

IT TRANSFORMATION UPDATE

DEPARTMENTAL COMPUTING SUPPORT SYMPOSIUM
MARCH 30, 2022

DELOITTE ASSESSMENT

IT Assessment and Security Review Overview

The objective of the assessment is to review and evaluate the current information technology (IT) & cybersecurity environment and provide recommendations and a roadmap for improving and aligning IT capabilities to meet the strategic needs of Virginia Tech (VT) students, faculty, researchers, and staff.

Phases



CURRENT STATE ASSESSMENT

Will focus on understanding the current state of each area in scope through interviews, detailed documentation reviews, and extensive qualitative and quantitative analysis of governance, finance, talent, infrastructure, applications, service management data, and cybersecurity.



FUTURE STATE DELIVERY MODEL

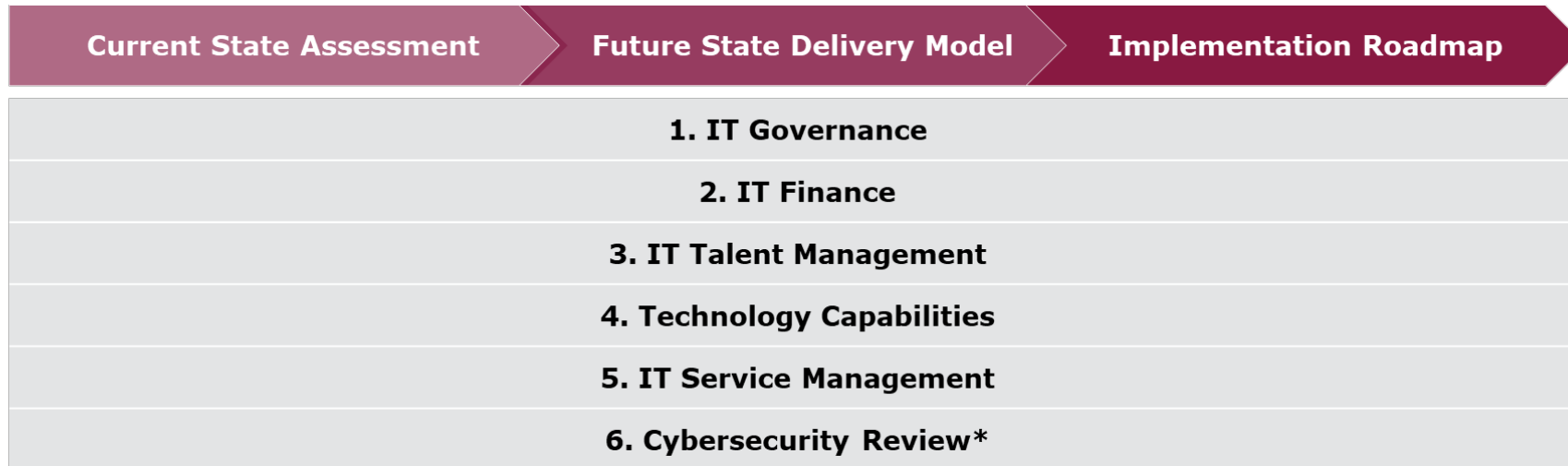
Defines a recommended future state for VT that addresses identified gaps and risks from the Current State and leverages best practices from benchmarking in higher education that can be undertaken in the short, medium, and long term.



IMPLEMENTATION ROADMAP

Identifies the prioritization, sequence, resources, risk/dependencies, and other considerations necessary to achieve the identified future state.

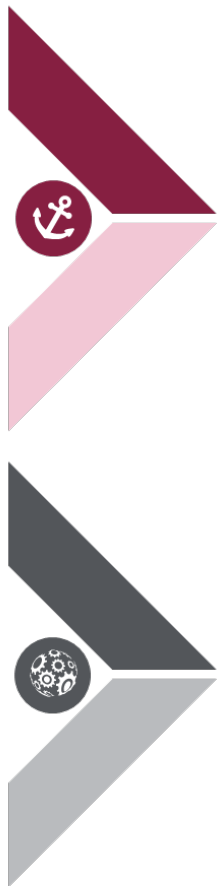
Focus Areas



DELOITTE ASSESSMENT

The Imperative for Change

Based on the current state challenges, three focus areas are emerging to shape the roadmap for establishing a more secure and effective future state IT Operating Model for Virginia Tech.



Strengthen the Core

VT's initial focus must be on reducing risk while bolstering the organization and capabilities of Division of IT to cultivate greater institutional trust and improve morale through the delivery of reliable, cost-effective core infrastructure and services.

