

Assessment Cycle 2019-2020

Information Technology Services

Division or Department: N/A

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Date:06/29/2020

Approved by: Dr. Darlene Williams

Date: 06/30/2020

Northwestern Mission. Northwestern State University is a responsive, Student-oriented institution that is committed to the creation, dissemination, and acquisition of knowledge through teaching, research, and service. The University maintains as its highest priority excellence in teaching in graduate and undergraduate programs. Northwestern State University prepares its Students to become productive members of society and promotes economic development and improvements in the quality of life of the citizens in its region.

Information Technology Services (ITS) provides services, support, management, and administration of university-wide technology resources. The goal is to ensure that technology is apparent, stable, and supportive of the campus mission and its constituents. These mentioned services must meet the requirements and expectations of the University community.

Methodology: The assessment process includes:

- (1) Data from assessment tools are collected and returned to the Chief Technology Officer (CTO) and Chief Information Officer (CIO);
- (2) The CTO and CIO will evaluate and examine the data with the ITS staff to determine whether the applicable outcomes are met;
- (3) Findings from the assessment to be reviewed with the appropriate personnel;
- (4) Individual meetings will be held with staff as required;
- (5) The CTO and CIO, in consultation with staff members, will determine proposed changes to measurable outcomes, assessment tools for the next assessment period, and, if necessary, changes to existing service offerings.

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Information Technology Services

Service Outcomes:

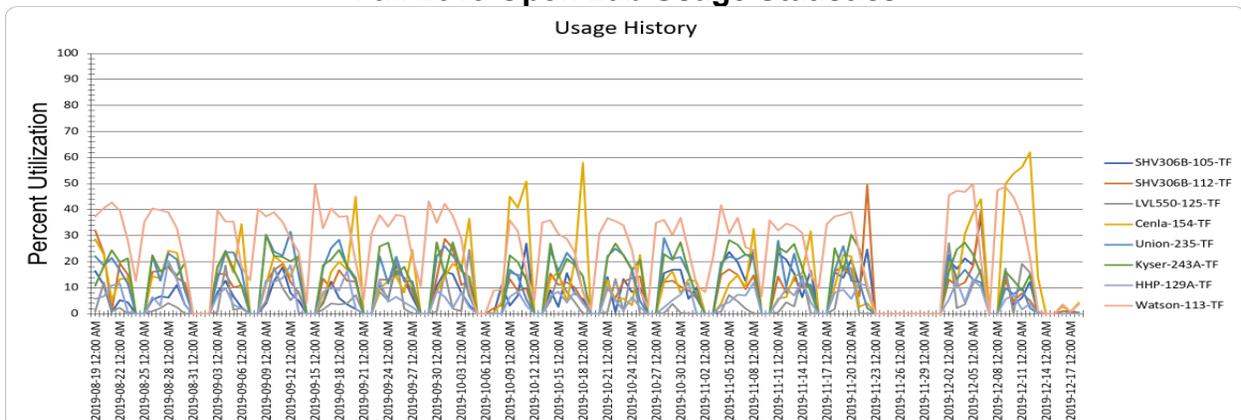
SO1. Ensure that the computer labs and classroom technology resources are accessible, supported, and current to optimize the teaching and learning environment.

Measure 1.1. Review the scheduling, availability, and usage of campus computing labs. Public labs should see usage rates of at least 75% as measured through reporting provided by our LabStats monitoring software.

Finding: Target was Not Met.

Analysis: In 2018-2019, the target was reported as met. However, based on the review of the 2018-2019 results, ITS reevaluated this measure to define how the "usage rate" should be more accurately measured. The determination was that the original measure attempted to conclude the computers in each open lab were utilized at least 75% based on logins to computers rather actual usage time to the time the computers were available. ITS determined the 2019-2020 results based on a utilization report extracted from LabStats. As a result of the closer analysis, the target was not met for 2019-2020. After further team discussion and analysis, it was concluded that the ITS department would not be able to improve this measure. The case is that public labs are just that, a service provided to the students at each location to serve on an as-need basis. Students use open labs mostly between classes, quick homework assignments, and testing. The most substantial usage occurs during midterms and finals, with the usage between being lower. Also, students are now equipped with their technology and do not require the use of the open lab services. In 2020-2021 it is recommended that this target be removed from the assessment. Open computer labs are a service that must be available for our student body, but a reduction of this service is the only way to increase the overall usage measure. ITS will continue to research the best path forward to the right proportion of this service.

