

Davis Technical College Technology Plan

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Technology Vision Statement

To achieve its initiatives, Davis Technical College must continue to leverage and expand upon its base of mission critical information and telecommunications technologies. Administrators, staff, faculty, and students use information technology as a fundamental tool for accomplishing strategic goals, daily business tasks, and assisting students achieve their highest possible outcome. Achieving this vision will require extensive collaboration and partnering among the College divisions in order to provide:

- Support of the College's mission through adaptive and innovative use of information technology.
- Empowerment of College staff, faculty, and students through access to the information and tools needed for successful performance.
- Support the broadening of College's educational courses, programs, and resources to students on the campus and beyond through the use of a variety of blended learning technologies and delivery methods.
- Extension of cost-effective and user-friendly telecommunication and Internet technologies
- Provide a highly reliable infrastructure and set of computer-based security policies to prevent, detect unwanted intrusion, and protect resources and systems from illegal access and use.
- Ensuring business continuity
- Implementation of improved business processes
- Contributions to the creation of new business strategies
- Remote access to information

Strategy and goals for using system, network, and telecommunications

The technology strategic plan for FY2018 is to meet the following goals and objectives. Each objective has a set of criteria established for the definition and measurement of successful implementation.

- Employee Landing Page Scope: Complete phase III of the employee landing page project which includes the home page, with division and department content pages
- Training Scope: provide training sessions in at least one technical area
 - SharePoint Expansion
 - IP Office
 - Office 365 Exchange Online

- Improve accessibility, consistency, and accuracy of data and information: ClearPass 1) Setup Radius Server to include fully implementing eduroam 2) Implement network Access control 3) Control threat attempts and remediate intrusions 4) Secure BYOD environment
- Generate quality assessment employee surveys for Administrative Division departments
- Office 365 for students Scope: Develop a system that as students are created in Northstar they are also provisioned in DavisTech Office 365 to include email and office apps.
- Develop standards for network infrastructure and components, projectors, display monitors, and room automation
- Construct davistech domain and internal network resources and names resolution
- E-Form Development Scope: Analyze the continued use of manual (paper) forms and convert them all to e-forms when this can be reasonably accommodated
- IT Services to become ITIL certified

Professional Development Strategy

Administration, Staff, and faculty development will be ongoing and systematic. During the new employee orientation with the Information Technology Manager, a brief training session is conducted and an assessment made if further training is necessary. From time to time, arrangements will be made regarding enterprise system training based upon new system implementation or other upgraded services where essential training must take place. The College also sends many employees to professional seminars and conference applicable to their job responsibilities.

Assessment

- Telecommunications
Expand VOIP (Voice over Internet Protocol) network and services to those new buildings and offices both on the College campus and other remote/off-site locations and reduce or eliminate toll charges
- Internet
Replace out of warranty core network equipment and switches less than 100Mb/s. Expand wireless network infrastructure and enhance security borders by purchasing new hardware and software as needed.
- Internet connections

As the College reaches out to further serve partners and the community, it is imperative that the College has the appropriate network connections in order to communicate between branch offices and the main campus. As necessary, the College will contract with vendors to provide services when the Information Technology department and Facility Services department does not have adequate resources (hardware, expertise, time, material, etc.) to complete the scope of network connections required.

