Information Services and Technology

Strategic and Operational Plan
Fiscal Years 2011-2013

Making IT Easy: Transforming the IT@MIT Experience
Message from the Head of IS&T

I am proud to be part of Information Services and Technology (IS&T), a vital, diverse and progressive organization. Through the efforts of a committed and talented staff, we provide foundational IT services and support to MIT. Achieving excellence in delivering services to the MIT community and strengthening customer focus will be critical objectives for the next three years.

This Strategic and Operational Plan and our new customer-focused organization provide a framework for achieving these objectives. Our Plan outlines a three-year strategy and vision for the future of IT at MIT. In order to achieve our goals we must develop a culture of “One IS&T”: a department that collaborates to understand the needs of its customers and to create cost-effective solutions that make it easier for the community to do its work.

Each employee fulfills a valuable role in ensuring service excellence and effectively partnering with our customers to achieve our collective goals. As we begin to implement this plan, we welcome your input and ideas. The Plan is a living document which will be modified and updated as systems change, projects are completed, and goals evolve. In collaboration with the MIT community, we hope to ensure that our priorities and projects reflect our commitment to service quality while firmly establishing our reputation as a customer-focused, dynamic and high-performing organization.

I want to thank all the key stakeholders, community members, and IS&T staff for their valuable input to this plan. Your contributions have been so important in creating a sustainable strategic and operational direction for IS&T.

IS&T will continue to partner with its customers as it works to advance MIT’s mission by providing IT services that make it easy for the MIT community to do its work: communicate, collaborate, and interact with MIT and beyond.

Sincerely,

Marilyn T. Smith
Head of Information Services and Technology
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Introduction

Information Services and Technology’s strategic and operational plan provides a framework to make IT easy for every member of the MIT community. It summarizes the vision for the IS&T department at MIT, the strategic directions needed to support that vision over the next three years, and details the Operational Plan for FY 2011.

Drivers for Change

The past couple of years have brought a number of changes to IS&T, including the change in leadership for the organization, two consecutive years of required budget reductions, and several recommendations from the Institute-wide Planning Task Force on how to refocus our work in order to be more efficient and reduce costs.

1. Department Responsibilities

IS&T’s charge, as stated by the Executive Vice President, is to provide services worthy of MIT. To accomplish this in FY2010, IS&T focused on delivering robust core services to the community based on available technologies and strategic positioning to allow for superior service at a reduced cost to the Institute.

Key responsibilities include:

- Providing efficient and cost-effective IT utility (network services, data centers, software infrastructure) to the MIT community
- Partnering with educational and administrative units to develop processes and solutions that improve service and decision making while lowering cost
- Maintaining receptivity to leading-edge IT knowledge embedded in MIT’s academic community and leverage it where appropriate

Working within the complexities of services at MIT, IS&T aims to:

- Improve the functionality and interoperability of MIT’s administrative systems environment
- Develop a practical next-generation approach for MIT’s operating system for the educational enterprise (the student system)
- Work with academic leadership on identifying appropriate research computing capabilities
- Build a strong, focused IS&T organization capable of meeting evolving campus needs in an environment of tight resources
2. **Institute-wide Planning Task Force (IT@MIT)**

IS&T’s reorganization and planning were driven in large part by the findings of the Institute-wide Planning Task Force, primarily the IT@MIT Working Group report. The final report, issued by the Working Group on December 16, 2009, embodied many hours of collective work by members of the task force and generated valuable ideas for improvement. The ideas outlined in the report focused on changes needed to simplify and reduce costs for the current operational systems and services while acknowledging the importance of innovation leading to long-term strategic advantage for the Institute.

The report emphasized the need to explore the themes of standardization, user-centered IT systems, outsourcing, streamlining operations for IT at MIT, and streamlining the governance and organizational structures for IT at MIT to achieve efficiency and cost savings.

**Standardization**

“MIT should support standards rather than require them. MIT users, including Departments, Labs, and Centers (DLCs), should be allowed to use non-standard things, as long as they pay for all the incremental costs and risks of doing so.”

“Different levels of standardization are appropriate for different activities (education, research, administration).”

**Culture Change**

“Culture changes will be required to implement some of the ideas.”

**Costs & Savings**

“Some ideas require one-time investments, which are not included.”

