MIT Position Description

Job Title: Department/School: Reports to (title): Date Updated:

Vice President Information Systems and Technology

Information Systems and Technology (IS&T) Office of the Executive Vice President and Treasurer October 2018

Summary

The Vice President reports to the Office of the Executive Vice President and Treasurer and serves on the President's Academic Council as the Institute's senior information technology executive. The Vice President (VP) provides strategic leadership, vision, and management for MIT's Information Systems and Technology (IS&T) organization. The VP is charged with computing infrastructure, cloud based services and expert consultation on the use of innovative technologies and services across MIT. The VP is also a member of the Information Technology Governance Committee, a decision-making body that reports to the Provost and the Executive Vice President and Treasurer. It is critical for the VP to build strong relationships with all of MIT's leaders, acting as a true partner in making IT an enabler that supports research, administration and academic/student services. The VP leads an organization of 250 staff and oversees a budget of \$90M. The budget includes capital funds, general fund allocations, charge-backs and fees for service.

Background

IS&T focuses on both emerging solutions and enabling services for MIT's computing environment. The Emerging Solutions group collaborates with teams across MIT to develop solutions that are responsive to community needs and will enhance MIT's capacity for innovation in research, education, and internal management. The Enabling Services group is responsible for ongoing operations, support, and security of all IS&T systems and services.

MIT has shifted to wider use of cloud environments (private/hybrid/public). Consequently, IS&T and the MIT community is adjusting to operating within vendor supplied/delivered advancements while simultaneously consolidating our gains and adjusting our processes and staff accordingly.

Key challenges: deliver systems and services that are inventive and cost effective

- Enable faculty, staff and library scientists to choose the most appropriate technology solutions to meet their research needs to include cloud based and on premise services, archiving and storage. Addressing needs not met through commercial products and services
- Reimagine research computing infrastructure: tools for dev-ops and continuous integration and testing for research computing, tools related to machine learning and data science, and systems required for data storage and retrieval.
- Support faculty and students in modernizing learning management and student systems
 - Replace legacy/home-grown learning management and student information systems
 - o Advance systems to support digital learning
 - o Improve infrastructure and data access for student experimentation
- Partner with administrative and academic units to keep pace with vendor software-as-a-service (SaaS) product roadmaps where the incorporation of artificial intelligence and machine learning technologies create opportunities for new services, enhanced insight, improved responsiveness, increased accuracy and other types of outcomes previously not possible.
- Enhance software asset management tools, smart buying approaches and cost-forecasting metrics in response to new subscription and consumption-based licensing and pricing models.

Key Responsibilities:

- <u>Develop</u> the strategic vision for IT to enable the MIT mission in education and research
- Foster a culture of innovation, transparency, customer service and accountability in IS&T
- <u>Align IS&T</u>: its mission, structure, service lines and staff with the Institute's mission and culture
- Partner with faculty and staff to identify opportunities and needs for new products and services
- <u>Architecture</u>: manage MIT's private, hybrid and public cloud services and integrate these with inhouse systems.
- Policy: Partner with faculty and administration to develop IT policies
- <u>Modernization</u>: Align MIT roadmaps with vendor plans and offer in-house developed solutions
- <u>Legacy Systems</u>: Guide the transition of legacy systems to commercial products
- <u>Security/Business Continuity:</u> Establish an information security program to ensure the integrity, confidentiality and availability of operations and data. Balance security requirements with user demands. Verify service providers meet compliance and security standards.
- <u>Cost Management</u>: Manage the resource contention and shifting demand to operate within assigned budgets for consumption-based licenses.
- <u>Requirement Management</u>: define features and services that tailor the software to user needs and budgets. Ensure consumption matches software licenses.

Qualities and Experience

- Strategic Vision:
 - Technical systems and services to support the MIT mission
 - Business posture IS&T to operate in a changing IT products and services market place
 - Organizational sense the needs of the staff, transparent leadership through change. Sustains a culture of teamwork, respect, collective pride and individual; professional development
- Management
 - Managed cloud services, vendors and complex budget, and operations
 - Delivered systems and services with security, resilience, business continuity
 - Partner with IT directors within the Schools, Libraries, Student Life ,VP for Research and administrative units
 - Smart delegator; motivator, upfront with staff on organizational and process change
- Personal
 - Ability to communicate effectively -- speaks faculty, student, staff and vendor. Can present capabilities without overselling benefits and under estimating costs
 - Understands the academic environment: consensus decision-making, faculty governance; working with student experts
- Experience
 - Experience in SAAS, Data management, storage and access, cloud computing services, APIdevelopment, and integration service capabilities. Deep expertise in one.
 - Minimum of 15 years of progressive IT experience in a collaborative, decentralized, and service-oriented IT operation, with a minimum of five years leading decision making in a large scale, cloud-based computing environment
 - Master's degree in computer or information science or related field