- Server Virtualization
Continue taking advantage of system virtualization thus reducing hardware requirements, real estate/footprint, power consumption, and cooling
- Desktop Virtualization
Reduce management and maintenance of desktop machines, lengthen duration hardware is in service and maximize length of time between desktop replacement.
- Expand document management system offerings and upgrade as current system. New features to include:
 - Integration with internal and external facing systems
 - The system must offer robust security features to limit access of users to information relevant to their specific job duties and authority. These security measures must go down to no less than the document level.
 - The intention of the workflow is to facilitate and streamline the circulation of documents through the system to ensure quick and timely processing of documents with minimal manual effort
 - Indexing. Includes manual, intelligent character recognition/optical character recognition (ICR/OCR), barcode, and metadata capture
- Forms automation workflow
Continue to expand the eforms cabinet and automate current processes that are manual in nature. Incorporate workflow processing to reduce forms requiring manual tracking and fulfillment.
- Business Intelligence
Continue building and refining reports in data warehouse using existing and other identified data sources
- Asset management
Implement an asset tracking and inventory system to help manage location and health of network attached devices
- Training
Continue upgrading training on systems currently in use and new system coming online. Make best use of training funding by taking advantage of online training system offered.
- Hardware
Utilize increased computing power and performance by purchasing hardware with more CPU cores, RAM, and drive space to reduce number of hardware devices required to run the data center.
- Software

As more software applications once housed on campus are served by SaaS (Software as a Service), it becomes imperative that the network infrastructure and associated systems are functional and availability is maximized. Further, as more software services become virtualized, it is also imperative for virtualization software to properly manage the applications being served.

- Northstar – student management system (Client based) developed and customized by a team of software developers located and employed by Utah Education and Telehealth Network at the University of Utah.
- UETN (Utah Education and Telehealth Network) – manages Internet connectivity throughout Utah, and specifically to Davis Tech. UETN utilized many commercial telecommunications vendors
- Canvas (SaaS) – Learning Management System developed by Instructure
- Respondus – (Client) a tool that create and manages exams, printed or published online
- GuestVision (Client) – system used by the Cosmetology Training Program to schedule and manage clients and students. This system interfaces directly with Northstar
- Microsoft Dynamics Great Plains (Client) – system that manages financial and accounting operations. Also contains reporting services and purchasing components
- Tableau (Client and SaaS) – systems the provides business intelligence and analytics
- Docuware (Client) – document management system for students, staff, and faculty
- SharePoint (SaaS) – a platform that supports collaboration and content management. Managing documents, data, and social activities.

Budget Resources

	FY2017	FY2018	FY2019	3 Yr Total	
Telecommunications					
Local	\$ 45,600.00	\$ 45,600.00	\$ 45,600.00	\$ 136,800.00	
Long Distance	\$ 3,600.00	\$ 3,600.00	\$ 3,600.00	\$ 10,800.00	
DSL, Leased Line, etc.	\$ 6,000.00	\$ 6,000.00	\$ 6,000.00	\$ 18,000.00	
Subtotal					\$165,600.00
Internet					
UETN Telecom Charges	\$ -	\$ 12000	\$ 12,000	\$ 24,000	
Subtotal					\$ -
Internal Connections					
LAN/WAN Wiring	\$ 2,500.00	\$ 2,500.00	\$ 2,500.00	\$ 7,500.00	
Switches	\$ 3,000.00	\$ 3,000.00	\$ 3,000.00	\$ 9,000.00	
Network File Servers	\$ 17,500.00	\$ 17,500.00	\$ 17,500.00	\$ 52,500.00	
Network Server Software	\$ 28,000.00	\$ 28,000.00	\$ 28,000.00	\$ 84,000.00	

Firewalls	\$ 1,000.00	\$ 1,000.00	\$ 1,000.00	\$ 3,000.00	
Maintenance	\$ 4,000.00	\$ 4,000.00	\$ 4,000.00	\$ 12,000.00	
Subtotal					\$168,000.00
Professional Development					
	\$ 1,500.00	\$ 1,500.00	\$ 1,500.00	\$ 4,500.00	
Subtotal					\$ 4,500.00
Other (automated Network Assessment)					
	\$ -	\$ -	\$ -	\$ -	
Subtotal					\$ -
Total					\$338,100.00

Inventory/Assessment of telecommunication services, hardware, software, and other services

	Data Center	Computer Labs	Library or Media Center	Admin. Office	Other Locations	Planned Future Acquisitions		
						Year 1	Year 2	Year 3
Single Core	30	375		110	40			
Dual Core	15	150	20	10		100	100	100
Quad Core	10	100		10			30	