Information Services and Technology

Fiscal year 2013 was a year of transition for Information Services and Technology (IS&T).

IS&T started the year guided by its strategic plan, which included some overarching strategic priorities, MIT community themes as stated by the president, and themes of the executive vice president and treasurer (EVP). See Appendix A: IS&T Strategic Plan for FY2013.

IS&T focused its work on a set of strategic initiatives, with department goals and detailed initiatives by area. See Appendix B: IS&T Strategic Goals and Initiatives for FY2013–FY2014.

Experience Teams

The Office of the Executive Vice President and Treasurer (EVPT) launched a series of efforts aimed at transforming experiences for the MIT community and advancing administrative excellence. IS&T staff were involved in helping to make these teams a success, with a focus on building person-centric systems and improving employee experiences. The teams fell into three categories, with several ongoing efforts in each area.

The Employee Experience

The employee experience teams are working together to enhance the overall experience of working at MIT.

- Hiring Experience
- Onboarding Experience
- Learning Experience
- Performance and Development Review
- Strategic Talent Planning

Person-Centric Experiences

A number of efforts are geared toward providing information for the user in a personalized, timely, intuitive, and interactive way.

- Atlas (formerly known as the Elana Prototype)
- Mapping
- Total Compensation Statement
- Managing Money (future effort)
- Buying Experience (future effort)

High Levels of Excellence and Effectiveness

To advance administrative excellence at MIT, these projects will enhance the effectiveness of administrative support.

- EVP Connect
- Renovation Transparency
- Eliminating Chargebacks
- Root Cause Analysis
- Operational Dashboards

IS&T Advisory Council

In May 2102, executive vice president and treasurer Israel Ruiz formed the IS&T Advisory Council to review and make recommendations that would enhance the delivery of information technology (IT) solutions and services at MIT. The council is made up of MIT faculty and chief information officers (CIOs) from other organizations, including:

- Frans Kaashoek,—Charles Piper Professor of Electrical Engineering and Computer Science (EECS), MIT
- Anne Margulies—Chief Information Officer, Harvard University (chair)
- James Noga— Chief Information Officer, PartnersHealth Care
- Robert Ramrat— Chief Information Officer, Bose Corporation
- Martin Schmidt—Professor of Electrical Engineering and Computer Science and Associate Provost, MIT
- Stephen Vinter—Head, Google Laboratories in Cambridge
- Robin Elices—Director of Communications, EVPT Office (staff to the council)

In August 2012, the IS&T Advisory Council released its report. The final report included the following recommendations:

1. Rationalize IT services across the Institute
2. Appoint a vice president for operations
3. Adopt a set of guiding principles
4. Develop a well-articulated technology strategy
5. Develop a plan to retain and attract top talent
6. Consider reducing or eliminating fees for service

IS&T Cascading Goals

IS&T developed the following set of cascading goals in response to the Advisory Councils recommendations, to EVPT's themes and goals, and to MIT's mission. See Appendix C: IS&T Cascading Goals for FY2013.

Leadership Transitions

The head of IS&T, Marilyn T. Smith, left MIT in February 2013. After her departure, the associate directors acted as interim leadership for the department. In April, the EVPT announced the appointment of Anthony (Tony) Sharon as deputy EVP. In addition to his EVP responsibilities, Mr. Sharon assumed the role of interim leader for IS&T (working closely with the associate directors) and is co-chair of the search for the next leader of IS&T.

Highlights for IS&T

In partnership with sponsors and customers, IS&T continued to focus on advancing MIT's mission, and the department delivered services and projects that simplified processing and reduced costs.

In FY2013, IS&T made contributions to the major MIT strategic programs: Digital MIT, Global Initiatives, the Massachusetts Green High Performance Computing Center (MGHPCC), and the MIT Energy Initiative.

In support of Global Initiatives, IS&T hosted five university visits to share its knowledge and insights into how it provides IT services to MIT's community. Visitors from the Center for Quantum Technology, Singapore; the Korean Education Network; the Middle East Technical University; and the Skolkovo Institute of Science and Technology, Russia, met with staff to exchange knowledge, tour facilities, and see demonstrations of systems and processes that they could use at their own universities.

IS&T continued the support for the development of the new MGHPCC, a collaboration of five Massachusetts research-intensive universities, the Commonwealth of Massachusetts, EMC, and Cisco. Construction of the 90,000-square-foot LEED-certified facility has been completed and is open for business. MIT has completed network connectivity for MGHPCC and also for Lincoln Laboratory's nearby computing site,. The Institute now provides robust network service, leveraging MIT's 2,500-mile fiber ring in the Northeast. MIT researchers are working on ways to best use this facility.

