## Vermont State Colleges System (VSCS)

Information Technology - Strategic Plan

## Introduction/About Us

In January 2023, the Information Technology (IT) teams across the Vermont State Colleges (VSC) came together in a newly developed IT Shared Services organization. Since our reorganization, we have been working hard to come together as a community, reorganizing into six new service areas that seek to best serve the entire system. IT is unique in that we provide technology to support students, and those who serve them, throughout their entire journey. Given the bold objectives of the VSC Transformation, it is critically important for IT to develop a strategic roadmap for alignment. Building on our discovery work through transformation, IT Shared Services came together in the summer of 2023 to build out six strategic pillars that align with the vision of the VSC institutions in addition to building out a website and mission statement:

#### **Our Mission**

VSC's IT Shared Services partners with and supports the VSC communities to achieve their missions by planning and implementing scalable, sustainable, secure, reliable, and user-friendly technology solutions that support emerging technology trends. Our team focuses on personal engagement, equitable access to tools and services, and strategic partnerships to improve opportunities for all users.

# Alignment with the Transformation of the Vermont State Colleges (VSC)

The IT organization is aligning strategy and planning to the multi-year transformation process being undertaken by member institutions of the VSC. With a strong focus on the student experience, the VSC is committed to revolutionary change including modernization of academic programs, ensuring equitable access, streamlining administrative processes, strengthening our student services, and expanding workforce development and continuing education programming. Given the critical dependencies on technology and systems, IT is an integral partner and supporting leader in the transformation process. We are aligning our strategic planning and efforts with the goals and strategies of the future of Vermont State Colleges, including the Community College of Vermont and Vermont State University. IT Shared Services reports into the Council of Presidents and is managed through Service Level Agreements for how IT dollars are spent and prioritized. IT seeks other structures of communities' governance to provide input into the IT roadmap and resource plans. This requires strong functional and partnered engagement from our colleagues across the system.

# Summary of IT Discovery Work

The comprehensive discovery phase of IT transformation surfaced several things that are working and not working with the current/legacy organizational environment.

The colleges within the VSC already have many unified services and systems in place and a history of IT leadership across the colleges and Chancellor's Office, prioritizing collaboration, and partnership. Recent COVID dollars also supported needed investments in network and telephone infrastructure, classroom technology, and laptops and mobile devices for faculty and staff. Those dollars were spent with a common objective to standardize where possible. We are committed to building on the foundational

investment we made with COVID dollars and ensuring we are creating a long-term, sustainable IT roadmap that is forward-thinking and student-centered.

Key challenges that surfaced from a broad discovery effort that our strategic roadmap will seek to address:

- Limited staffing and duplication of some services across the campuses
- Inequities in student access to academic software and other resources
- Inconsistencies in classroom technology and course design to support a quality learning experience
- Issues surrounding the support and sustainability of our administrative systems
- The lack of a robust system and strategy for Institutional Research and Business Intelligence
- Inconsistencies in IT governance and disjointed roadmaps across the organization
- Inconsistent hardware and software management

#### **Strategic Pillars**

With a foundational understanding of our history, a strong understanding of our current state through discovery, and building on the transformation work over the past two+ years, the IT team developed six strategic pillars to guide strategic planning.

# 1. System Affordability and Sustainability

Consolidate and streamline duplicative systems to drive down costs and ensure ways to improve, sustain and expand access to our services.

## 2. Teaching and Learning

Support current and emerging instructional modalities that provide opportunities for success to our diverse, traditional, and non-traditional students.

# 3. IT Operational Procedures and Governance

In collaboration with stakeholders, establish transparent and inclusive IT processes that support a student-centered vision and provide opportunities for continuous improvement.

# 4. User Experience

Prioritize efficient systems and processes that provide a common user experience to support a student-first vision.

#### 5. Data as an Asset

Implement enterprise reporting tools and data governance principles with key stakeholders to support data-driven decision-making.

## 6. Safety, Security, and Compliance

Ensure confidentiality, integrity, and availability of VSC data resources to comply with relevant laws and regulations.