“The printing cost savings shown here are based on an extrapolation of numbers for Athena. We suspect this number may be too high, but we include it here to illustrate the potential magnitude of savings and encourage further analysis.”

**De-customization and Simplification**

Because MIT was the first educational institution to use SAP, substantial customization was needed. In subsequent years the customized features were incorporated in the standard version of SAP. Analyzing the potential to remove customization in SAP software should precede implementation.
3. **Budget Reductions**

Along with the rest of MIT, IS&T was asked to make significant budget reductions over a two-year period. We recognized this as an opportunity to focus on services, process improvements, and key priorities versus strictly on expense management.

IS&T reduced its FY11 Gross Expense Budget by 7% to reach our two year target of 15% (8% was taken in FY2010).

**Timeline of Events**

- **FY10/FY11 Budget Reductions Required**
- **New Head of IS&T Appointed Sept 2009**
- **IS&T Planning Started Nov 2009**
- **Institute-wide Task Force Report Dec 2009**
- **IT Governance Committee May 2010**
- **IS&T Reorg July 2010**
- **Digital MIT in High Gear Fall 2010**
- **Planning Complete Sept 2010 and Implementation of IS&T Plan FY11-FY13**

**IT Governance**

The IT@MIT Task Force identified a number of issues for focus, one of which was to create clear processes for decision-making. To address these issues, L. Rafael Reif, Provost, and Theresa M. Stone, Executive Vice President and Treasurer, chartered a small, focused Information Technology Governance Committee (ITGC).

The Information Technology Governance Committee is a decision-making body that reports directly to the Provost and Executive Vice President and Treasurer. Membership in the committee includes:

- Professor Martin Schmidt, Associate Provost (Co-Chair)
- Marilyn T. Smith, Head of Information Services and Technology (Co-Chair)
- Professor M. Frans Kaashoek, Associate Director of CSAIL (Technology Domain Expert)
- Professor Claude Canizares, Vice President for Research and Associate Provost (Research Representative)
- Armand Doucette, Executive Director of Information Technology, Sloan School of Management (non-IS&T IT Representative)
- Professor Daniel Hastings, Dean for Undergraduate Education (Education Representative)
- Israel Ruiz, Vice President for Finance (Administration Representative)
These colleagues will work together to help drive development of an IS&T strategy for MIT, manage the IS&T investment portfolio, and charter and manage committees and working groups (see Model for Decision Management).

The ITGC has been charged with the following:
• Ensure development and maintenance of a three-year strategic IS&T plan for an IT environment in support of the vision and mission of MIT.
• Ensure the proper sharing of responsibility and setting of priorities for IS&T investments and the deployment of resources by reviewing and making decisions on IS&T projects. Ensure appropriate sponsorship for IS&T projects.
• Guide, direct, and approve the establishment and implementation of policies, guidelines and standards pertaining to use of IT within MIT.
• Identify and charge subcommittees or working groups as appropriate to complete the ITGC charge and provide funding and review of progress as needed.
• Advise EVP and Provost on IT matters at MIT.

Model for Decision Management

[Diagram showing the flow of information and decision-making processes involving Provost, EVP, IT Leaders, IS&T Student Technology Advisory Board (ISTAB), Information Technology Governance Committee (ITGC), and various committees and working groups.]

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Published November 2010
The committees that the ITGC manages include:

- **MIT’s Council on Educational Technology (MITCET)** – Co-chaired by the Dean for Undergraduate Education, Dan Hastings, and a faculty member appointed by the Provost, this group provides strategic guidance and oversight of MIT institutional activities concerning the application of information technology to education, and advises the ITGC and the Provost on priorities, policies, and opportunities.

- **Student Systems Steering Committee (SSSC)** – Chaired by the Dean for Undergraduate Education, Dan Hastings; the Dean for Graduate Education, Christine Ortiz; and the Head of IS&T, Marilyn Smith, this group focuses on ensuring that the vision of education systems worthy of MIT is achieved.

- **Administrative Systems and Policies Coordinating Council (ASPCC)** – Chaired by Vice President for Human Resources, Alison Alden; Vice President for Finance, Israel Ruiz; and Head of IS&T, Marilyn Smith, this group focuses on improving campus-wide administrative systems and related processes and policies in support of the Institute’s mission.

- **Research Computing IT** – This group will be created and charged in FY011 by Claude Canizares.

