IT Transformation

Prepared for Faculty Senate
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Agenda

• Principles, purpose and deliverables of the program
• Service and support in the new model
  • Tech bars
  • Location strategy
• Relevant quick updates
MISSION
Implement and maintain practical information technology solutions that provide the platform for Michigan State University to excel in research, education, and outreach.

VISION
Exemplify visionary leadership and deliver effective technology solutions to enable Michigan State University students, faculty, and staff to positively impact vital global issues.
**MSU IT Organizational Alignment Principles**

MSU IT must transform its operating model to meet rising student, research, academic, and unit expectations. The transformation will be guided by the principles outlined below:

<table>
<thead>
<tr>
<th>Enable Students through Innovation</th>
<th>Create Service-Oriented Delivery</th>
<th>Leverage Key Strengths Across IT</th>
<th>Reliably Support Unit Specific IT Needs</th>
<th>Align Across IT Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Innovations created by both MSU faculty/staff and MSU students</td>
<td>• Improve IT consumer satisfaction</td>
<td>• Enhanced collaboration and common priorities</td>
<td>• High engagement with Service Delivery Managers</td>
<td>• Improve employee engagement</td>
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<tr>
<td>• Provide a digital learning experience for MSU students</td>
<td>• Consistent consumer experience</td>
<td>• Increased depth and breadth of IT skills across MSU</td>
<td>• Ensure information security for units</td>
<td>• Effective governance</td>
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<tr>
<td>• Enable MSU with new digital platforms</td>
<td>• Consumable IT services, in a published catalog</td>
<td>• New and integrated processes</td>
<td>• Reduce outages affecting units</td>
<td>• Increase both individual and team effectiveness</td>
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<tr>
<td></td>
<td></td>
<td>• Reduced technical debt</td>
<td>• Deliver on unit commitments</td>
<td>• Talent retention with diverse career opportunities</td>
</tr>
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</table>

MSU IT has to balance all internal, administrative, and academic unit influences to deliver both near term performance and longer term innovation.
MSU IT Transformation
Rapid innovation for the future

MSU IT must transform to meet rising MSU student experience expectations

Focus on developing our people at MSU IT
Foster and empower our workforce to deliver on goals through culture, skills, and a collaborative work environment

The new MSU IT will:
• Enable MSU students with innovative technology capabilities
• Deliver with speed
• Improves satisfaction through service orientation
• Leverage key strengths and skills across the organization
• Supports unit specific needs
• Enables clients to spend less time running IT and more time on innovation

Emphasis on innovative university-centric IT services
Everything we do must start with our students and end with our students and by doing so, we create an innovative culture that delivers a digital experience

Continue to support unit specific functions including faculty research

We need YOUR help to achieve our mission
We will engage the right people at the right time to ensure we are meeting the needs of the MSU students, faculty and our people

We will be transparent and communicate often to ensure we are aligned throughout this transformation
How Will the Operating Model Change?

Student, Faculty, and Research driven operating model

New model will feature:

- Service Delivery Management organization will harmonize currently disparate functions & demand, and will assist the Units and faculty navigate IT, and maximizes the University’s value of IT
- Flexibility that allows IT to shift with changing student and Unit priorities
- Shift to providing student and Unit-centric IT services through service oriented functions and a service catalog
- Capability driven application teams (working on similar systems) that allows for sharing of resources and drives down technical debt by maximizing reuse & rationalization

MSU IT will foster innovative solutions, expediting ideation, incubation, and industrialization by encouraging innovation, reducing rigorous approvals, & increasing faculty productivity

Agile focus

Common use of a standardized agile methodology for development, as the default delivery model, leveraging Unit-IT scrum teams made up of business resources, Unit capability-aligned developers and allocated infrastructure team members. Shift to development in the cloud.

Efficiently managing the business of IT

A centralized IT management function will manage the portfolio of MSU IT services, establish shared standards and policies, drive consistent processes across functions and set strategic goals.

Process ownership and end to end managed processes allow for impactful improvements and efficiencies around automation and standardization

Service Orientation

- Services delivering as a bundled offering, and not as individual components, making it easier for IT consumers to get the right services in an timely manner
- Consolidation of end to end functions around IT service operation, delivery of platform, core development, and infrastructure services

Flexibility

Standardized delivery model allows for flexible sharing of resources and better anticipation to changes in student needs and Unit demand

Clarity

Clearly defined roles and functions create efficiencies and maximize the organization’s strengths

Consolidated and integrated technology and infrastructure operations functions standardizing the provisioning of common capabilities across IT, while still addressing Unit specific needs

Emphasis on delivering value

The future operating model will drive behaviors aimed at maximizing the realization of university benefits with performance management tracking metrics