The IT Governance Committee (ITGC) held nine meetings to review various topics related to information technology services, including MGHPCC; the Council for Administrative Systems Planning; the MIT Council on Education Technology; the Network Deferred Maintenance Proposal, and the Telephone and Network Service Center (TNSC) Capital Plan; Kerberos security; the IS&T Advisory Council findings; and Digital MIT funding requests. The committee approved the Administrative Systems roadmap, and reviewed the Customer Support and Mobile Computing roadmaps during the year.

The ITGC worked closely with the Student Systems Steering Committee and the Administrative Systems and Policies Coordinating Council, which determined software development priorities and recommended and oversaw, respectively, the Education Systems and Administrative Systems investment portfolios.

IS&T provides a dynamic computing environment for its customers and stakeholders. It has expanded its offerings to respond to increasing demands for new IT services, while

decommissioning or eliminating obsolete and outdated technology to reduce risk and allow for more support of newer technologies.

Following are highlights of work completed as it aligns to the EVPT themes.

Enabling MIT's Mission

EVPT has highlighted three key goals: advancing education innovation; harmonizing international engagements; and supporting MIT's leadership transition. IS&T continued to build Education Systems capabilities by providing support and services that advance educational technology in the following areas.

Online Financial Aid

Provides enhanced visibility and tracking of application requirements, and eliminates paper-based award letters. The new system makes it easier for students to both apply for aid and monitor the status of their applications. An improved interface provides specific, real-time status updates. With this information, students can clearly understand what additional steps need to be taken to complete their application and can view the real-time status of their application.

Intelligent Messaging

Intelligent messaging provides rules-based, real-time, individualized help to students as they use the various Registrar-based systems. It guides them with recommendations based on their status and study goals, and provides warnings when needed about the consequences of registration choices.

Early Warning System

The Early Warning System enables faculty and advisors to recognize students who may be struggling academically. By using data from the Gradebook Module and instructor-set criteria, the system monitors student performance and automatically notifies faculty and advisors when students may need help.

National Collegiate Athletic Association Compliance

This new system allows student athletes to submit their information electronically, replacing a paper-driven process. The new system ensures that the Institute is compliant with the National Collegiate Athletic Association rules for student athletes and also provides new recruitment and roster management functionality for coaches.

Strengthened Campus Cyber Security

In response to the changing nature of the internet and significant external threats, IS&T prepared to deploy its first border network firewall, securing access to most MIT personal computing devices from outside MIT's campus. Given the need for an open network to support MIT's teaching and research mission, an opt-out process was developed for members of the MIT community who require unfiltered network access. This was communicated to the community in collaboration with EVPT and ITGC.

ITGC also outlined and communicated a number of additional security initiatives. To protect MIT's critical business systems, both SAP and the MIT Data Warehouse would be accessible only from campus. Additionally, a stronger policy requires passwords to be changed annually and puts more robust requirements in place around the complexity of passwords used to access MIT services. IS&T also began expanding the use of two-factor authentication systems for IT staff access to critical systems (for core services and infrastructure), with future deployment of these systems to the entire MIT community. MIT leveraged external resources to improve resiliency of the campus web presence and off-campus Domain Name Server services for MIT.EDU and associated domains.

Laying the Foundation for the Future

As part of laying the foundation for the future, EVPT wants IS&T to work toward strengthening campus planning, organizing for success, and refining governance structures. IS&T completed the following initiatives for FY2013.

Websites

A new website service, DrupalCloud, was piloted this year. This pilot moved ~170 MIT websites onto a standard, flexible, mobile-optimized, open-source content management system integrated with many of MIT's Enterprise IT services. (drupalcloud.mit.edu)

Three key websites were launched during the year:

- Future of MIT Education website for the Task Force on the Future of Education at MIT, soliciting input from the MIT community and alumni (future.mit.edu)
- Officer Sean Collier memorial site (officer179.mit.edu)
- Aaron Swartz review site (swartz-review.mit.edu)

Software

IS&T released several new software upgrades, keeping the community up to date with the most current versions, including new releases of Kerberos for Windows, Android, and Unix/Linux operating systems; Cisco Anytime Connect for Virtual Private Network connections; Adobe Reader for Mac and Windows; and Stretch Break 6.0 for Windows.