- **IT Leaders** – Chaired by Marilyn T. Smith, this group brings together IT Leaders from across the Institute to share best practices for IT and review and discuss IT plans for the Institute.
IS&T Organizational Overview

IS&T reorganized the department in July 2010 with a focus on delivering service worthy of MIT. There were three major drivers for the new organization: Task Force findings and recommendations, IS&T’s strategic and operational plan and workload, and expense reductions.

Our organizational structure reflects a concerted effort to factor in the input from both the IT@MIT Working Group and our customers to best prepare for the work which lies ahead. We are focused on our customers and partners in the major Institute functions – education, research and administration. We aim to strengthen our connections with stakeholders and facilitate the improvement of service delivery. We will also develop internal partnerships so that we work as “one IS&T” and concentrate on the needs of the MIT community.

Working closely with the IT Governance Committee to determine direction and make investment decisions, the department is organized to provide IT services to the community with improved effectiveness.

Information Services and Technology

The new organization consists of the following areas: Administrative Systems, Education Systems, Data Management, Systems Engineering, Customer Support, and Operations and Infrastructure – supported by an Administration area. Key changes from the previous organization include structuring applications areas by function; combining course management and student systems into one applications area; forming a new area, Systems Engineering, focused on technical support and interoperability of applications; forming a new Data Management area; combining some key hardware and software support organizations in our Infrastructure and Operations area; and focusing the Customer Support area on the Help Desk and faculty and student partnerships.
The Planning Process

In November 2009, IS&T began working on a strategic and operational plan. The initial phase of the planning focused on gathering data to build a new foundation for IS&T and the services we provide to the MIT community.

Our goals and approach focused on improving customer relationships and service delivery. Our process for data gathering was designed to support transparency, teamwork, and inclusion. The process included:

**Listening and Learning** – Held informal one-on-one conversations with the new Head of IS&T and more than 70 MIT faculty and staff.

**Pulse Groups** – Collected data from approximately 30% of IS&T staff and met with randomly selected groups of IS&T staff to identify what’s working and what’s not and to brainstorm potential improvements within IS&T.

**World of the Customer** – Interviewed more than 30 customers from across the Institute to better understand their business needs and pain points and how IS&T can support them in their work.

**Findings Review** – The IS&T Leadership Working Group (LWG) reviewed eight previously completed studies/reviews over the past three years, including the IT@MIT Task Force Report, and identified high-value recommendations and findings.

Integrating the feedback from all of these sources, we worked to develop this strategic and operational plan for IS&T.

We learned from our outreach and planning efforts that our customers want easy-to-use, cost-effective IT solutions that are available anytime, anywhere. We need to increase consistency and transparency in what we do and how we do it.

This plan demonstrates how our organization will improve service delivery to the community. It builds upon and in some cases goes beyond the charges from the MIT Planning Task Force, addresses customer needs for the support of innovative information technology, and strengthens and expands partnerships with the community. Guidance for prioritization and implementation of the plan will be sought from the recently announced IT Governance Committee and its supporting committees: the Administrative Systems and Policy Coordinating Council; the Student Systems Coordinating Council; the MIT Committee on Educational Technology; and the Research Computing Committee (which is yet to be formed).
The IS&T Strategic Plan Overview

<table>
<thead>
<tr>
<th>IS&amp;T Vision</th>
<th>IS&amp;T Mission</th>
<th>IS&amp;T Values</th>
</tr>
</thead>
</table>
| IT is easy: dynamic solutions are available anytime, anywhere to every member of the MIT community. | 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. | 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  
- Customer Support  
- Data  
- Education  
- Infrastructure  
- Mobile

### MIT Planning Task Force Ideas Assigned to IS&T
- Centralized purchasing and management for **computer software**.
- Centralized purchasing and management for **computer hardware**.
- De-customize administrative enterprise systems.
- De-customize educational enterprise systems.
- Remove pain points in using MIT enterprise systems.
- Outsource voice and video communication.
- End support for selected IT products and services.
- Streamline help-desk support and outsource as appropriate.

[Ideas listed are as stated in the Task Force Reports. Other task force ideas assigned to other units will require significant work from IS&T.]

