

Transform 2020

Information Technology Project Needs Assessment

Executive Summary

1. Project: Upgrade campus networks, telephone systems, wireless for seamless access across all campuses. Develop a federate student ID system.

Current Situation: Universities networks, phone systems and wireless are at end of life (EOL), current phone system is 15 years old, with little or no VoIP, requiring a high maintenance and operational cost. EOL networks don't not provide the necessary speed required to support student and faculty expectations, operating currently at 1 gig at the desktop and 1 gb throughout the campus. There is limited wireless technology in the residence halls, which is recruitment, retention and limits student's ability to be productive and socialize on campus. Older academic and administrative facilities don't have any wireless, only buildings constructed in the last 5 years. The college networks are in a similar situation, but partially upgraded. The project is currently over budget, out of scope and behind schedule. There is no seamless access for students, faculty and staff throughout the constituent units. Video conferencing is used in limited applications within the system.

Proposal: Upgrade the networks to 10 gb on campus and in most sections of the LAN, with 1 gig to the desktop. Complete wireless throughout each campus, including out door open areas. Replace the existing digital voice switches with a combination analog and VoIP system, which can be maintained at the local level, instead of waiting for the BOR to provide support. Video conferencing will allow the constituent units to share courses and reduce duplication of services and costs.

Value Proposition: This investment allows the campuses to compete in the market place. One of the first questions asked by prospective students is the speed of the network and do you have wireless. This impacts our recruitment, retention and ability to graduate students. Many parents complain of high cell phone bills and most students are coming to campuses with tablets to research and socialize on campus. Video conference of low enrolled, duplicate programs will reduce costs and allow for timely graduation of students in these programs. Enhanced and secure network is the basis for all transitions and process on the campuses. A federated student, faculty and staff credentials will allow seamless access across campuses.

2. Project: Enhance WAN.

Current Situation: WAN is saturated at 2 gb supporting the Universities and for the Colleges at 200 mb. Although they use the same provider, Connecticut Education Network (CEN), the WANs are separated and need to be joined to support other initiatives. Students and faculty constantly complain about bandwidth and administrators are concerned with having the production networks on the same connection as the residential networks.

Proposal: Refresh the WAN and join connections of all 17 constituent units, supported under CEN. Increase WAN speed, to 10 gb, along with associated firewalls and routers. Design the

WAN to support specific administrative functions as encrypted transactions. This proposal allows and supports a new Disaster Recovery Strategy.

Value Proposition: Lays the ground work for DR strategy and federated student ID, provides faster Internet transactions to a client population living on the Internet. This initiative sets up redundant and separate connections to residential and production networks.

3. Project: Leverage New WAN for DR Strategy.

Current Situation: Most campuses do not have a solid, industry standard backup strategy. Ideally, each campus would leverage the WAN to have redundant data centers for critical applications. Presently, the CCC enterprise data center is a single point of failure, which would cripple the BOR and CCC operations. The increase speed of the WAN and connectivity to all 17 constituent units, allows for strategic applications to be redundant at sister institution.

Proposal: Eliminate the current Exagrid solution and leverage the new WAN to provide redundant services for critical applications that are a single point of failure.

Value Proposition: Creates a fast, secure and redundant DR function at sister institutions leverage the WAN and eliminates single points of failure for critical applications that would damage the CSCU financial reputation and public image.

4. Project: Single/Automated Admissions and Financial Aid Process.

Current Situation: Goal is to allow for a single admissions process and to streamline financial aid processing. Currently, these processes are manual or semi-automated with substantial staff support. Moving to a digital and automate process that integrates with Banner and the Common App would allow staff currently assigned to these labor intensive position to be reallocated to other student support functions. These are repeated at each campus in some form or fashion.

Proposal: Leverage new technology in the market place and cloud services to eliminate manual intervention regarding admissions and financial aid. Cloud services allow you to centrally process admissions material and once accepted financial aid packages through a portal. The cloud services processes the material, digitizes items in paper form and places them in Banner through a secure feed, eliminate most and in the case of admissions all BOR staff interactions.

Value Proposition: Automates a manual transaction and streamlines functionality in a single process. Allows staff to be reassigned or eliminates the need for additional staff to support a manual process. Possibly allows campuses to eliminate maintenance contracts with Banner Xtender software and dramatically reduces processing time allow faster transactions in both strategic functions (admissions and financial aid).

