UNLV

Pathway Goal: Infrastructure and Shared Governance   **Report:** Year-End: May 2018
Action Item #   2-1

Action Item Description:

Technology infrastructure:
Finalize and implement the IT Master Plan.

Submitted By:

Name	Department
Lori Temple	Office of Information Technology

Working Group Members:

Name	Department
Nancy Rapoport	President's Office
Diane Chase	Provost
Lori Temple	Office of Information Technology

Process and Timeline: Provide a brief summary of the year-long process for your working group.

IT Master Plan has been approved and implementation is underway.
1) Determine appropriate funding sources for improving tech infrastructure.
Work with Action Item #5(c) to
(a) create identity management, and
(b) create document management.

Describe what has been accomplished so far this year.

In Fall 2017:

The Technology Advisory Committee, a new governance committee called for in the IT Master Plan, held regular meetings in the second half of 2017and completed the following activities:
1. Created and charged the Cyber Security Team (CST) and approved the group's annual goals
2. Created and charged the Technology Review Board (TRB)
3. Adopted an annual planning cycle to ensure continuity of the planning process
4. Modified Plan action items to better reflect Top Tier initiatives
5. Approved a set of FY18 IT Master Plan Annual Goals

Also in Fall 2017:

1. The IT Master Plan was introduced to the campus community through a series of presentations at campus leadership meetings and open forums
2. The IT Master Plan website was made available to the campus: https://www.it.unlv.edu/it-master-plan
3. The TRB began work on helping the UNLV community seamlessly access the many available IT services, while preserving the distributed nature of our computing environment through the creation of a comprehensive list of UNLV IT services to be accessed on a new UNLV IT website in Spring 2017

Major IT Infrastructure achievements in Fall 2017 included:

1. Workday Go live occurred on October 1, 2017
2. Pilot colleges going live with Canvas in Spring 2018
3. Implementation of new Wi-Fi in the first eleven buildings underway to be completed in February
4. New wireless authentication system (known as eduroam) available to all employees and guests from other higher education and research institutions who also deploy eduroam

Identify next steps.

Next steps include:
1. Continue progress on all FY18 IT Master Plan Goals
2. Start the next phase of the Wi-Fi project
3. Move all courses to Canvas by Fall 2018

What will your final product be at the end of the year? Such as, what metrics which will be used to assess your progress/achievement, will a report be generated, etc?

A 9-month IT Master Plan progress report will be available to campus and will include updates on all FY18 goals.

You may have reference material to attach to this report. Select from the list.

☒ No additional reference material

OR

☐ Any material generated by this working group (if completed at this time)

Additional information to include (optional).

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——— **End of Mid-Year Report** ———
Remainder of the report will be completed in May.

━━━━ **Year-End** ━━━━
This portion is to be completed in May.

2017-18 Accomplishments.

See attached file entitled *"IT Master Plan: Nine-Month Progress on 2017-2018 Goals"*

SWOT Analysis: Determine the strengths, weakness, opportunities, and threats presented in the data.

Strength(s)	Initial participation of the IT governance groups in establishing prioritized goals has helped the campus make progress towards meeting the Top Tier Pathway Goals.
Weakness(es)	Weaknesses are included as "Potential Issues" on the attached document.
Opportunity(ies)	New opportunities for the use of information technology in meeting Top Tier goals are being explored as IT governance groups establish IT Master Plan FY19 goals. The campus outreach for input into the IT Master Plan scheduled for May 2018 may reveal additional opportunities.
Threat(s)	Over commitment of campus leaders is impacting participation in the highest-level IT governance group (i.e., Technology Advisory Committee).

2018-19 recommendations and next steps

- **What does the SWOT analysis reveal?**
- **What should the goals / activities be for the subcommittee?**
- **Who should be responsible?**

Continued and renewed commitment to the IT governance process will be essential to sustaining progress on implementing IT Master Plan initiatives.   The development of sustainable IT funding models, postponed until FY19, is critical to creating a stable IT environment.

You may have reference material to attach to this report. Select from the list.

☐ No additional reference material   **OR**   ☒ Any material generated by this working group

Additional information to include (optional).

UNLV IT Master Plan
Nine-Month Progress on 2017-2018 Goals

Section 1: Governance and Planning
- ❖ Governance of IT
- ❖ Strategic Technology Planning
- ❖ IT Leadership and Coordination
- ❖ IT Projects

UNLV has made excellent progress on year one goals within the Governance and Planning section. All goals expected to have been completed by this timeframe have been met. The first year has been devoted to forming the new governance structure, informing the campus about the IT Master Plan, and setting the stage for ongoing effectiveness. Governance groups are engaged and working on many foundational goals which will increase their ongoing effectiveness. Increased reference is being made to the Plan in university governance meetings and planning discussions. The reporting activities and launch of the first full planning cycle beginning this April will be important in achieving campus trust and participation in IT decision-making. The two issues evident at this time are the need to confirm timing for hiring a CIO and developing an IT Project and Purchasing Process.

