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University of Tennessee System
System Effectiveness Study | Final Deliverable – Appendix
June 5, 2019

Appendix: Table of Contents

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Current State Resources

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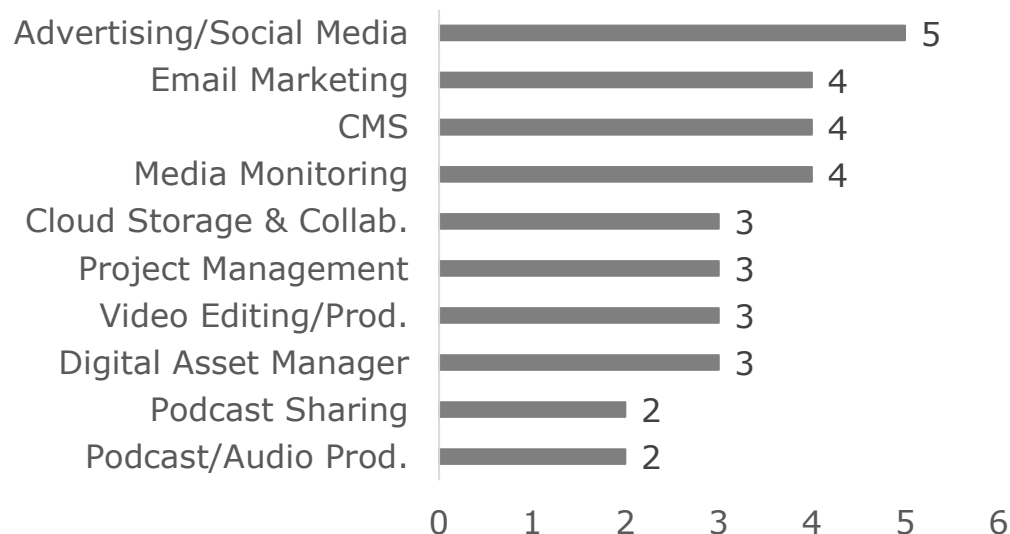# Communications & Marketing Technology Inventory

There may be opportunity to better optimize the technology portfolio used across the communications functions.

54 Discrete communications tools reported

13 Tools are used by 4+ campuses and institutes

25 Tools are used by only one campus or institute

Highest Volume Categories

Category	Value
Advertising/Social Media	5
Email Marketing	4
CMS	4
Media Monitoring	4
Cloud Storage & Collab.	3
Project Management	3
Video Editing/Prod.	3
Digital Asset Manager	3
Podcast Sharing	2
Podcast/Audio Prod.	2

(axis: 0 1 2 3 4 5 6)

In addition to streamlining the number of tools used, identifying gaps in technology support and pooling financial resources to procure a shared solution could enhance operations across the system.
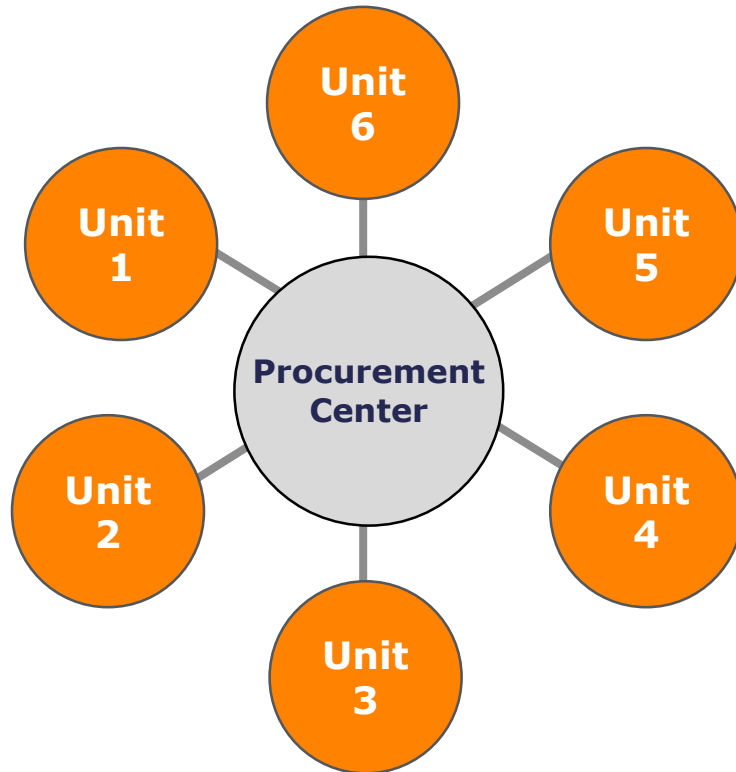
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Deloitte Leading Practices