### IS&T supports MIT-wide Initiatives
- 2030 Vision Project
- MIT Energy Initiative
- Massachusetts Green High Performance Computing Center (MGHPCC)
- MIT Printing and Digital Archiving Project
- MIT 150

### IT Governance

### IS&T Operational Plan – FY2011
Key approaches and tools aimed at improving service delivery will include:

- Partnering with our customers to develop roadmaps for Administrative Systems, Education Systems, Computing Support, Infrastructure, Data Management, and Mobile Computing which will be monitored by the governance committees and will enable thoughtful, planned, and collaborative decisions regarding future investments.

- Strengthening our customer relationships and enhancing the customer experience by establishing a set of operational metrics for IS&T and increasing outreach to build trust, respect and a shared commitment to improving IT at MIT.

- Prioritizing projects that align with the IT needs identified by the community.

- Streamlining internal IS&T processes, including establishing capacity planning and a sourcing strategy.
IS&T’s Mission, Vision, and Strategic Priorities

Mission

IS&T’s purpose is to *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.*

Vision

IS&T pictures a world in five years where:

_**IT is easy:**_ Dynamic mobile solutions are available anytime, anywhere to every member of the MIT community.

Strategic Priorities

IS&T developed the following strategic priorities through discussion with customers and our staff. These will guide our work for the next three years and help in setting priorities.

Capabilities

Build the organization’s capabilities to execute on our vision

- Continually review the work IS&T does and doesn’t do based on MIT’s needs
- Simplify processes across IS&T for consistency, clarity, and follow-through

Customer Connections

Strengthen the customer connection – understand who they are, what they value and how we can partner with them

Services

Deliver reliable, high-quality, and cost-effective computing services while supporting technology and innovation for the future

- Operational excellence
- Make sure that IS&T evolves with technology changes and stays current with tools used by other IT departments

Data

Help MIT make sense of its data

People

Improve collaboration, responsiveness, and accountability and provide growth opportunities for people

Research Computing

Support creation of a more cost-effective research computing environment
IS&T Strategic Priority Projects for FY2011

IS&T priority projects for FY2011 by operational area are highlighted below. These are the projects in each area with the highest customer impact and many tie back to the IT@MIT Working Group recommendations.

IS&T supports the following MIT-wide Initiatives

<table>
<thead>
<tr>
<th>Project</th>
<th>Sponsor</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT Governance (including roadmaps)</td>
<td>EVP and Provost</td>
</tr>
<tr>
<td>2030 Vision Project</td>
<td>EVP</td>
</tr>
<tr>
<td>MIT Energy Initiative</td>
<td>President</td>
</tr>
<tr>
<td>Massachusetts Green High-Performance Computing Center (MGHPCC)</td>
<td>VP for Research</td>
</tr>
<tr>
<td>MIT Printing and Digital Archiving Project</td>
<td>VPF and IT@MIT Task Force</td>
</tr>
<tr>
<td>MIT 150</td>
<td>President</td>
</tr>
</tbody>
</table>

Administrative Systems

<table>
<thead>
<tr>
<th>Project</th>
<th>Description</th>
<th>Sponsor</th>
<th>Benefit/Value to MIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advance Digital MIT</td>
<td>Digital MIT: eW-2 – Enable year-end W-2 tax forms access through Employee Self Service (ESS)</td>
<td>Israel Ruiz, Gerry O'Toole</td>
<td>De-customization Automation Simplification Remove pain points Advance Digital MIT Reduce long-term costs</td>
</tr>
<tr>
<td></td>
<td>Digital MIT: Hourly Student Positions – Reduce manual data entry by the HR/Payroll Service Center by automating updates to SAP for all hourly student appointment transactions from MITSIS</td>
<td>Gerry O’Toole</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Digital MIT: Appointment Process Redesign – Automate HR transactions for DLC administrators and HR-Payroll service center staff</td>
<td>Israel Ruiz, Alison Alden, Robin Elices, Gerry O’Toole</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Digital MIT: Request for Payment – Expedite the process for submitting, approving, and processing reimbursement requests.</td>
<td>Israel Ruiz</td>
<td></td>
</tr>
<tr>
<td>SAP Assessment</td>
<td>Engage SAP to facilitate business/IT workshops to:</td>
<td>Israel Ruiz, Alison Alden, Marilyn Smith</td>
<td>Remove pain points De-customization</td>
</tr>
<tr>
<td></td>
<td>● Assess MIT’s SAP implementation</td>
<td></td>
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<tr>
<td></td>
<td>● Identify challenges and opportunities (quick wins, foundational changes, transformational improvements)</td>
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<tr>
<td></td>
<td>● Make concrete recommendations</td>
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</tbody>
</table>
## Education Systems

