

A dark blue background with a light blue network pattern of interconnected nodes and lines.

# IT Transformation Town Hall Meeting

**January 23, 2024**

- **1:00 p.m. | Welcome**
  
  - **1:05 p.m. | IT Transformation Updates**
    - **“Deep Dive” Areas – Findings & Recommendations**
    - **IT Service Catalog – Overview & Areas Of Change**
    - **Updated Organizational Charts/Structures**
  
  - **2:10 p.m. | Moderated Q&A**
-

## Organizational Design & Structure

- Better align service delivery, organizational structure, and business interaction model in support of overall enterprise strategies
  - Unify IT roles and teams, system-wide, under single organizational and leadership structure
    - Cohesive structure is critical to help evolve/mature processes (repeatable, consistent)
  - Preserve local customer care and teamwork (Enterprise | Campus | Specialized delivery model)
- Identify all relevant IT services and resources to move into a unified structure
  - Assess traditional IT roles as well as those embedded within business units and adjacent groups
- Determine org structure last, not first -- “structure follows function”

## Governance Model

- Assess current governance frameworks, structures and/or processes so that we can collectively determine how to best redesign and/or optimize those moving forward
  - Provide greater insight and visibility
  - Ensure agility and responsiveness

# **UNTS IT Current State Review & Future State Recommendations**

**Researching Computing, Data Analytics, &  
Academic Technology**

Deloitte Consulting, LLP

# Deep Dive Interviews Overview

## Deloitte Leaders



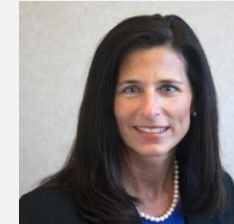
**Roy Mathew**

Deloitte's National Higher  
Education Leader  
*Research Computing*



**James Wilson**

Technology Fellow  
Data Analytics



**Sue Van Voorhis**

Specialist Leader  
Academic Technology

## Interview Process & Interviewees

- **24 Total Interviews Completed:** 14 Academic Technology; 8 Data Analytics; 2 Research Computing
- **Interviewees:**
  - **Academic Tech:** John Luetkemeyer, Mark Phillips, Grant Benatar, Brian McFarlin, Daniel Duncan, Russell Coyle, Annesha White, Adam Fein, Ashley Olsberg, Jim Byford, Paul Krueger, Andrey Voevodin, Michael McPherson, Tim Christian, Brandi Everett, Roy Zumwalt, Glennison de Oliveira, Ben Bigby, Kirsten Soriano, Scott Krejci, Michael Baggett, Eric Ligon, Jana Hawley, Sampath Pamidimukkala, Jackie Thames, Nicole Dash, Mike Pullin, Ramona Holmes, Kendra Weise
  - **Data Analytics:** Rajesh Nayak, Ashtin Preston, Chad Ramsey, Clayton Gibson, Gregory Harris, Shinae Yoon, Kimberly Chandler, Donna Asher, Nnaemeka Onuoha, David Baker, DAIR (Jason Simon, Debbie Rohwer, Mary Barton, Daniel Hubbard), Luis Angulo, Jim Gross,
  - **Research Computing:** Ryan Kane, Anthony Tissera, Sharad Shrestha, Robert McClain, Brian Gladue, Tom Cunningham, August Woerner, Pamela Padilla, Aaron Roberts, Kalyan Sai Gudikadi, Brian McFarlin

# Current State Insights: Research Computing

General Overview	Pain Points	Opportunities
<ul style="list-style-type: none"> <li>• <b>Needs of the Denton and Dallas campuses are different than the needs of HSC</b></li> <li>• Overall, <b>higher orders of computing power are required every year based on the growing research portfolio/funding and complexity of computations</b></li> <li>• <b>TACC system has been mostly serving research computing needs</b>; it will be expensive to replicate TACC's computing capacity if UNTS decides to bring this function back in-house completely</li> <li>• UNTS should expand the use of student workers to support research computing – both to build a long-term workforce pipeline as well as create career opportunities for students</li> </ul>	<ul style="list-style-type: none"> <li>• <b>HSC requires research computing capacity outside of TACC and are in the process of pursuing the build-out of a small cluster.</b></li> <li>• While many departments across the campuses have small clusters, no single department wants to step up and propose a common consolidated research computing platform due to funding, control, and culture issues.</li> <li>• The lack of change management / communications when the research computing platform was transitioned/retired many years ago has resulted in a loss of trust among units that needs to be rebuilt.</li> <li>• <b>Information security, risk, and compliance (CUI, CMMC) is one of the top priorities/concerns</b> with most interviewees</li> </ul>	<ul style="list-style-type: none"> <li>• UNTS IT could play a <b>major role in improving the information security, risk, and compliance capabilities (CUI, CMMC) for research data</b>. This is a major need for most research units and presents a great opportunity to rebuild trust, increase collaboration across campuses/units, and add immediate value</li> <li>• UNTS IT could serve as the <b>facilitator to consolidate the various research computing clusters across campuses and broker the creation of a larger/powerful cluster by pooling siloed resources</b> and establishing rules-of-the-road on usage, priority, upgrades, etc.</li> </ul>