Build a Culture of Collaboration

In parallel, VT must establish a shared vision for IT, including defined roles and responsibilities for central and distributed IT units to proactively collaborate through a clear governance model.



Foster Innovation and Efficiency

Ultimately, VT needs to focus on enhancing the student, faculty, staff, and research experience by implementing efficient, effective, timely, and innovative services across the Institution.

DELOITTE ASSESSMENT

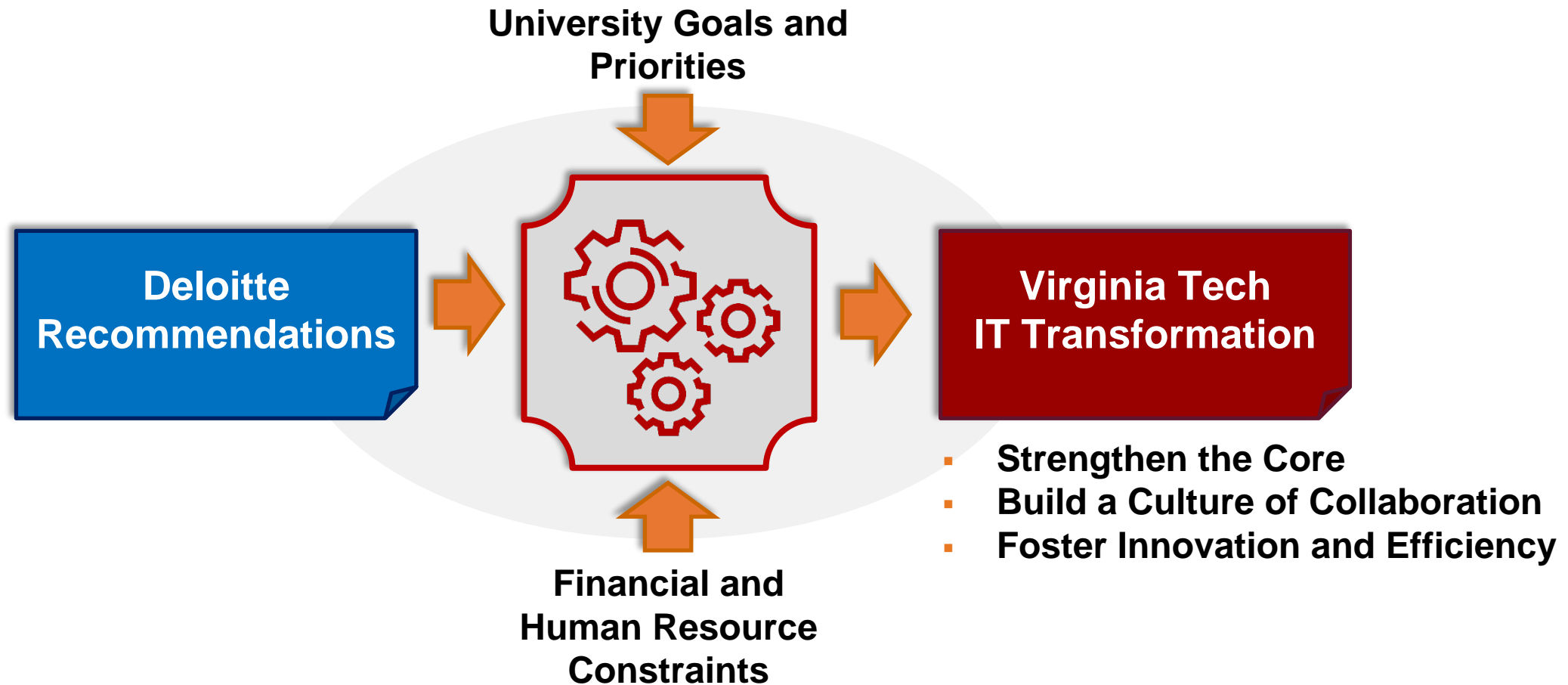
IT Transformation Recommendation Overview

A portfolio of “Transformational” recommendations provide opportunities to address critical current state challenges to improve how work is done at Virginia Tech.