<table>
<thead>
<tr>
<th>Project</th>
<th>Description</th>
<th>Sponsor</th>
<th>Benefit/Value to MIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online Grading</td>
<td>Develop an Online Grading System to replace the existing paper system</td>
<td>Mary Callahan</td>
<td>Advance Digital MIT Remove pain points</td>
</tr>
<tr>
<td>Online Registration Phase 1</td>
<td>Develop an Online Registration System to replace the existing paper system</td>
<td>Mary Callahan</td>
<td>Advance Digital MIT Remove pain points</td>
</tr>
</tbody>
</table>

## Data Management

<table>
<thead>
<tr>
<th>Project</th>
<th>Description</th>
<th>Sponsor</th>
<th>Benefit/Value to MIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Making data easier to use: showcase one data domain that has been streamlined and piloted using a new reporting tool</td>
<td>Streamline data and create one domain-based data model for reporting</td>
<td>Deb Leitch</td>
<td>Simplification Clearly defined data</td>
</tr>
<tr>
<td>Reporting and Forecasting Tool (RAFT)</td>
<td>Develop system of record for reporting and forecasting</td>
<td>Claude Canizares</td>
<td>Simplification Remove pain points</td>
</tr>
</tbody>
</table>

## Systems Engineering

<table>
<thead>
<tr>
<th>Project</th>
<th>Description</th>
<th>Sponsor, Affiliation</th>
<th>Benefit/Value to MIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIT Mobile Application for the Android Platform</td>
<td>Develop an Android platform and applications similar to those already developed for the iPhone</td>
<td>The News Office</td>
<td>Mobility</td>
</tr>
<tr>
<td>Online Training for MIT Applications</td>
<td>● Outsourcing of desktop software training to lynda.com&lt;br&gt;● Focus on development of online training for MIT-specific applications&lt;br&gt;● Pilot eLearning courses</td>
<td>Margaret Ann Gray, Bill Van Schalkwyk, Colleen Leslie, Marilyn Smith</td>
<td>Advancing Digital MIT Remove pain points Outsourcing where possible</td>
</tr>
<tr>
<td>Mobile Application for MIT150</td>
<td>Create mobile application for campus tour by January 2011 for MIT150</td>
<td>Gayle Gallagher (MIT 150 Committee)</td>
<td>Simplification (for visitors to campus during celebration and for future guests) Mobility</td>
</tr>
</tbody>
</table>
## Customer Support

<table>
<thead>
<tr>
<th>Project</th>
<th>Description</th>
<th>Sponsor</th>
<th>Benefit/Value to MIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implement short-term recommendations for IS&amp;T-managed Athena Clusters</td>
<td>Work toward improved printing for students in clusters and future use of clusters on campus.</td>
<td>Marilyn Smith and Dan Hastings</td>
<td>Remove pain points Simplification</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Greening campus</td>
</tr>
<tr>
<td>Streamline the IS&amp;T Help Desk</td>
<td>● Complete study of current Help Desk operations&lt;br&gt;● Develop project plan(s) for implementing tools, processes, and resource recommendations.</td>
<td>Marilyn Smith and Steering Committee (w/reps from Sloan, Facilities, Libraries, etc.)</td>
<td>Streamline Remove pain points Outsource where appropriate</td>
</tr>
<tr>
<td>Develop Service Catalog for IS&amp;T</td>
<td>● Develop an intuitive way to describe IS&amp;T services to the community (using the website to deliver).&lt;br&gt;● Develop an intuitive way for different operational areas of IS&amp;T to understand and interact with IS&amp;T services (using the website to deliver).</td>
<td>Marilyn Smith</td>
<td>Advance Digital MIT Remove pain points Streamline Clarify</td>
</tr>
</tbody>
</table>