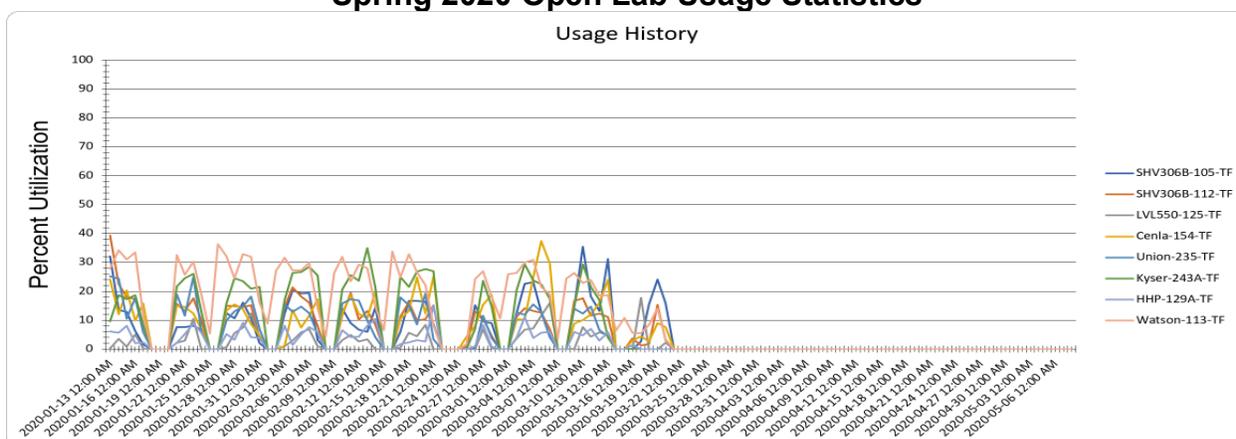
Fall 2019 Open Lab Usage Statistics



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Open Labs	Login Count	Station Count	Unique User Count	Total Session (Minutes)	Avg Session (Minutes)	Semester Usage Rate
Cenla-154-TF	2526	10	470	79,345	31	
HHP-129A-TF	1294	15	244	49,662	38	
Kyser-243A-TF	4175	14	772	110,947	27	
LVL550-125-TF	1258	20	281	71,226	57	
SHV306B-105-TF	1612	11	356	59,454	37	
SHV306B-112-TF	11175	33	850	215,174	19	
Union-235-TF	3911	14	827	108,534	28	
Watson-113-TF	30080	41	3534	1,056,585	35	
	56031	158	7334	1,750,926	34	

Spring 2020 Open Lab Usage Statistics



Open Labs	Login Count	Station Count	Unique User Count	Total Session (Minutes)	Avg Session (Minutes)	Semester Usage Rate
Cenla-154-TF	1302	10	353	36,292	28	
HHP-129A-TF	553	15	133	19,589	35	
Kyser-243A-TF	2143	14	502	63,742	30	
LVL550-125-TF	824	20	239	28,300	34	
SHV306B-105-TF	882	11	194	39,792	45	
SHV306B-112-TF	7860	33	800	132,109	17	
Union-235-TF	1610	13	515	40,510	25	
Watson-113-TF	13343	41	2554	461,160	35	
	28517	157	5290	821,495	31	

Decision, action, or recommendation: We recommend that ITS not maintain this measure in our assessment process for 2020-2021, based on the analysis of 2019-2020 data. ITS will move forward with researching a better means to gauge the utilization of open lab computers, and with COVID-19 challenges, it will be increasingly difficult to improve usage.