CoE’s focused on enabling solutions addressing common Unit demand or core “Big Bet” services:
- Advanced Analytics
- Collaboration
- Shared Platforms
- Mobile

MICHIGAN STATE UNIVERSITY
Unit Onboarding Activities

- Introduce transformation to Unit leveraging new onboarding strategy and material

- Review integration plan with Units for process transparency as well as to advise them of the next steps

- Identify Unit point of contact to work with in order to collect detailed IT information

- Pre-populate the questionnaire with information about the Units that’s currently available

- Socialize questionnaire with Unit points of contact for information validation and additional information

- Distribute completed response to all IT integration teams (e.g. CTO office, Finance, Service Help Desk etc.) to review and prepare for integration

- Schedule working sessions with Units for clarification, as needed

- Follow up with Units to ensure understanding and prepare for migration

- Leverage completed questionnaire to create asset integration and management plan

- Map Unit resources to appropriate structure in central IT organization, creating new structures where required

- Identify skills and training needs for Unit resources

- Create migration plan to onboard Unit resources with minimal disruption to their consumers

- Create mitigation plan for potential risks identified and known issues documented in the questionnaire

- Communicate migration plan with Unit to prepare them for integration

- Assign SDM

- Assist onboarding Units (HR orientation package)

- Create work streams for each IT integration team to execute on their integration plan

- Determine metrics to measure Unit performance

- Monitor Unit integration performance and acceptance

- Collect feedback from Units regarding onboarding effectiveness and satisfaction

- Apply lessons learned as part of continuous improvement to optimize onboarding processes and update onboarding documentation
# MSU IT Transformation Overview

<table>
<thead>
<tr>
<th>People &amp; Org</th>
<th>3 months</th>
<th>6 months</th>
<th>12+ months</th>
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</thead>
<tbody>
<tr>
<td>Consolidate all IT staff <strong>under a central organizational structure</strong></td>
<td>Optimize Reorganize IT organization landscape to align with architecture of new MSU Technology Operating Model</td>
<td>Optimized future state organization structure in alignment with new operating model and MSU IT’s vision</td>
<td></td>
</tr>
<tr>
<td>Design new organizational model, and identify roles required to support the new MSU IT operating model</td>
<td>Optimize IT organization to support the new operating model and transformed roles</td>
<td>New roles and functions staffed to support the new IT operating model</td>
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<tr>
<td>Begin target state organizational structure implementation</td>
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<table>
<thead>
<tr>
<th>Process</th>
<th>3 months</th>
<th>6 months</th>
<th>12+ months</th>
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<tbody>
<tr>
<td>The integrated IT organization works with MSU’s existing <strong>IT governance</strong> processes</td>
<td><strong>Future state</strong> IT processes are being designed and <strong>implemented</strong></td>
<td>Centers of Excellence (<strong>CoEs</strong>) are set up for best practices across MSU (e.g.: Agile, Innovation, Faculties / Department IT Liaison, etc.)</td>
<td></td>
</tr>
<tr>
<td><strong>Future state</strong> processes are designed (e.g. governance structures, proposed future IT service centers &amp; functions)</td>
<td>Standardized on application development methodology</td>
<td>Continual process improvement</td>
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<tr>
<td>Service definitions and service catalogs are developed</td>
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<table>
<thead>
<tr>
<th>Technology</th>
<th>3 months</th>
<th>6 months</th>
<th>12+ months</th>
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<tr>
<td>MSU’s technology landscape is assessed for readiness to align with architecture of new MSU Technology Operating Model, as well as to identify opportunities to optimize (e.g. retire, consolidate and modernize)</td>
<td>Begin deploying and configuring processes on the MSU ITSM platform to deliver standardized IT service management</td>
<td>Continue executing the technology roadmap, implementing new technologies and eliminate technical debt</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Optimize MSU IT services to utilize capabilities and efficiencies of the cloud</td>
<td>Leverage cloud based solutions to support tech roadmap implementation</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Setup <strong>Innovation CoE</strong></td>
<td></td>
</tr>
</tbody>
</table>

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3 months

- Consolidate all IT staff under a central organizational structure
- Design new organizational model, and identify roles required to support the new MSU IT operating model
- Begin target state organizational structure implementation

6 months

- Optimize Reorganize IT organization landscape to align with architecture of new MSU Technology Operating Model
- Optimize IT organization to support the new operating model and transformed roles

12+ months

- Optimized future state organization structure in alignment with new operating model and MSU IT’s vision
- New roles and functions staffed to support the new IT operating model

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*Centers of Excellence (CoEs) are set up for best practices across MSU (e.g.: Agile, Innovation, Faculties / Department IT Liaison, etc.)*

