



DATE ISSUED: 02/19
FLSA: Exempt
PTO: VCS

JOB DESCRIPTION

TITLE

Director, Cyberinfrastructure Services

JOB SUMMARY

The Director of Cyberinfrastructure Services provides vision, leadership, and execution on enterprise-class, technology infrastructure solutions that support the university's administrative and academic needs. In this role, s/he oversees the university-wide technology and communications infrastructure, including the data center, wired and wireless networks, voice/telecom services, cable plant, server farm and related operating system environments, central storage, backups, databases, email and directory services, technology service monitoring and response, information security, and disaster recovery services.

The Director is responsible for the planning (strategic and tactical), budgeting, technology evaluation and selection, implementation, delivery, and assessment of the university's technology infrastructure systems and services. S/he leads and manages the Cyberinfrastructure Services team, including hiring, training, managing, mentoring, and establishing project and resource priorities. The Director will ensure that Cyberinfrastructure Services builds the required competencies for the team's future, adopts modern and forward-looking technology and service strategies, and effectively utilizes its technological, financial, and human resources.

The Director serves as a member of the division's senior leadership team, and will work with the CIO and other divisional leaders to drive cultural transformation within the Office of Technology (OoT) and build a 'next generation' technology organization. S/he will have a strong commitment to supporting innovative infrastructure technologies, a passion for building and mentoring high-performing teams, and a desire to contribute positively to a user-centered, collaborative, transparent, innovative, and accountable culture within OoT.

ORGANIZATIONAL RELATIONSHIPS

Reports to: Associate Vice President for Technology & Chief Information Officer

Supervises: Directs multiple Network Engineers, Telecom Engineers, Information Security Analysts, Database Administrators, and System Administrators and/or has direct

management responsibility for multiple positions in the Cyberinfrastructure Services Department

ESSENTIAL DUTIES - May include, but not limited to the following:

Planning & Budgeting

- Creates an infrastructure architecture roadmap that effectively meets both current and future needs, with an emphasis on designing and implementing simplified, scalable, interoperable, and flexible infrastructure solutions.
- Leads the evaluation of infrastructure technologies that meet short and long-term goals, and develop business cases, ROI, TCO, and other analyses to help guide their selection.
- Manages operating and capital budgets. Develops financial models related to equipment replacement and maintenance, and contribute to multi-year budget projections.
- Adds technical and strategic input during the planning phase of potential projects, in the form of technical architecture designs and recommendations.
- Determines Cyberinfrastructure Services' priorities and allocate resources accordingly.
- Leads the design and continuous improvement of security standards, processes, and reference architectures to ensure adequate security controls across the organization.
- Directs performance tuning and capacity planning activities to enhance the performance of the technology infrastructure, including forecasting technology changes impacting demand and making recommendations for future planning.
- Evaluates and pursue infrastructure technology cost containment and reduction strategies, as well as optimization and process improvement projects.
- Establishes disaster recovery (DR) strategies, lead OoT DR/business continuity activities, and serve as the OoT liaison for university-wide DR/business continuity work. Ensure DR plans are current and regularly tested.
- Recommends infrastructure enhancements and investments, where appropriate, to support research computing needs to enable the university's research strategic goal.

Service Delivery & Optimization

- Directs the day-to-day operations of Cyberinfrastructure Services, including creating and managing plans, policies, procedures, and personnel; and overseeing the creation, planning, maintenance, and expansion of TWU's technology infrastructure.
- Ensures that architecture principles and standards are consistently applied across the data center, computer, storage, and network services.
- Identifies and implements appropriate best practices and industry standards within Cyberinfrastructure Services, including configuration, change, and release processes.
- Establishes and implements a standard process for the application of patches/updates to operating systems, applications, hardware, and firmware to ensure all physical, virtual, and hosted systems are patched with the appropriate level of security and versioning.

- Ensures high availability, reliability, and security of core data and systems, maximum uptime for infrastructure systems and services, and that all key infrastructure services are maintained with high-availability functionality.
- Ensures daily system monitoring, verifying the integrity and availability of all hardware, server resources, network resources, systems, and key processes.
- Tests and assess existing infrastructure against industry standard internal and external benchmarks to ensure optimal performance and service delivery.
- Establishes protocols for 24x7x365 on-call infrastructure support, assist with on-call availability, and ensure response within agreed upon timeframes.
- Participates in IT and information security audits and prioritize corrective actions and successful remediation of supervised areas to ensure that continuous improvements are made on an ongoing basis.
- Creates and documents standards and practices regarding data center, computer, storage, and network services for use across the university.

Management & Leadership

- Supervises, mentors, evaluates, and directs the work of staff, including meeting regularly to discuss progress of work, resolve problems, and ensure standards for quality and quantity of work are met. Participates in or lead hiring processes, as needed.
- Regularly communicates with Cyberinfrastructure Services staff regarding OoT and university issues, initiatives, and activities.
- Champions organizational values and holds employees accountable for fostering these values for a healthy, professional, and productive work environment.
- Builds strong and collaborative partnerships with key stakeholders across the university, actively participate in university activities and initiatives, and serve on university-wide committees and projects, as assigned.
- Works with the Facilities department to anticipate infrastructure needs, and oversee the planning and design of technology infrastructure, for new or renovated campus buildings.
- Cultivates and manages advantageous relationships with vendors and service providers, including contract review and compliance, and conflict resolution.
- Creatively sources and coordinates additional labor, vendor support, and consulting services to best meet short and long-term needs.
- Builds a strong network of peers at comparable institutions and represent Texas Woman's University at local, statewide, and national meetings and conferences, as appropriate.
- Consults and advises the CIO on infrastructure and security trends, opportunities, strategies, solutions, resources, and compliance; and keep the CIO informed of current and potential issues, activities, operational outages, and any other risks that might jeopardize or degrade IT service delivery to the university community.
- Serves as a member of the OoT leadership team and as the university's designated information security officer (ISO), and assist the CIO with divisional management, strategic planning, fostering a high-performing and innovative OoT environment, and driving digital transformation at the university.

