities and a frustrating tin ear from the new IT structure to ideas that have not originated within a more limited group of decision makers. Structures to ensure that this core group is both aware of or sensitive to innovation needs or IT problems arising on the frontlines of knowledge creation appear mostly nonexistent. Many complaints receive either slow or no response. This has already had a negative impact on some health sciences faculty. Let us share two examples. DGIT implemented, without consultation, email access termination to employees when they go on leave. While this reduced the Health Sciences vulnerability to HR concerns pertaining to staff, it caused great inconvenience for faculty going on sabbatical leave as their email was shutoff both unnecessarily and without warning. This has been resolved but should never have happened. Second, data use restrictions and DGIT inefficiency in responding to time consuming, expensive unit responses to these restrictions has led at least one unit to cease pursuing research and lucrative external funding opportunities as to do so would cause a high degree of DGIT intrusion into their operations with no apparent security gain. In other words, centralization as a strategy has woefully underestimated the complexities of current IT at the local level and the required needs of individuals (faculty, staff, students). Unless the IT needs of the research and creative activity enterprise are prioritized, they are not always as well understood as other institutional needs that the administration is more cognizant of.

The proposed plan, as we best understand it, sets as a priority a desire to generate a coherent hub and spoke structure. The emphasis is on simplifying and straightening out reporting lines, consolidating like units, and increasing decision-making speed through clear pathways that drive information needed to make decisions to the core and allowing the core to distribute decisions in a timely manner. Hub and spoke models have several well-known potential advantages (more efficient use of resources, enhanced uniformity in decisions and operations, easy distribution of management decisions, greater ability to monitor the system as a whole) as well as several potential disadvantages that seem key to a

research/creative activities university environment (clogged decision making which must flow from the central hub, problems capitalizing on more localized opportunities, a lack of intentionally structured connections among the spokes that allow for rapid and innovative solutions, and a tendency for inhibiting free information flow as the workforce's natural inclination is to willingly transmit positive comments up to the hub but suppress negative ones). One of the points of failure in transitioning to such a model is the lack of an upfront, clear definition of what resides in the hub vs. what is in the spokes. A second is that while the emphasis in enhanced flow and control may effectively contribute to security and efficiency, it might also work to slow down innovation which tends to have a more idiosyncratic and less structured path of development. For example, innovation in the use of technology in teaching at UCLA currently occurs in several locations: individual instructors across multiple Divisions and units; university-recognized loci of innovation such as CEILS in Life Sciences, CAT; and the undergraduate and graduate divisions. To the best of our understanding CAT's input was solicited in the construction of the proposal but not CEILS or its equivalents in the humanities, social sciences, or arts and architecture. And certainly, individual instructors have not been polled, though CDIPT and administrative committees with faculty representatives have been a point of input. The committee well recognizes the enormity of attempting to consult with every possible current contributor to the institutional mission and we are not suggesting that it be done. However, the point is that the optimal IT structure will be unlikely to be achieved if the innovation needs on campus, which are highly distributed, are not placed at the center of the discussion. Hence, one shortcoming of the current proposal is the lack of direct alignment with the mission of the university as a generator of research/creative activities innovation. While the report does refer to enhancing, "the end user experience" and, "deploying leading edge technologies and practices," these ideas and how a centralized structure will create these opportunities are greatly underdeveloped.

CDIPT has other concerns worthy for your consideration. For example, the proposed reorganization of IT governance appears to place loci of innovation (departments, distal units) into "advisory and alignment" roles via a proliferation of committees and working groups where the organic nature of IT as used within UCLA is arbitrarily siloed, sometimes into strange bedfellows by measures of commonality that do not truly capture an index of commonality in IT needs. Also, the rejiggering of reporting lines appears to more neatly address those components of the campus that have a relatively easier time of being grouped into independent units: administrative backbone needs (the basic infrastructure, processing of student and personnel data, financial data) and the more academic side of managing our student's common needs. Where the report seems less cogent is the rest of the university's operations—which is precisely where innovation in IT structures and resources is needed to maintain UCLA as an engine of discovery. One example is the severing of the humanities and arts from the sciences although in recent years the emergence of digital IT needs (similar to other major data sciences initiatives) is making strong inroads in the former fields. And finally, the model does not include a structure to capitalize on innovations that arise within the highly interdisciplinary nature of the UCLA campus. We have learned over time the value of crossing boundaries to fuel innovation—but the proposed hub and spoke model will take us in the opposite direction—it is structured to cut off pathways of communication and innovation outside of flowing to the hub where decisions will be made.

We propose several recommendations for your consideration:

- We encourage prioritizing the university's mission of innovative and high quality research, creative activity, and instruction at the local level to be at least equal to the current prioritized needs in the plan that focus principally on creating a structure manageable by a central team. UCLA, as evidenced by our rise in standing among R1 universities over the years, has greatly

benefitted from its distributed model of decision-making, which encourages high levels of engagement and has allowed us consistently to punch above our weight. In practical terms, it would be wise to recognize the strategic goals of the divisions. Every Division and professional school has been engaged in strategic planning initiatives. These initiatives both address teaching and research missions holistically and embrace increasingly high levels of interdisciplinarity across units on campus. On south campus, much of this work is conducted both within the central campus IT architecture and the DGIT architecture. For some purposes, a more centralized IT system might be an advantage, but the current plan focuses primarily on how the proposed structure will contribute to more effective centralized decision-making. It seems critical to articulate the ways in which centralization will fuel innovation as well.

- We suggest that there are multiple opportunities to learn from the benefits and weaknesses in IT operations that have been created by the DGIT transformation, especially if consultation openly queries about the experiences across multiple levels of the operation and its users.
- The current model siloes customer service considerations into a centralized location. Another approach would be to ensure that customer service responsibilities are broadly distributed across the units with some guarantee for some level of customer service at the unit/departmental level. Faculty, for various reasons, are often uncomfortable with seeking help from centralized mechanisms who may be unfamiliar with their discipline specific needs and often prefer more local solutions from staff who are familiar with normative technologies in the unit. This is also more efficient for their work.
- We encourage intentional efforts to mitigate the weaknesses of the proposed model by incorporating within a consolidated IT structure, hard-wired structures to prioritize the "end-user/innovator" perspective/experience. One simple, but effective way, is to embed a service transaction analysis (STA) in every end-user interaction with the IT system (i.e., the end-user creates a digital ticket and at the end of the interaction, receives a service transaction survey. The STA (via a dashboard <https://www.tableau.com/solutions/survey-analysis>) would allow components of the hub and spoke to systematically analyze the quality of their service processes at a detailed, or transaction level, from a faculty/staff perspective. The approach could focus on four critical elements; the service requested, the service process, transaction quality assessment, and messages - the customer's interpretation of the service. The key benefits of this approach are that it will instill a "customer orientation" in managers and staff and encourages managers to engineer their service processes by identifying the root causes of transactions that do not accord with the intent of the IT restructuring. Currently, the only measure of user satisfaction is indirect (reliance on chargebacks for services) and much of the challenges faced by users lie outside the awareness of IT managers on campus. For example, one member of the committee had the experience of attempting to set up a simple Amazon Web Service (AWS) Instance to host a patient-friendly portal for a clinical service. The process took over three months with 35 emails to various parties—OIT, DGIT, purchasing, finance, AWS, etc. Another member experiences frequent outages of ethernet connections on campus and though the member has complained for years to the IT service providers, the problem persists. These issues are not currently tracked in a central fashion.
- The model of hub and spoke does not have an articulated structure to actively encourage connections across the spokes that will support and reward innovation. The proposed plan assumes that ideas, in a cumbersome manner, migrate up through narrowing information flow systems to the hub. However, much of innovation is likely to be moving on a faster clock with immediate needs for IT assistance and solutions. Making use of the IT infrastructure to encourage this innovative activity will benefit the campus. The current plan does include a siloed sandbox for IT staff but placing innovation in a fixed location within the structure is

unlikely to be nimble enough to respond to the idiosyncratic nature of innovation especially when generated by the faculty who work within a high number of diverse units with an equally diverse set of IT tools and systems. The UCLA workforce, like knowledge workforces everywhere, is more likely to be engaged and productive within a management system that prioritizes and rewards initiative and discovery on the knowledge frontier.