Wireless Coverage

IS&T continued to provide MIT's wireless and wired network services. Connectivity to fraternities, sororities, and independent living groups (FSILGs) and other buildings has been increased through the use of dark fiber. 196 Broadway and 141 Portland Street have been connected to allow departments, laboratories, and centers (DLCs) there to use IS&T's services over dark fiber. IS&T has connected One Main Street and is working on connecting One Broadway to 500 Technology Square. The entire network in Buildings 10, E17, E18, and W91 has been upgraded and progress has been made on the design for upgrading the networks in Buildings 24, NW16, NW17, NW21, and NW22.

In-building Cellular

IS&T's In-building Cellular Project—the Distributed Antenna System (DAS) project—has made substantial progress. Mobile usage on campus continues to show growth and, as a result, IS&T increased Exchange server capacity by 30 percent. The service level agreement (SLA) was renegotiated to keep deploying the more robust technology of multiple-input/multiple-output for the entire campus. The second phase of the project continued and final tuning is being made for the first phase 50 buildings. IS&T also collaborated with the MIT Investment Management Company to bring the DAS system to all of Building E70 next year.

Data Center Systems

IS&T initiated a test phase for virtual co-location service. This service consists of a self-service web-based application allowing members of the MIT community to provision computing resources in MIT's "private cloud" data center environment. Expected to become a production service in 2013–2014, virtual co-location will potentially ease access to IS&T data center resources for the MIT community.

Transforming Experiences through Collaboration

One of the keys to transforming experiences is building strong partnerships and relationships across campus. These partnerships enable IS&T to work closely with the community to understand its needs and work toward EVPT's goal of simplifying community experiences. IS&T has developed strong collaborative working relationships across MIT and completed the following work to help simplify community experiences.

Engaging with the Academic Community

IS&T collaborated with the Center for Mobile Learning to develop the "MIT App Inventor" programming system. This project—originally hosted by Google—has been transferred to MIT. IS&T provides development resources and assistance in operating this large-scale deployed system.

The department participated in three MIT courses, sharing user experience, accessibility, and assistive technology expertise: 6.S196 Principles and Practices of Assistive Technology (Seth Teller/Robert Miller); 21W.785 Communicating in CyberSpace (Edward Barrett), guiding student project teams through usability and accessibility evaluations; and 21W.789 Mobile Human Computer Interaction Class.

IS&T rolled out the eZeep mobile printing solution, which works with both iOS and Android devices and facilitates printing to Pharos printers on campus. This eZeep printing solution works alongside the print@mit student-developed printing app.

While IS&T continued to advocate for improved common teaching and learning spaces, there has been a 31 percent reduction in common student space. Until recently, IS&T maintained 10 computing and learning spaces in MIT's academic buildings on behalf of MIT's undergraduate and graduate students: about 6,100 square feet supporting individual and small-group student study, research, and problem-set work. During summer 2013, four of these spaces will be permanently closed due to building

construction and Institute space planning, reducing available student common space by 1,400 square feet.

IS&T ensured a smooth transition—maintaining username spaces and access data—for faculty on a short timeline, moving from personal Google Apps to MIT's Google Apps for Education domain.

IS&T also participated in the Office of Digital Learning's Hands-On Learning Task Force, contributing to research and the final report.

IT Service Management Improvements

IS&T trained an additional 20 IT staff in Information Technology Infrastructure Library foundations (having trained 20 last year), as well as in BMC Remedy basics. It rolled out changes in the current ticket-tracking system to facilitate trend and problem management to teams beyond the Help Desk. In addition, it devoted significant time and resources to exploring IT service management tools, specifically BMC RemedyOnDemand and Hewlett Packard's ServiceNow. IS&T created use cases for vendors developing prototypes for comparable evaluation. It began exploring requirements and solutions for the next phase of knowledge management, along with vendors to facilitate easier and improved customer satisfaction surveys and reporting.

Service Retirement Improvements

IS&T continued to retire legacy services, including TechTime, Kerberos v4 authentication protocol, Tether, and Octel and iPeria voicemail systems. Whenever possible in service retirements, it has begun sending personalized communications and offering personalized support services. It provided project leadership and staffing to the team charged with retiring the old Cyrus email infrastructure; reduced the footprint from 13,422 to 6,920 accounts; retired Kerberos 4 to eliminate the security risk posed by encryption key vulnerability; retired the remote connectivity tool Tether, migrating the last remaining 50 users to alternative solutions; consolidated voicemail systems from Octel and Iperia to Cisco's Unity Voicemail product; and began preparations for retiring eOn Automatic Call Distribution System by learning about and developing call workflows in Cisco's automatic call distributor solution.