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Deloitte Leading Practices
Procurement & Contracting

The Center of Excellence Model

Developing a Center would move the majority of work from the local units to centralized operations, but still maintain decision control locally.

Key benefits of a Center include:

1 Increased transparency and accuracy through consistent processes and use of enabling technology tools and reports

2 Development and adoption of best practices throughout the University/System to ensure efficient processes and strong process management

3 Expanded breadth and depth of analysis to better tie procurement and contracting with strategic priorities

4 Opportunity to free up staff time previously spent managing processes and paperwork so that units have more resources to focus on their core mission

5 A more educated procurement workforce with greater depth and experience, with fewer individuals involved overall, reducing errors and risk

6 More dedicated and defined employment paths for procurement staff

Unit 6
Unit 5
Unit 1
Procurement Center
Unit 4
Unit 2
Unit 3

The Procurement Center would guide the campuses and institutes on their options and execute the purchase on their behalf.

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Roles and Responsibilities within a Center of Excellence

A clear delineation of roles within procurement and contracts would need to include consideration of these three areas of work.

Organizational Delegation of Roles

Strategic Sourcing/ Demand Management

To provide maximum value to the University, procurement should participate in strong strategic sourcing and demand management activities

Procurement Operations

To compliment the strategic approach to sourcing, the Center would also need a group of staff focused on the tactical operations of procurement and contracting. This group would enable responsible purchasing habits by providing efficient and effective support processes. Clear delineation of procurement and contracts roles in the process will be critical.

Customer Interactions

Finally, having a function dedicated to supporting and analyzing customer feedback will enable purchasing to quickly eliminate roadblocks in the process, provide timely and dedicated process feedback, and enable a culture of continual process improvement.

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Taking a Strategic Approach to Procurement and Contracting

Procurement and contracting can only provide their optimal benefit when decisions are comprehensive, proactive, and made with an enterprise view.

Leading Practices

Develop a **joint vision** for Purchasing, Contracting, and Payables. Define strategies that encompass all aspects, including sourcing, purchasing, settlement, as well as vendor, contract, and supplier management.

Conduct **customer feedback sessions** to understand varied priorities and business drivers.

Develop a **comprehensive spend management strategy** and determine what policies and processes need to be modified to accommodate this strategic change.

Realign **organizational responsibilities and duties** to match strategy.

Develop a list of **performance indicators** from which the University/System can track and monitor performance.

Define feedback loops and continually monitor these, along with the performance indicators, to understand where improvement can be made.

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Strategic Planning

The strategic planning process requires research and planning, implementation, monitoring, and evaluation.

Start by addressing the following questions...

(1) Where are we operationally?

(2) What do we have to work with?

(3) Where do we want to be?

(4) How do we get there?

...then research, plan, prepare, and execute your strategy.

Research	Engage key supply chain staff, stakeholders, external partners, and thought leaders
Plan	Evaluate current state, conduct SWOT analysis, brainstorm future state and next steps
Prepare	Obtain executive approval before communicating the plan and initiating work
Execute	Manage projects on an ongoing basis and continuously refine processes for improvement

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Strategic Sourcing and Demand Management

Leading procurement strategy proactively analyzes buying trends to identify opportunities for cost reduction, improved products, and enhanced service.

Find **strategic procurement opportunities**

Find and vet vendors that will provide the most value to the institution and ensure vendor compliance

Source products and services at the **lowest total cost of ownership**

Negotiate potential **revenue opportunities** throughout the procure-to-pay process (e.g., prompt pay discounts)

Enable **efficient buying** processes to encourage responsible buying habits

Proactively manage demand

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Current State Observations

Leading and trending practice organization is to progress toward a center-led or centralized model.