- Define, with each of the current IT groups, what can be centralized and what cannot. Build in autonomy and policies for things that need more rapid decision-making than is possible with the proposed infrastructure.
- Find ways to reduce the increasingly divisive iron wall between central campus and DGIT infrastructure. While this division may have little impact of staff or faculty who live completely in one world or the other, faculty across the campus are increasingly working across the IT divide and it is leading to inefficiencies. It may be possible, for example, to house some IT aspects of the health sciences within the central campus architecture to remedy the HIPAA concerns that are prominent with DGIT, although many of the researchers are using non-human or anonymized data.

If you have any questions, please feel free to contact me at cochran@ucla.edu and the Interim Committee on Data, Information Technology, and Privacy Analysts Taylor Lane Datmude (tlanedaymude@senate.ucla.edu) and Estrella Arciba (earciba@senate.ucla.edu).

Sincerely,



Susan D. Cochran, Ph.D., M.S.
Chair, Committee on Data, Information Technology, and Privacy
Professor of Epidemiology and Statistics, UCLA Fielding School of Public Health

cc: Alex Bui, Member, Committee on Data, Information Technology, and Privacy
Chris Kelty, Member, Committee on Data, Information Technology, and Privacy
Jody Kreiman, Vice Chair, UCLA Academic Senate
Michael Meranze, Immediate Past Chair, UCLA Academic Senate
Ed Parson, Member, Committee on Data, Information Technology, and Privacy
Vivek Shetty, Member, Committee on Data, Information Technology, and Privacy
John Villasenor, Member, Committee on Data, Information Technology, and Privacy
Kent Wada, Chief Privacy Officer and Director of Strategic IT Policy
Shane White, Chair, UCLA Academic Senate
Bonnie Zima, Member, Committee on Data, Information Technology, and Privacy

January 26, 2021

Shane White, Chair
Academic Senate

Re: UCLA IT Assessment GOIT Executive Summary

Dear Chair White,

At its meeting on January 13, 2021, the Council on Research (COR) had an opportunity to review the UCLA IT Assessment GOIT Executive Summary. Members offered the following comments:

1. IT services centralization: Members weighed in on the advantages and disadvantages of centralized IT services. Is there a way in which centralized IT services can be nimbler? What is being planned for department-level services and support for the many departments that already have IT services? Is there a path through which existing IT services that already provide excellent support can be preserved? COR would like to underscore that in many cases IT centralization would be detrimental to the work of many areas on campus. It is important to COR to take into consideration the different concerns and voices. In particular, if there are existing IT resources that work because they have supported research enterprises historically, there should be mechanisms that allow those to thrive while providing similar access to departments with more limited resources. As examples, the Social Sciences Center for Education Research and Technology and the David Geffen School of Medicine DGIT already provide IT support and resources to its members and there have been concerns regarding centralizing many of those capabilities, from impacts on research infrastructure to loss of institutional memory. Some members had first-hand experience in departments that transitioned from local IT support to a centralized one. While there may be advantages to centralization, there is no transparency about the prioritization of issues and faculty have no knowledge of there being a database to manage cases (helpdesk). With centralization there is also the risk of costs to units and departments where existing servers may be currently more affordable.
2. Legacy systems: Similarly, other members expressed concern over legacy systems and websites and what would be done with that information if departments on campus were to move to a more centralized IT model. There should be a way to preserve legacy work, which is the result of years of faculty labor, without causing disruptions and increasing costs for the campus. Important records of research are in these systems. Members observed that there have been unilateral decisions that disrupt,

and even destroy, the ability of individuals to do their research. It is not sufficient to state that existing systems will be phased out; in order to do that, there need to be concrete systematic systems or alternatives in place. Legacy platforms are in most cases the result of faculty efforts in research. Taking a slow approach that updates and transitions all legacy systems will preserve and ensure access to datasets through systematic archiving or transitioning to new platforms.

3. Communication: Finally, effective communication regarding cybersecurity and ensuring transparency to promote trust would advance data security. Opportunities for improving communication could include annual reports on initiatives and updates, ensuring flexibility in how information is received (text, email, website updates). Engaging existing compliance and research safety officers to tackle cybersecurity communication. Furthermore, websites and their lack of flexibility for website platforms compliance and implementation limits the ability to support research endeavors.

Thank you for the opportunity to review and comment. If you have any questions for us, please do not hesitate to contact me at julianmartinez@mednet.ucla.edu or via the Council's analyst, Elizabeth Feller, at efeller@senate.ucla.edu.

Sincerely,

Julian Martinez, Chair
Council on Research

cc: Jody Kreiman, Vice Chair/Chair-Elect,
Michael Meranze, Immediate Past Chair, Academic Senate
April de Stefano, Executive Director, Academic Senate
Elizabeth Feller, Principal Policy Analyst, Council on Research
Members of the Council on Research

January 26, 2021

Shane White, Chair
Academic Senate

Re: UCLA IT Assessment GOIT Executive Summary

Dear Chair White,

At its meeting on January 11, 2021, the Council on Planning and Budget (CPB) had an opportunity to review and discuss the IT Assessment GOIT Executive Summary. Members offered the following comments.

It would be beneficial to view the high-level budget before making an assessment. This would enable CPB to provide more meaningful feedback. Some members pointed out that given the many pressing issues that the university is facing due to COVID, this may not be the best time to work on this new and ambitious initiative. At the moment, there are too many adjustments happening to also add IT restructuring, especially without a full understanding of its cost. Perhaps reimagining the proposal to focus on 'smaller,' more attainable goals would be better, especially as a means for bolstering confidence in the plan.

Many noted that UCLA works so well because it is diverse and felt the report would benefit from some acknowledgement of this perspective. Members argued that there are benefits to having decentralized IT services in terms of the support offered to the consumers of those services, including greater responsiveness and local expertise.

A few members proposed carrying out a pilot trial within a smaller units or group of units, or within a particular vertical or service area. They argued some services are more likely to benefit from centralization or being cloud-based, while others that should remain local.

Other members questioned whether the proposal was targeted at certain units. Members noted that the Health Sciences (including Public Health and Dentistry) are not part of the proposed IT Strategic Partner function (slide 14). Why were these areas excluded? What is the purpose of restructuring if it would continue the fragmentation? What triggered this assessment?

Overall, members agreed that a one-size-fits-all approach would not be good for UCLA; many things, including IT, need to meet (or be customized to) the needs of each discipline. Similarly, carrying out this plan would be disruptive and expensive in a time of many changes and other pressing needs.

Thank you for the opportunity to review. If you have any questions for us, please do not hesitate to contact me at groeling@comm.ucla.edu or via the Council's analyst, Elizabeth Feller, at efeller@senate.ucla.edu.

Sincerely,

A handwritten signature in black ink, appearing to read 'Tim Groeling', with a long horizontal flourish extending to the right.

Tim Groeling, Chair
Council on Planning and Budget

cc: Jody Kreiman, Vice Chair/Chair-Elect, Academic Senate
Michael Meranze, Immediate Past Chair, Academic Senate
April de Stefano, Executive Director, Academic Senate
Elizabeth Feller, Principal Policy Analyst, Council on Planning and Budget
Members of the Council on Planning and Budget

January 26, 2021

Shane White, Chair
Academic Senate

Re: UCLA IT Assessment

Dear Chair White,

At its meeting on January 19, 2021, the Faculty Welfare Committee discussed the UCLA IT Assessment. Committee members offered the following comments.

The report sheds light on certain aspects about the current IT landscape at UCLA and pushes for centralization. Members noted that UCLA may gain benefits of scope by centralizing IT services, however, the implementation may prove to be challenging. Members indicated that they would oppose to a one-size-fits-all solution. There are variable needs across disciplines and fragmentation is not necessarily a terrible thing. Certain types of work do not fit into a centralized model, and people who understand the nuances of departments are necessary. A few members with experience in the School of Medicine pointed out that the quality of IP support may decrease after centralization. Moreover, members do not have confidence in the university's ability to centralize services, as exemplified by UC Path.

Additionally, members expressed that they did not understand the rationale for this assessment, since it describes the heterogeneity of the many IT offerings. Furthermore, some of its proposed consolidations are opaque. Members would like to know who produced the document and if it was a consulting company, whether the company has a track record in assessing institutions like UCLA.

If you have any questions, please contact us via the Faculty Welfare Committee's interim analyst, Elizabeth Feller, at efeller@senate.ucla.edu.

