

IS&T All Hands Meeting

September 28, 2015

Future
of IT
@MIT

Agenda

10:30am

- Welcome – John Charles

10:35am – 10:55am

- Jag Patel – Chancellor's Office (Qualtrics)

10:55am – 11:15am

- Jason Soohoo – Haystack Observatory (WiFi, VoIP, Scrum)

11:15am – 12:00pm

- IS&T v1.0, Community Engagement, and Plans for v1.5 – John Charles
- Details of IS&T Transition v1.5 – Eamon Kearns
- Closing Remarks – John Charles

IS&T and Community Collaborations

Jag Patel – Chancellor's Office (Qualtrics)

IS&T and Community Collaborations

Jason Soohoo – Haystack Observatory (WiFi, VoIP, Scrum)

IS&T v1.0, Community Engagement, and Plans for v1.5

John Charles

The past several months were extremely productive for IS&T. We continued to deliver new high quality solutions while implementing v1.0 of our transformation

Recent Highlights for the MIT Community

- Banner release for Student Financial Services
- SAP HANA successful PoC and go-forward recommendation from steering committee
- Release of new services: LastPass, DocuSign, Qualtrics, Casper, SCCM
- Campus-wide rollout of Duo Two-Factor authentication
- Atlas Upgrades
- Initial release of MIT People API
- Beta release of developers.mit.edu, Developer Community Portal
- Financial Review & Control (FRC) application



Some additional highlights from v1.0 of our transformation

Space Improvements

- Collaborative working and meeting spaces
- Whiteboard walls
- Conference room technology upgrades
- Furniture upgrades

Training Sessions

- Fundamentals
- Scrum Master
- User Stories
- Product Owner

Fun Events

- Duck Boats
- BBQ
- Family Halloween Party

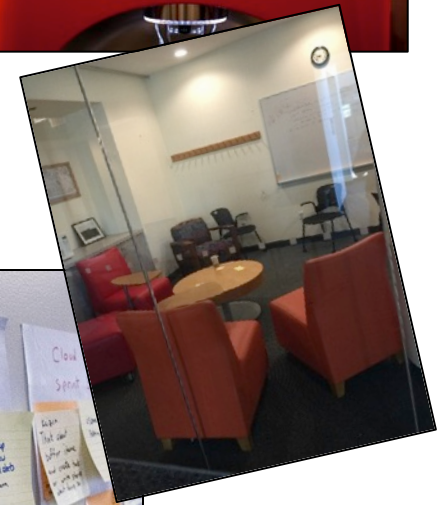
And, of course Food

- IS&T weekly lunches
- New Hire breakfasts
- Bevi drink machine, Coca-Cola freestyle fountain machine, BostonBean coffee machine



Collaboration & Sharing

- tl;dr
- “Agile” Office Hours



And, we would like to thank the Engagement Model Working Group for their efforts over the past few months – efforts that help inform and guide the planning for v1.5







WG Members
Myra Hope Eskridge
Meaghan Murray
Frank Quern
Lori Singer
Zahida Taher
Oliver Thomas

WG Tasks / Artifacts	
Weekly meetings (led by Oliver)	Week in the Life Scenarios
Wiki to capture WG information	Initial IS&T staff feedback
Operating Principles	Community Engagement questions
Glossary of Terms	ROM review & sample scenarios
Engagement Model Diagrams	Pilot Planning
Use Cases	Service Sorting/Mapping Exercise

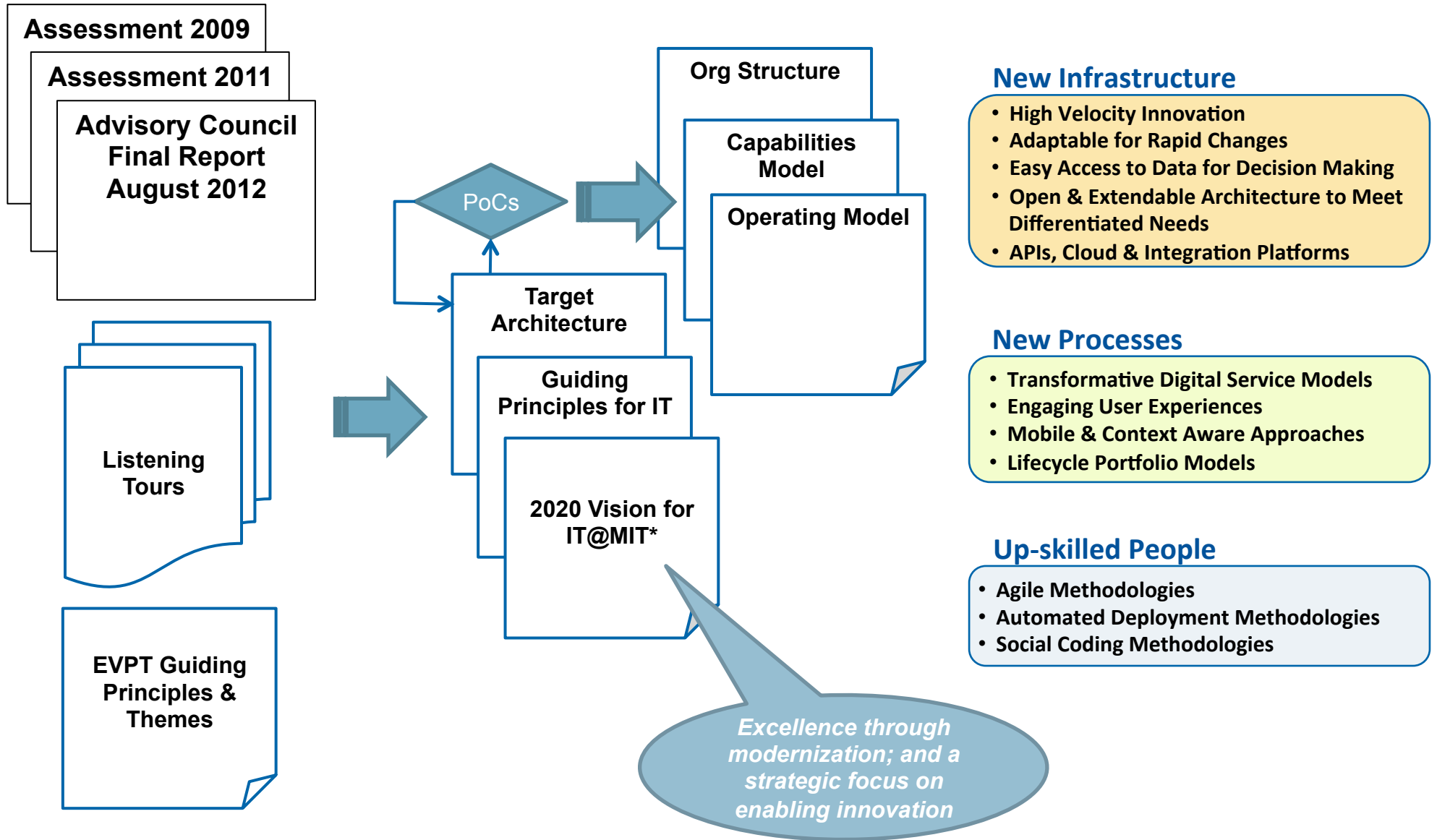
Community Interest & Optimism Continues to Grow