## Operations and Infrastructure

<table>
<thead>
<tr>
<th>Project</th>
<th>Description</th>
<th>Sponsor</th>
<th>Benefit/Value to MIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hosted Virtual Desktop (Pilot)</td>
<td>Make it easier and more efficient to maintain and operate a managed desktop computing environment and provide for a consistent application environment for mobile devices.</td>
<td>EVP</td>
<td>Simplification Automation Sustainability</td>
</tr>
<tr>
<td>Ubiquitous indoor coverage of mobile/cellular services (Distributed Antenna System)</td>
<td>In partnership with a telecommunications provider, install a multi-carrier in-building cellular technology infrastructure for ubiquitous indoor coverage of all MIT buildings in the Cambridge area.</td>
<td>EVP</td>
<td>Remove pain points Mobility</td>
</tr>
<tr>
<td>Massachusetts Green High-Performance Computing Center (MGHPCC): Optical Network and Project Support</td>
<td>Extend MIT’s regional optical network to serve the Institute’s MGHPCC activities in the Holyoke area and Lincoln Lab's Holyoke research computing center. Play a key role in the design and operations planning for the MGHPCC facility.</td>
<td>VP of Research</td>
<td>Greening campus Partnership with other universities and the Commonwealth of Massachusetts</td>
</tr>
<tr>
<td>Project</td>
<td>Description</td>
<td>Sponsor</td>
<td>Benefit/Value to MIT</td>
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</tr>
<tr>
<td>Accounting and Reporting Process Standardization</td>
<td>Develop standards for IS&amp;T’s accounting and reporting practices.</td>
<td>John Donnelly and Marilyn Smith</td>
<td>Consistency of process Simplification</td>
</tr>
<tr>
<td>Talent Management Plan</td>
<td>Develop and retain our talent as well as acquire new talent where needed and build succession plans for key roles.</td>
<td>Alison Alden and Marilyn Smith</td>
<td>Staff retention Clarity of process</td>
</tr>
<tr>
<td>Project Management Process Standards</td>
<td>Develop common project management guidelines and tools for each phase of a project lifecycle.</td>
<td>Marilyn Smith and the IS&amp;T Associate Directors</td>
<td>Consistency of process Simplification</td>
</tr>
</tbody>
</table>
Visions for IS&T Strategic Priority Projects

For each of the strategic priority projects in the IS&T operational plan, the current state and projected end-state for FY11 and FY13 are aligned by strategic priority and presented in the table below.