Sincerely,

Huiying Li, Chair
Faculty Welfare Committee

cc: Jody Kreiman, Vice Chair/Chair Elect, Academic Senate
Michael Meranze, Immediate Past Chair, Academic Senate

April de Stefano, Executive Director, Academic Senate
Elizabeth Feller, Interim Analyst, Faculty Welfare Committee
Members of the Faculty Welfare Committee

January 20, 2021

To: Shane White, Chair
Academic Senate

From: Andrea Kasko, Chair
Graduate Council

Re: Senate Review: UCLA IT Assessment

At the Graduate Council meeting on January 15, 2021, the UCLA IT Assessment was presented as an information item. Although the Graduate Council was not required to opine on this issue, members offered the following observations for your consideration:

Members would like to ensure that there not be discontinuity in services given plans to address inefficiencies in the current state of IT services on campus. Members also advocated for ways to increase the research enterprise as an IT priority moving forward.

Members agreed that there must be clearly defined and established structures whereby the Senate has direct input and good channels of communication with the Administration regarding IT governance. Senate input is necessary as IT matters have direct impact on all faculty and the work they perform.

Thank you for the opportunity to comment. If you have any questions, please do not hesitate to contact me via the Graduate Council analyst, Estrella Arciba, at earciba@senate.ucla.edu.



**IT Assessment
Future State
Recommendations**
GO IT

NOVEMBER 19, 2020

UCLA

AGENDA

Current State Summary

Future State Recommendations

Next Steps

IT Governance Deep Dive

IT at a Glance



UCLA spends **\$210M** on IT, **\$135M** of which is toward staff salaries and benefits. **33%** of total IT spend is attributable to ITS, **9%** of total IT spend is attributable to OIT, and **58%** is incurred by 47 local IT units and departments*



UCLA has **15+ different groups** that have at least some IT decision making or advisory capacity, yet lacks **a well understood model for coordinating and executing IT decisions**



Of **952** IT staff FTEs across UCLA, **34%** are employed by ITS and **7%** are employed by OIT



UCLA's IT workforce has **105+** Job Titles and **385+** unique working titles



IT staff at UCLA are **distributed** among **47+** different IT, academic, and administrative units across campus, many of which have their own help desks and systems



UCLA maintains at least **10 data centers** and **~205 server rooms** among unit IT groups, ITS, and OIT, **requiring adequate funding and staffing** to meet management, maintenance, and support needs

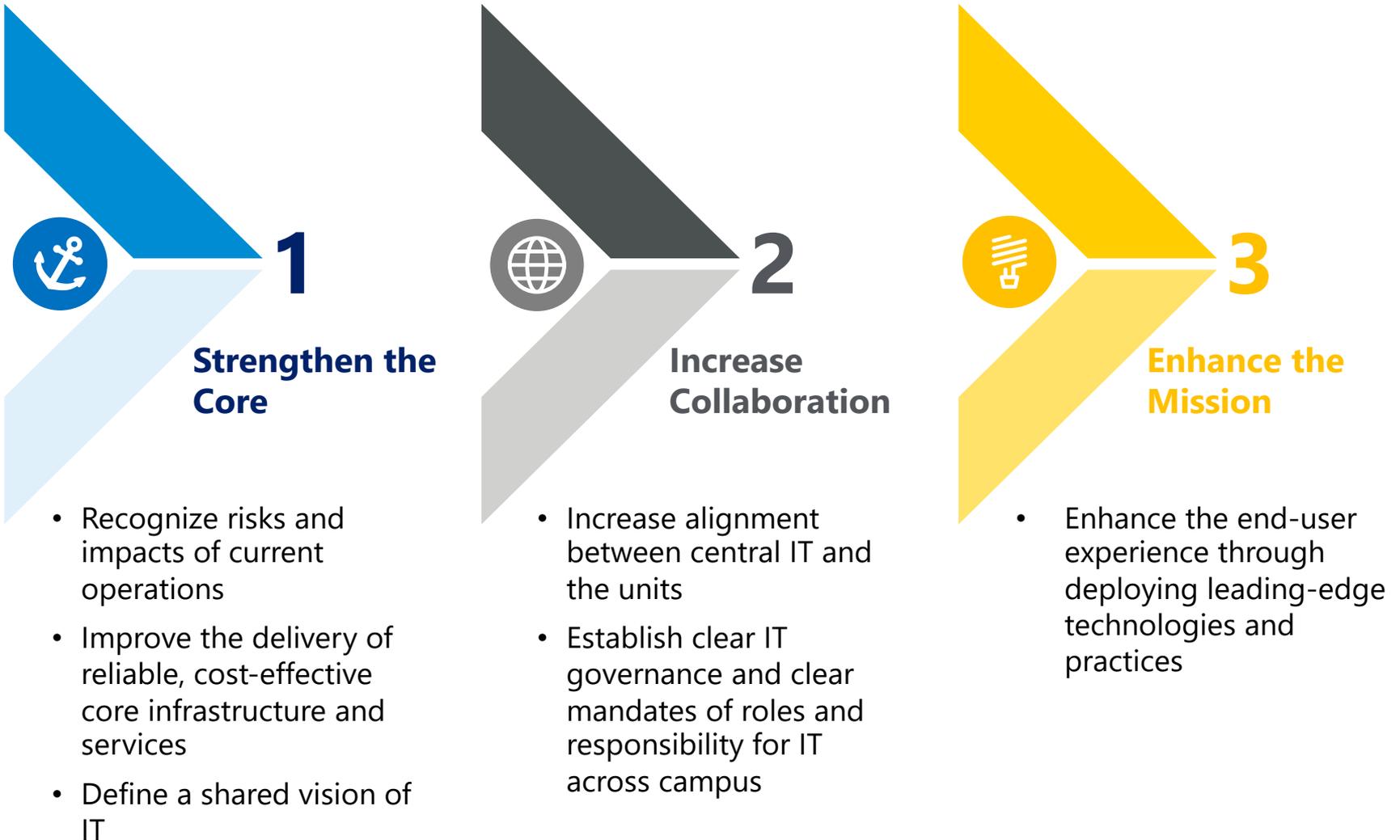


UCLA has a **distributed computing environment**, inclusive of a distributed **network design, more than a third (37%) of servers** being managed outside of central IT, and **57% of storage space** at UCLA being managed by individual IT units comprising of **more than 21 different storage device vendors**

DMS 17

⁴ *Note: Totals may not add due to rounding

The Imperative for Change



What Will Change with IT Transformation?

IT Today

Lack of an **enterprise IT Strategy** aligned to the UCLA mission

Multiple **CIO's and CTO's** across campus

\$200M+ spent annually on IT services in a fragmented manner

900+ IT staff operating in a decentralized manner limiting career growth and learning opportunity

Major **information security risks and compliance gaps across campus**



Modernizing UCLA's IT Ecosystem



Potential for Tomorrow

An **enterprise IT strategy** based on collaboration and innovation to serve the UCLA mission

A **UCLA CIO** responsible for leading academic, research and administrative IT services

Opportunity to reduce **\$20-30M** through reduction of duplicate services and **reinvest** those savings in **IT innovation**

Streamlined **hub-and-spoke** organization of IT staff to maximize potential and improve workforce satisfaction

Improved **information security posture** and **risk reduction** related to cyber threats

**FUTURE
STATE
RECOMMENDATIONS**

IT Governance

IT Finance

IT Talent

Technology

IT Service Management



1.1 Refine IT Operating Model to Enable Improved Coordination

- Provides for a cohesive and coordinated operating model that clarifies authority over various services, creates efficiency and consistency in the customer experience, and allows for local IT groups to focus on value-added services for end users



1.2 Enhance IT Governance Model to Promote Greater Effectiveness and Transparency

- Promotes transparency and effectiveness through a clear and comprehensive interaction model between groups comprised of the right people to make decisions around shared IT investments, standards, and priorities



1.3 Standardize IT Enterprise Project Management Office and Enterprise Architecture Functions Across UCLA

- Provides clarity over foundational IT disciplines that are either immature or not well understood across UCLA, enabling structure over operational and technical IT decision making and direction while promoting use of leading practices across campus

1.1 Refine IT Operating Model to Enable Improved Coordination

Guiding Criteria:

DEPARTMENT IT*

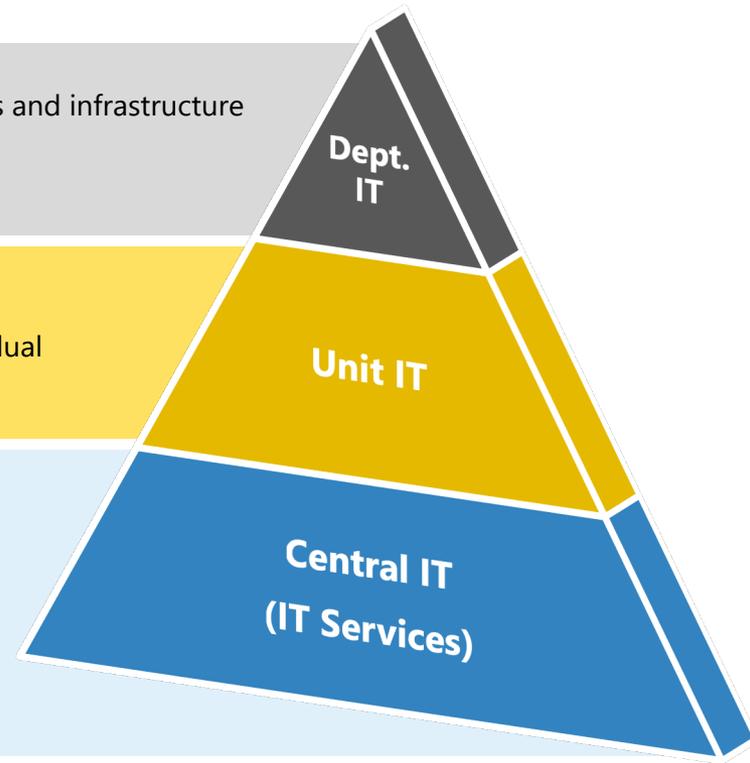
- Enables support for department-specific research and pedagogical applications and infrastructure
- Embedded with faculty and department staff to seamlessly support their work

UNIT IT*

- Responsible for all IT operations within the Unit including the departments
- Support the Unit Leader (e.g., Dean) in their role as the IS-3 accountable individual
- Enables support for IT needs that are not common across units

CENTRAL IT

- Supports governance and facilitation of a campus-wide IT strategy
- Reduces fragmentation in delivering common IT services
- Provides a shared infrastructure for unit and department-specific needs
- Enables economies of scale and standardization across campus
- Drives information security and compliance with policies, procedures, and standards



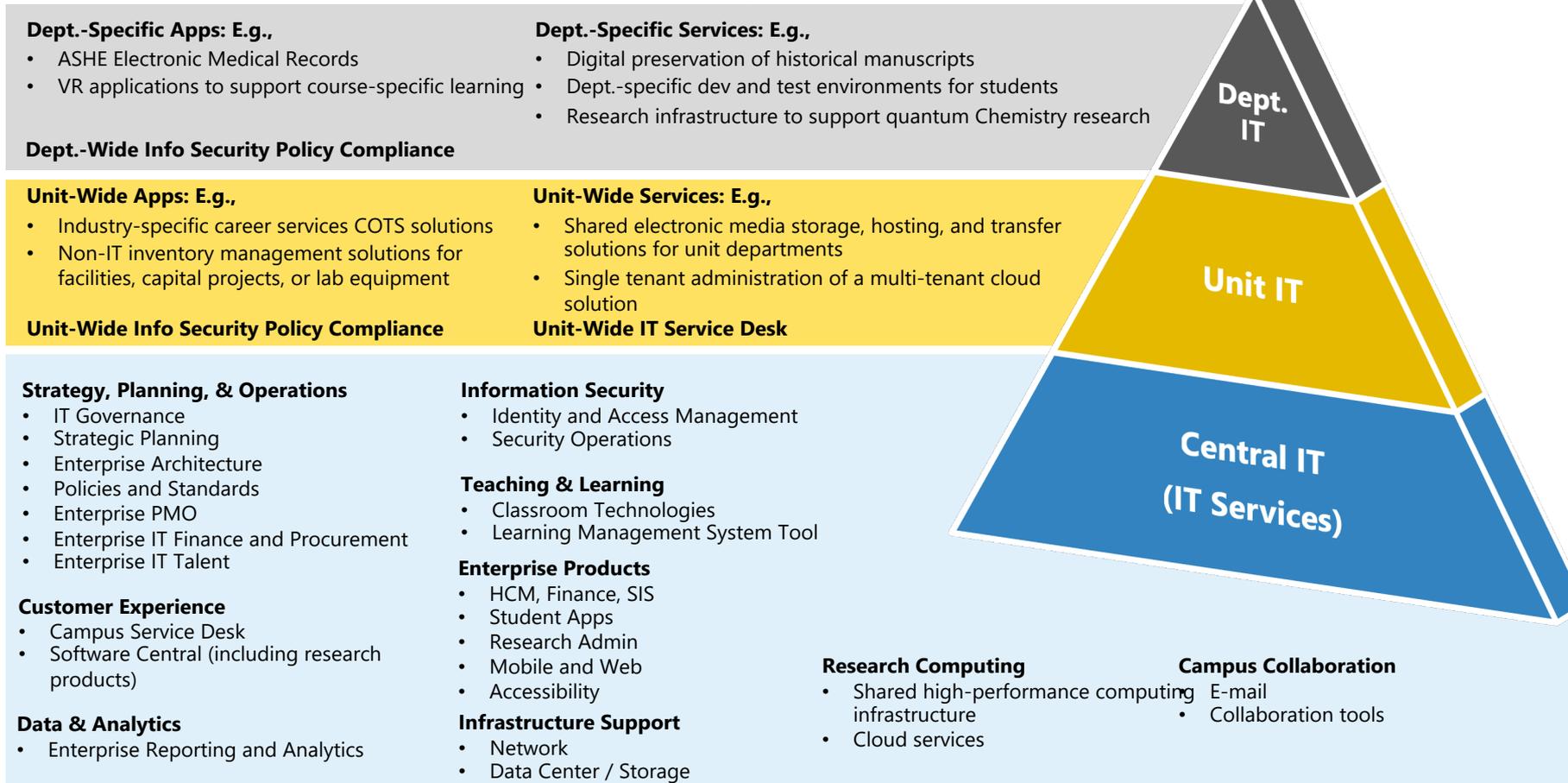
*Note: As used here and elsewhere in this report:

- “Unit” refers to UCLA administrative offices overseen by a Vice-Chancellor or Director that reports directly into the Chancellor and schools and divisions with Deans or equivalents that report directly into the Executive Vice-Chancellor and Provost as illustrated on this organizational chart: <https://dnn.uclanet.ucla.edu/Portals/90/Documents/chancellor.pdf>
- “Department” refers to the sub-units that report into these units