Reminder – why we’re transforming IS&T and IT@MIT

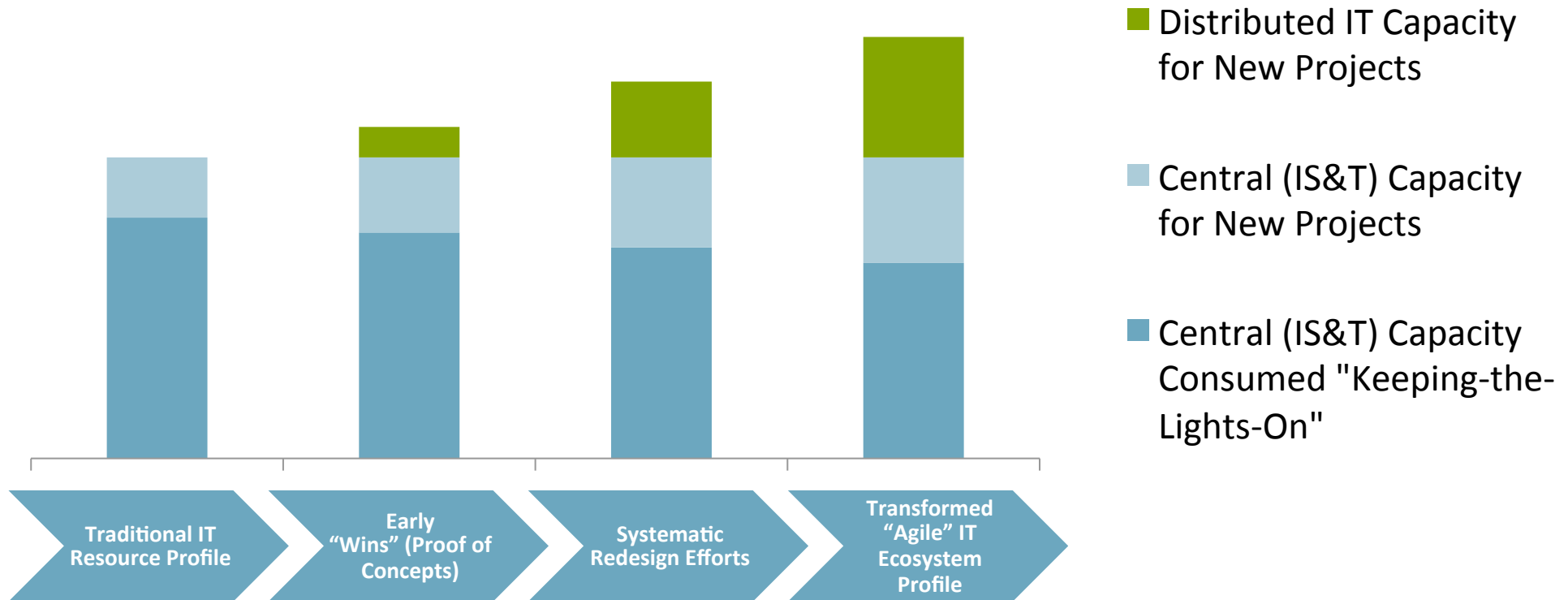
The 2012 Advisory Council Report identified six opportunities for improvement – improvements that would significantly increase the value of IT services that IS&T provides for the MIT Community.

	<p>Unmet project demand and lack of roadmap for administrative systems.</p>	<p><i>“The backlog and pent-up demand for work in the administrative systems area...is of great concern. IS&T is not meeting community expectations for administrative systems development in either the centralized administrative areas or across the schools.”</i></p>
	<p>Lack of integrated systems and user experiences.</p>	<p><i>“The lack of integrated systems makes it difficult to complete basic transactions, and there is no long-term strategy of how to bring about greater integration.”</i></p>
	<p>Lack of integration framework for data access and sharing.</p>	<p><i>“Data ownership is decentralized and data is pushed to the Data Warehouse.”</i></p>
	<p>Uneven desktop and local IT support across campus.</p>	<p><i>“Local areas have [hired] their own IT support. This has resulted in duplication of efforts and there are strategic questions of centralization versus distributed service delivery.”</i></p>
	<p>Limited IS&T capacity for non-KTLO (keeping-the-lights-on) activities.</p>	<p><i>“There is a widely held perception that IS&T staff members are spread too thin and that there is no opportunity for innovation.”</i></p>
	<p>Lack of alignment between IS&T business models and MIT community needs.</p>	<p><i>“Community members believe that IS&T services are too expensive, and the pay-for-service model is a disincentive to many organizations.”</i></p>

Institutional needs drove convergence on a vision, guiding principles, target architecture, new operating model, new capabilities model, & new org structure.



2020 Vision for the Transformation of IS&T and IT@MIT:



Excellence through modernization; and a strategic focus on enabling innovation.

The expansion of IS&T, DLC, and administrative unit capacities for innovation will be facilitated by the adoption of open APIs (application programming interfaces) and "platform-based" models that are designed to create and connect ecosystems of diverse participants as producers and consumers of IT services.