Measure 1.2. Perform annual reviews of the technology-based classrooms and

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department computer labs to meet 100% of identified upgrades/refresh during the replacement cycle as funding permits.

Finding: This target was Met.

Analysis: In 2018-2019 the target was met. Based on the analysis of 2018-2019, results, all classrooms and services areas were refreshed. In accordance with the plan of action in 2018-2019, in 2019-2020, Instructional Technology developed a five-year plan that monitors and tracks the life cycle of the equipment funded by Instructional Technology. This plan tracks which computer labs and classroom space require a refresh based on the life cycle. Following the plan of action, ITS completed 100% of the projection for 2019-2020 in all identified areas. As a result, the target was met. Below is a summary chart of the number of computers and classrooms scheduled beginning with 2019-2020 through 2023-2024.

Initiative	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
Computers	93	103	173	125	283
Audio/Visual	16	7	14	9	9
Video Conferencing	2	6	1	0	1

Decision, action, or recommendation: Based on the analysis of 2019-2020 results, in 2020-2021 Instructional Technology will stay abreast of the refresh cycle of technology-based classrooms and computer labs as funding permits. Additionally, Instructional Technology will make the necessary adjustments to respond to any future post-COVID-19 outcomes and assist individual departments with monitoring and upgrade recommendations for academic department funded technology spaces.

SO2. Provide technical support to faculty, staff, and students to ensure their success in fulfilling their educational goals and job responsibilities.

Measure 2.1. After each closed support ticket, an email notifying the user of the closed state of the support request includes a link to a satisfaction survey. ITS will maintain an average experience of 4-Star or better.

Finding: The target was Met.

Analysis: In 2018-2019 the target was Met. Based on the analysis of the 2018-2019 results, a satisfaction survey is included in the notification after each support request is closed so that ITS can monitor quality of service provided to our community. In accordance with the plan of action for 2018-2019, in 2019-2020, ITS had a total of 6,297 service tickets during the academic year. Of these tickets, ITS received 816 survey responses. ITS uses the service request ticket system to help route the requestor's request to the appropriate service area and classify the severity of the issue. This system allows the ITS department to streamline the process and ensure high priority issues are resolved as quickly as possible. The chart below identifies the results for

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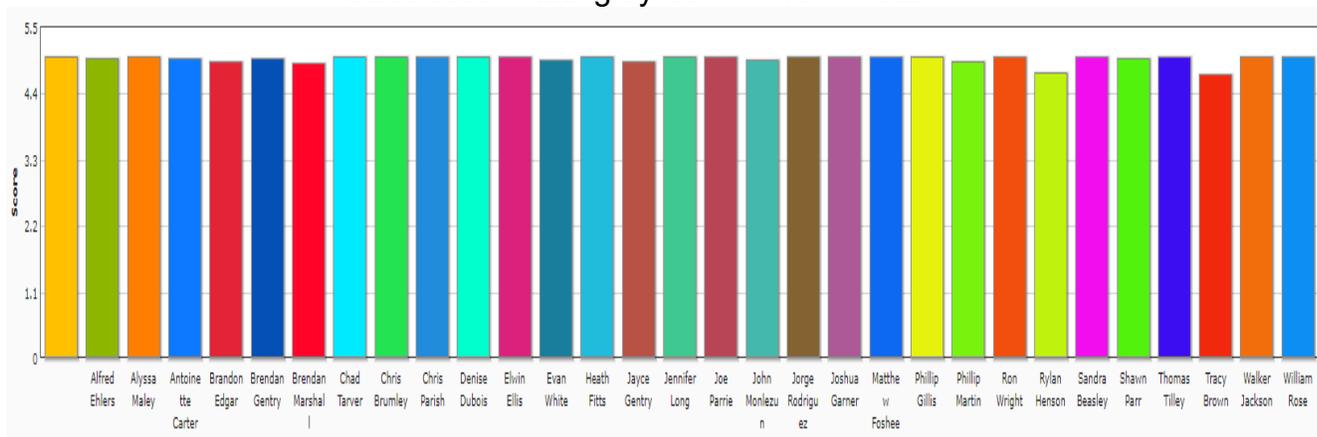
each service area, along with the percentage of the response rate.