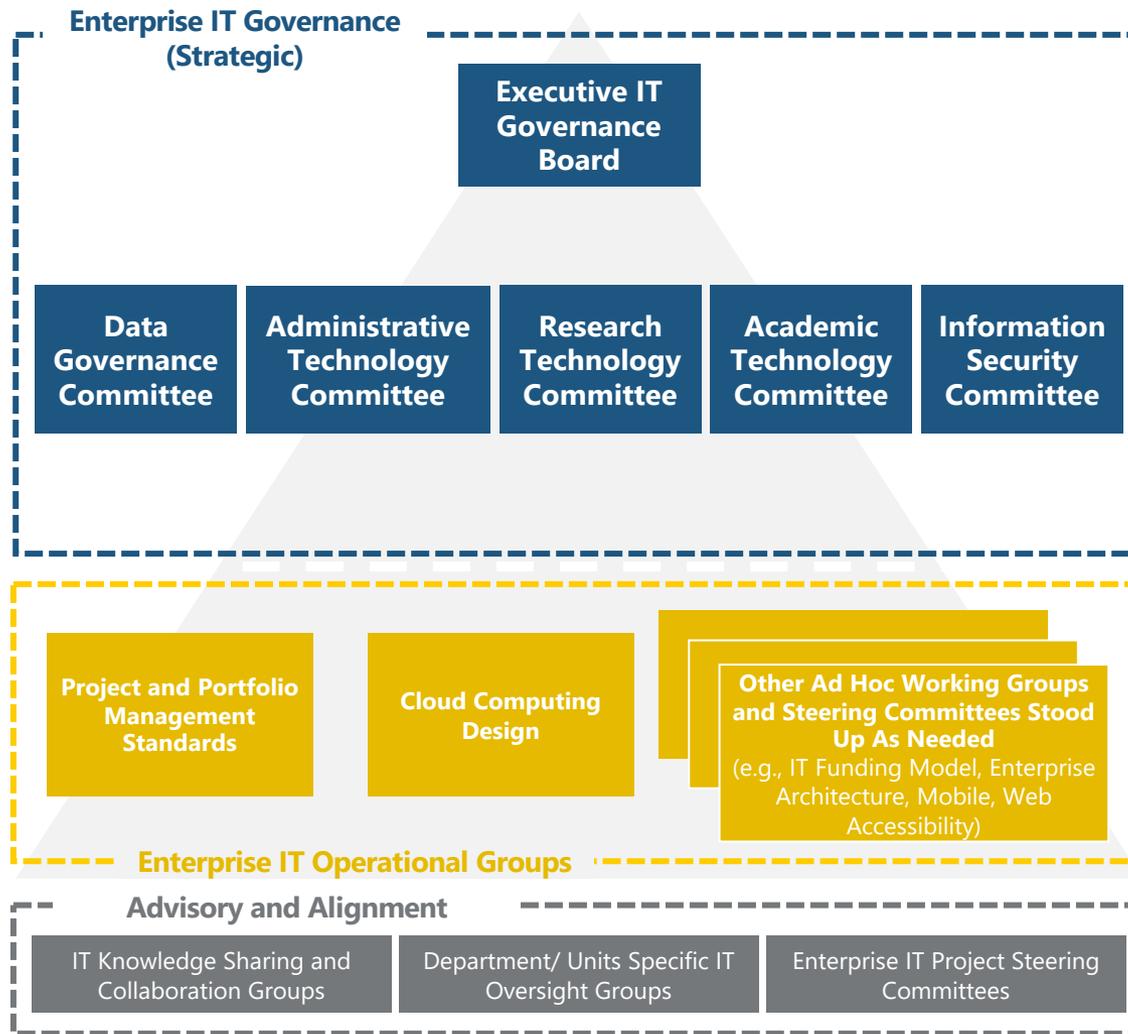
1.1 Refine IT Operating Model to Enable Improved Coordination

The model presented outlines a potential scope of responsibilities across various IT tiers at UCLA. Given the volume and diversity of unique applications and services at the unit and department level, only illustrative examples are provided for these tiers.

Potential Scope:



1.2 Enhance IT Governance Model





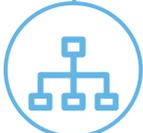
2.1 Rationalize IT Funding Model for Core Services in Support of New Operating Model

- Develops a funding model that allows for greater stewardship of IT funds and encourages more effective financial planning



2.2 Source IT More Collaboratively and Strategically to Reduce Costs and Improve Compliance

- Creates a unified approach to IT procurement and vendor management and aligns policies and processes to support the strategic sourcing of IT goods and services



3.1 Develop and Deploy a New IT Organizational Model to Increase Efficiency of Current IT Workforce

- Improves understanding of the IT org and operating model across UCLA, creating a central IT hub by consolidating resources and rationalizing services
- Supports more effective resource management to address demands by centralizing IT staff performing enterprise IT activities in distributed units



3.2 Create a Cross-Campus IT Learning and Development Program to Standardize and Enhance Workforce Skillsets

- Grows a workforce that keeps pace with innovation and emerging technologies, gaining economies of scale through consolidation and standardization of training



3.3 Enforce and Enhance the Current Performance Management Process

- Standardizes rewards and mobility related to performance, encouraging top performers while addressing underperformance through enhanced accountability

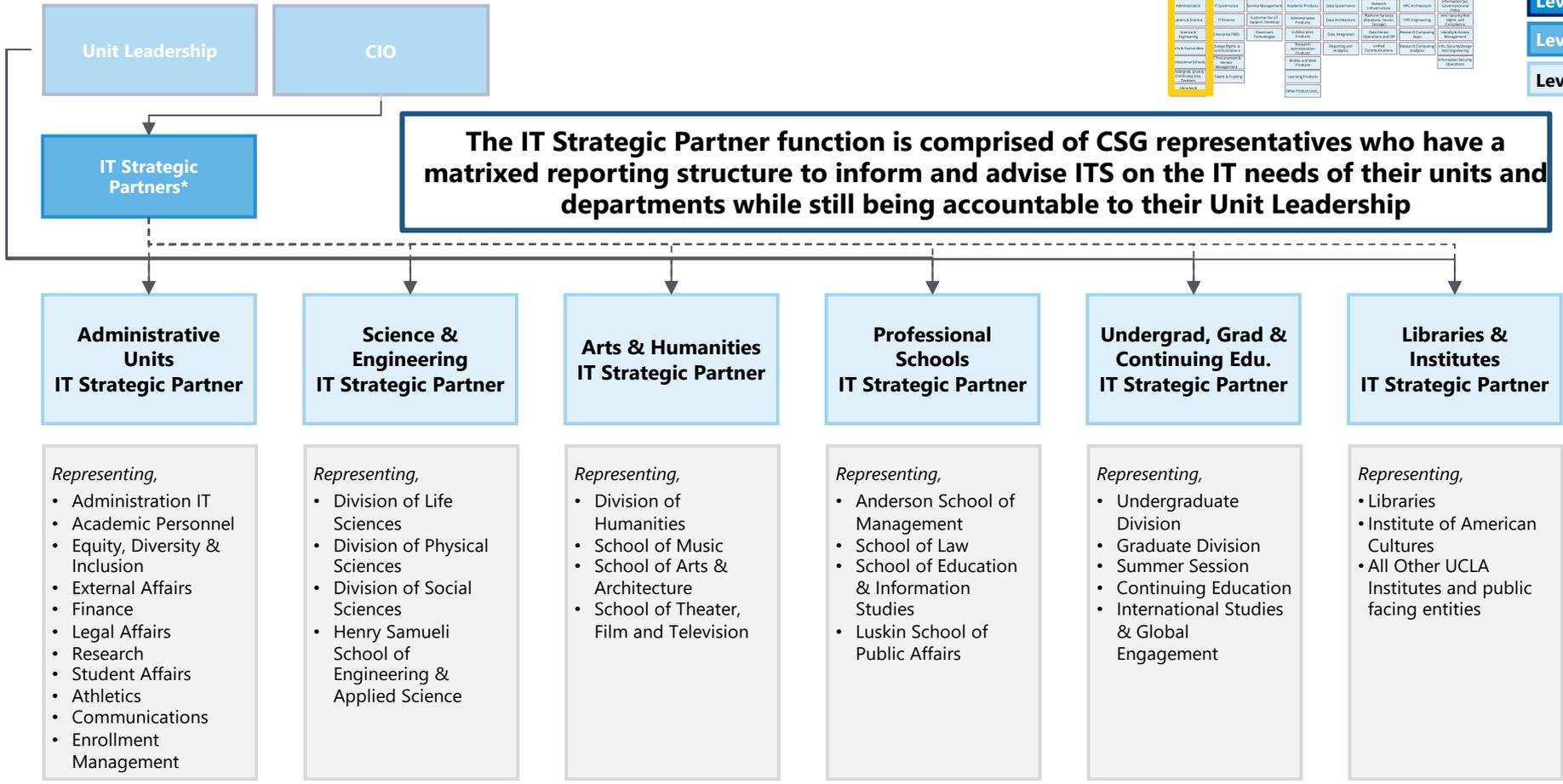
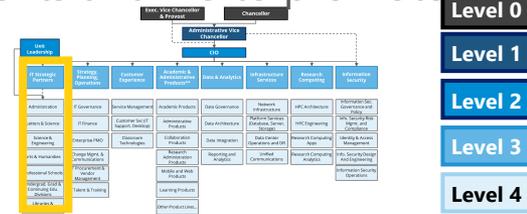


3.4 Launch a UCLA Gig Network to Foster IT Communities of Practice

- Drives technical excellence and provides a sense of stability in a dynamic environment by connecting individuals in similar functional groupings
- Provides IT staff with opportunities to gain and develop new skills through problem solving, mentorship, and innovation via the Gig Network

3.1 Develop and Deploy a New IT Organizational Model

IT Strategic Partners will liaise between functionally-aligned departments and ITS to promote unified decision making across UCLA.