# Current State Insights: Data Analytics

General Overview	Pain Points	Opportunities
<ul style="list-style-type: none"> <li>• <b>Current operating model for Data across the System is very decentralized</b></li> <li>• HSC was the first to develop a campus specific EDW – Dallas Campus uses this data warehouse</li> <li>• HSC uses SQL and Power BI. Denton uses SAS, Dallas uses SAS but also leverages Power BI</li> <li>• Leadership changes have been positive, however have led to frequent changes in direction</li> <li>• DAIR exists to drive decision making at the executive level</li> </ul>	<ul style="list-style-type: none"> <li>• <b>No centralization and lack of cooperation has led to disjointed data systems</b> across the UNT system</li> <li>• <b>No centralized area for data related knowledge transfers</b></li> <li>• AIS currently has no ticket system, uses MS Teams for intake</li> <li>• No uniformity in position names leads to <b>lack of clarity of responsibilities</b></li> <li>• <b>Data ownership is unclear</b> – there is no clear understand of who should own what data</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Redesigned and clear operating model that treats “data” as a critical asset and breaks down siloes</b> across the System. This is an essential step for UNTS to make any progress on the impending advent of AI.</li> <li>• Long term modeling capabilities and outcomes could be improved through <b>greater collaboration</b> across campuses</li> <li>• <b>Develop a shared enterprise data dictionary</b> to be used throughout the UNT System</li> <li>• <b>Develop a data literacy program</b> to raise fluency on taking advantage of data as an asset for UNTS</li> </ul>

# Future State - Options

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## Option #1: Governance Only

Each campus retains their individual data; UNTS focuses on data policies and standards alone



## Option #2: Integrator

Each campus retains their individual data; UNTS focuses on data policies/standards as well as enabling integration between datasets



## Option #3: Centralized

UNTS builds a central data warehouse that hosts most datasets; establishes data policies/standards and enables self-service across campuses for reporting/analytics



- Establishes non-duplicated data and reporting tools/systems
- Improves data accessibility/quality to enhance data-driven decisions
- Increases efficiencies; lowers data acquisition/processing and analysis/reporting costs

