WT 125 Generational Plan
Colleges and Responsibility Areas

Date
April 9, 2018

Area of Responsibility Name
The Division of Information Technology

Introduction
Information Technology plays a distinct role across every division and department on campus and as such, has enhanced visibility into the key operations across the campus that quite possibly, no other department or division has. This unique perspective, combined with the numerous committees and councils that the division participates in, has equipped IT with key insights and knowledge that has benefited the overall WT 125 planning process. This report was developed through this experience, key committee meetings conducted over the past year, feedback from key IT personnel, reviews of aspirant peer institutions, and industry specific feedback through professional research organizations such as Gartner and Educause.

The general theme of these initiatives centers around the concept of digital transformation and enhancing the University's digital capabilities. As noted in the WT 125 information technology whitepaper, the fundamental characteristic of Generation Alpha students will be their relationship with information technology so it's important that technology be appropriately used to connect and engage with tomorrows generation of students. Karen Gross, former policy advisor to the U.S. Department of Education, says that Universities need to start thinking several steps ahead and realize that technology will be more profound in terms of socio-economic penetration and how education happened in the past is not how it will happen in the future. These specific initiatives accomplish this key recommendation.

Many of these initiatives are possible with existing resources while some, such as those included in the intellectual resources area will require additional funding. From a financial resources perspective, the current trajectory of so many different cloud services and subscriptions are not sustainable or feasible in the long term. The financial burden of campus departments maintaining annual subscription costs that increase 5-15 percent or more each year have already created gaps, inconsistencies and confusion with University product offerings. Additionally, the IT human resource requirements required for integration with campus information systems has been in a constant state of change for the past decade. More standardization across software portfolios is required, which will reduce overall operational expenditures and provide a more reliable and sustainable information resources environment, which will improve the University's cybersecurity posture.

The concepts and ideas presented in this generational report will serve the University well across all theme groups. Closing with a comment by Andrew Stephens, the associate dean of research at the University of

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Oxford, said that if brands wish to remain relevant and appealing to the next generation, they must stay on top of emerging technologies.

Theme Group Name

The Panhandle and Its Heart-The I-27 Corridor

Key Idea (1)

Key Idea (1)

Establish a regional technology forum & internet of things (IoT) challenge to engage area high schools, community colleges, local businesses and media outlets.

Goal 1:

Utilize the newly created Internet of Things and Research Computing Department to expand collaboration with the College of Business, the School of Computer Science & Engineering, Research, donors, and technology companies.

Action(s) 1.1:

Bring together all existing technology events hosted on campus throughout the year and consolidate efforts and resources to create a larger and more comprehensive event that would be a highly anticipated event that brings area high school students and technology companies in the area together. Potentially host the event at the newly established Amarillo Center.

Action(s) 1.2:

Develop relationships donors, local businesses and technology companies to establish partnerships and sponsorships to generate revenue to support the annual technology forum.

Measurable Outcome(s) 1.1.1:

Increased presence and media coverage in the area, throughout regional high schools, and surrounding community colleges in the Panhandle.

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Key Idea (2)

Key Idea (2)
Create technological opportunities to emphasize the University's role in the Panhandle to foster greater collaboration, knowledge sharing, expand research, and stimulate economic development.

Goal 1:
Create technology partnerships across the Panhandle region to strengthen the University's relationship and commitment to service.

Action(s) 1.1:
Engage in high level discussions throughout the Texas Panhandle related to technology innovations and make recommendations to senior leadership and the University President.

Measurable Outcome(s) 1.1.1:
Increased presence throughout the Texas Panhandle.

Theme Group Name
Our Relationship to Community Colleges

Key Idea (1)

Key Idea (1)
Introduce an all new Internet-based WT Global Television Network that includes unique channels for athletics, academic programs, campus events, lectures and seminars complete with University specific commercials promoting various events and programs. Essentially broadcasts WT to the world and go global. All things WT all the time.

Goal 1:
Digitize and Internet-enable the existing WTTV campus channel to enable global campus broadcasting. From the Panhandle to the world.

Action(s) 1.1:
Digitize the WTTV platform and convert it into a digital media delivery system with an

Internet accessible domain name and public IP address.