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- Responsible for establishing job standards for subordinate staff and effectively evaluating staff under charge in accordance to University policy. The performance evaluation is conducted through the performance evaluation system and in accordance with the University Policies & Procedures.

ADDITIONAL DUTIES

- Performs other duties as requested.

EDUCATION

Bachelor's degree required. Additional job related experience/and/or education may substitute for the required education on a year-for-year basis. Master's Business Administration or advanced degree in a related field desirable. IT certifications, such as ITIL, Agile, SixSigma, TOGAF, AWS or Azure certifications, preferred.

EXPERIENCE

Ten years of relevant experience working in IT infrastructure, strategy, and/or leadership roles.

REQUIREMENT

Regular and reliable attendance at the University during regular scheduled days and work hours is an essential function of this position.

Work is performed under minimal supervision and performance is based on the effective operation of the administrative function. The performance evaluation is conducted through the performance evaluation system and in accordance with the University Policies & Procedures.

KNOWLEDGE, SKILLS, AND ABILITIES - The following are essential:

- Expertise in one or more of the Infrastructure technical domains, including: data centers, email, identity management, systems, storage, database administration, networks, voice/telecom, cloud, security, disaster recovery, and business continuity.
- Experience in IT planning, strategy, and architecture that supports an organization's business needs and operations, with the ability to plan and execute technology infrastructure initiatives strategically, tactically, and expansively.
- Proven leadership skills and demonstrated ability to build and manage inclusive and high-performing teams, with experience in position planning, diversity and inclusion, recruitment, retention, compensation, training/development, and evaluation.

- Demonstrated knowledge of budgets and fiscal planning, including budget development, vendor management, procurement, RFPs, and other related activities.
- Experience planning and leading infrastructure projects with enterprise--wide impact, including deployment of physical, cloud, virtual, SaaS, and IaaS services, and/or significant conversion projects of legacy systems to modern technologies.
- Experience designing and implementing security controls, and handling cybersecurity threats and prevention measures.
- Success in leveraging both traditional practices, such as IT service management, as well as emerging methods, such as DevOps, that are optimized for agility.
- Deep understanding of current and emerging infrastructure technologies, best practices for their use, and how other enterprises are employing them.
- Demonstrated ability to build infrastructure capabilities that effectively balance the need to optimize operational efficiency with the need to deliver innovative and agile infrastructure solutions to enable the university to explore new opportunities.
- Commitment to continuous assessment and improvement with experience identifying, establishing, reporting on, and managing performance to key performance metrics.
- Excellent oral and written communication skills, with the ability to effectively present technical topics to large groups with potentially varied levels of technical sophistication.
- Ability to build effective relationships and strong commitment to working collegially and collaboratively with constituents at all levels in a diverse and distributed environment.
- Demonstrated ability to listen, understand customer needs, and maintain a customer/client focus with an emphasis on problem solving and resolution.
- Ability to establish and maintain effective work relationships with students, faculty, staff, and the public.
- Ability to provide administrative guidance within area of responsibility, providing direct training and supervision as needed.
- Ability to apply budgetary and fiscal planning techniques within financial constraints.
- Ability to organize work effectively, conceptualize and prioritize objectives and exercise independent judgment based on an understanding of organizational policies and activities.
- Ability to integrate resources, policies, and information for the determination of procedures, solutions, and other outcomes.
- Ability to communicate effectively orally, by phone, in person, and in writing.
- Ability to respond to emergency situations in a timely manner.
- Ability to use a personal computer and other office equipment, including related university software and email.

Additional/Desirable Skills & Abilities

- Demonstrated capability to manage infrastructure operations in a cloud environment.
- Experience designing technology infrastructure to meet and support PCI, HIPAA, GDPR, and/or other compliance needs.
- Experience managing implementation of DevOps automation systems, including CI/CD best practices and containerization of legacy applications
- Experience building a research computing infrastructure to support academic needs.

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- Experience in a higher education setting.
- Familiarity with Texas Administrative Code (TAC 202).

PHYSICAL DEMANDS

The physical demands described in the Essential Duties and below are representative of those that must be met by an employee to successfully perform the essential duties of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential duties.

The employee may be required to travel.

WORK ENVIRONMENT

All employees are responsible for maintaining an environment that is free from discrimination, intimidation, harassment, including sexual harassment. Work is normally performed in a typical interior work environment.

SAFETY

TWU promotes a safe working environment. Employees are responsible for completing assigned tasks safely and efficiently, and supervisors are responsible for creating and maintaining a safe work environment. Employees must report any unsafe work conditions or practices, as well as any near-miss incidents, to their supervisor and Risk Management. Supervisors and employees should ensure that injury/accident reports are submitted to the Office of Human Resources and Risk Management within 24 hours of the incident.

The job description does not constitute an employment agreement between the employer and employee and is subject to change by the employer as the needs of the employer and requirements of the job change.

Employee Signature: _____

Date: _____

Employee Printed Name: _____

Texas Woman's University strives to provide an educational environment that affirms the rights and dignity of each individual, fosters diversity, and encourages a respect for the

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differences among persons. Discrimination or harassment of any kind is considered inappropriate.

Texas Woman's University is committed to equal opportunity in employment and education and does not discriminate on the basis of race, color, religion, gender, sex, sexual orientation, ethnic origin, age, veteran's status, or against qualified disabled persons.

All positions at Texas Woman's University are deemed security sensitive requiring background checks.