# Multi-Year Strategic Plan – Guiding Principles

These guiding principles help provide context to "guardrails" that informed our plan:

- 1. We are a new organization, so an understanding that the benefit of system-wide IT consolidation will take time. The phased objectives under each pillar seek to present a roadmap that leadership can contribute to and adjust as needed. Proactive agreement on planned priorities seeks to make the budget and resource cycle more predictable for all.
- 2. Given the VSC has operated under a distributed IT services model for years, a focus on building a strong foundational IT organization is important. Foundational operations in how we run our organization are required to ensure we can sustain the long-term investments we make in IT.
- 3. We seek to be a fluid and agile organization, so an understanding that priorities and resources may need to shift as appropriate is an important consideration. We focus on designing for a mobile and distributed student and employee experience to support access to all.
- 4. We understand that standardization everywhere may not make sense. The institutions we serve will have differing priorities and needs.
- 5. Below is drafted based on the most comprehensive understanding of the **current** state of the VSC and where the organization seeks to go through transformation. We seek to embed into the local communities and governance models as much as possible to ensure strategic partnerships continue to drive this fluid plan.
- 6. We encourage recognition that by combining IT shared services into one organization, we have already seen consolidation.

## Multi-Year Strategic Plan

Under each of the following strategic pillars are the strategic priorities of the IT organization with guiding timelines. We outline objectives under priority 1-3.

- Priority 1 is a current effort underway.
  - Please note that some efforts under priority 1 will continue into the priority 2 timeline based on scope/resources.
- Priority 2 efforts are projects and objectives we seek to start in fall 2024.
- Priority 3 efforts are longer-term efforts to be prioritized in alignment with the system's strategic priorities.

# **System Affordability and Sustainability**

- Conduct a review of academic software to understand where duplicative services exist and create space for new/emerging needs.
- Collect an inventory of all learning spaces hardware to:
  - o Prioritize immediate replacement needs.

- O Develop a replacement plan with academic partners.
- o Implement a more standardized hardware model.
- Inventory and assess the distributed server and data center infrastructure across the VSC.
- Continue to support current system/administrative projects to deliver on the immediate transformation needs of the VSC.
- Perform an ERP (Enterprise Resource Planning) assessment, and related readiness activities, to inform the longer-term roadmap of system-wide administrative system and data needs.
  Assessment will be broadly inclusive, with key focus on:
  - Clearly documented requirements.
  - o A review of all systems beyond core ERP today both central and distributed.
  - o Integration and data health.
  - Sustainability planning including resourcing, ownership, roles.
  - o Align workforce needs.

# **Priority 2**

- Develop and implement a Microsoft roadmap to reconfigure our current active directory architecture and lay the foundation to leverage our Microsoft licensing and reduce and/or eliminate duplicate products and systems more fully.
- Develop and implement a data center consolidation plan:
  - o Consolidate distributed infrastructure.
  - o Ensure security and proper management.
  - o Align on future needs based on ERP assessment including cloud-first opportunities.
- Work towards full optimization and ownership of our Microsoft 365 environment within the IT service portfolio.

# Priority 3

- Improve the login experience for all users and align with our Microsoft 365 implementation with current standards. This will allow the system to take fuller advantage of the offerings of Microsoft and standardize on a more sustainable/current authentication system.
- Expect a multi-year project roadmap based on ERP assessment.

## **Teaching and Learning**

- Develop relationships with key academic leadership and departments to ensure IT alignment of academic needs and establish governance structures.
- Engage in conversations with workforce partners to better understand system needs.
- Build on relationships with Centers for Teaching and Learning (CTL)/online leadership to ensure clear understanding of service ownership and identify opportunities for broader collaboration.
- Lead, in partnerships with academics, the redesign of the system-wide Teaching and Learning Technology committee to better align with thoughtful engagement in IT Shared Services governance.
- Focused research and development on AI (Artificial Intelligence).

#### **Priority 2**

- Implement solutions to enhance remote management of learning spaces.
- Support digital equity and accessibility efforts around 1:1 technology, expanded connectivity programs, etc.
- Focus research and development on emerging and horizon-based technologies.
- Expand training programs in partnership with CTL (Centers for Teaching and Learning) (Center for Teaching and Learning) teams.