**Continual process improvement**

**Setup Innovation CoE**
Measuring Performance and Results
# MSU IT Summary and Trends

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<tbody>
<tr>
<td>Security Incidents (&lt;100)</td>
<td>✗ 103</td>
<td>✗ 122</td>
<td>✗ 159</td>
<td>✗ 282</td>
<td>▶ 95</td>
<td>▶ 87</td>
</tr>
<tr>
<td>Vulnerabilities Remediated (&gt;10%)</td>
<td>▶ 4,502</td>
<td>▶ 9,570</td>
<td>▶ 9,750</td>
<td>▶ 5,300</td>
<td>▶ 7,554</td>
<td>▶ 6,318</td>
</tr>
<tr>
<td>IT Projects On-Plan (&gt;80%)</td>
<td>▶ 81%</td>
<td>▶ 82%</td>
<td>▶ 81%</td>
<td>▶ 84%</td>
<td>▶ 72%</td>
<td>▶ 67%</td>
</tr>
<tr>
<td>User Created Reports/Contents (Positive trend)</td>
<td>▶ 4,211</td>
<td>▶ 4,371</td>
<td>▶ 4,456</td>
<td>▶ 4,577</td>
<td>▶ 4,646</td>
<td>▶ 4,664</td>
</tr>
<tr>
<td>D2L Availability (&gt; 99.9%)</td>
<td>✗ 90.0%</td>
<td>✗ 99.3%</td>
<td>✗ 99.8%</td>
<td>✗ 99.9%</td>
<td>▶ 100%</td>
<td>▶ 99.9%</td>
</tr>
<tr>
<td>SIS Availability (&gt; 99.9%)</td>
<td>✗ 97.4%</td>
<td>✗ 99.5%</td>
<td>▶ 100%</td>
<td>▶ 94.3%</td>
<td>▶ 96.5%</td>
<td>▶ 99.4%</td>
</tr>
<tr>
<td>EBS Availability (&gt; 99.9%)</td>
<td>▶ 99.9%</td>
<td>▶ 99.0%</td>
<td>▶ 99.2%</td>
<td>▶ 98.6%</td>
<td>▶ 99.9%</td>
<td>▶ 99.9%</td>
</tr>
<tr>
<td>Customer Satisfaction (&gt; 85%) Per Service Desk Survey</td>
<td>▶ 89.7%</td>
<td>▶ 95.5%</td>
<td>▶ 90.5%</td>
<td>▶ 90.5%</td>
<td>▶ 94.2%</td>
<td>▶ 88.9%</td>
</tr>
</tbody>
</table>

## ACCOMPLISHMENTS AND PARTNERSHIPS

- IT doubled campus internet capacity overall and quadrupled building-to-building (internal) capacity in some areas. The increased bandwidth will benefit the entire on-campus community, especially researchers and those who process considerable amounts of data.

- The Avaya softphone application was made available for all managed workstations on campus, enabling the use of campus telephone numbers and features from internet-connected devices.
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• Relevant quick updates
MSU IT Tech Bar

MSU IT Spartan Tech Bar
Spartan Tech Bar staff provide on site support including:
• Technology issues and questions, ticket tracking
• Immediate mobile device support
• Walk-in help Monday-Friday from 6:00 a.m. until 6:00 p.m.

Currently Live
• MSU IT Tech Bar @ComputerCenter
• MSU IT Tech Bar @IPF
• MSU IT Tech Bar @CVM
• More pop-up MSU IT Tech Bars will be available during the MSU IT integrations and will become permanent on a case-by-case basis

Email CIO@msu.edu to request an MSU IT Tech Bar for your unit or area!
Location Strategy

• MSU IT has three primary locations
  • Computer Center
  • Collins Road
  • Crescent Road

...and over a dozen client based locations
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Relevant Quick Updates

1. Eduroam live! ([https://tech.msu.edu/support/getting-online/](https://tech.msu.edu/support/getting-online/))
2. MSU Mobile App live!
3. Increased enablement of Amazon Web Services (AWS)
4. All ResHalls have WiFi
5. ServiceStatus live for current status of IT services (e.g. D2L) and subscribe for updates (email, SMS, and Teams) - ([https://servicestatus.msu.edu/](https://servicestatus.msu.edu/))
6. Major Constituent Relationship Management kicked-off with Advancement and CABS
7. Enhanced VPN coming soon
Questions?

Contact me – cio@msu.edu

https://tech.msu.edu/ for technology services, help, and more information

• https://bolderit.msu.edu/ for more information on major initiatives

• https://servicestatus.msu.edu/ for current status of IT services (e.g. D2L) and subscribe for updates (email, SMS, and Teams)