The requested improvements require significant transformations within 3 broad categories

Infrastructure

Providing flexible and scalable services to the community



- Moving to modular, API-centric, platform-based application system architectures
- Shifting to a SaaS model to enable community members to do their work faster
- Implementing new mobile-ready tools to improve user experiences
- Migrating data centers to private, public, and hybrid cloud services

Processes

Providing responsive and high quality services to the community



- Introducing Agile methodology for faster realization of benefits
- Implementing streamlined processes to speed the delivery of fast-track solutions
- Improving portfolio management to increase transparency of project priorities and status
- Implementing a new operating model for improving responsiveness to DLCs needs




















People

Growing IS&T capabilities



- Upskilling existing staff through training and development
- Hiring new staff with high-demand skills
- Using contractors to provide a more flexible and on-demand staffing model
- Putting the right people in the right roles

Alignment of the IT@MIT Transformation Strategy with “Opportunities for Improvement:”

		Transformations		
		Infrastructure	Processes	People
	Unmet project demand and lack of roadmap for administrative systems.			
	Lack of integrated systems and user experiences.			
	Lack of integration framework for data access and sharing.			
	Uneven desktop and local IT support across campus.			
	Limited IS&T capacity for non-KTLO (keeping-the-lights-on) activities.			
	Lack of alignment between IS&T business models and MIT community needs.			

Senior stakeholder-level focus is on facilitating the partnership collaborations that will interlock our IT transformations with their digital business transformations

IS&T and IT@MIT

Admin Units and DLCs

Resources

- Develop, acquire, source, and retain digital talent
- Dedicated resources for non-KLTO work and community Roadmap initiatives
- Greater knowledge of community and processes

Methodologies

- Agile methodology for faster realization of benefits
- More consultative approach
- Improved communication of (and response) to user needs

Infrastructure

- Improved infrastructure to allow better integration and flexibility of systems
- Renovate the IT core to enable digital business

Service Desk

A more uniform service desk experience

Project Management

- Build bimodal capability to enable digital business
- Agile project management to drive fast & successful delivery

Clear Communication

- Champion digital business innovation and transformation initiatives
- Clear communication of community priorities and requirements (Roadmaps)

Methodologies

- Openness to working with new IS&T methodologies like Agile development
- Openness to iterative product and solution delivery and updates

Solutions

Openness to new cloud and mobile solutions that provide the community with more control over the services they need

Resources

- Commit to highly collaborative engagement with IS&T teams
- Commit business/function-area resources to product and solution teams
- Openness to working with new IS&T teams

Transforming User Experiences at



Retrospective: What we've learned from v1.0 of the IS&T transformation:

- Breaking down old siloes, up-skilling staff, introducing new tools, and adopting agile processes is delivering promising results in terms of faster speed, lower cost, higher quality, and improved stakeholder satisfaction
- It is important to use the right tools for the right situation. So regardless of whether your project follows an agile or a waterfall development methodology, it is key for IS&T staff to operate with an *agile mindset*
- These steps forward have also helped us identify some additional opportunities for improving the *community alignment* of IS&T teams – improvements that will enable IS&T to be even more responsive in meeting the evolving needs of MIT's diverse community of admin units and DLCs
- We've also identified some gaps within *processes and workflows* that need to be closed in order for IS&T to further strengthen and streamline its delivery of services for the MIT Community – gaps specifically associated with:
 - Project intake & community engagement capabilities (Emerging Solutions)
 - Project prioritization processes
 - Architectural review processes
 - Project management processes
 - Project delivery & operational effectiveness capabilities (Enabling Services)

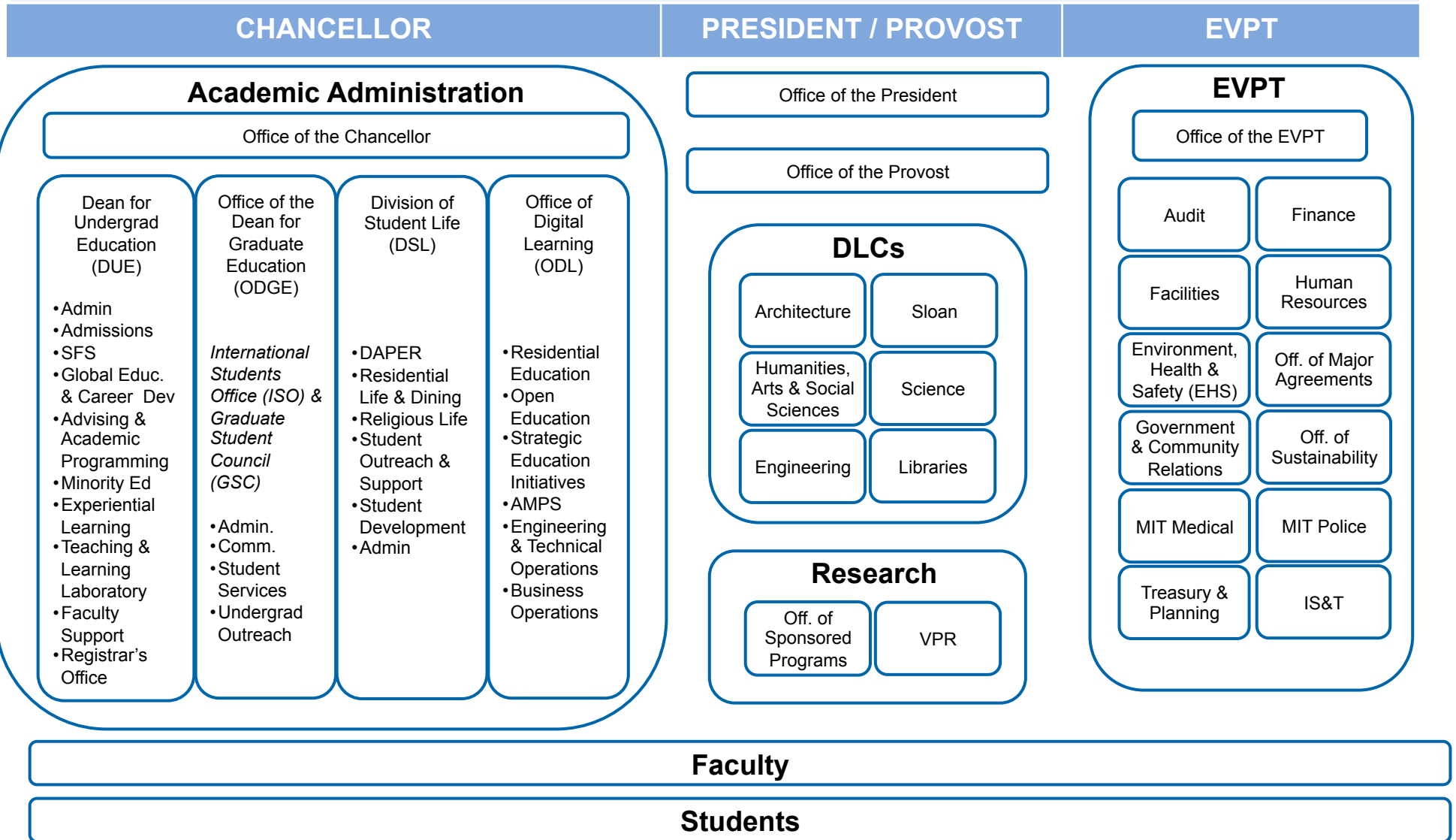
With v1.5:

- Community Partners want and need direct engagement with (and commitment from) IS&T to help identify and meet their evolving needs
 - They (and we) want and need better two-way communications and information sharing about projects, services, capabilities, changes, scheduling, and priorities
 - They (and we) are ready and willing to try a new approach for handling and scoping requests, and for coordinating and accelerating the agile delivery of new projects, solutions, and services
- To facilitate this new engagement model, IS&T will establish Community Partnership teams with Product Owners to better align with Community segment groupings:
 - Academic Admin + Records
 - SFS + Student Life+ Admissions
 - HR
 - VPF
 - Facilities / EHS
 - Faculty / Students
 - DLCs

Details of IS&T Transition v1.5

Eamon Kearns

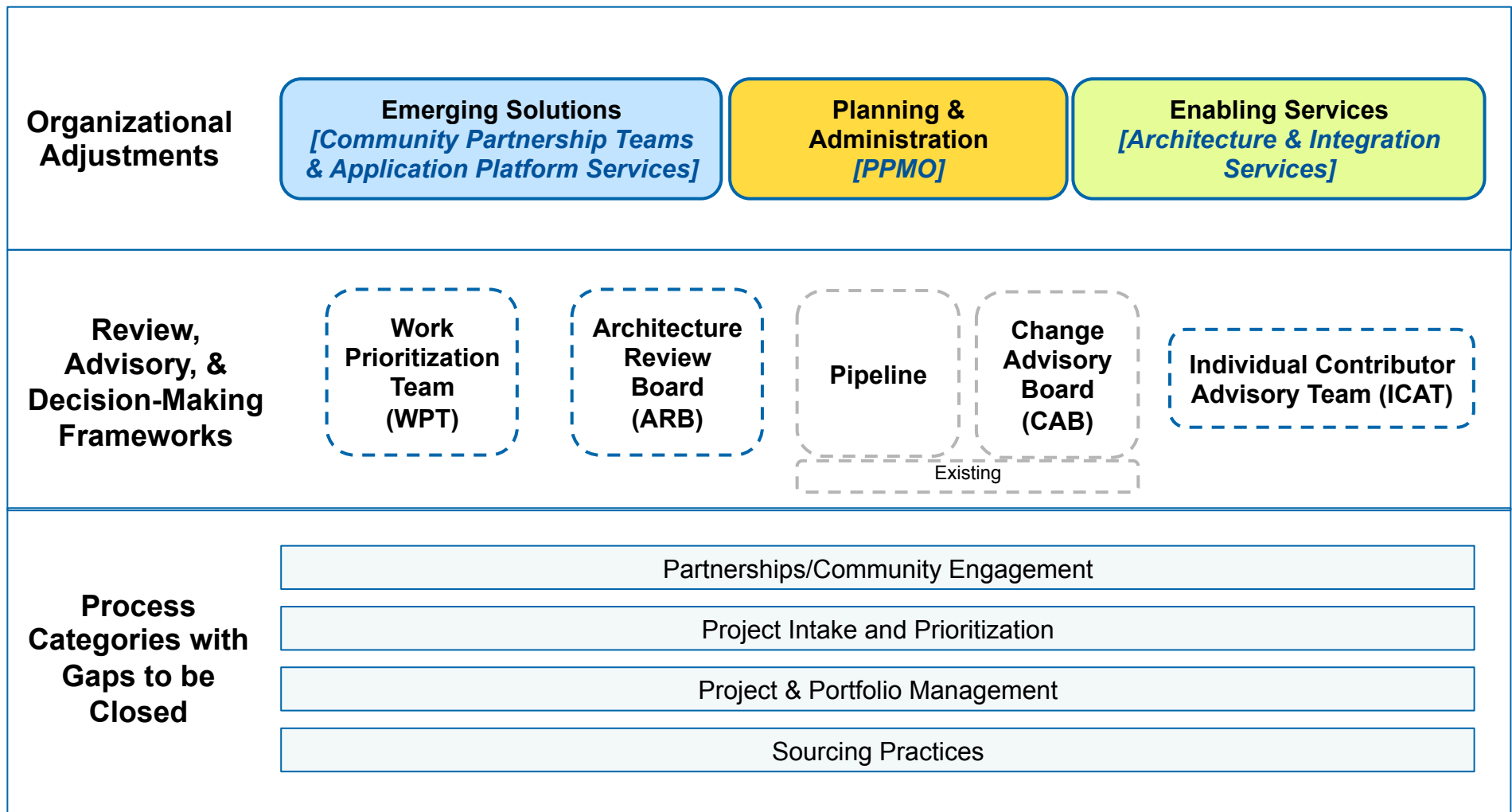
In Transition v1.5, IS&T Community Partnership teams will be structured to better align with MIT's Community segments.



Transition v1.5 is designed to help close the following identified organizational gaps.

- Lack of clarity for the community on how to engage with IS&T for their requests
- Short supply of both business and technical expertise
- Lack of clarity on which IS&T resources should review and approve business and technical decisions
- Unclear processes for prioritization, governance and reporting of department work
- Lack of clear focus on broader institute efforts around transforming education
Digital Learning

A high level view of the scope of iteration v1.5 in IS&T's transformation journey:



Staff and team adjustments will be made to optimize our community partnership and operationalize excellence in our organizational model.