Status	Init	Assessment
Completed	1.1 1.2 1.3 1.5 3.1 1.4	● New IT governance structure has been communicated to the university. ● Governance committees (TAC, TRB, CST) proposed in the IT Master Plan are meeting regularly, membership reflects Plan recommendations, and charges are being carried out. ● Campus engagement sessions and a new website have increased awareness of the Plan and the new IT governance structures. ● An annual roadmap for implementing Plan action items has been published. ● Approval and funding for the CIO position has been secured. ● Research Technology Group has been established. First meeting is scheduled for April 20, 2018.
Expected to be Completed	1.6 2.4	● Draft assessment of Plan progress during the first FY to campus by May 1, 2018. ● Final report on assessment of first FY progress by July 1, 2018.
Potential Issues	1.6 3.1 4.1	● First assessment of effectiveness of IT governance structure scheduled for April 2018 has been delayed. ● Approval and funding of the new CIO position was achieved.The reporting structure and timeline must be clarified to effectively report annual progress to stakeholders. ● Development of IT project processes and associated purchasing processes are unlikely to meet FY18 established goals. Minimal work has been done on providing visibility into current IT projects and establishing IT purchasing thresholds and associated approval processes. Greater TAC input may be required.

Section 2: Creating Sustainable IT Services

- ❖ IT Service Coordination
- ❖ Sustaining Technology Investments
- ❖ IT Awareness and Training

UNLV has made progress on many year one goals within the Creating Sustainable IT Services section but a number of goals are delayed and unlikely to be completed within the FY. No progress has been made on funding models. In addition, escalating demands for network resources to address new campus initiatives have increased the scope and timeline of the network infrastructure project. Supporting this growth requires major construction and additional space to be dedicated to the network in most campus buildings.

Status	Init	Assessment
Completed	5.1 6.1 6.2	● Received a $3 million equipment donation as part of the second-year of a three-year partnership with Cox Communications to enhance Wi-Fi. ● Partnered with ConvergeOne to provide managed IT services for the family practice clinics that comprise UNLV Medicine. ● Enhanced Wi-Fi services have been added to the first 10 building locations and specifications for next phase of the Wi-Fi have been submitted. ● Core components of the UNLV network have been re-architected to accommodate growth and make it possible to meet a complex variety of connectivity needs. ● Implemented multiple training delivery methods for the transition to Canvas.
Expected to be Completed	5.1 5.2 5.3 5.4 6.3 6.5 7.1 7.3 7.4	● Expansion of data center services to Switch will be completed in May. ● Development of inventory of current technology professionals campus wide is delayed. An initial list is expected this FY. List will be used to improve retention and training of IT professionals as well as the seamless delivery of services. ● IT Services website with links to service offerings to improve campus awareness of available IT services is delayed but expected to be completed by summer. ● Prioritized list of technology standards with timelines for delivery. ● Pilot phase of new UNLV IT Security Risk Assessment program completed in December 2017. New program will be rolled out to campus in 2018. ● CST: Annual education - Development of role-based annual IT security education with an emphasis on roles that deal with protected data.
Potential Issues	5.1 6.1 6.6 7.2	● Project to implement the Cox-donated wireless equipment will be expanded from three to five years to accommodate the need for network improvements including securing and remodeling IDF rooms. ● Project plan for creating funding models to effectively sustain IT investment delayed to provide new CFO time to complete assessments of the current environment. ● Project to re-architect the UNLV network for current needs and future growth expanded scope to incorporate new security (emergency phones, cameras, panic buttons) and other internet of things (HVAC, sprinklers). ● Inventory of current technology assets to inform development of a refresh strategy delayed until full implementation of a new asset management tool is complete. ● Increase in cost-effective professional development opportunities for the IT community underway but delayed. ● CST: Onboarding/orientation - Creation of security awareness training for staff onboarding that is handled like Title IX training underway but may be delayed.

Section 3: Foundation for Growth & Agility
   ❖ Information Security
   ❖ iNtegrate 2
   ❖ Identity Management and Single Sign-On
   ❖ Mobility

UNLV has made progress on many year one goals within the Foundation for Growth & Agility section but a number of goals are delayed and unlikely to be completed within the FY. Benefits to the campus for many of these initiatives will not be realized this FY.