Measurable Outcome(s) 1.1.1:
Increased global presence, interest and expanded coverage in the area, throughout regional high schools, and surrounding community colleges in the Panhandle and beyond.

Key Idea (2)

Key Idea (2)
Establish a unified and "Fully Digital WT" communications strategy to engage and connect with high school and community college students at all levels.

Goal 1:
Create a robust digital recruitment, engagement and communications platform that leverages website analytics from network traffic, incorporates mobile and social media platforms to promote the University brand and establish communications with high school and community college students from point of entry to targeted and tailored communications.

Action(s) 1.1:
Unify existing campus efforts and resources across information technology, marketing and communications, admissions, and other areas key areas to build out a comprehensive digital platform. Consolidate efforts that are underway to achieve this goal.

Measurable Outcome(s) 1.1.1:
Increase transfer students by 10-15 percent.

Theme Group Name
Undergraduate Academics

Key Idea (1)

Key Idea (1)
Establish a hands-on technology focused experiential learning program for undergraduate students

that is linked to their curriculum and provides insight into how technology will shape and influence their career path while also providing unique real-world internship opportunities outside of the classroom.

Goal 1:
Prepare undergraduate students for a world that is being exponentially shaped by technology across every industry to better equip them to enter the workforce and have healthy and productive careers.

Action(s) 1.1:
Create an information technology specific internship program and requirements by working directly with academic units across the campus to align and identify opportunities that would benefit undergraduate students.

Measurable Outcome(s) 1.1.1:
Increased technology competencies across undergraduate students that are measurable through the annual NSSE instrument that compares incoming freshman with seniors.

Theme Group Name

Graduate Academics

Key Idea (1)

Key Idea (1)
Provide technology-based student project opportunities that include research computing services and programs for graduate academics through collaboration with academic programs, associated research, and specialized graduate programs that utilize computing and technology components.

Goal 1:
Provide effective technology based resources, personnel and secured services for graduate programs, graduate faculty and research programs that support innovation with technology and are contributing to the needs of a regional research University.

Action(s) 1.1:
Increase financial resources for additional personnel and graduate assistants in the IoT and research computing department to ensure timely and efficient services for graduate

research programs.

Measurable Outcome(s) 1.1.1:
Increase graduate faculty and student participation in technology based projects.

Theme Group Name
Residential Education Experience

Key Idea (1)

Key Idea (1)
Revolutionize the residential network experience through the consolidation of cable television services, wired and wireless networking, and Internet services by increasing Internet bandwidth and offering Internet TV services like what has been done at other aspirant peer institutions such as Valdosta State University and Indiana State University by providers such as Philo.

Goal 1:
Unify Internet and cable television services through IPTV (Internet Protocol Television) and adopt a "One Network" strategy that consolidates coaxial cable TV networks, wired, and wireless networks that are available anywhere on the campus network, including residence halls, dining halls, common areas and outdoor areas.

Action(s) 1.1:
Explore IPTV services and content providers to determine bandwidth needs, rates, and legal and contractual requirements.

Measurable Outcome(s) 1.1.1:
Improved student satisfaction through more robust, ubiquitous and meaningful residential network services.

Key Idea (2)

Key Idea (2)
Implement Buff Print, cloud print and printing kiosk solutions across all residence halls to provide students with anywhere anytime printing and service options.

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Goal 1:
All residence halls will be equipped with at least one high capacity, multifunction printer/copier/scanner connected to the University network with integrated cloud printing services and integration with Buff Print.

Action(s) 1.1:
Identify source(s) of funding to provide monthly printer/copier/scanner lease payments for equipment, paper, and operations.

Action(s) 1.2:
Coordinate with the division of Student Engagement Enrollment and Success, Student Government, and Residential Living to develop processes and procedures for the operations and maintenance of the equipment.

Measurable Outcome(s) 1.1.1:
Improved student satisfaction through more robust, ubiquitous and efficient residential hall printing, scanning, and copier services.

Theme Group Name
Financial Resources

Key Idea (1)

Key Idea (1)
Ensure that overall campus spending on technology services and solutions is appropriately aligned with the University's strategic priorities and delivering an appropriate return on investment.