Security and Emergency Responsiveness

When a single emergency notification system failed, IS&T assisted the Security and Emergency Management Office (SEMO) in an immediate migration to a redundant solution involving two vendor partners, Code Red and Rave Mobile Security, for alert notification.

Customer Support staff and Operations and Infrastructure staff worked together to document current state and future directions for electronic identity and entitlements, outlining changes IS&T wants to implement to improve its ability to provide appropriate and secure access to MIT informational resources.

IS&T handled spiking support loads due to a major power outage that affected much of Cambridge area and all of the campus, as well as subsequent attacks on MIT's network infrastructure due to the Aaron Swartz case.

Usability and Accessibility Improvements

Usability was successful in engaging early with key Enterprise-wide services such as SAP for the Department of Facilities (DOF), Office of Sponsored Projects Coeus, and Stellar. Providing user research in the planning and design phase of IS&T's services, it was able to save time on fixes to improve the user experience later in the development cycle.

IS&T worked with faculty to make accessible 24 MIT courses for an increasing enrollment of MIT students with disabilities. This past year, it supported a 50 percent increase in students seeking assistance with course materials.

IS&T staff explored a variety of new assistive technologies, including magnification, PDF, and text-to-speech book reading apps on iOS, live on-site and remote captioning, tools to facilitate captioning of video content on MIT websites, and various amplification solutions. It facilitated captioning for large events such as the Martin Luther King breakfast and the Diversity Summit.

IS&T participated on the Diversity Council and advocated for greater recognition of disabilities in the diversity space, and assisted with planning for the Diversity Summit.

Support for New Services

As services converted from manual to digital or moved to new digital platforms, IS&T rolled out support. These services include the MIT Learning Center; the Performance and Development Review tool; Outside Professional Activities reporting; Stellar Gradebook; new/consolidated voicemail solutions; new security protections, such as stronger password requirements; and new significantly reworked Windows and Mac operating systems.

Outreach

IS&T participated in several back-to-school outreach events, including shorter and more useful mini-courses and MITnet orientations; the Academic Expo and Community Fair; and laptop tagging. It offered satellite help and produced Man on the Street—a video capturing the early impressions of freshmen, which it captioned and highlighted on the IS&T homepage.

Advancing MIT's Administrative Excellence

As MIT increasingly operates in a global landscape, administrative functions and services will have to work seamlessly as one administration, delivering targeted information and effective processes. EVPT is focused on two key goals related to advancing administrative excellence: extending performance review and development, and communicating direction, principles, and goals. IS&T's focus was on three key strategies around technology, administrative systems, and data.

Administrative Systems Roadmap

As a first step in enabling the Institute to realize the EVPT vision of simplified administrative processes and higher levels of administrative excellence, the Administrative Systems roadmap will provide a framework for prioritizing and addressing the backlog of work and pent-up demand for systems development.

Segregation of Duties

SAP authorizations for 200+ individuals in the Office of the Vice President for Finance (VPF) and IS&T were redesigned based on sound financial management practices and in response to comments from PricewaterhouseCoopers, MIT's auditor, that "formal controls are not fully in place. Further actions are required to ensure that access granted to MIT's financial accounting and reporting system, SAP, is fully controlled."

Appointment Process Redesign

Comprehensive edit capability for initiators and approvers was added to the existing Appointment Process Redesign system to provide community users with an improved and easier way to process faculty and staff appointments, and to increase adoption of the automated process beyond the current 60 percent of all transactions.

Applicant Tracking System

A new system supporting staff recruiting across the Institute for candidates, recruiters, and hiring managers was implemented. It replaced an eight-year-old, unsupported system that presented a stale user interface and lacked functionality to maintain compliance with the Office of Federal Contract Compliance Programs guidelines.

Data Strategy

Significant improvements were made in the management, storage, and analysis of Institute data, across virtually every functional area. These improvements include the ongoing work of Roles Database authorizations (with more than 50K updates made centrally within Data Management in FY2013 alone) in SAP and Data Warehouse upgrades and enhancements, and also the deployment of new systems and functionality.