Status	Init	Assessment
Completed	8.4 8.6 9.3 10.3	● Pilot phase of new UNLV IT Security Risk Assessment program completed in December 2017. New program will be rolled out to campus in 2018. ● Comprehensive UNLV IT security strategy using the framework established by the National Institute of Standards and Technology (NIST) is being implemented in accordance with new NSHE IT security policies. ● Multi-year project to transition legacy human resources and financial systems to Workday went live on October 1, 2017. ● Transition from a home-grown Wi-Fi authentication system to a secure, certificate-based authentication used by the majority of Tier One higher education institutions initiated in Fall 2017. Will be completed in 2018.
Expected to be Completed	8.2 8.8 8.9 8.10 9.5	● Creation of a campus-wide Privacy Officer position is underway. Position description in under review. ● Provide IT security consultation for grants and contracts providing community services. ● Define highest priorities for improving research data risk mitigation and begin implementation (Research Technology Committee). ● CST: Annual education - Develop role-based annual IT security education emphasis on roles that deal with protected data. ● Timeline for initiatives to strengthen endpoint security (least privilege, encryption). ● Procurement of mobile application development platform. ● Super-user Workday training has increased the level of Workday expertise across the campus. Additional just-in-time customized training materials are being developed to address unique university requirements.
Potential Issues	8.9 9.3 10.6	● CST: Onboarding/orientation - Creation of security awareness training for staff onboarding that is handled like Title IX training underway but may be delayed. ● Post go-live UNLV Workday governance structure to prioritize alternatives for functionality unavailable in Workday will not be completed by June 2018. ● Gap analysis of Workday functionality will not be completed by June 2018. ● Role-based information available in Workday not yet ready to be used for refined Identity Management access.

Section 4: Information Sharing and Collaboration Tools
- ❖ Enterprise-Wide Document Management
- ❖ Data Management for Institutional Effectiveness and Decision-Making
- ❖ Communication and Collaboration Tools

No real roadmap exists for two of the three initiatives in this section - Document Management and Data Management. Communication and collaboration initiatives are proceeding well, and the release of the new UNLV Strategic Marketing Communication Plan is likely to enhance building an effective roadmap for next FY.

Status	Init	Assessment
Completed	13.1	- Data Oversight Committee established. - Comprehensive emergency notification services available through digital signage, desktops, email, and the new RebelSafe mobile application implemented. - UNLV Student Official, a timely, email-based notification system for students created and implemented. - Approved a campus data vision, mission, and guiding principles.
Expected to be Completed	13.1 14.1 14.3	- Develop and begin implementation of an 18-24 month data management plan to facilitate access to campus data to inform decision making. - Procurement of web-conferencing solution to facilitate online office hours, group work, connecting with offsite guest lecturers, etc. and initiation of pilot. - Gather requirements for tools to enhance Top Tier dashboard reporting. - Develop web analytics dashboard for departmental communicators. - University Communications will provide TAC and TRB with analysis of available social media tools and recommendations for procurement and implementation.
Potential Issues	12.2 14.5	- Enterprise-wide document management implementation one-time funding awaits approval. Initial ongoing funding has been secured. - Enterprise-wide video streaming solution moved to FY19.

Section A through D: 2017-18 Pathway Goals/Core Theme Activities

- The build out of the networking, state-of-the-art technology-rich classrooms, simulation center enhancements, and new learning management and administrative systems for the new School of Medicine were completed in time to welcome the inaugural class of students.

- In partnership with the Lee School of Business, several paid technology internship positions to assist students in gaining experience in their areas of study have been created and filled.

- A new 24/7 computer lab was created to ensure students have access to the software and computing resources needed to complete their course and research activities.

- A behavioral-based early warning system designed to improve course performance was used in additional courses in 2017 and is being piloted in math preparation courses in 2018.

- The first year of a two-year project to transition UNLV to Canvas, a new, feature-rich learning management system that provides greater mobility, easier access to materials, and is used by all other NSHE institutions, is complete. Training materials and support services are in place to assist students and faculty as the campus moves to Canvas by the end of 2018.

- Eduroam, a secure authentication system that allows students, faculty, and staff, to access academic resources via Wi-Fi at UNLV and when visiting other eduroam higher education institutions, was introduced in Fall 2017. By December 2017, the service had been used by UNLV constituents at 102 different locations in 30 states and 17 countries.

- The third year of a partnership with Jim Bridger Middle School introduced a new group of 6th, 7th, and 8th graders to IT professionals who demonstrate a variety of technologies, share what it is like to work in IT, and talk about how to prepare for an IT job in the future.