Organizational Adjustments

Emerging Solutions
[Community Partnership Teams & Application Platform Services]

Planning & Administration
[PPMO]

Enabling Services
[Architecture & Integration Services]

Specific team adjustments to support the next iteration of our Community Engagement model:

Emerging Solutions

- New Community Engagement teams - establishing Community Partnership teams and shift roles to business analysts
- New Platform Engagement team - creating an Application Platforms team for Agile delivery of new/emerging platform-based systems, services, and solutions
- New Digital Learning team

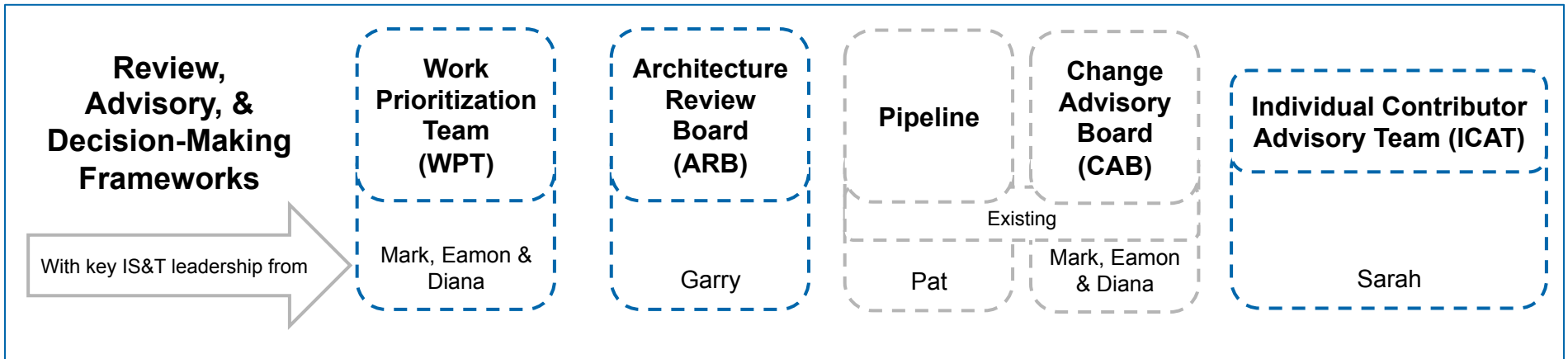
Planning & Administration

- Formalizing the Project and Portfolio Management team

Enabling Services

- Expanding the IT Ecosystem Architecture group to provide oversight & technical leadership
- Consolidation to form an enterprise-wide Integration team
- Establishing a team for Systems Analysis
- New Platform Development & Support team - establishing a team to deliver on-going development and support for existing platforms, as well as for new platforms that are ready to be deployed at scale

New advisory & decision-making frameworks will be put in place to work in conjunction with existing IS&T forums to improve project prioritization and consistency.



Specific agile-oriented frameworks to support the next iteration of our Community Engagement model:

- Work Prioritization Team (WPT) – Prioritizes and schedules projects
- Architecture Review Board (ARB) – Defines architecture best practices and reviews architecture for relevant projects
- Pipeline – Reviews changes and releases for Production
- Change Advisory Board (CAB) – Approves changes and releases for Production
- Individual Contributor Advisory Team (ICAT) – Identifies opportunities for knowledge sharing across IS&T

Closing the identified process gaps will help improve project planning and project delivery for our Community partners.

Process Categories with Gaps to be Closed	Partnerships/Community Engagement
	Project Intake and Prioritization
	Project & Portfolio Management
	Sourcing Practices

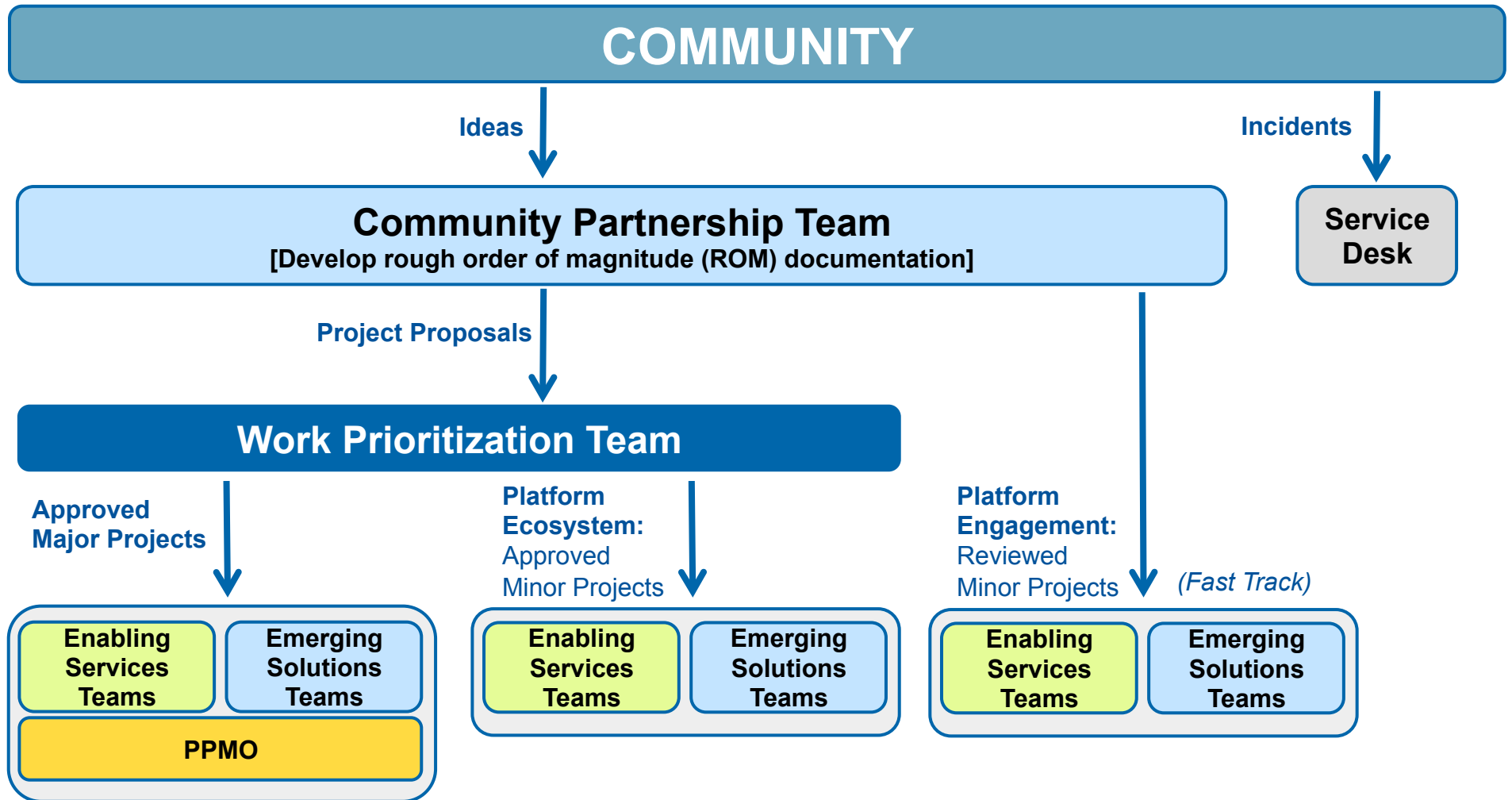
Specific agile-oriented processes to support the next iteration of our Community Engagement model:

- Process for regular/dedicated engagement with the MIT Community
- Process for handling project intake, prioritization, scheduling, and integrating new projects into IS&T team work-streams
- Process for staffing projects and performing Project & Portfolio Management Office (PPMO) functions
- Process for establishing streamlined and consistent sourcing practices

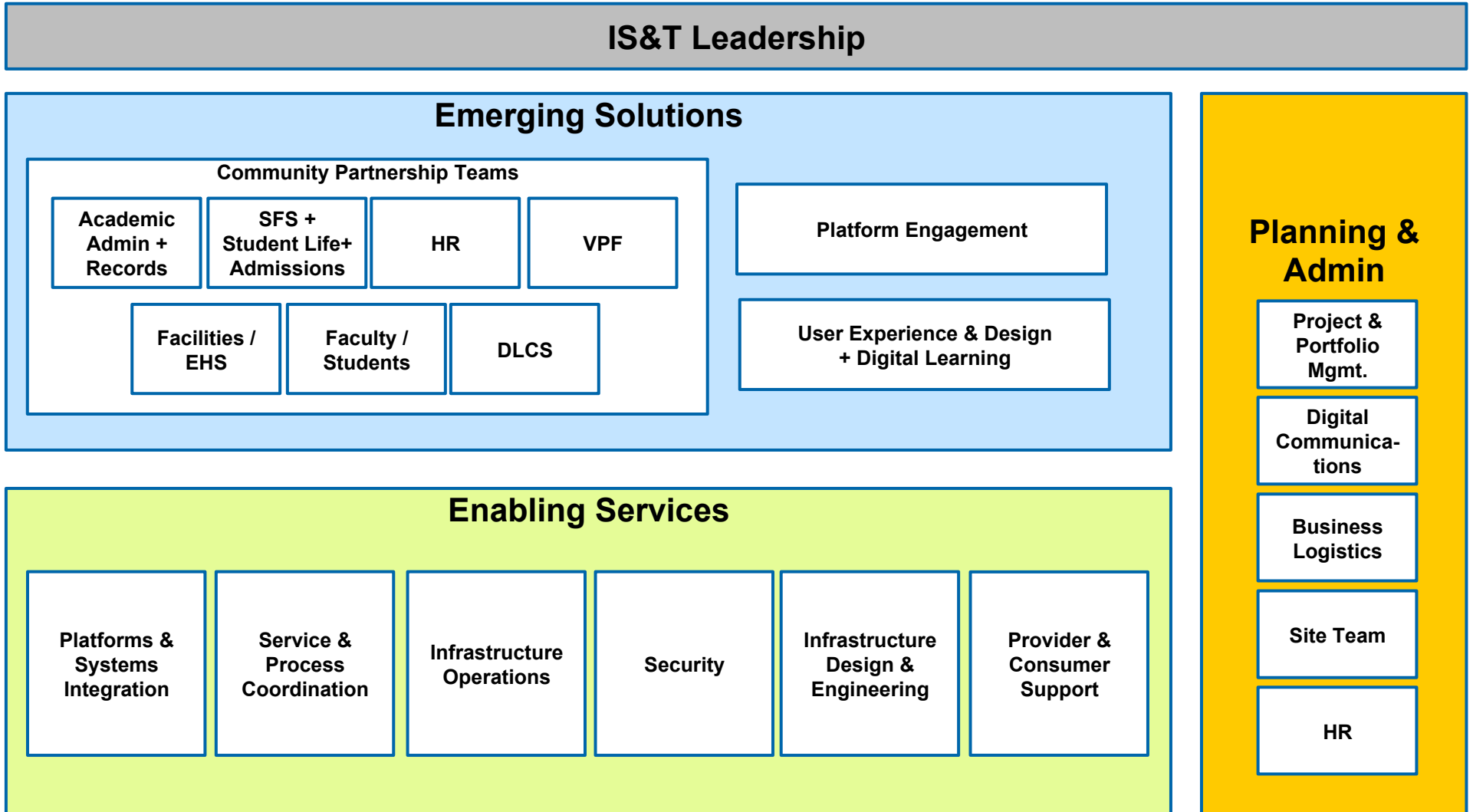
Transition v1.5 is designed to improve IS&T's ability to quickly triage & prioritize Community requests, assign appropriate resources, and expedite delivery of the requested upgrades & solutions.

