Presentation to the JTC

Dec. 14, 2021

2:15-2:50 PM

CSU SYSTEM

COLORADO STATE UNIVERSITY

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Jason Huitt, Director of Networking & Telecommunications, CSU-FC
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Perspective

"Do what you can, with what you have, where you are." – President Teddy Roosevelt (quoted from Bill Widener)

Consolidate and Share IT Systems & Services

AGB Recommendation

- Keeping our money in our mission
  - Reduces administrative costs, ergo overall, reduces tuition
- Enhancing the student experience
  - Facilitates enrollment, registration, and other necessary student functions
  - Allows the focus to be on education, and
  - Increases retention and graduation rates

- All Institutional Priorities

AGB
ASSOCIATION OF GOVERNING BOARDS OF UNIVERSITIES AND COLLEGES

Benefits vs. Levels of Consolidation

The Value Proposition

Separate Systems

Shared Purchasing/Separate Implementations

Shared IT System

Shared Functional Units (Offices)

Participants

2017 – A Shared Financial System

Scope

- IT operations consolidated at CSU-FC
- Business Office Operations consolidated at CSU-FC
- Working VERY well

Joint Banner Project Status – Funded 100% Internally

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BANNER

A $10.8M, 34-month implementation: completed on schedule, and under budget!

Why Are We Here?

- Recent Financial Stress on the Institutions
- The Joint Banner Project has consumed all available funding for IT Projects
  - Internally funded ("We do what we can, …")
- But, there are critical IT Projects at the Institutions that are time-sensitive and require additional funding, for which we are very grateful
  - The Network Upgrade Project at CSU-FC
  - The Voice over IP (VoIP) Project at CSU-P

Network Upgrade Project

Jason Huitt, Director of Networking & Telecommunications

Brandon Bernier, VP for IT and CIO

Project Review: Critical need

- Refresh aging, critical network equipment across the CSU-Fort Collins network
  - Eliminate security vulnerabilities and functionality gaps
  - FY22 - $760k to upgrade legacy network switches
  - FY23 - $1.14m to continue upgrading legacy switches and to refresh core routers
  - FY24 - $2.9m to upgrade legacy switches, and refresh border routers and firewalls

- Network switches
  - Supply chain delays have reduced supply
  - Reduced supply has also increased pricing
  - And, the manufacturer has discontinued our switch line
  - Thus, we have adjusted our project plan, but will meet project objectives

Status Update

- FY22 Progress as of December 2021:
  - Switches to be purchased in FY 22: 200 ($760k)
  - Significant reengineering effort has been undertaken using a new switch line
  - Seeking to maximize the state's investment

- We will catch up to our plan during the 2nd half of FY 22

- The path to sustainable self-funding for the network
  - Revamping cost recovery mechanisms
  - CSU student fee contributions to this effort are significant

VoIP Project

Douglas Summer, Manager of Telecommunications Services

CSU-Pueblo’s Presentation of Need to the Joint Technology Committee for a Unified Communications VoIP System Upgrade

December 14, 2021

The current analog PBX telephone system (installed in 1999) exceeded end of life years ago, and replacement parts are virtually impossible to obtain.

The New VoIP Phone System

- Is essential to support:
  - Life Safety
    - 911 emergency calls to the Public Safety Access Point (PSAP)
    - Emergency “blue” telephones distributed throughout and around the campus, the old ones of which are also on their “last legs” and need to be replaced
  - Critical communications capabilities
    - Phone calls
    - Voice/video conferences
    - Unified communications

- Additionally, CSU Pueblo is one of the last Colorado Higher Ed Institutions not having transitioned to a modern communications/collaboration system.
- Lack of this technology puts CSUP at a competitive disadvantage :
  - In today's distributed educational environment, and
  - Operationally in terms of efficiency and effectiveness

Our Proposal

- Conduct a formal purchasing process to replace our current, aged telephone system with a modern, state-of-the-art unified communications /collaboration system, that will provide VoIP Internet-enabled unified communications and collaboration in todays' modern, distributed environment, essential:
  - To support remote and "stay at home" students, faculty and staff
  - To support remote and hybrid learning via communications and collaboration
  - A modern unified communications/collaboration system will not only replace our aged telephone system, but also add significant additional capabilities that are critical to support education, operations, and research.

Benefits

- CSU-Fort Collins has deployed such a system that provides telephone service, as well as general communications and collaboration tools
- This approach will provide
  - Consistency at the CSU System level,
  - Take advantage of CSU-FC's experience and expertise, and
  - Allow consolidation of back-end operations and provide a more efficient environment

Recent Success – Microsoft Teams for Collaboration & Communications (Voice)

- Project:
  - Leveraged Teams collaboration platform for scalable voice communications
  - Migrated CSU-Fort Collins and CSU System users to Microsoft Teams for voice calling
  - Reduced complexity, and on-premises infrastructure footprint & impact
- Status:
  - “Proof of Concept” project completed successfully
  - Support for all voice-driven use cases
  - Now in full deployment, with high degree of satisfaction
  - These collaboration services were critical during the pandemic, especially for student/professor interactions
- Success:
  - Enables CSU employees to work in a fully-remote environment
  - Scales easily to CSU-Pueblo

Professional Services Engagement Funded by the CSU System @ $200k for FY 22

- Analyze and scope how the new system would integrate into CSU-P's current environment
- Project need
  - Capital needs (VoIP telephone hardware/software/licensing, emergency "blue" telephones, POE edge switches, telecomm closet remodels, and UPS's.
  - Integration into the consolidated Identity and Access Management (IAM) environment established under the Joint Banner Project

Budget Request

Total Project Request for FY 23

$2,755,000

FY 22 self-funded

$200,000

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Questions are more than welcome.