|---------|-----------------------|--------|---------------|
| **Hosted Virtual Desktop (Pilot)** | • Exploring licensing options for initial pilot  
• One-to-one match of operating environments and hardware  
• Virtualization limited to data center servers | Completed pilot with select set of administrative IT customers | Virtual desktop anytime anywhere, providing efficient and secure support for MIT’s administrative and centrally managed academic computing environment |
| **Ubiquitous indoor coverage of mobile/cellular services** | • Spotty cellular coverage on campus and in-building  
• Completed installation of AT&T and Sprint/Nextel cellular towers | General cellular coverage improved across some buildings and the outside MIT campus | Complete cellular coverage in all MIT buildings in Cambridge |
<p>| <strong>Online Grading</strong> | All final grades submitted to Registrar’s Office on paper or via email, then entered by Registrar staff. | Online Grading piloted for a number of departments | All final grades entered online |
| <strong>Online Registration Phase I</strong> | Paper forms coordinated by Registrar’s Office and delivered to departments. Advisors must sign forms after meeting with students; students then return forms to the Registrar’s Office for manual data entry. | Summer term registration available online | Registration an online process; Tools added to integrate Advising process |
| <strong>MIT Mobile Application for the Android Platform</strong> | MIT Mobile Application available only on iPhone | MIT Mobile Application in place for Android devices | New features rolled out simultaneously with iPhone application |
| <strong>Online Training for MIT Applications</strong> | Most IS&amp;T training provided in person, scheduled in advance, during work hours, usually requiring registration and sometimes provided for a fee | Deliver pilot online courses. | Training for MIT applications delivered online via webinar and video |</p>
<table>
<thead>
<tr>
<th><strong>Reporting and Forecasting Tool (RAFT)</strong></th>
<th>No standard forecasting tool or process</th>
<th>Complete Phase II of RAFT (Reporting and Forecasting Tool).</th>
<th>Centralized forecasting in use by the MIT community</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>* Digital MIT: Appointment Process Redesign – Duplication of data entry; automating HR transactions for DLC administrators and HR-Payroll service center staff to reduce errors, provide visibility, and avoid duplicate data entry</td>
<td>* Appointment Process Redesign 1.1 – more flexibility and additional information available to approvers. Approvers able to enter comments.</td>
<td>* Employees access year-end W-2s in a secure and easy manner.</td>
</tr>
<tr>
<td></td>
<td>* Digital MIT: Hourly Student Positions – Hourly student appointments are entered manually into MITSIS.</td>
<td>* Appointment Process Redesign 2.0 – Enhanced functionality, allows attaching documents, automatic update of the backend from approver screen etc.</td>
<td>* Improved user experience; ability to review the status of requests; automatic routing of requests for appropriate electronic approvals; enhanced functionality and information, especially for approvers; improved functionality such as bulk supplements, attaching supporting documents, automatic update of the backend.</td>
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<td>* Digital MIT: Request for Payment – Process is paper-heavy, in submission, processing, and payment by check</td>
<td>* Interface from MITSIS in place that updates SAP with undergraduate student appointment data; including appropriate edits, error reporting to MITSIS users and error tracking via an error log.</td>
<td>* Continued efficiency gains realized by Payroll because new and changed undergrad appointments are saved to SAP by the daily interface; improved experience with faster turnaround and reporting results.</td>
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<td>Mobile Application for MIT150</td>
<td>30,000 visitors to the MIT campus take a scheduled campus guided tour.</td>
<td>The people coming to the MIT campus for our 150th anniversary celebration will be able to take a variety of tours, create custom tours, and receive push notifications when in proximity of events, and points of interest.</td>
<td>After the 150 celebration, much of the functionality developed will remain evergreen, and can be used for visitors to the campus to take their own tours, create custom tours, and travel at their own pace.</td>
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<td>SAP Assessment</td>
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<td><strong>Strategic Priority: Customer Connections</strong></td>
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<td>IT Governance</td>
<td>▪ IT Governance inconsistent &lt;br&gt;▪ Lack of coordination between Governance/Steering committees</td>
<td>▪ New IT Governance structure in place &lt;br&gt;▪ Monthly meetings held, budget, projects, and operational plan reviewed and approved &lt;br&gt;▪ Plan in place for software budget allocation for FY2012</td>
<td>▪ IT Governance Committee is a well-established and respected committee responsible for reviewing and approving IT directions and investments.</td>
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<td>Coordinate support and implementation of short-term recommendations for IS&amp;T-managed Athena Clusters</td>
<td>Current space allocations, distribution, and designs for public Athena clusters are not optimal and not tied to Institutional or IT strategic direction. Athena has transitioned from being our students’ primary computing environment to being a complement to their personal computers.</td>
<td>All cluster printers are upgraded to models configured to use hold-and-release technology (Pharos) and are administered through CopyTech. To support Digital MIT, strategically placed public clusters are also equipped with scanning technology.</td>
<td>Student computational and teaching/learning spaces intimately connected to Institutional strategic planning efforts and directions, such as Green MIT and Digital MIT. New student and community centers developed and deployed.</td>
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<td>Streamline the IS&amp;T Help Desk to improve and expand services offered</td>
<td>Customer Support and our Help Desk struggle to meet ever-increasing demands for service across a growing variety of products and services. Support involves inconsistent and non-integrated tools and processes and lacks access to information necessary to assist end users.</td>