Key Area	Notes
Project Proposals	Project proposals will be summarized within a “Rough Order of Magnitude” (ROM) document – designed to capture high level requirements and work effort estimates
Project Distinctions	<ul style="list-style-type: none">• Major projects are managed by the PPMO• Minor projects will be managed by designated Emerging/Enabling team:<ul style="list-style-type: none">• If Platform Ecosystem, will be approved by the WPT• If Platform Engagement, will be reviewed by Emerging Team
Platform Engagement Delivery	Streamlined initiation process will allow for improved agility to quickly meet admin unit & DLC requests for platform engagement (e.g., data access, workflow differentiation, etc)
Service Desk Relationship	Partnership Teams and the Service Desk will coordinate and expedite responses to community requests

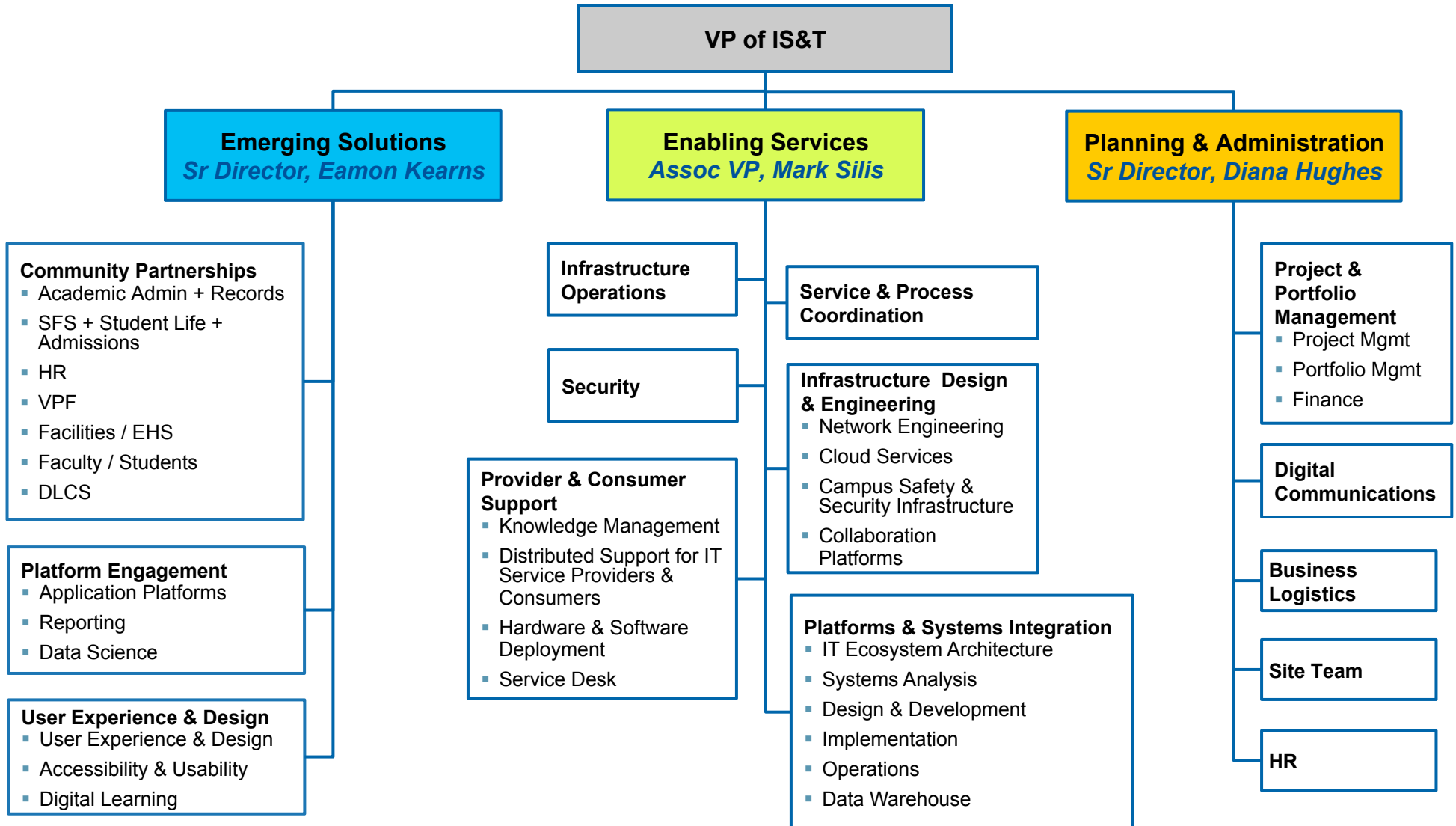
Streamlining project/request intake, prioritization, & response will be conducted via matrixed teams (where necessary).



IS&T will be organized slightly differently as we transform as part of Transition v1.5



Here is the Transition v1.5 high-level view of the IS&T organizational hierarchy



In the upcoming weeks, there will be immediate activities for IS&T staff to learn more detail about v1.5, as well as our Community partners, as reflected below.

W1: 8/31 W2: 9/7 W3: 9/14 W4: 9/21 W5: 9/28 W6: 10/5 W7: 10/12 W8: 10/19 W8: 10/26

Transition Planning



**Transition v1.5
Announced;
Effective 10/1**

Implementation of Process Changes

Implementation of Review & Decision-Making Frameworks

Partnership-Building with Community Engagement Teams

Key IS&T Meetings

- HR Meeting
- Directors Meeting
- All Hands Meeting
- Team Meetings
- Staff Process Briefings
- Staff Process Briefings
- Staff Process Briefings
- Staff Process Briefings

Key Milestones

What are some of the details on immediate next steps for you to support v1.5?

- Attend team meetings (week of Sept 28th)
 - Emerging
 - Enabling
 - Planning & Administration
 - Individualized sub-team meetings
- Attend briefings on processes, as requested (starting week of Sept 28th, thru Oct 16th)
 - Community Engagement
 - Project & Portfolio Management
- Participate in kickoffs of frameworks/activities, as requested (starting week of Oct 12th)
 - Work Prioritization Team
 - Architecture Review Board
 - Individual Contributor Advisory Team
- Work individually with your manager on any projects/responsibilities that may need transitioning

Closing Remarks

John Charles

What we will need from each of you as we implement v1.5:

■ Your ongoing commitment to transforming IS&T, and transforming the Future of IT@MIT

- ✓ Your head & your heart will be “all in”
- ✓ You will help champion the transformation with a positive sense of strategic urgency
- ✓ You will be willing to embrace agile-oriented mindsets & behaviors
- ✓ You will become fully-engaged in helping to realize the 2020 vision for IT@MIT
- ✓ And, you will sustain operational excellence on current efforts underway

Be Proactive

- **Initiate** – Actively search for opportunities to contribute to organizational success and take the lead in pursuing those that appear promising
- **Improvise** – Devise and implement new and creative approaches to pursuing opportunities and dealing with challenges