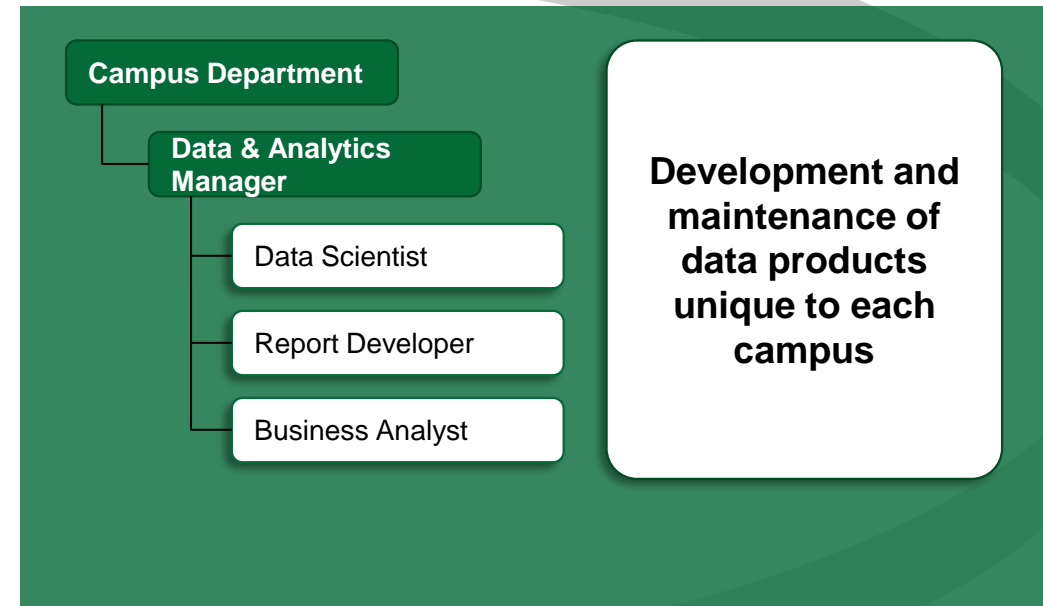


# Organizational Structure

## UNT SYSTEM



## UNT INSTITUTIONS



**Operating Model & Data Governance Structures Provides the Framework for Coordinated Working Relationships**

*Note: Titles and reporting are notional; Data & analytics capabilities may report into several varying departments depending on the institution and business need.*

*Note: FTE counts for each role will vary by campus and cyclical demand*

# Data Governance



## **Establish a shared data governance structure to ensure quality, security, and compliance of data**

- Assess current practices and resources/roles actively involved in data governance activities
- Collaborate on design, development and implementation of a data governance structure with an enterprise-wide focus
- Areas of focus and expected outcomes:
  - Data ownership
  - Data domains/stewards
  - Data quality and standards
  - Data security
  - Data modeling & design
  - Data storage
  - Data warehousing and architecture
  - Common data dictionary

# Data Literacy



## Promote data literacy across the enterprise by providing training and resources to help employees understand and interpret data

- Areas of focus and expected outcomes:
  - Maturity assessment across the System (data sources, data quality, and basics of data analysis)
  - Implement data literacy program with differentiated strategies that offers credentials, badging, recognition, etc.
    - Promote individual data literacy that helps the community read, write, and communicate data in context
    - Build a cultural commitment to an analytic culture at our institutions
    - Identify and cement leadership support for financial and theoretical analytic needs
    - Help data consumers understand the range of analytic methods, approaches, and the challenge of bias
    - Help data consumers understand the value of analytics and incorporate these practices into operations
  - Foster analytic expertise by bringing together key functional/technical SMEs to share best practices and highlight innovation

# Current State Insights: Academic Technology

General Overview	Pain Points	Opportunities
<ul style="list-style-type: none"> <li>• <b>Colleges depend on their IT teams</b> for teaching, research, and academic support</li> <li>• <b>College IT understands needs of faculty, students, and staff</b> for teaching, learning, and research with regards to software and hardware requirements where Central IT could not</li> <li>• Colleges have 210 and 220 classrooms, conference spaces with <b>specialized academic technologies</b> and many have partnerships with DSI Tech</li> <li>• College IT provides helpdesk, laptop, software, hardware service support some partner across the campus</li> <li>• Resources are lean and colleges utilize student employees to assist in service support needs</li> <li>• Colleges want Central IT to support enterprise solutions where possible by partnering from the beginning</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Lack of information or partnering on when updates occur</b> resulting in negative impacts students, staff and faculty</li> <li>• Follow through on ServiceNow tickets causes frustration plus unsure where to submit large scale projects, and there is a loss of personalization</li> <li>• Changes in leadership have led to large enterprise decisions without understanding college impacts, leaving colleges scrambling for workarounds</li> <li>• Colleges believe that Central IT does not understand their teaching mission and need for specialization</li> <li>• <b>Procurement process is a bottleneck</b> for many and impacts colleges' teaching, learning and research</li> <li>• Ancillary – Academic Affairs IT needs to communicate their role and responsibilities</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Improve relationships across the colleges by creating Communities of Practice</b> to build knowledge of college specialization and create a more trusting environment</li> <li>• <b>Create Classroom Room Advisory committee(s)</b> which includes faculty and facilities to provide governance input on new campus creation, building construction, or building renovation for long-term sustainment</li> <li>• <b>Partner on change management</b> when updates, patches, or releases occur with improved communications</li> <li>• <b>Review ServiceNow process flows and perform usability testing</b> to address college frustrations and make improvements</li> <li>• Ancillary - <b>review procurement process</b> to identify bottlenecks and pain points by conducting a process redesign to improve process flow, decision timing, and create efficiency</li> </ul>

# Future State - Options



## Option #1: Governance Only

UNT retains current college configuration; UNTS focuses on policies and standards alone to address issues