Information Technology Services 2019-2020 Service Request Survey Results

Service Requests Summary by Service Area

Service Area	Ticket Count	Survey Response	Response Rate
Technical Services	4585	653	14.24%
Instructional Technology	592	37	6.25%
Administrative Services	306	51	16.67%
Academic Services	814	75	9.21%
Total:	6,297	816	

Satisfaction Rating by Service Technician



As a result, the analysis of 2019-2020 data shows the target was met. Technical and Administrative services received the highest response rates at 14.24% and 16.67%, respectively. The satisfaction rating exceeds the 4-Star rating for each of the 28 technicians with an average score of no less than 4.74, as reported by the Kayako program. (See Appendix A) In 2020-2021, ITS target is to validate the 4.5-Star rating by increasing the response rate for our survey.

Decision, action, or recommendation. Based on the analysis of 2019-2020 results, in 2020-2021, ITS will focus on maintaining the 4.5 satisfaction rating but will work towards increasing the response rate to the surveys by 5% across each service area. The increase in responses to the survey data will allow for a broader sample of data to analyze and report. Plus it will enable the service areas to document their efforts further.

Measure 2.2. The Student Help Desk will provide services to students, both in-person and via telephone, for at least 70 hours per week while classes are in session and at least 40 hours per week during all other periods that the University is open.

Finding: The target was Met.

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Analysis: In 2018-2019 the target was met. Based on the analysis of the 2018-2019 results, ITS identified an increase in hours of operation due to a change in the academic calendar. The student help desk continues to follow the hours of the library in which it is housed. In accordance with the plan of action for 2018-2019, the Student Helpdesk was open for 80 hours during the fall semester, excluding holidays, prior COVID-19.

Fall/Spring Semester

Monday – Thursday: 8:00am – 11:45pm

Friday: 8:00am – 1:45pm

Saturday: 10:00am – 1:45pm

Sunday: 2:00pm – 11:45 pm

This schedule was maintained this spring semester until March 23rd when the campus closed for Stay at Home orders. New hours were adopted based on the availability of full-time staff, student workers, and technology resources available from home. Even after the staff returned to campus on April 18, 2020, the student worker staff was limited to the hours Watson Library was open. Student workers are not allowed to work in the Instructional Technology office area while the library is closed. The following adjusted hours of operation was posted.

Spring - COVID-19

Monday – Thursday: 7:00am – 5:00pm

Friday: 8:00am – 12:00pm

Saturday & Sunday: Closed

As a result, in 2019-2020 the target was met. Prior the COVID-19 impact, Student Help Desk was able to maintain 81 hours and 15 minutes of operation. After the Stay at Home Orders and the closure of the Watson Library, the Student Help Desk was able to maintain at least 44 hours of service as staff worked from home. In 2020-2021 ITS will adjust the focus of this measure to include ticket types to improve the level of detail in reporting and tracking of service requests.

Decision, action, or recommendation. Based on the analysis of the 2019-2020 results, in 2020-2021, it is recommended that ITS focus on the quality of service by the Student Help Desk and add additional ticket types to improve the level of detail in reporting and tracking of service requests. This feedback will aid Instructional Technology to better tailor services provided to students and faculty from the Student Help Desk location. The target will be to provide a quality star rating of 4-Star or better on average. In addition, comments from recipients will be reviewed to consider areas of concern by the recipients. Instructional Technology will continue to monitor the situation post COVID-19 and will adjust in accordance to the guidance provided by the Northwestern administration.