1. IT Governance	2. IT Finance	3. IT Talent	4. Technology Capabilities	5. Service Management	6. Cybersecurity
<p>Clarify roles and responsibilities for providing IT services across the institution <i>(1.1 Define the University-wide IT Operating Model)</i></p> <p>Clarify roles and responsibilities for making VT-wide IT decisions <i>(1.2 Establish a University-wide IT governance model)</i></p> <p>Improve delivery of IT projects and development of IT standards <i>(1.3 Establish University-wide IT PMO and IT architecture functions)</i></p>	<p>Simplify funding and paying for common IT services <i>(2.1 Optimize Funding Model)</i></p> <p>Reduce time to procure software <i>(2.2 Streamline Software Procurement Process)</i></p>	<p>Simplify reporting within DoIT’s organizational structure <i>(3.1 Revise DoIT’s Organizational Model)</i></p> <p>Create common roles and responsibilities for IT staff <i>(3.2 Standardize job classifications for IT staff across)</i></p>	<p>Enhance data quality, access, and tools <i>(4.1 Enhance Data Governance)</i></p> <p>Improve solution integration and data availability across systems <i>(4.2 Deploy a Common Integration Layer)</i></p> <p>Reduce number of duplicative IT solutions <i>(4.3 Rationalize Application Portfolio)</i></p> <p>Optimize IT infrastructure across VT <i>(4.4 Establish Data Center Consolidation Strategy/ Cloud Enhancement)</i></p> <p>Improve strategy for using 3rd party solutions <i>(4.5 Define Strategy for Adopting Managed Services & SaaS Solutions)</i></p>	<p>Create processes and tools to track IT assets <i>(5.1 Implement University-wide CMDB Processes and tools)</i></p> <p>Improve processes for delivering IT services <i>(5.2 Enhance Maturity of Core ITSM Processes)</i></p>	<p>Elevate security leveraging organizational standards already in place throughout the University <i>(6.1 Enforce the CIS IG2 Minimum for Systems Processing Sensitive Data)</i></p> <p>Increase coverage and decrease incident response time across crucial systems <i>(6.2 Managed 24x7 Security Operations Center (SOC))</i></p> <p>Control identities and access to Virginia Tech data and systems <i>(6.3 Reshape Identity through Identity and Access Management (IAM))</i></p> <p>Stop data exfiltration and breach attempts before data leaves the network <i>(6.4 Deploy an Endpoint Data Loss Prevention (DLP) Solution)</i></p> <p>Increase visibility and control over the most crucial borders of the University’s landscape: the endpoint <i>(6.5 Full Deployment of Endpoint, Detect, and Respond (EDR) Solution)</i></p> <p>Create consistency and document practices to empower the University to secure the infrastructure <i>(6.6 Develop Procedure Guides to Augment the Minimum Security Standards)</i></p>
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From: Deloitte, “IT Transformation – assessment review – case for change slides” 12/16/2021.