In FY2013, IS&T's ongoing roll-out of the Cognos reporting software included active participation from nine DLC-focused groups, with an average membership of 8–12 people. Together, IS&T analyzed current business practices and data needs and designed more than 100 reports and 40 data packages to meet those needs as efficiently as possible. Those reports are now in production, and provide streamlined access to key data for Financial; Human Resources; Environmental, Health, and Safety; Outside Professional Activities; E-Learning; Travel; Annual Budgeting; and Payroll reporting. With new functionality provided by Cognos, IS&T also implemented an automated notification system and launched more than a dozen notifications linked to these reports, such as the 90-day notice in advance of a sponsored project's end date. This one process change freed central areas from more than 50 hours of repetitive, manual activity each month, and significantly improved the customer experience for research administrators and principal investigators (PIs).

IS&T also had successful partnerships with the Office of the Vice President for Research, DOF, and VPF that led, respectively, to the deployment of a completely rebuilt and streamlined Reporting and Forecasting Tool system (RAFT), the launch of a new Space Management System (SMS), and the implementation of a rigorous Segregation of Duties process in SAP. RAFT allows research administrators and PIs to view the collected data from all systems of record for any cost object in a single screen, incorporating both known future personnel and operating expenses and projected future expenses based on local knowledge. This data can be used for scenario analyses and for projections of, for example, the number of graduate students to be supported by research funding or the planned hiring of postdoctoral or research staff. SMS provides new functionality based on the DOF building and room inventory and space assignment data from the provost's office.

Support

The VIP help team successfully provided support for many clients, including the new president and provost and associated staff. There have been several additions to the client list in all areas, including emerita/emeritus clients. The VIP help team achieved 100 percent encryption of all laptops (PC and Mac) and desktops (Mac), and its customers are full participants in the Desktop Renewal Program where applicable. Special attention has been put on upgrading all operating systems and software to keep the environment current. This effort included installation of a virtual private network on all mobile and travel devices for the senior administration.

The Distributed Information Technology Resources (DITR) Team and the Accessibility Team partnered to install printer stations in the Hayden and Dewey Libraries that are compliant with the Americans with Disabilities Act.

IS&T went live with DITR Lite Touch to manage Windows imaging and deployments, a network-based solution for operating system and initial application deployment. This solution is currently being used in the Desktop Renewal Program and by managed IT support services consultants in support of their SLAs. IS&T utilized the Casper Suite to deploy 290 managed Macs.

IS&T rolled out tools to facilitate collaboration for faculty, students, and staff, such as WebEx, which includes the ability to generate conference call bridges. IS&T migrated the community to the Cisco Unity voicemail platform, providing cost savings.

IS&T provided IT resources, including video surveillance, for a number of special events on campus, such as the Dalai Lama visit and the Officer Collier memorial service, and continued to work with MIT Police and SEMO on physical security systems (e.g., card access and video surveillance.)

Facts/Annual Metrics

- Issued 45,000 Help Desk tickets
- Provided 225 assistive technology consultations to persons with disabilities or temporary injuries

- Reviewed 300 projects/products for usability/accessibility
- Migrated about 6,000 additional users to the Exchange platform, with about 44,500 Exchange accounts; about 7,000 users are still to be migrated
- Training team created 60 online courses on how to use MIT Enterprise systems
- Provided 60 percent of administrative systems with automated software quality assurance testing
- Provided 4,300 wireless access points across campus
- Put in place 5,000 end switches for the wired network throughout the campus
- Provided support to 65 DLCs
- Engaged in 35 annual SLA contracts, resulting in the processing of 9,400 incidents—a 21 percent increase over the previous year
- Deployed 2,549 items (computers, adapters, locks, cases, etc.) of equipment, worth $2,123,269, as part of 712 deployments, including 207 PC laptops, 558 PC desktops, 336 Mac laptops, and 321 Mac desktops
- Replaced 112 computers in Athena clusters as part of IS&T's four-year replacement cycle

Administration

In support of its operations, IS&T Administration—VPF, Human Resources, Communications, Process Development and Improvement, and Administrative Services—worked closely with the associate directors, managers, and staff to develop standard work processes to improve consistency of project and service delivery; streamline accounting and administrative processes to make it easier for IS&T to measure, manage, and account for its services; provide transparency through communications to community and staff; and engage employees through the development of skills that align with the direction of its customers' work.

IS&T focused on developing and implementing a total cost of ownership expense model, as well as developing a plan to retain and attract top talent.