SO3. Employ innovative and out-of-the-box ideas to the development and delivery of technology-based services that enhance collaboration, communication, and the overall

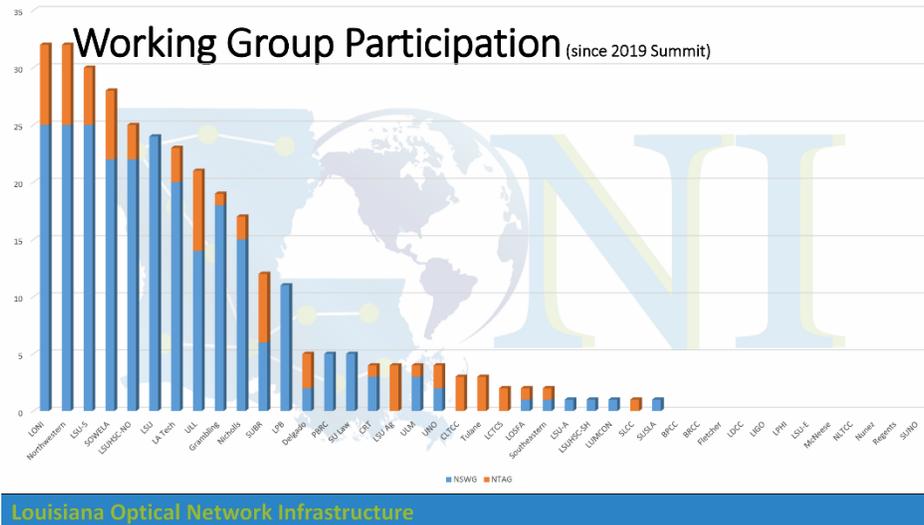
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student experience at the University by partnering with LONI, Louisiana Optical Network Infrastructure.

Measure 3.1. ITS will implement at least one enhancement to our current system by connecting and attending 90% of LONI scheduled meetings to stay in touch with implementations and innovations within the higher education space in the State of Louisiana.

Finding: The target was Met.

Analysis: In 2018-2019 the target was met. Based on the analysis of the 2018-2019 results, ITS has been updating functionality to existing systems across the campus. In accordance with the plan of action for 2018-2019, in 2019-2020 the Technical Services area within ITS department participated in 100% of the meetings conducted by the two working groups established by LONI. Those two working groups are called the Network Security Working Group (NSWG) and the Network Technical Advisory Group (NTAG). Each working group provides a platform to discuss and share information on a variety of topics. These working groups also provide opportunities for staff members from across multiple higher education systems and to reach out to establish connection when comparing technologies or systems for implementation. These connections allow for swifter adoption and vetting of technologies.



One example is the preparation of the implementation of EduRoam at Northwestern. The implementation of EduRoam will allow guests (students, faculty, and staff) from other institutions of higher education to have access to Northwestern's wireless network when visiting any of the Northwestern campuses. In addition, this service extends to Northwestern constituents when they visit another institution that participates in EduRoam. Secondly, Northwestern entered into a service agreement with LONI to extend fiber optic cable to the Medical Arts building located at the Rapides Medical Center. This building is utilized by our College of Nursing and School of Allied Health. This project will provide a tremendous network connection opportunity for our nursing and radiology students taking classes at this location. These two projects are just a

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small sample of the opportunities presented by the ITS staff participation in the LONI community. As a result, in 2019-2020 the target was met and with participation with LONI, NSU is setting the foundation to continue to stay abreast of the vast and swift technology changes facing our university. In 2020-2021 the target will continue to implement at least one enhancement to our current system by connecting and attending 90% of the LONI scheduled meetings.

Decision, action, or recommendation: Based on the analysis of the 2019-2020 results, in 2020-2021, ITS will work collaboratively with LONI working groups. Especially in response to COVID-19 impact on university campuses, ITS will continue discussions and research on the development of improved network services on college campuses and bring at least one enhancement to our technology that benefits the students and staff at NSU.

Measure 3.2. Additional services will be added to NSU Mobile to allow for fee payment and degree audit access.

Finding: The target was Met.