VIRGINIA TECH IT TRANSFORMATION



IT TRANSFORMATION CURRENT STATUS

IT Transformation Program launched

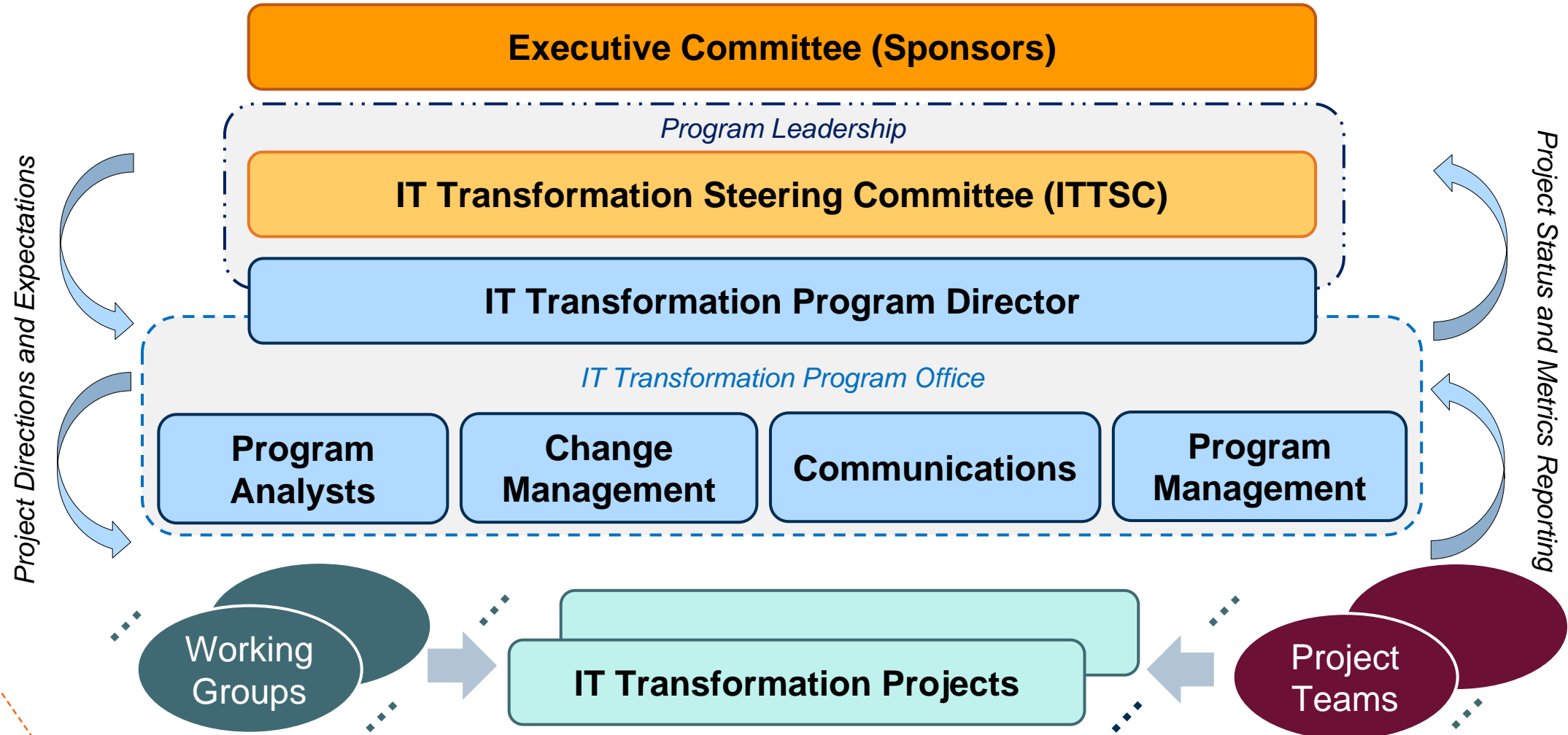
IT Transformation Program Office established and staffed

- Interim program director assigned
- Search opened for long-term program director
- Support staff in place and will adjust as needed

Active communication is underway

- Town Halls and Forums
- Presentations to Constituent Groups
- IT Transformation Website:
 - <https://svpcbo.vt.edu/Transformation-Initiative/ittransformation.html>
- VTx Daily News Notices

IT TRANSFORMATION CURRENT STATUS



IT TRANSFORMATION CURRENT STATUS

Key projects launched

- 1.2: Establish a University-wide IT governance model
- 3.2: Standardize job classifications for IT staff across VT (HR's Job Architecture project)
- 6.1: Enforce the CIS IG2 minimum for systems processing sensitive data

Recommendations have been reviewed and a tentative prioritization has been established

- What is the importance of the project to establishing a foundation, reducing cyber risk, and contributing to IT transformation?
- What are dependencies between projects?
- What is the likely impact of the project?
- Additional prioritization will likely occur with input from the ITTSC

IT TRANSFORMATION LOOKING AHEAD

Priority	#	Recommendation	Activity			
			FY22	FY23	FY24	FY25
0	0.0	Establish the IT Transformation program office	X			
1	1.2	Establish a University-wide IT governance model	X	X		
2	3.2	Standardize job classifications for IT staff across VT	X	X	X	
3	1.3	Establish University-wide IT PMO and IT enterprise architecture functions		X	X	
4	6.4	Deploy an endpoint data loss prevention (DLP) solution		X	X	
4	6.5	Full deployment of endpoint detect and respond (EDR) solution		X	X	
5	6.2	Managed 24x7 security operations center (SOC)		X		
6	6.3	Reshape identity through identity and access management (IAM)		X	X	
7	6.1	Enforce the CIS IG2 minimum for systems processing sensitive data	X	X		
8	6.6	Develop procedure guides to augment the minimum security standards		X		
9	4.2	Deploy a common integration layer		X	X	
10	4.1	Enhance data governance		X	X	
11	2.2	Streamline software procurement		X		
12	5.1	Implement university-wide CMDB processes and tools		X	X	
13	3.1	Revise DoIT's organizational model		X	X	
	1.1	Define the University-wide IT operating model		X		
	2.1	Optimize funding model			X	X
	4.3	Rationalize application portfolio		X	X	X
	4.4	Establish data center consolidation strategy/cloud enhancement		X	X	X
	4.5	Define strategy for adopting managed services and SaaS solutions			X	
	5.2	Enhance maturity of core ITSM processes			X	X

Key
Funded through reallocation or budget not needed
Budget request submitted for FY 2023
Budget not yet analyzed or requested