## Option #2: Centralized

Academic technology pulls out of academic areas and provides centralized services to all colleges



## Option #3: Campus Hybrid/Embedded

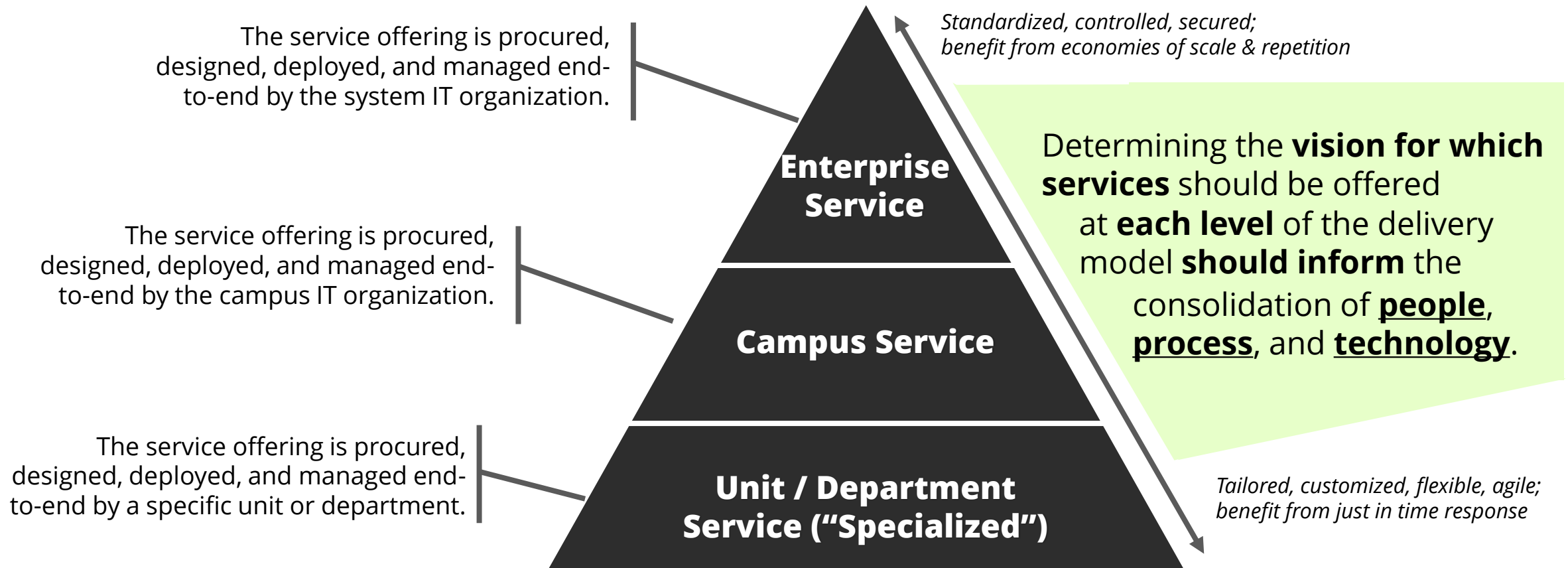
Centralizing academic technology functions while embedding them within each college combines the benefits of a unified strategic approach with the flexibility and customization needed at the college level



- **Efficiency and Consistency:** Centralization ensures that all colleges within the university operate under a unified technology strategy
- **Cost-Effective Resource Allocation:** Significant cost savings as it avoids duplication of technology purchases and maintenance across different colleges