Analysis: In 2018-2019 the target was not met. Based on the analysis of the 2018-2019 results, vendor partners were unable to deliver necessary updates for full implementation of the Mobile Application. To bring the application online for NSU students, design changes were implemented to adapt available DegreeWorks program functionality for use within the mobile application. We were also able to schedule implementation of a newly released, phone friendly, interface that allowed for mobile payment processing. In accordance with the plan of action of 2018-2019, in 2019-2020 ITS was able to successfully incorporate both the fee payment and degree audit access through the mobile application. As a result of these changes, in 2019-2020 the target was met. In 2020-2021, this measure is being retired as the overall goal for breath of services available via the mobile application has been obtained.

Decision, action, or recommendation: Based on the analysis of the 2019-2020 results and the challenges facing the campus related to the ongoing COVID pandemic, in 2020-2021 it is recommended that ITS focus on current campus operations that can migrate into an everchanging and uncertain environment due to our COVID-19 exploitation. Technology will play a key role in the reconfiguration of processes to support increased automation, flexible methods of course delivery, and greater access to real-time data for enhanced decision support. Projects currently underway include assisting Academic Affairs with implementing the HyFlex Course Model across the existing course schedule; assessing classroom needs to identify readiness to deliver instruction to remote students; and streamlining the online acquisition, storage and sharing of documents related to admissions, registration, financial aid and student accounting to accommodate students at a distance while ensuring social distancing on campus.

While these events are presently evolving, key components surrounding the implementation of the HyFlex Course Model are expected to include: Modification to the schedule of classes to facilitate the expected HyFlex course delivery model including

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the transition of currently enrolled students to new sections and the implementation of a proper coding scheme to accommodate student billing; development of a new interface between the recently implemented Banner 9 and Moodle to accommodate the new scheduling scheme; and ultimately preparing classroom technology to accommodate requirements associated with the HyFlex delivery model. During 2020-2021, all processes will be monitored, reviewed, and adjusted as necessary to guarantee an appropriate student experience.

SO4. Maintain and enhance the technology infrastructure used to deliver both current and future services to ensure ubiquitous access and high availability while meeting user expectations.

Measure 4.1. Determine the upgrade needs in the upcoming year by reviewing the current network and server infrastructure to so costs can be included in both the standard and technology fee budgeting process.

Finding: This target was Met.

Analysis: In 2018-2019, the target was Met. Based on the analysis of the 2018-2019 results, ITS worked diligently to secure funding to jumpstart the faculty/staff pc replacement cycle. In accordance with the plan of action for 2018-2019, in 2019-2020 The Chief Technology Officer (CTO) worked with Vice President of Technology and the Chief Finance Officer (CFO) to secure funding and replace the data center storage arrays in Roy Hall and the backup data center located at the School of Nursing in Shreveport. Also included in the project was the replacement of hardware used for backups of the University data. Each system has reached the end of life and would no longer be supported. These systems were purchased and installed in late fall 2019. As a result of the efforts, the 2019-2020 target was met. In 2020-2021, the target continues to move forward in upgrade and replacement as NSU prepares for a financially constricted budget.

Decision, action, or recommendation: Based on the analysis of the 2019-2020 results, in 2020-2021, Technical services will be working to secure funding to refresh the campus Wi-Fi network. Core components in the current Wi-Fi system are approaching end of life. This upgrade is not only needed to operate a stable wireless network but to able to adopt new wireless standard such as Wi-Fi 6 and infrastructure to support way finding services.

Measure 4.2. Complete replacement of the campus telephone system.

Finding: The target was Not Met

Analysis: In 2018-2019 the target was not met. Based on the analysis of 2018-2019, this measure consists of a needs assessment, a review of possible solutions, product selection, and implementation. A pilot project was conduct in 2018-2019 and determined that Voice Over Internet Protocol (VOIP) would be the better solution for our

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communication needs. In accordance with the plan of action of 2018-2019, in 2019-2020 Technical Services was able to accomplish many of the goals of this measure but fell short of the procurement and implementation due to concerns over funding. Technical Services staff were able to develop a project and set a budget for the total cost close to \$500,000. This plan was proposed in two parts. Part one was to address the core system and hardware and bring over the business units of the University. Part two concentrated on the transfer of the academics' areas and other campus tenants to the new system. The goal of this strategy was to help distribute the telephone system infrastructure at a pace that would allow the University to spread the cost out over two fiscal years to accommodate the budget impact.