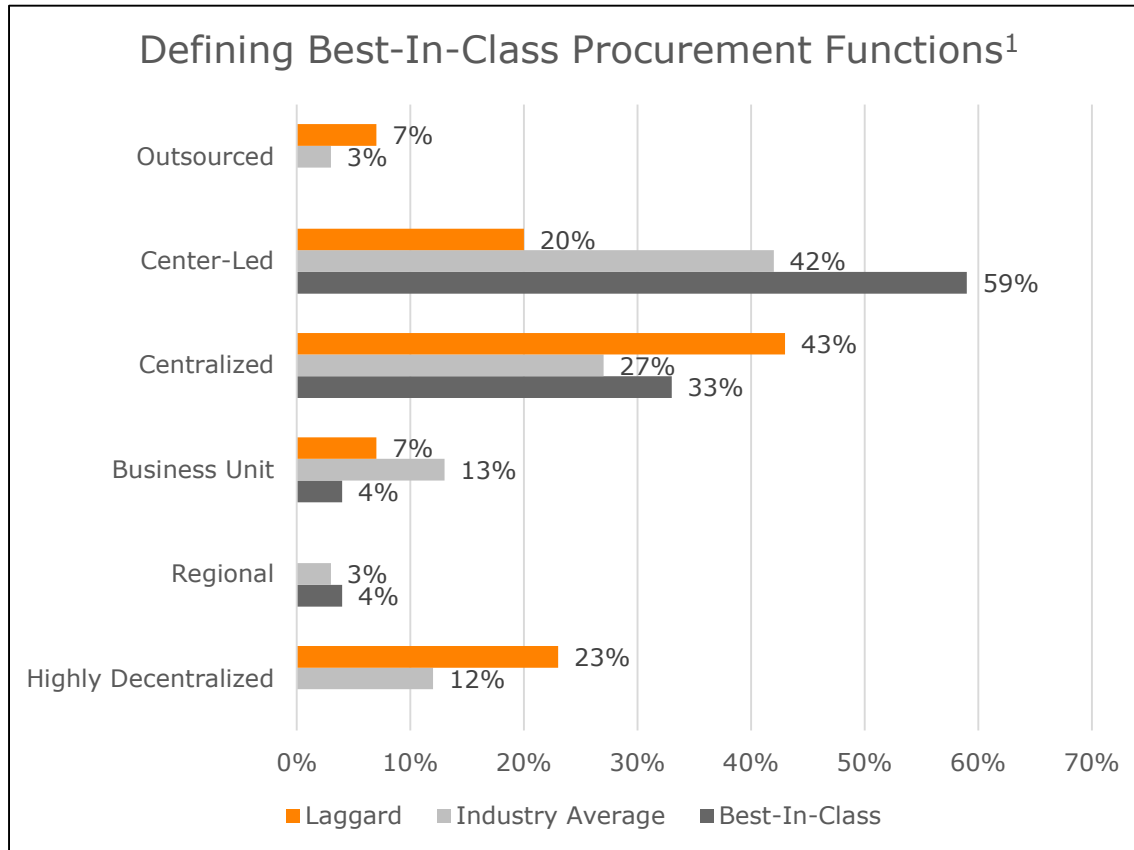| Area	Best Practice	UT Performance Gap
Procuring	• Limit purchase options to funnel spend to strategic partners • Proactively evaluate spend to identify opportunities to leverage demand management and obtain better pricing	• Very little demand management occurs • Minimal system-wide vendor consolidation has occurred, leading to a proliferation of vendors • Sourcing activity occurs but mainly locally • Significant responsibility for purchasing resides with end users
Contracting	• Clear, distinct policies/processes for which requisitions go through purchasing and which go through contracts • University contract templates utilized for contracts in almost all cases to reduce risk	• Little guidance exists for which requisitions go through procurement and which go through contracting, leading to confusing and varied processes that can be gamed by end users • Many contracts drafted on vendor paper
Technology	• Leverage eProcurement to manage spend, obtain better pricing, and build strategic supplier relationships • Utilize system to manage contract lifecycle • Automate workflows to ease transfer of data and increase process transparency • Employ spend analytics/sourcing solutions to identify/capitalize on purchasing opportunities	• Technology utilized but system is not optimal for driving efficient and effective processes • Spend analytics not comprehensively utilized to understand spend, operations, and sourcing opportunities
Organization	• Structure organization around the full lifecycle of supply chain activities • Contracting and Purchasing integrated into a single office • Center-led procurement model utilized to ensure consistency across system and enhance value • Utilize COE's to enhance efficiency and effectiveness	• Purchasing and A/P are combined at some campuses but not all • Purchasing and Contracts combined at some campuses, but not all or at the system level • System office has ownership over some process and policy decisions but does not operate as a center-led organization • Purchasing activities are highly distributed and COEs are not utilized