— Direct Oversight
 - - - Alignment to UCLA IT

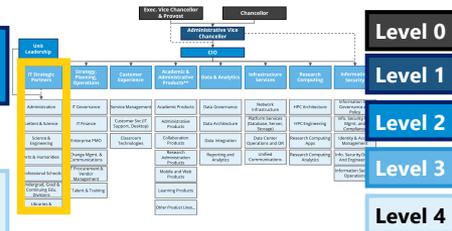
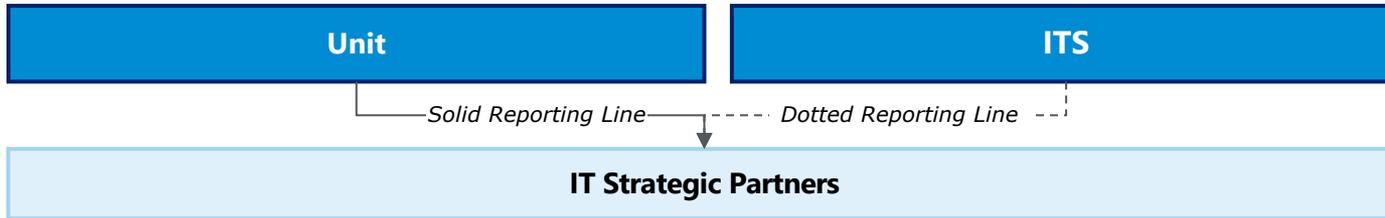
A strong partnership between ITS and IT Strategic partners will be **paramount to success**; business agreements and governance around ownership of various activities and functions will allow groups to work together more seamlessly

IT Strategic Partners is a rotational position held by one CSG member for each vertical at a time.

14 *Note: The Level 2 Strategic Partners Role would be directly reporting to the CIO and the Level 3 Strategic Partners would indirectly report to the Level 2 role. Level 3 Strategic Partners would still maintain their direct report relationships with Unit Leadership.

3.1 Develop and Deploy a New IT Organizational Model

IT Strategic Partners will liaise between functionally-aligned departments and ITS to promote unified decision making across UCLA.



What remains the same through the solid line:

- Reporting relationship to the unit leader
- Responsibilities aligned with the mission of the unit
- Responsible for IT funding, staffing and services within the unit
- Performance reviews conducted by the unit leader

What changes through the dotted line:

- Generates awareness of enterprise needs, challenges, gaps, and strengths across campus
- Aligns unit IT strategy and priorities to enterprise IT priorities
- Promotes a culture of One IT across UCLA as brand ambassadors
- Advises and consults ITS on strategic planning as well as portfolio and project management
- Assists with projects impacting home departments and units



Benefits of Matrix Reporting Structure

The matrixed reporting structure proposed for the IT Strategic Partner function can formalize the role of CSG members in influencing the IT strategy & investments made by ITS in a coordinated fashion for the university.

Example: Department Wants to Implement a New Student Success Platform

- IT Strategic Partner raises awareness to ITS and other IT Strategic Partners that the department is searching for a new student success platform. The process identifies if something similar already exists and allows for collaboration accordingly, leveraging governance groups where appropriate
- If it does not exist, the IT Strategic Partner works with the department to determine business and technical requirements, then partners with other IT Partners and ITS to evaluate the possible options, begins procurement, and implements the tool following enterprise security, data and architectural standards



Technology



4.1 Redesign Network Infrastructure Architecture and Support Across Campus

– Develops an approach to re-design the UCLA network and consolidate network operations across campus into a single unit within ITS



4.2 Consolidate Data Centers and Server Rooms; Establish a Cloud Fit-For-Purpose Model to Improve Efficiency, IT Security, and Cost Savings

– Consolidates data centers and establishes a campus-wide cloud strategy to enable greater agility and reliability



4.3 Establish an Enterprise Data Strategy and Data Governance Model to Support Advanced Analytics Initiatives and Advancing Research Capabilities

– Defines data governance and modernizes data warehousing capabilities to assist in data quality and availability and research data management campus-wide.



4.4 Establish a Common Enterprise Integration Layer to Enable Access to Data Across Campus Platforms

– Adopt a single middleware application to improve application functionality through data consistency across distinct application environments

Technology (Continued)



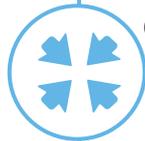
4.5 Consolidate Email Applications Across Campus Into a Single Email and Collaboration Platform

–Adopts a common email and directory service to reduce risk and drive cost savings for campus units



4.6 Develop an Application Modernization Program to Rationalize Duplicate and Remediate Legacy Applications

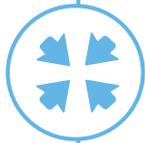
–Eliminates redundant and unsupported software applications and deploy modern applications to meet unmet user needs



4.7 Develop and Implement a UCLA-Wide Customer Relationship Management (CRM) Strategy for Common Use Cases

–Leverages current capabilities and a common approach to expanding CRM functionality across campus

Service Management



6.1 Enhance IT Service Management (ITSM) Platform to Accommodate Central and Unit IT Needs; Redesign the Service Catalog to Include Service Level Agreements (SLAs) and Service Rates to Enable a Better Customer Experience and Business Decision Making

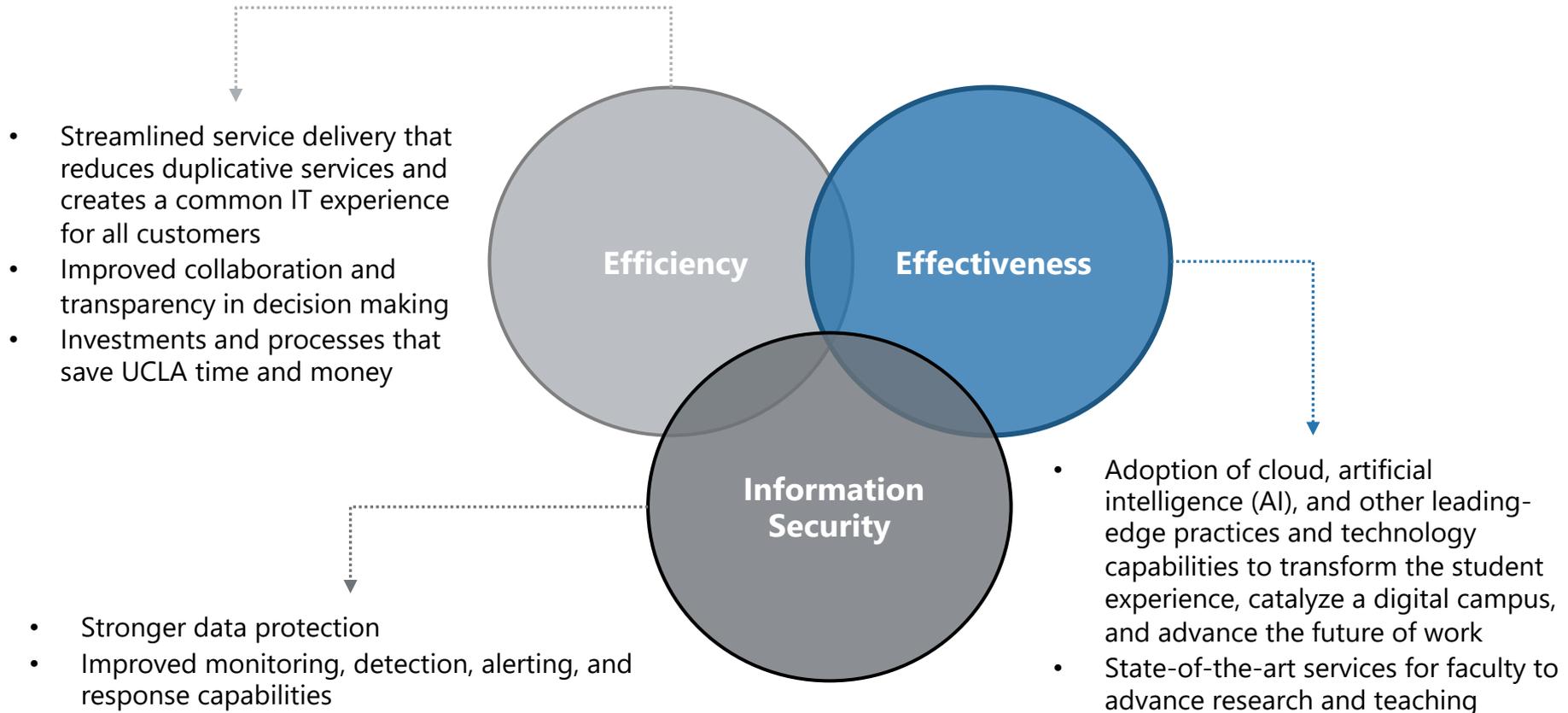
- Improves effectiveness through improved usability of the tool and sets the foundation for adding key features within the ITSM platform