However, with the reality of COVID-19, the Technical Services staff have been re-evaluating the plan to purchase an on premise telephony solution and look at solutions that are cloud based and can allow for flexible telephony and video services to be delivered off premise. The truth is that Northwestern students, faculty, and staff could be operating from other places for some time to come. The introduction of this new business requirement has altered the discussion to consider a cloud-based solution to facilitate the changing workforce environment.

As a result of this COVID-19 impact and the unexpected changing workforce environment, for 2019-2020 this target was not met. In 2020-2021, the target will focus on the replacement of the campus telephone system using a cloud-based solution.

Decision, action, or recommendation: Based on the analysis of the 2019-2020 results, in 2020-2021, Technical services will take action to continue evaluating cloud-based telephony options and present a summary of costs to the administration. Each approach, on-premise versus cloud-hosted, carry a unique set of benefits and drawbacks. Technical Services will continue to explore these options and will leverage our peer resources the in LONI community to help produce a solution.

Measure 4.3. Continuously maintain and enhance the university Enterprise Resource Planning (ERP) system (Banner) at 100% to ensure optimal delivery of services for the University to carry out its daily operations.

Finding: The target was Met.

Analysis: In 2018-2019 the target was met. Based on the analysis of 2018-2019 results, Banner 9 was fully implemented by the January 2019 deadline date. By the end of February, all users were migrated to the new system and the focus transitioned to updating the underlying database infrastructure to prepare the university for future ERP system updates. This Banner software suite is considered mission critical due to its ties to essential services including the ability to recruit and admit students, register them for classes, disburse financial aid, purchase supplies, collect tuition and fees, and process payroll.

In accordance with the plan of action in 2018-2019, in 2019-2020 the following updating projects were scheduled and completed: 1) Upgrade of the Oracle database production

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environment to version 12C; 2) Transitioning from Oracle Weblogic servers to the open-source Tomcat server; and 3) completion of all updates necessary to comply with federal reporting requirements. The update to Oracle 12C ensures we meet the necessary requisites for Banner related updates scheduled to be released over the next year. The move from proprietary Oracle Weblogic servers will save the university \$89,000 in decreased maintenance costs in 2020-2021. All updates containing supporting materials required to comply with federal reporting requirements, including W2, 1099, 1098, 1095, Title IV, etc. were completed as scheduled to ensure timely compliance with their associated deadlines. As a result of these updates in 2019-2020, the target was met resulting in the university being prepared to leverage key updates in the upcoming year as well as realizing a significant cost savings in maintenance charges. In 2020-2021, the target will remain to Continuously maintain and enhance the university ERP system (Banner) at 100% to ensure optimal delivery of services for the university to continue operations at maximum efficiency.

Decision, action, or recommendation: Based on the analysis of the 2019-2020 results, in 2020-2021, it is recommended that ITS focus on two initiatives related to student services and one initiative focused on infrastructure. These include: Upgrading Degreeworks from version 4 to version 5; Upgrading Banner Self-Service from version 8 to version 9; and the implementation of Ellucian ETHOS which will prepare the campus for next generation Ellucian products including Workflows, Analytics and CRM Recruit.

Comprehensive summary of key evidence of improvements based on analysis of results.

PC Labs and Classroom Technology Resources are Accessible, Supported, and Current

- Reevaluated how to measure more accurately the "usage rate". The measure was to reach 75% usage based upon total time available for usage. After considerable discussion, ITS determined that this was not a measure that could be improved but was simply a service provided on an as-need basis.
- Annual reviews to upgrade/refresh classrooms and department pc labs are based on a five-year plan according to the life cycle of the equipment. All required upgrades were met.