# Determining Appropriate IT Service Ownership

Source: Educause



# SERVICE CATALOG & OWNERSHIP MAPPING

Admin & Business Systems	Communication & Collaboration	Desktop & Mobile Computing	Infrastructure	IT Professional Services	Research	Information Security	Teaching & Learning
Alumni and Advancement (C)	Conferencing & Telephony (E)	Desktop & Mobile Device Support (C/S)	Business Continuity & Disaster Recovery (E/C/S)	IT Communications (E/C)	Lab Management Systems (S)	Identity and Access Management (E/C)	Assessment Systems & Learning Analytics (C/S)
Athletics (C/S)	Email & Collaboration Services (E/C)	Hardware Lifecycle Services (E/C)	Data Center & Cloud Computing Services (E)	IT Strategy (E/C)	Research Administration Systems (E)	Secure Computing (E/C/S)	Academic Technology & Support (C)
Auxiliary Services (C)	Mass Comms & Emergency Notif. (E/C)	Printing & Related Services (C)	Database Management (E)	IT Governance (E/C)	Research-Specific Computing and Apps. (E/C/S + Outsourced)	Security Consulting and Education (E/C/S)	E-Portfolio Management (C*)
Business Capability & Process Autom. (E/C)	Media & A/V (E/C/S)	Configuration Management (E/C)	Integration Services (E/C/S)	Enterprise Architecture (E)	Research Data Services (E/C/S)	Security Incident Response and Investigation (E)	Instructional Tech. & Design (C*)
Facilities Mgmt. (C/S)	Web Services (E/C)		Monitoring & Alert Management (E/C)	IT Portfolio and Project Management (E/C/S)	Research Software (E/C/S)	Security Policy and Compliance (E/C)	Learning Mgmt. (C*)
Financial & Procurement Systems (E)			Network & Connectivity Mgmt. (E)	IT Training and Outreach (E/C/S)			Lecture Capture (C*)
Human Resources Systems (E/C/S)			Server & Storage Management (E/C)				
Library Systems (C/S)			Conference Room Technology (E/C)				
Medical & Health Systems (C/S)							
Data, Reporting, & Analytics (E/C/S)							
Student Information Systems (E/C/S)							
IT Procurement (E/C)							
IT Vendor Management (E/C)							
IT Finance (E/C)							

## KEY

**E** = Enterprise   **C** = Campus   **S** = Specialized    = unchanged  
**C\*** = Delivered at campus level (business units)    = changing



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Library Systems (C/S)			Conference Room Technology (E/C)				
Medical & Health Systems (C/S)							
<b>Data, Reporting, &amp; Analytics (E/C/S)</b>							
Student Information Systems (E/C/S)							
IT Procurement (E/C)							
<b>IT Vendor Management (E/C)</b>							
<b>IT Finance (E/C)</b>							

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# IT Finance and Vendor Management

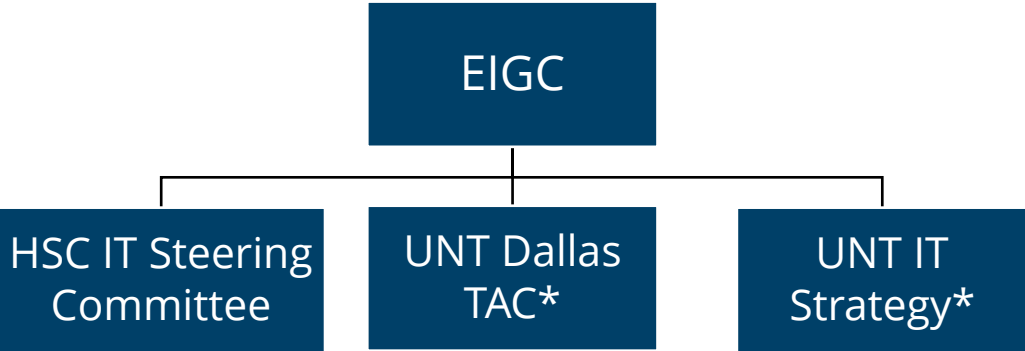
## Vendor Management

- Manage IT Strategic Vendor relationships
  - Quarterly vendor meetings, scorecards, risk assessments, contract review
  - Develop close partnership with campus stakeholders and strategic vendors
  - Analyze any complex multi-contracts to see if consolidation is possible

## Finance

- Begin process of mapping all IT chart strings
- Develop consolidated view of UNT Enterprise income statement
- Provide guidance on budget template and formatting for easy consolidation

# Governance Structure



### IT Steering Committees

- Review and approve campus IT projects
- Recommend initiatives to EIGC for awareness and additional buy-in
- Forward projects that meet EIGC thresholds

### EIGC Membership

- System CIO – Chair<sup>+</sup>
- System CFO
- Chancellor Appointment
- Campus CFO (x3)
- President Appointment (x3)
- Campus CIO (x3)<sup>+</sup>

## Enterprise IT Governance Committee (EIGC)

### Purpose

- Oversee key IT developments, evaluate potential impacts and facilitate adoption across the system
- Review and propose annual budget to SSGB
- Identify and recommend critical IT opportunities
- Guide strategic IT planning
- Provide high-level advice and recommendations on major system-wide IT projects
- Enhance communication and visibility of IT initiatives