# **IT Operational Procedures and Governance**

# Priority 1

- Develop a comprehensive budget process and proposal for IT.
- Conduct a comprehensive inventory of all physical IT equipment across the system.
- Implement a governance model for supporting IT academic decision-making.
- Implement fundamental project management practices into standard IT operations.
- Develop a scorecard/assessment framework to support reporting to leadership on IT outcomes per SLAs (Service Level Agreements).
- Establish clear meetings and communication structures that ensure cross team communication and collaboration between IT service areas. Ensure access to leadership meetings, agendas, and notes for full transparency.
- Ensure a predictable replacement and funding model for core IT equipment and services.
- Ensure SLAs are in alignment with adjusted budget objectives and future planning.

# **Priority 2**

- Implement an inventory management solution for managing system-wide inventory.
- Implement a governance model to support staff and business/functional unit IT governance.
- Implement a governance and partnership model with student organizations and groups across the system.
- Develop a project dashboard to represent all active IT projects.
- Invest in employees through professional development and ongoing clarity of job roles.
- Implement an updated disaster recovery plan.
- Perform a full IT policy review, ensuring that principles of access and diversity, equity, and inclusion are integrated.
- Engage in conversations with key vendor partners to standardize contracts, ensure alignment with our priorities and values, and explore new opportunities.

## **Priority 3**

 Embed professional development funding into our roadmap to support the ongoing development of functional units and leads across the system that supports and works with our enterprise systems and services.

## **User Experience**

# Priority 1

- Conduct a full review of network connectivity across the system and perform critical upgrades where necessary, inclusive of coverage mapping and documentation.
- Inventory labs and user machines to help address future replacement needs with consideration of consolidation.
- Implement a full pilot of virtual software delivery with the idea future software delivery will not be reliant on physical labs only.
- Expand self-service resources on our <a href="http://support.vsc.edu">http://support.vsc.edu</a> website and investigate system improvements to our enterprise service management system.
- Conduct a review of printer inventory across the system.

# Priority 2

- Standardize on an endpoint and mobile device management system:
  - Expand services to be more compatible with iOS and/or other modern systems that might not have been historically supported within the VSC.
- Engage/help lead a plan around implementing Enterprise Service Management.
- Audit the accessibility of services and systems.
- Develop a plan for our phone system inclusive of service needs, architecture, licensing, compliance, and remote/hybrid worker support.
- Assess the health of current cable/fiber infrastructure across our state.
- Expand the student employment program.

# **Priority 3**

- Plan for outdoor Wi-Fi expansion.
- Develop timeline and funding plan for cable/fiber infrastructure modernization.
- Initiate vendor discovery and develop a plan for phone system modernization.

## Data as an Asset

- Develop documentation and guidance for proper file management practices due to expanded Microsoft 365 use, inclusive of adopting processes around VSC data retention.
- Focus on an effort to "clean-up" and improve our Informer 4 reporting environment the reporting system that works in collaboration with our core student system, Colleague in partnership with our strategic vendor partners.
- Develop an Institutional Research (IR) working committee to support the prioritization of system-wide IR efforts inclusive of expanding system-wide reporting dashboards.
- Propose a data governance plan.
- Review of system fields to ensure inclusive and fluid language.

# **Priority 2**

- Develop a Business Intelligence/data roadmap for IT in alignment with ERP conversations.
- Formalize data governance activities related to operational reporting.

## **Priority 3**

 Review and implement best practices around identity information in collaboration with Diversity, Equity, Inclusion and Social Justice Office (DEISJ) and Human Resources.

## Safety, Security, and Compliance

# Priority 1

- Engage in conversations about AI (Artificial Intelligence) usage and policy.
- Implement a more formal framework for security compliance to assess capabilities and maturity.
- Finish implementation of multi-factor authentication (MFA), inclusive of MFA for remote access and server administrative level access.
- Review and update IT policies and procedures.
- Expand network monitoring and complete equipment upgrades.
- Implement security incident response and communication plan.
- Perform risk and access assessments of critical systems.
- Address the highest IT security vulnerabilities.
- Implement a formal backup/file management protocol inclusive of file and cloud shares.
- Implement a Security Information and Event Management (SIEM) system to enhance logging and detection upon completion of an endpoint and detection response system.
- Focus expansion on security education.

# **Priority 2**

- Investigate and implement Microsoft 365 security features in alignment with broader Microsoft roadmap.
- Perform table-top exercises to ensure adoption of security response policies.

- Review of IT-related facilities systems.
- Perform physical security review.
- Ensure clear onboarding/offboarding procedures with HR (Human Resources).