Goal 1:
Review all campus technology expenditures against strategic initiatives and priorities and ensure that appropriate governance remains in place to ensure proper alignment with institutional spending.

Action(s) 1.1:
Review all campus software subscriptions and cloud-based services to determine the effectiveness, cost efficiency, and expected outcomes of the annual investments.

Action(s) 1.2:
Strengthen overall IT project management, the use of business cases, reviews and other evaluation criteria to ensure appropriate alignment and institutional commitment.

Action(s) 1.3:
Review campus technology CAPEX and OPEX plans to ensure they are appropriately aligned to achieve expected outcomes and financially sustainable for longer term commitment, operational support and system integration.

Measurable Outcome(s) 1.1.1:
Technology expenditures and operational costs will remain within appropriate balance, 4-5 percent, of the institution's overall budget.

Key Idea (2)

Key Idea (2)
Consolidate, minimize and optimize the overall technology and software supported and maintained by the University and the division of information technology.

Goal 1:
Reduce the overall number of enterprise applications and technologies, cloud-based services and software subscriptions supported by campus departments to reduce annual maintenance costs, human resource requirements, complexity, and associated security exposure to confidential data.

Action(s) 1.1:
Cut renewal and replacement of hardware and software subscriptions to reduce costs and begin to leverage functionality already in place in existing software and services.

Action(s) 1.2:
Use open-source software solutions and technology as a cost containment strategy and leverage the strength of the open source higher education community.

Measurable Outcome(s) 1.1.1:
Reduce the overall information technology spend on cloud-based and subscription based software. Estimated cost savings over the next five years are

approximately $250k.

Key Idea (3)

Key Idea (3)
Secure new funding through technology partnerships with corporations, donors and external grant opportunities.

Goal 1:
Explore new ways to increase revenue from external sources to minimize the maintenance, operation and expansion of the campus technology environment.

Action(s) 1.1:
Partner with the University's Institutional Advancement department and explore the idea of having a dedicated advancement officer for information technology to work with external donors, corporations, and other partners to increase funding opportunities.

Action(s) 1.2:
Collaborate with research and compliance to strategically identify and pursue external grant funding related to technology through the NSF and other similar sources.

Measurable Outcome(s) 1.1.1:
Increased revenue to support new initiatives or offset costs from existing maintenance and operations or personnel costs.

Theme Group Name
Intellectual Resources

Key Idea (1)

Key Idea (1)
Create the digital campus of tomorrow that blends the cloud and the physical campus together with a new and exciting digital experience that connects an entirely new generation of faculty, students, researchers and staff from the Texas Panhandle and beyond.

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Goal 1:
Architect a next-generation network platform to usher in the fourth wave of the Internet and securely connect researchers, students, faculty, staff, and constituents to the University's digital ecosystem of information resources, learning systems, and campus support systems.

Action(s) 1.1:
Establish a secure and robust internet of things (IoT) and research network that spans campus proper, the city of Canyon, the Nance ranch, the Amarillo Center, and the Enterprise Network center to facilitate research projects, reduce operational expenses, integrates cloud-based technologies and stimulates new services and partnerships.

Measurable Outcome(s) 1.1.1:
The University's network infrastructure will seamlessly enable 5G connectivity and cloud connectivity, support next-generation wireless access, enable virtual and augmented reality, connect with and support artificial intelligence, facilitate data analytics and machine learning, and secure the digital infrastructure from cybersecurity attacks that originate locally or abroad.

Key Idea (2)

Key Idea (2)
Architect the next-generation digital learning platform to support greater global interoperability with virtual reality, cloud-based service offerings, provide for deeper levels of personalization, and support greater levels of video collaboration that dynamically enables data analytics for increased student success.

Goal 1:
Create learning spaces that enable next-generation teaching, learning, and collaboration.

Action(s) 1.1:
Transform the physical smart classroom inventory into a modular and dynamic digital learning space that automatically and seamlessly integrates with the campus next-generation digital learning platform to support students individual learning styles.

Action(s) 1.2:
Establish a virtual smart classroom that enables anywhere anytime learning.

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Measurable Outcome(s) 1.1.1:
The University's digital architecture and next-generation digital platforms will enable continuous growth at the undergraduate and graduate levels as well as support and stimulate research for a prominent regional research University.