6.2 Implement Formal Asset Management Process and Tool

- Increases accuracy in data to plan renewal and replacement investments and increases efficiency by streamlining Asset Lifecycle Management strategy and tracking all UCLA IT assets from deployment to retirement

Transformation Benefits



High Level Implementation Plan

KEY IMPLEMENTATION PRIORITIES

	Year 1				Year 2				Year 3			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
STRENGTHEN THE CORE												
1. Refine IT Operating Model to Enable Improved Coordination and Quality and Reduce Duplication Across UCLA (1.1)	■											
2. Enhance IT Governance Model to Promote Greater Effectiveness and Transparency in Strategic Decision Making (1.2)	■											
3. Reorganize and Enhance IT Workforce, Learning and Performance Management (3.x)	■											
4. Standardize IT Enterprise Project Management Office and Enterprise Architecture Functions Across UCLA (1.3)		■										
5. Rationalize IT Funding Model for Core Services in Support of New Operating Model (2.1)		■										
6. Strengthen Enterprise IT Solutions (e.g., Email, Network, Data Center, Compute, Applications) (4.x)	■											
7. Enhance Enterprise Information Security Services and Solutions (5.x)	■											
8. Enhance Current IT Service Management Platform to Meet Central and Unit IT Needs (6.1)		■										
INCREASE COLLABORATION												
9. Source IT More Collaboratively and Strategically to Reduce Costs and Improve Compliance (2.2)			■									
10. Rationalize Relevant Administrative IT Services into The "Strengthened Hub" (<i>multiple</i>)			■									
11. Rationalize Relevant Academic IT Services Into the "Strengthened Hub" (<i>multiple</i>)				■								
ADVANCE THE MISSION												
12. Establish an Enterprise Data Strategy and Data Governance Model to Support Advanced Analytics Initiatives (4.3)	▨				■							
13. Establish a Common Enterprise Integration Layer to Enable Access to Data Across Campus Platforms (4.4)					■							
14. Develop an Application Modernization Program to Rationalize Duplicate and Remediate Legacy Applications (4.6)					■							
15. Develop and Implement a UCLA-Wide Customer Relationship Management (CRM) Strategy for Common Use Cases (4.7)	▨				■							

Key

- ▨ Indicates opportunity to begin earlier based on progress with higher prioritized activities
- Implementation Timeline

Where to begin?



There is an opportunity now to move forward by leveraging the large degree of engagement and interest across campus generated by the IT assessment.

01

Executive Alignment | *What is the shared vision of IT across UCLA?*

- Gain alignment and approval from UCLA IT Assessment Leadership (i.e., EVCP and Admin. VC)
- Socialize the case for change with key stakeholders (e.g., Academic Senate, Deans Council, Administrative Leadership, UCLA Health) to inform future state planning
- Finalize timing for gaining alignment on future state vision

02

Program Funding | *How will we finance the transformation?*

- Identify high-level budget and funding required for program initiation and various scenarios for implementation

03

Organizational Considerations | *What steps can we take to mobilize any staff reorganization?*

- Assess and communicate org. academic, research, and administrative unit impacts (i.e., OIT, BTO, SAIT, ORA-ORIS etc.)
- Finalize dotted line reporting relationship to Unit Leadership for IT Strategic Partners role
- Assess organizational transition approach to determine HR constraints and considerations for future planning

04

Program Initiation | *What structures will be in place to support implementation?*

- Define program structure and change management approach, inclusive of governance, risk/issue management, communications, and project management standards

DMS 34

IT GOVERNANCE

Recommendations to
Enhance UCLA's
IT Governance Model

IT Governance: Summary of Recommendations

Recommendations are aligned to current state assessment finding areas, taking into consideration the guiding principles and ongoing UCLA initiatives impacting IT.

Recommendation	Summary	Benefits
1. Governance		
1.1 Refine IT Operating Model to Enable Improved Coordination, Improved Quality, and Reduced Duplication Across UCLA	Articulate clear roles and scope of services provided by central, unit, and department IT service providers across UCLA	Provides for a cohesive and coordinated operating model that clarifies authority over various services, creates efficiency and consistency in the customer experience, and allows for local IT groups to focus on value-added services for end users
1.2 Enhance IT Governance Model to Promote Greater Effectiveness and Transparency in Strategic Decision Making	Augment the current governance model by establishing clearer decision escalation and communication paths between groups, establishing discrete domain-focused oversight over common technology needs, and aligning to funding process	Promotes transparency and effectiveness through a clear and comprehensive interaction model between groups comprised of the right people to make decisions around shared IT investments, standards, and priorities
1.3 Standardize IT Enterprise Project Management Office and Enterprise Architecture Functions Across UCLA	Create an Enterprise Project Management Office and Enterprise Architecture group within ITS to provide clear oversight of UCLA-wide IT initiatives and facilitate development of enterprise architecture-based standards, frameworks, and principles	Provides clarity over foundational IT disciplines that are either immature or not well understood across UCLA, enabling structure over operational and technical IT decision making and direction while promoting use of leading practices across campus

1.2 Enhance IT Governance Model

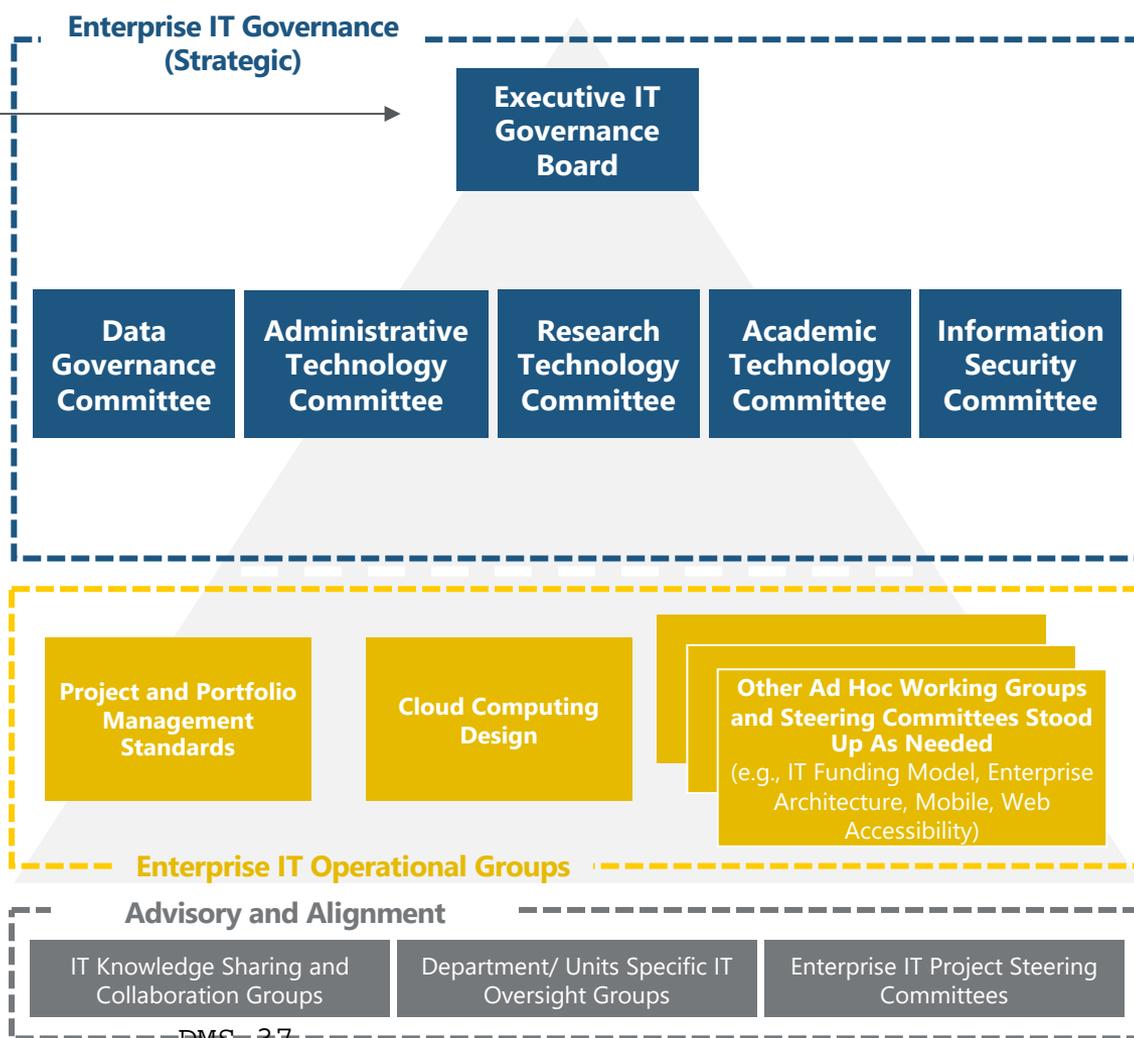
The model below represents a potential design based on the identified needs and focus areas for UCLA with regards to enterprise IT needs.*