Process Improvement

IS&T's process improvement efforts continued from last year. As a result, it implemented the following process improvements:

- Eliminated TNSC chargebacks across the Institute
- Eliminated cell phone reimbursement and processing within IS&T

Energize and Motivate Employees

IS&T continues to support growth, development, and engagement of its employees. It hired 28 new staff members and promoted 25 employees. It focused training efforts on improving management skills through a targeted pilot consisting of five sessions

of related topics. Focus groups were held to receive feedback from the employee engagement findings. Valuable information and ideas produced four achievable activities: meetings and gatherings from across operational areas on a variety of topics; shadowing/mentoring opportunities; internal training opportunities; and additional options for rewarding and recognizing staff and colleagues. There were 220 Spotlight awards, seven Infinite Mile awards, and one recipient of the MIT Excellence Unsung Hero award.

IS&T staff participate in, contribute to, and play key formal and informal leadership roles in various professional and industry organizations, such as Internet2, Educause, the Common Solutions Group, the Northeast Regional Computing Program, College and University Information Security Professionals, the Boston Consortium, the Ivy Plus groups, the Internet Engineering Task Force security and calendaring standards groups, SAP International Higher Education and Research Conference, and the Association of American Universities Data Exchange, among others. Staff collaborates with a wide range of vendors and outside groups.

Financial Summary

IS&T provides its IT services through various funding models, which include the General Institute Budget, software development (SWD), revenue recovery, and service centers. In FY2013, IS&T underspent its recurring General Institute Budget of $31.5M by $755K. Year-end expenses were over budget by $822K, while revenue and transfers to the service centers exceeded their budgets by $1.5M and $31K, respectively. The main driver of the $822K variance in expenses is due to increased demand for Server Operations Service Center (SOSC) and Tivoli Storage Manager (TSM) services (both are revenue-recovered), greater than budgeted consulting and temporary help expenses, as well as the purchase of SAP Enterprise licenses. These expenses were partially offset by open positions and an increase in staff allocation to SWD projects.

IS&T spent $14.5M in SWD dollars ($10.2M in recurring SWD funds, and $4.3M in Digital MIT funds). ITGC initially approved SWD spending of $9.5M at its August meeting. This spending level was later increased at its December, January, and February meetings, with the increase spending funded by using part of the SWD carry-forward budget. Approximately 47 percent, $6.8M, was spent to develop Education Systems projects, including Scheduling Implementation, Workflow and Assignment Revision Project, Membership Module, and Student Accounts Implementation. An additional 42 percent, $6.1M, was spent to support SWD projects for Administrative Systems, including Segregation of Duties, DOF Plant Maintenance Realignment, and RAFT Phase III. The remaining 11 percent, $1.6M, was used for software infrastructure projects, including QA Test Automation, MIT Mobile development applications, Kerberos, and DrupalCloud Modules projects.

Approximately 31 percent of IS&T activity, or $23.2M, is funded from services which are billed to departments for telephone and network services, server management and collocation services, and other rate-recovered services, such as desktop support, software distribution, and departmental website and database consulting and development. In FY2013, funding from these sources was $53K higher than budgeted.

TNSC ended the year with an operating deficit of $137K, which is $435K lower than the FY2013 budgeted deficit of $574K. This favorable variance was due to lower than budgeted operational expense settlements and lower interest rate charges. Investment in new capital assets totaled $9.2M, or $468K less than the FY2013 capital budget of $9.6M. TNSC operating and capital expenditures provide funding for telephone and network infrastructure maintenance and upgrades, including building network upgrades, telephone and data communications room renovations, Voice over Internet Protocol rollouts, and data center expansion and upgrades.

SOSC ended the year with an operating surplus of $690K, which represents a favorable variance of $392K compared with the budgeted surplus of $297K. However, after removing SOSC and TSM charges (billed and charged within IS&T), this results in an unfavorable variance of $41K for SOSC. This is primarily due to fiber work and equipment purchases for the W91 data center, as well as higher than anticipated depreciation expenses. Capital investment expenses in SOSC for FY2013 totaled $1.0M and consisted of server equipment, automatic tape library and storage- area network storage.

Looking Forward

IS&T is proud of its achievements over the past year. As it plans for the coming year, the department looks forward to bringing the next leader of IS&T on board and enabling MIT's mission while supporting the themes and goals of EVPT.

IS&T Strategic Plan FY11-FY13

Appendix A

IS&T Vision

IT is easy: dynamic solutions are available anytime, anywhere to every member of the MIT community.

IS&T Mission

Advance MIT's mission by providing foundational IT services that make it easy for the MIT community to do its work: communicate, collaborate, and interact with MIT and beyond.