Key Idea (3)

Key Idea (3)
Establish a digital success center that builds competencies and quality around new methods of online teaching and learning with technology.

Goal 1:
Faculty and students will have a dedicated facility and superior resources needed to engage and learn with next-generation digital platforms, pedagogies, and video technologies.

Action(s) 1.1:
Allocate available space within the Hastings Electronic Learning Center to establish a digital success center.

Action(s) 1.2:
Construct a digital teaching and learning facility within the space that emulates next-generation smart classrooms to facilitate training and pilot new technologies for faculty and students.

Action(s) 1.3:
Construct a digital recording studio within the space to enable the creation of professional video content to support online learning methods and programs. As Dr. James McQuivey with Forrester Research discovered, one minute of video is worth 1.8 million words to a student.

Action(s) 1.4:
Consult with academic programs within each college and collaborate with academic leadership, instructional technology services, the teaching excellence center, and the Texas A&M University System Council for Academic Technology and Innovative Education.

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Measurable Outcome(s) 1.1.1:
The University's digital architecture and next-generation digital platforms will enable continuous growth at the undergraduate and graduate levels as well as support and stimulate research for a prominent regional research University.

Theme Group Name
Human Capital

Key Idea (1)

Key Idea (1)
Attract and retain a diversified workforce with the right balance of business acumen, digital skills and technical know-how needed to fulfil the mission of the University in the 21st century.

Goal 1:
Provide an encouraging and supportive environment that includes a total compensation package that is competitive with industry and other verticals that are attracting top talent for digital transformation efforts.

Action(s) 1.1:
Provide midlevel and above salaries for key positions needed for digital transformation efforts.

Action(s) 1.2:
Provide for ample professional development courses for key IT personnel throughout the year.

Action(s) 1.3:
Provide an environment and reward system that fosters creativity, collaboration, and ideation.

Measurable Outcome(s) 1.1.1:
Lower turnover rates for IT personnel, increased participation and interest in institutional projects, improved employee performance and enhanced job satisfaction.

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Theme Group Name
Research and Infrastructure

Key Idea (1)

Key Idea (1)
Expand IoT and research computing systems and services that utilize computing and technology for specialized research.

Goal 1:
Provide effective technology-based resources, personnel and secured services for research programs that support innovation with technology and are contributing to the needs of a regional research University.

Action(s) 1.1:
Provide financial resources to increase personnel and services in the IoT and research computing department to ensure timely and efficient services for research programs.

Measurable Outcome(s) 1.1.1:
Increased levels of funding and research using computing and Internet technology.

Theme Group Name
Leadership Governance and Organization

Key Idea (1)

Key Idea (1)
The Division of Information Technology at West Texas A&M University will transform the educational experience through collaboration, continuous improvement, innovation, shared governance and transparency.

Goal 1:
Information Technology at West Texas A&M University will be recognized for technology leadership across the Texas A&M University System by actively engaging, listening, and anticipating the needs of our faculty, staff, and students.

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Action(s) 1.1:
Attend academic and non-academic departmental meetings to increase IT business relationship management capabilities and obtain direct feedback from faculty, staff, department heads and academic deans.

Action(s) 1.2:
Survey faculty, staff, and students to determine needs for administrative, academic, and learning by leveraging technology to improve outcomes.

Measurable Outcome(s) 1.1.1:
Analyze trends and recurring patterns associated with incident requests, service requests, project requests and customer satisfaction surveys to improve service delivery.

Appendices and Additional Facts and Analysis

Valdosta State University Residential Life:
https://www.valdosta.edu/housing/faqs/amenities-and-hall-information.php
Valdosta State University strategic plan:
https://www.valdosta.edu/strategicplan/goals.php#goal-2
Indiana State University Residential Life:
https://www.indstate.edu/reslife/resources/housing-information/iptv-cable
University of Nebraska Omaha strategic plan
https://www.unomaha.edu/strategic-plan/index.php
East Tennessee State University strategic plan
https://www.etsu.edu/president/documents/univ_strategicplan.pdf

References

WT 125 Information Technology Whitepaper
https://www.wtamu.edu/webres/File/About/White%20Papers/12_wt125_white_paper_information_technology.pdf