### Scope

- Enterprise IT projects, service or process improvements, IT policies, new technologies, and infrastructure investments
- Recommendations on overarching IT strategies

### Cadence

Quarterly – ad hoc as needed

<sup>\*</sup> To be renamed <Campus> IT Steering Committee  
<sup>+</sup> Non-voting - Additional members may be invited on an agenda-specific basis


# Org Charts


- Implemented Changes
  - Campus IT Leaders
  - Infrastructure & Telecom
  - Security & Compliance
- Upcoming Changes
  - Data Analytics
  - UNT - DSI Tech


# Campus IT Leaders





# Infrastructure Services

  
Christopher Pritchard  
Assoc VC Enterprise Infr  
& CTO  
89 ↓ 3 ↑


  
John Mears  
Director, IT Operations  
19 ↓ 2 ↓


  
Christopher Polson  
Dir Network &  
Telephony Svcs  
33 ↓ 9 ↓


  
Ryan Kane  
Dir, Infrastructure  
Services  
14 ↓ 2 ↑


  
Michael Heredia  
Systems Engineer  
Manager  
9 ↓ 4 ↑


  
Joel Phillips  
Sr Infrastructure  
Architect  
3 ↓ 3 ↑


  
Daren Dugan  
Systems Engineer Lead  
2 ↓ 2 ↓

  
Jennifer Keller  
Systems Engineer Lead  
3 ↓ 3 ↓

  
Thomas Delozier  
Senior Systems  
Administrator

  
William Lancaster  
Senior Systems  
Engineer

  
Yoke Teo  
Systems Administrator  
III

  
Brad Henson  
Sr. Cloud Engineer

  
Mark Davidson  
Senior Systems  
Engineer