Be Adaptive

- **Assume multiple roles** – Perform in multiple capacities across levels, projects, and organizational boundaries (often simultaneously)
- **Redeploy rapidly** – Move quickly from role to role
- **Spontaneously collaborate** – Engage often and easily with others with a singular focus on task accomplishment

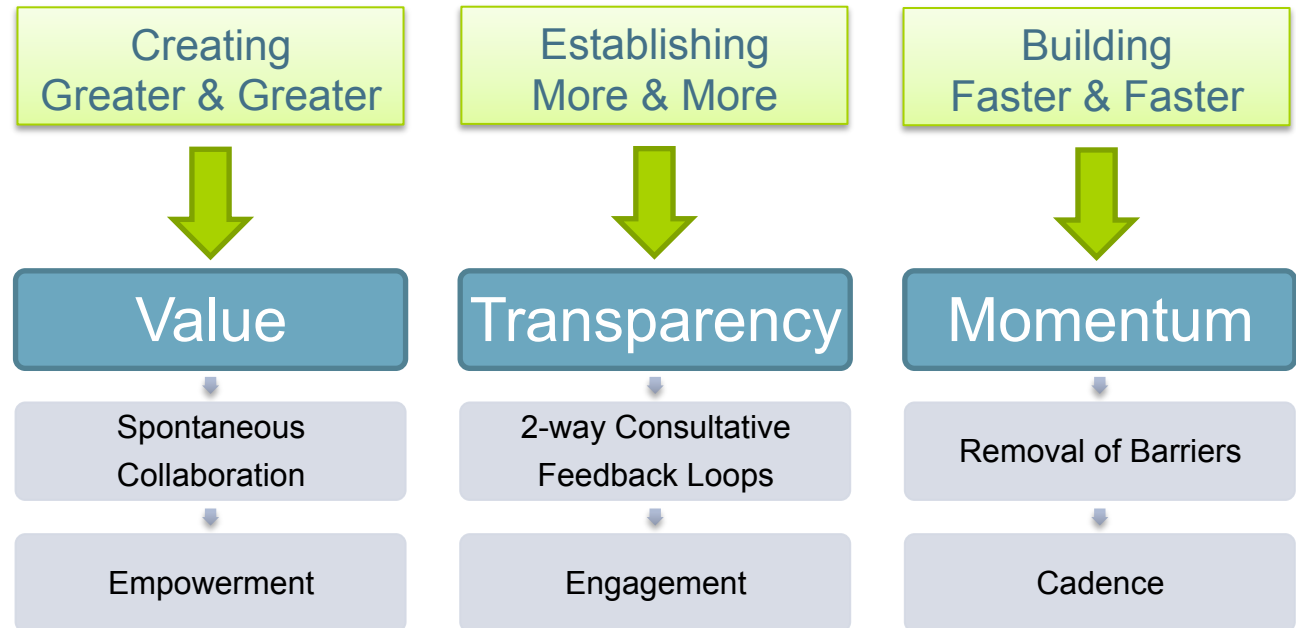
Grow & Share

- **Learn** – Continuously pursue the attainment of proficiency in multiple competency areas (eschewing overspecialization and complacency)
- **Educate** – Actively participate in the sharing of information and knowledge throughout IS&T, as well as with our partners and collaborators

And: What you can expect from the IS&T leadership team, as we collectively implement v1.5:








■ The IS&T leadership team is committed to:

- ✓ Providing the necessary tools, training, and support
- ✓ Facilitating the necessary collaborations with key stakeholder groups








Thank You. Questions?








Infrastructure transformations:

 <p>Infrastructure Transformation Elements</p>	 <p>Unmet project demand and lack of roadmap for administrative systems</p>	 <p>Lack of integrated systems and user experiences</p>	 <p>Lack of integration framework for data access and sharing</p>	 <p>Uneven desktop and local IT support across campus</p>	 <p>Limited IS&T capacity for non-KTLO activities</p>	 <p>Lack of alignment between IS&T business models and MIT community needs</p>
Providing Institute-wide Platforms (SaaS) to more rapidly develop solutions and deliver projects (QuickBase, DropBox, Mendix)	✓			✓		✓
More positive and uniform user support interactions (ServiceNow)				✓	✓	
Providing easier access to system of record via APIs (SAP and MITSIS)	✓		✓		✓	
Transforming user experiences (Atlas, WebGradAid, Buy-to-Pay)	✓	✓				
Real-time data access (SAP Hana, MITISIS, Coeus)	✓	✓	✓		✓	
Migrating to the Cloud to increase agility, resiliency, and capacity for value-added projects	✓				✓	✓

Process transformations:

 <p>Processes Transformation Elements</p>	 <p>Unmet project demand and lack of roadmap for administrative systems</p>	 <p>Lack of integrated systems and user experiences</p>	 <p>Lack of integration framework for data access and sharing</p>	 <p>Uneven desktop and local IT support across campus</p>	 <p>Limited IS&T capacity for non-KTLO activities</p>	 <p>Lack of alignment between IS&T business models and MIT community needs</p>
Applying Agile methodologies to increase project velocity	✓					
Improved portfolio management	✓				✓	✓
Establishing architecture practices and teams to design solutions from the ground up with integration in mind		✓	✓			
Consolidating user support functions into a single, institute-wide organization				✓		
Staffing model that adds flexibility and agility to project delivery	✓				✓	
Eliminating chargebacks to reduce administrative burden						✓

People transformations:

 <p>People Transformation Elements</p>	 <p>Unmet project demand and lack of roadmap for administrative systems</p>	 <p>Lack of integrated systems and user experiences</p>	 <p>Lack of integration framework for data access and sharing</p>	 <p>Uneven desktop and local IT support across campus</p>	 <p>Limited IS&T capacity for non-KTLO activities</p>	 <p>Lack of alignment between IS&T business models and MIT community needs</p>
Establishing dedicated resources to rapidly address admin unit and DLC needs	✓	✓			✓	✓
Creating specific DLC-focused roles to better understand DLC needs and perspectives	✓	✓				
Enhancing UX capabilities to develop compelling user experiences		✓				
Creating a community for developers across MIT (GitHub & developers.mit.edu)			✓			
Improving information, reporting, and real-time data by establishing dedicated data science and reporting resources			✓		✓	
Sponsoring Scrum training for IT@MIT community	✓			✓		
Increasing dedicated staff focused on non-KTLO activities					✓	