<td>Help Desk study by Dell Professional Services is completed, including gap analysis of current Help Desk services as compared to industry best practices. This has led to 2-3 process improvement efforts to streamline and expand Help Desk support. Key partnerships with Sloan STS and Lincoln Labs contribute to our efforts and lead to consistent practices across our domains.</td>
<td>Customers find it easy and convenient to get the IT help that they need any time, from anywhere. Customers know that one interaction with the Help Desk gets their problem understood and resolved quickly.</td>
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<td>IS&amp;T Service Catalog</td>
<td>▪ Services are confusing and customers often are not aware of key services or are unclear how to acquire IS&amp;T services or what level of support to expect. ▪ IS&amp;T staff don’t always understand how and to whom to escalate service issues.</td>
<td>Very clean, clear view of key IS&amp;T services that make it easy for customers to understand and engage with our services and allows IS&amp;T staff clear escalation paths.</td>
<td>Customers and IS&amp;T staff understand and can easily access IS&amp;T services. There is transparency via metrics and reporting for all service levels.</td>
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| **Strategic Priority: Data** | Making data easier to use: showcase one data domain that has been streamlined and piloted using a new reporting tool | Cumbersome reporting for data access | ▪ New reporting tool selected  
▪ 120-day tool piloted  
▪ One data domain is selected, streamlined, and all data within the domain is defined | ▪ Old data reporting tools retired  
▪ Expanded pilots to increase easy data access and create clear enterprise data definitions |
| **Strategic Priority: Capabilities** | Accounting and Reporting Process Standardization | Inconsistent accounting, budgeting and reporting processes used across IS&T | ▪ Simplified and consistent accounting structure  
▪ Standard Software Development Project accounting, forecasting, and budgeting processes  
▪ FY12 Budget developed using standardized data collection processes and budgeting assumptions  
▪ IS&T accounting policies and financial reports, forms, and deliverable dates clearly defined and communicated using a centralized location | ▪ Standard processes around accounting, forecasting and budgeting of expenses result in timely, accurate, and informative financial data and analysis, which help to indentify operational issues and make management decisions easier. |
| | Project Management Process Standards | ▪ IS&T lacks the ability to monitor project health in a timely way (whether projects are on time and on budget and what resources may be needed to correct changes in scope/requirements)  
▪ Customer experience and engagement varies across project teams | ▪ Revamp of project reviews to create more collaborative and open environment  
▪ Develop shared set of steps and roles/responsibilities for initial phases of the project lifecycle  
▪ Common tools for stakeholder analysis and engagement adopted across project teams  
▪ Standard set of requirements gathering tools (including conceptual modeling and reporting requirements) piloted by IS&T project teams | ▪ Projects are delivered on time and on budget.  
▪ Customers are active members of project teams and have similar experiences and expectations regardless of the product or service.  
▪ IS&T uses a shared set of project management tools and resources across project teams. |
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<td><strong>Talent Management Plan</strong></td>
<td>No formal strategy linking development and retention of our talent as well as acquiring new talent where needed and succession planning for key roles.</td>
<td>Action plan rolled out including a needs analysis, roadmap, talent review and workforce analysis, and revised performance appraisal forms.</td>
<td>Technical management and individual contributor career paths publicized and staff know their growth potential in IS&amp;T. Succession plans in place for all staff as well. A skills training curriculum for IS&amp;T staff has been implemented. IS&amp;T’s talent management plan will be broadly recognized as best practice.</td>
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<td><strong>Strategic Priority: People</strong></td>
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| Massachusetts Green High-Performance Computing Center (MGHPCC) Optical Network and Project Support | ▪ On-campus central hosting capability (limited capacity)  
▪ Total cost of ownership for research computing facility increasing (power, space, renovation)  
▪ Duplicated efforts and costs through local, one-off research computing facilities  
▪ Massachusetts Green High-Performance Computing Center (MGHPCC) project is in progress in partnership with other universities | ▪ Continued support for on-campus central hosting capability  
▪ Support for design of the network and other infrastructure for MGHPCC  
▪ Support for funding and business model for MGHPCC | ▪ MGHPCC 2MW IT capacity available to MIT (10MW in total)  
▪ Cost-effective alternatives for high-performance computing customers  
▪ Effective and appropriate use of MIT investment to support research computing  
▪ MGHPCC connects researchers via MIT’s regional optical network |
IS&T Values

*IS&T selected four key values that will help to govern decision-making and problem-solving; shape behaviors, attitudes, policies, procedures, and activities; and motivate us individually and organizationally.*

Respect

*“Respect is a two-way street.”* Respect is the cornerstone of our values. We show positive intentions towards the actions of others, and demonstrate patience in understanding their views, wishes, needs, and preferences. We treat others with the highest degree of dignity, equality and trust. We celebrate the diversity of the people within IS&T and MIT.

Responsibility

*“Say what you mean, mean what you say.”* We hold ourselves accountable to our customers, stakeholders, partners, and each other by honoring our commitments, providing results, and striving for the highest quality. We take ownership and inform others if we will miss deadlines. We hold each other accountable – “organizational ownership.”

Teamwork

*“Together Everyone Achieves More.”* We work together and function as a cohesive unit to achieve a common goal. We create an environment of inclusion and support which encourages learning and sharing with each other and fosters trust.

Transparency

*“Clarity with regard to intent and execution.”* Transparency is full disclosure of non-confidential information. We provide information in a way that makes it understandable to others. We enable open and honest two-way communication.