IS&T Values

Respect
Responsibility
Teamwork
Transparency

IS&T's Strategic Priorities

- Keep IT ***Up and Running***
- Deliver ***Services*** that are reliable, cost-effective, and constantly evolving to support innovation and future technology
- Strengthen ***Customer Connections*** and expand partnerships.
- Help MIT interact and make sense of its ***Data***
- Develop IS&T's ***Capabilities*** through broadening of skills and implementation of simple, clear, consistent processes that make it easy to follow through and get things done
- Help our ***People*** grow: Improve collaboration, responsiveness, and accountability across the organization
- Support cost-effective ***Research Computing***

Roadmaps

Administrative Systems
Customer Support
Data
Education Systems
Infrastructure
Mobile

IS&T supports:

MIT Community Themes

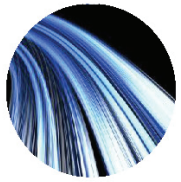
- Online Learning and Residential Research University
- Basic Research
- Mission Driven Research (on a few great global challenges)
- Innovation and Entrepreneurship
- International Strategy
- Diversity and Inclusion
- Campus of the Future

Executive Vice President's Themes

- Enabling MIT's mission
- Laying the foundation for the future
- Transforming experiences through collaboration
- Advancing MIT's administrative excellence

IT Governance

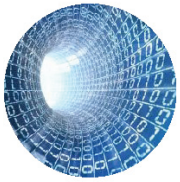
IS&T Department Goals and Strategic Initiatives for FY2013-FY2014



Articulate a **Technology Strategy**

Develop and implement **a Total Cost of Ownership (TCO)** expense model

Articulate a **strategy for Administrative Systems** including a **roadmap**



Articulate a **Data Strategy**

Continue to build **Education Systems capabilities**

Develop a **plan to retain and attract top talent** and explore alternative sourcing and partnerships

Administrative Systems

- Advance a 'person centric' simplified experience
- Strengthen and refine planning and governance processes

Education Systems

- Develop services to enable the advancement of educational innovation
- Complete next iteration of the Education Systems Roadmap

Data Management

- Develop a data strategy shared by the central business units, approved by IT Governance, and makes data more accessible and usable to the MIT community
- Add additional functionality to the Reporting and Forecasting Tool (RAFT)
- Continue the deployment of Cognos – the new reporting tool – by extending the focus group strategy to Assistant Deans, Vice President of Finance department, and student areas

Systems Engineering

- Develop Drupal Cloud – a new automated, free web site creation and hosting service
- Evolve training services at MIT by supporting the Training Alignment Team and the Learning Experience Team
- Develop a location and permissions-aware mapping service for mobile devices that makes facilities and other data available to the community

Customer Support

- Complete plans for delivering customer-centric support that leverages both local and central staff resources
- Streamline the support experience by implementing IT Service Management (ITSM) process improvements for major incidents and service requests