5. Project: Establish a new chart of accounts and consolidation of Banner Finance.

Current Situation: Separate chart of accounts exist for constituent units, on 8 individual ERP Financial applications. This limits the BOR CFOs insight into financial operations and makes reporting impossible.

Proposal: Through a collaborative committee of CFOs and Deans of Admission, develop a new chart of accounts. Using the CCC Banner Financial Module, which is a multi-tenant single instance application, add an additional college to the tenant list called CSU and roll the required chart of account information from the 4 CSU schools to the new instances of CSU in the CCC Banner Finance Module. The same process would be done for the Charter Oak. Create an additional instance call the BOR and roll all the financial data up to this entity. Take the old BOR Banner Financial instance off line.

Value Proposition: Lays the ground work for possible future transition to a cloud based ERP and possible single ERP instance, while providing a functional look a financials in a single instance. This initiative allows for reporting and data mining, which currently doesn't exist.

6. Project: Cloud Based ERP

Current Situation: The ERP suite is located in 7 separate instances in 7 locations, with some form of redundancy. This requires layers of server administrators and applications support to operate the suite. Moving to the cloud allows for these staff to continue providing some level of support to the suite and additional support to other administrative computing areas reduces risk and ensures availability.

Proposal: Once the centers of excellence are established and staff are aligned accordingly, the chart of accounts with the move to the CCC Banner Financials is completed and the contract is nearing the 2017 end of terms begin an RFP process in 2016 to move to a cloud based ERP suite. The scope of work for the RFP and the response will determine if the application will be a single suite for the BOR constituent units or multi suite.

Value Proposition: Eliminates single points of failure, reduces risk, provides timely end of contract transition and cuts capital cost for number hardware platforms. Allows for the possible re-deployment of staff resources to support other administrative functions.

7. Project: Further Enhancement of Smart Classrooms

Current Situation: The initial 26.2m in base funding will establish the floor for classroom technology and allow for low enrolled classes to be taught at multiple locations. The next level of investment will ensure full spectrum classroom technology is available in most lecture venue, allowing for video documentation of lectures to be available to students from a cloud based application on demand to their tablets from any location. This will enhance learning and review of materials, increase recruitment, retention and graduation rates. Currently, this capability doesn't exist on the campuses.

Proposal: Equip a majority of classrooms with media equipment to capture lectures to be used by students during the semester to review and enhance learning outcomes. Lectures would be available through a cloud services, on demand during the course of the semester.

Value Proposition: Increased recruitment, retention and graduation rates, leveraging low enrolled programs and on demand access.

8. Project: Combined Library Databases.

Current Situation: The CCC has one library database for research and the CSU has a separate system. These systems are not integrated and require a process to share data and books, which increases costs between the systems.

Proposal: move the CCC library database to the CSU database to reduce costs and streamline operations within the 17 constituent units.

Value Proposition: Eliminates separate and redundant systems, reduce operating costs.

9. Project: Virtual Desktop Initiative

Current Situation: The BOR currently purchases most computers with Bond funds. These funds are restrictive and increase the cost of desktop purchases by making them a capital expense. Further, the security risk for most administrative systems is large; using the VDI strategy reduces acquisition, operating, maintenance and security costs.

Proposal: Replace all administrative and where applicable, academic computers with VDI.

Value Proposition: 50% lower acquisition cost, lower operating, security and maintenance costs.

10. Project: Data Warehouse/Data Mining Tool

Current Situation: The BOR has separate ERP suites with no combined data warehouse or standard reporting tool. Creating a centralized data warehouse will allow data driven decisions across the system.

Proposal: Conduct an RFP to develop a single data warehouse to roll common data elements to the repository for data mining and data driven decisions.

Value Proposition: Allows for data driven decision quickly and efficiently over 17 institutions.

11. Project: CCC Scheduling Software:

Current Situation: CCC Banner system is void of common scheduling software for events and academic functions, they process is separate and not aligned.

Proposal: Conduct an RFP to develop a single and common academic and event calendaring system for the CCC Banner instance.

Value Proposition: No cross utilization of resources and eliminates manual scheduling of events.

12. Project: Layer Strategic Applications with 24 hour technical support.