The **Executive IT Governance Board** oversees and makes decisions on enterprise-wide IT strategy, enabling executive-level sponsorship of IT initiatives, deciding on projects above certain thresholds, determining exceptions from approved standards, and providing oversight of IT investments and their impact

Subcommittees are cross-functional recommendation groups comprised of IT, administrative, and academic representatives that provide oversight, coordination, and collaboration on specific domain and mission-focused areas. These allow for broad stakeholder representation in IT decision making and direction setting

Working Groups and Steering Committees are operational and provide recommendations to support the development of a common approach to specific domains and functions of IT across UCLA. Working groups may be standing or ad-hoc and convened to drive standards for processes around specific initiatives and projects (e.g., IT Funding Model – See recommendation 2.1 or IT Learning and Development – See recommendation 3.2)

Advisory and Alignment Groups may function to identify opportunities or issues to be escalated to IT governance groups, advise on certain decisions, or align on enterprise standards



1.2 Enhance IT Governance Model

A key element of any governance structure is promoting diverse membership with both IT and non-IT staff to facilitate IT/university mission alignment.

Enterprise IT Group	Scope	Proposed Membership*
Executive IT Governance Board	<ul style="list-style-type: none"> Facilitates alignment of IT strategy with university priorities and mission Decides on projects above certain thresholds Adopts IT standards and policies across campus Oversees the return on UCLA's IT investments Promotes transparency of university IT decision making Implements a priority-setting process and accountability mechanisms Encourages knowledge and information sharing across campus Makes decisions on issues that cannot be resolved by the other IT governance groups 	<ul style="list-style-type: none"> Provost Vice Chancellor, Research Administrative Vice Chancellor Chief Financial Officer (CFO) CIO Faculty Representatives Total: 4-6 <p><i>Meeting participation may increase to include representative IT, Research, Academic, and Administrative leadership from subcommittees depending on the topics discussed</i></p>
Data Governance Committee	<ul style="list-style-type: none"> Reviews and approves data management strategy, standards, and policy Promotes/facilitates intra and inter-unit cluster and campus data sets and sharing opportunities, inclusive of opportunities to research data management capabilities and standards Advocates for stakeholder data needs and concerns, inclusive of data access and protection 	<ul style="list-style-type: none"> Representatives from data-intensive functions (e.g. HR, Student, Finance, Research) Chief Information Security Officer (CISO) Unit IT Service Leaders/Providers Faculty representatives Total: 5-7
Administrative Technology Committee	<ul style="list-style-type: none"> Provides oversight of enterprise applications at UCLA inclusive of projects, policies, or standards related to finance, human capital management, customer relationship management, student, or other business systems and applications supporting the shared administrative functions across UCLA Streamlines application sourcing and supports ongoing portfolio management (e.g., identifying applications in the portfolio that can be shared across campus) Supports life cycle management for critical system-wide business applications 	<ul style="list-style-type: none"> Executive Representative, Administration Executive Representative, External Affairs Executive Representative, Research Executive Representative, CFO Executive Representative, Student Affairs Executive Representative, Campus Human Resources ITS and Unit IT Service Leaders/Providers Total: 6-8 <p><i>Meeting participation may increase to include representative IT leadership depending on the topics discussed</i></p>

*Note: Representative model only; actual participants should be finalized and appointed by UCLA leadership

1.2 Enhance IT Governance Model

A key element of any governance structure is promoting diverse membership with both IT and non-IT staff to facilitate IT/university mission alignment.

Enterprise IT Group	Scope	Proposed Membership*
Research Technology Committee	<ul style="list-style-type: none"> • Focuses on advanced information technology to support research across campus, inclusive of research data • Establishes priorities, identifies initiatives, and recommends funding of innovative technology projects that support the advanced information technology needs of research at the university 	<ul style="list-style-type: none"> • Vice Chancellor, Research • CIO or designee • Executive Director, IDRE • Unit IT Service Leaders/Providers from computationally research-intensive disciplines • Faculty representatives from computationally research-intensive disciplines • Total: 6-9
Academic Technology Committee	<ul style="list-style-type: none"> • Provides oversight of teaching and learning technologies at UCLA, inclusive of projects, policies, or standards related to UCLA-wide classroom and lab technologies, the learning management system, and collaboration tools available to students and faculty • Develops policies and standards related to the adoption and use of campus technologies across the campus that facilitate interoperability and standardization 	<ul style="list-style-type: none"> • Representative, Center for Education Innovation and Learning in the Sciences • Representative, Center for Advancement of Teaching • Representative, Library Teaching & Learning Services • Representative, Center for Excellence in Pedagogy and Innovative Classrooms • Unit IT Service Leaders/Providers • Faculty representatives • Total: 6-8 <p><i>Meeting participation may increase to include representative IT leadership depending on the topics discussed</i></p>
Information Security Committee	<ul style="list-style-type: none"> • Align IT security practices with UCLA's tolerance for risk • Establish accountability, authority, and responsibility for information protection • Identify, prioritize, and develop IT security standards and enforcement mechanisms to be implemented across UCLA • Communicate new IT security processes, practices, and standards across UCLA 	<ul style="list-style-type: none"> • CISO • Chief Privacy Officer • Provost or designee • Faculty representatives • Unit IT Service Leaders/ Providers • Representative, Audit and Advisory Services • Total: 7-9

*Note: Representative model only; actual participants should be finalized and appointed by UCLA leadership

1.2 Enhance IT Governance Model

Effective IT governance is determined as much by the supporting tools and processes as it is the membership and designated groups.

Thresholds

To help bring the right decisions to the right group/level, a set of thresholds should be defined to differentiate between decision types on projects, policies, standards, and initiatives. Thresholds can be based on estimated hours to complete, risk, estimated cost, strategic impacts, etc. Once defined, the interaction model can use this information to determine who should have visibility into which types of decisions

Templates

A set of templates should support all activities. Templates should include: a project request form, a business case template, a project health check form, a technical standard template, a post mortem, or lessons learned template. UCLA should leverage existing templates where available

Charters

A charter template defines the key elements of each group including: responsibilities, membership, decision rights, inputs and outputs, and reporting requirements. This helps clarify each group's purpose

Committee Training

As part of the initial launch of a committee and as membership changes, members are trained on committee charter elements, supporting processes, and the overall governance model. This helps members understand committee operations within their specific group and how they fit into the larger governance model

Defined Interaction Model

As part of the governance design, UCLA needs a model for governance interactions: how the individual groups interact with the business units represented, how the committees interact with one another, how and to whom decisions are escalated between IT governance groups, and how decision outcomes are communicated across campus

Process Ownership

To be effective, committees need a person or group of people to support the actual operations. This includes activities such as developing materials for meetings, taking meeting minutes, tracking metrics, and moving decisions from one committee to another



DMS 40

THANK YOU