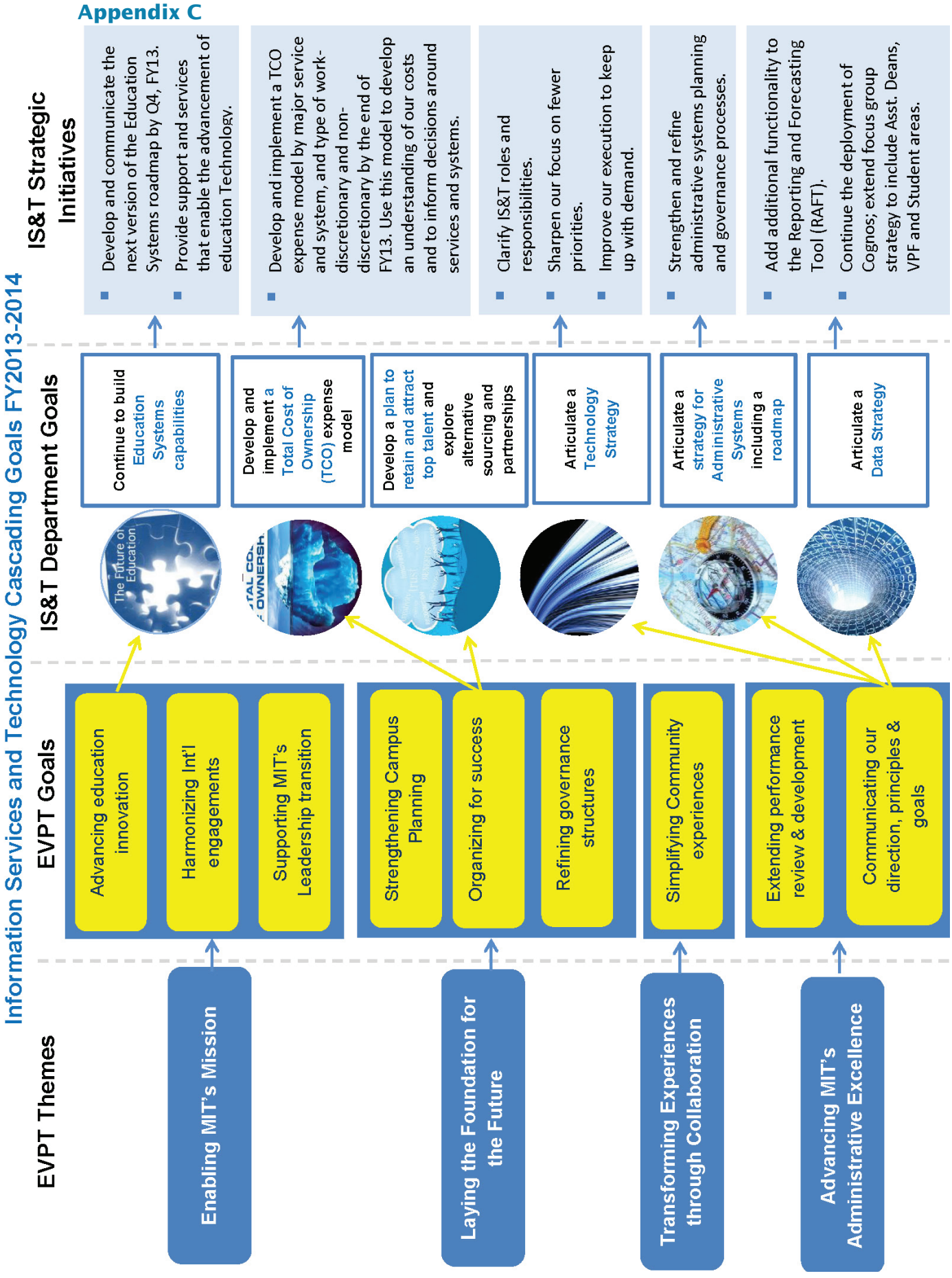
Operations and Infrastructure

- Create roadmaps for key areas
- Improve levels of execution and talent for the Distributed Information Technology Resources Team (DITR) and the Network Security Team
- Develop a strategy for Cloud Services

Administration

- Improve efficiency and provide higher levels of service
- Create a dashboard of performance metrics and monitor quarterly metrics for Human Resources
- Provide direction and support for strategic initiatives addressing resources, technical expertise, succession planning and retention
- Monitor, evaluate and amend activities identified to support and enhance employee engagement

Appendix C


Information Services and Technology Cascading Goals FY2013-2014
EVPT Themes
EVPT Goals
IS&T Department Goals
IS&T Strategic Initiatives
Enabling MIT's Mission
Advancing education innovation
Harmonizing Int'l engagements
Supporting MIT's Leadership transition
Continue to build Education Systems capabilities
Develop and implement a Total Cost of Ownership (TCO) expense model
Develop a plan to retain and attract top talent and explore alternative sourcing and partnerships
Articulate a Technology Strategy
Articulate a strategy for Administrative Systems including a roadmap
Articulate a Data Strategy
Develop and communicate the next version of the Education Systems roadmap by Q4, FY13.
Provide support and services that enable the advancement of education Technology.
Develop and implement a TCO expense model by major service and system, and type of work- discretionary and non-discretionary by the end of FY13. Use this model to develop an understanding of our costs and to inform decisions around services and systems.
Clarify IS&T roles and responsibilities.
Sharpen our focus on fewer priorities.
Improve our execution to keep up with demand.
Strengthen and refine administrative systems planning and governance processes.
Add additional functionality to the Reporting and Forecasting Tool (RAFT).
Continue the deployment of Cognos; extend focus group strategy to include Asst. Deans, VPF and Student areas.
Laying the Foundation for the Future
Strengthening Campus Planning
Organizing for success
Refining governance structures
Transforming Experiences through Collaboration
Simplifying Community experiences
Advancing MIT's Administrative Excellence
Extending performance review & development
Communicating our direction, principles & goals