# Infrastructure – Network & Telecom

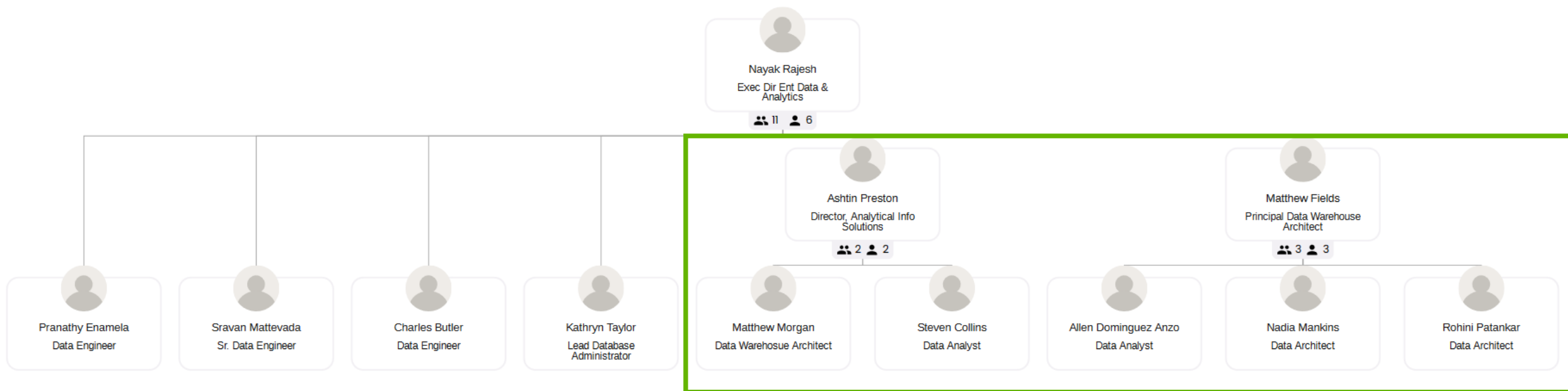




# Information Security & Compliance

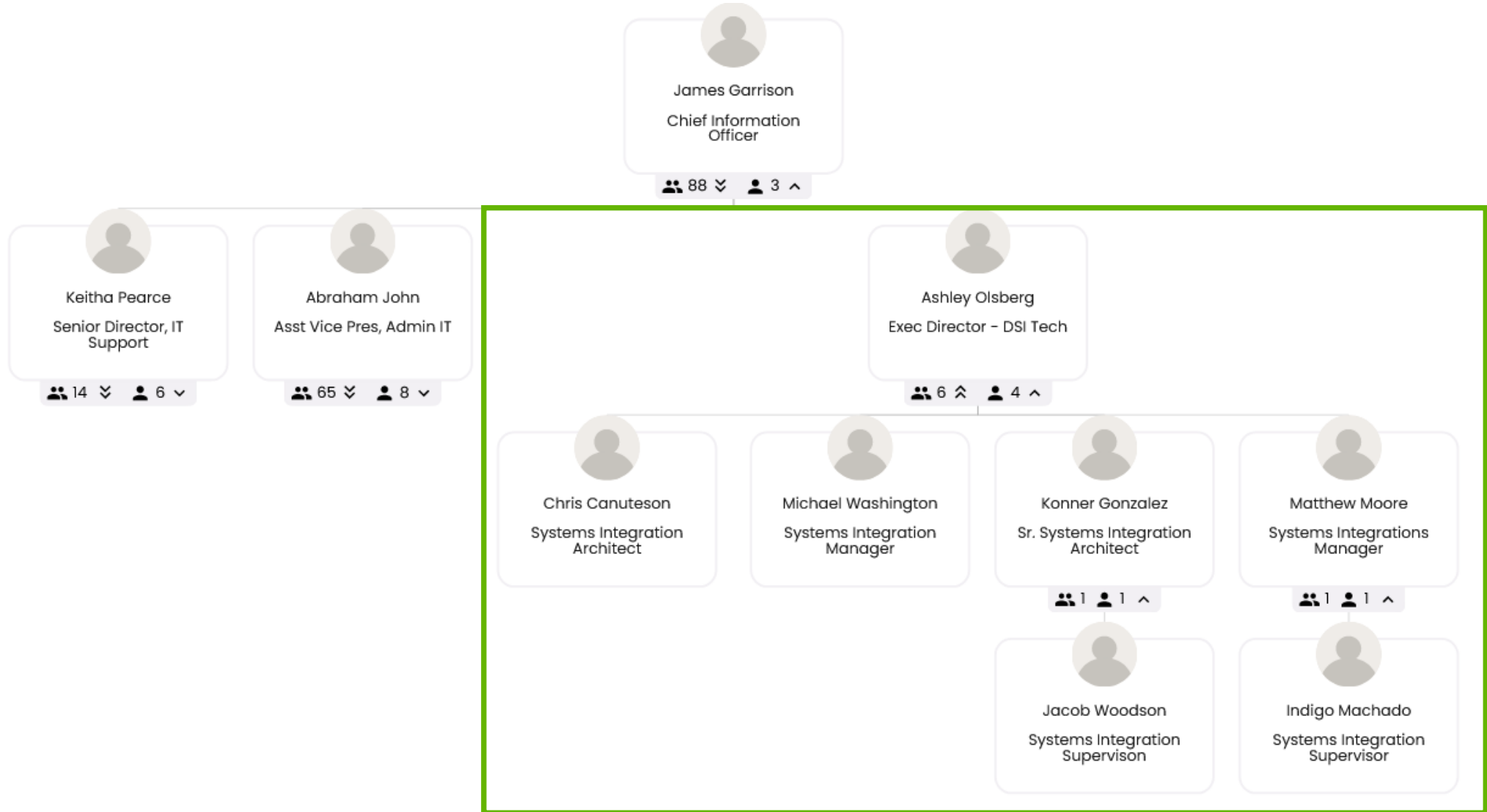


# Data Analytics



- Realign technical, data warehouse-specific roles under UNTS Ent. Data & Analytics (dotted line to Jason and Chad)
  - Enhanced technical oversight, participation and coordination
  - Increased collaboration and knowledge sharing (campus solutions, financial analytics data domain expertise)
  - Active participation in technical, future state roadmap definition
- This change will not require employees to change work location or affect current funding sources
- Data Platform
  - Transition to and leverage enterprise data warehouse platform for Budget & Analytics team
  - Retain Insights (SAS) platform given significant investment and operational criticality for UNT

# UNT - DSI Tech



# Next Steps

- Implement realignments (“report to”) changes
  - Effective date: February 1
  - Setup follow-up meetings with the teams to discuss changes
  - Email communication will go out for non-impacted teams
- Wrap-up job architecture process
  - Steady progress made on future job title structure
- Process Standardization & Optimization
  - IT Governance
  - Asset Management
  - Identity and Access Management



## Q & A Session