Quality technical support

- Exceeding quality support to faculty, staff, and students as reported by Kayako satisfaction survey with a 4-Star or better rating. Current average is not less than 4.74.
- Student Help Desk was open more than 80 hours per week during the semester until March 16, 2020 when facilities were shut down due to the COVID-19 pandemic. Following, the Student Help Desk was able to provide 44 hours of service per week as staff worked from home.

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Innovative and Out-Of-The Box ideas

- Attended 100% of LONI meetings, both Network Security Working Group and Network Technical Advisory Group. Preparing implementation of EduRoam for our visiting guests and extended fiber optic cable to the Medical Arts building for our College of Nursing and School of Allied Health.
- NSU Mobile service for fee payment and degree audit is operational.

Maintain and Enhance Technology Infrastructure

- In collaboration with the Vice President of Technology and the Chief Finance Officer, ITS secured funding and replaced the data center storage arrays in Roy Hall and backup the data center located at the School of Nursing as well as replacement of hardware used for backups of University data.
- Replacement of the campus telephone system was not met. Pilot project was conducted, and the university was ready with a VOIP system until COVID-19 disrupted our communication concept. ITS re-evaluated the plan to purchase and is investigating a cloud-based solution.
- All scheduled upgrade projects were completed with a university saving of \$89,000 in decreased maintenance costs projected for 2020-2021.

Plan of action moving forward.

PC Labs and Classroom Technology Resources are Accessible, Supported, and Current

- Recommended that ITS not continue to use this measure in our assessment process and move forward with researching a better means of utilization of open lab computers with COVID-19 challenges facing us and our students.
- Stay abreast of the refresh cycle as funding permits. Monitor and assist individual departments with recommendations to be able to provide access to current classroom and lab resources.

Quality technical support

- Increase the response rate of the satisfaction rating by 5% across each service area.
- Recommendation to focus on the quality of service instead of hours of service available. Suggested that ticket types be identified so that detail in reporting and tracking service request can be charted with the intent of using the 5-Star rating program in Kayako.

Innovative and Out-Of-The Box ideas

- Continue with 100% meeting attendance to stay abreast of development of improved network services that benefits the students and staff at NSU, by bringing at least one enhancement to our campus.
- Recommend ITS focus on current campus operations that will involve implementation of the HyFlex Course Model as the nation prepares for a very different university experience amidst the COVID complications.

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Maintain and Enhance Technology Infrastructure

- Secure funding to refresh campus Wi-Fi network as we prepare for Wi-Fi 6
- Continue to evaluate a cloud-based telephone option versus on-premise.
- Recommended that ITS focus on two student service-related initiatives and one infrastructure initiative to include Upgrading Degreeworks version 4 to 5, Upgrading Banner Self-Service from version 8 to 9, and implement Ellucian ETHOS as we prepare the campus for next generation Ellucian products.

Appendix A – Satisfaction Report by Kayako

Northwestern State University - Powered by Kayako

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6/19/20, 10)19 AM

Title: Survey Results
AM

Last Run: June 19, 2020 10:19

Overall Satisfaction
5.00

Alfred Ehlers 4.97
Alyssa Maley 5.00
Antoinette Carter 4.98
Brandon Edgar 4.94
Brendan Gentry 4.98
Brendan Marshall 5.00
Chad Tarver 5.00
Chris Brumley 5.00
Chris Parish 5.00
Denise Dubois 5.00
Elwin Ellis 5.00
Evan White 4.96
Heath Fitts 5.00
Jayce Gentry 4.91
Jennifer Long 5.00
Joe Parrie 5.00
John Monlezun 4.94
Jorge Rodriguez 5.00
Joshua Garner 5.00
Matthew Foshee 5.00
Phillip Gillis 5.00
Phillip Martin 4.92
Ron Wright 5.00 CIO
Rylan Henson 4.74
Sandra Beasley 5.00
Shawn Parr 4.98
Thomas Tilley 5.00
Tracy Brown 4.71 CTO
Walker Jackson 5.00
William Rose 5.00

Northwestern State University - Powered by Kayako 6/19/20, 10)19 AM