Operating Model Design

As a reminder, a center-led model exhibits the following characteristics:

	Decentralized	**Distributed Governance**	**Center-Led**	**Centralized**
Description	• Sourcing and procurement activities occur in various institutions and units	• Part-time responsibilities for sourcing and procurement activities occur within each of the functions and institutions	• Sourcing and supplier management are center-led for most categories and decentralized for only localized buys	• All procurement and strategic sourcing activities/decisions are made within a centralized procurement organization
Benefits	• Strategic purchasing/ sourcing decisions are made by individual institutions	• Some formalized interaction between institutions • Greater capability to leverage purchasing across the organization	• Business area experts still own requirements but "non-core" purchasing activities are off-loaded to experts • Ability to enforce commonality and standards	• Commonality/alignment across divisions • Uniform approach to suppliers • Ability to focus on leverage with suppliers • Improved control (quality and standards)
Risks	• Little to no cross-institution leverage exists for pricing/volume discounts • Supplier base is large and hard to manage (minimal formal agreements) • Duplication of efforts is likely to occur	• No full-time focus on procurement/sourcing • No efficient focal point for executive and cross-process communication • Difficult to maintain a degree of commonality/ standardization • Central Purchasing's role tends to be more reactionary	• To avoid conflicts around sourcing strategy and vendor selection, goals/incentives between procurement and business areas must be aligned and active executive leadership must exist	• Often requires great organizational changes • Cultural resistance to "Central Procurement" • Weakened link to departmental needs • Potentially slower response time

Recommended Future State

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Procurement Models

Best-in-class organizations tend to demonstrate a center-led organizational model for procurement.

Defining Best-In-Class Procurement Functions[1]

Data chart showing percentages by procurement model for Laggard, Industry Average, and Best-In-Class:

Model	Laggard	Industry Average	Best-In-Class
Outsourced	7%	3%	
Center-Led	20%	42%	59%
Centralized	43%	27%	33%
Business Unit	7%	13%	4%
Regional		3%	4%
Highly Decentralized	23%	12%	

Legend: ■ Laggard ■ Industry Average ■ Best-In-Class

Notes

- Higher education institutions are typically a hybrid of decentralized and centralized models, with departments independently making many of the buying decisions and central procurement providing standard policies and procedures to drive regulatory compliance and realize cost savings where possible.

- Regional models are typically not applicable in higher education, as they are usually "country" based.

- Business unit models are used in higher education, but are atypical.

- Outsourced models are not used in higher education largely due to federal and state legislation and/or preferences for local economic support.

Center-led organizational structures in Higher Education are marked by the provision of standard procurement policies and guiding principles, thought leadership, category expertise, contract management and strategic sourcing.

Source(s): 1) Aberdeen Group, Dynamic Procurement, August 2011

Importance of a Center-Led Strategy

UT has an opportunity to rationalize and consolidate its large base of suppliers to drive greater discounts, increase revenue generating activities, and reduce its total cost of ownership.

% of Total Spend: 2018

Invoices	90%	10% Pcard

% of Total Transactions: 2018

Pcard	70%	Invoices	30%

	UT	NAEP HE Average[1]
Total Spend	$221,358,180	$72,850,000
Number of Vendors	8,436	1,230
Spend With Top 20% of Vendors	$215,509,192	$66,500,000
% Spend With Top 20% of Vendors	97%	91%
Number of Vendors in Top 20% of Spend	17	246
Average Spend Per Vendor	$26,239.71	$59,000

Appropriateness of consolidation is highly dependent on commodity. It is critical that UT conducts a comprehensive spend analysis to determine where there are opportunities for consolidation both across the system and at the campus level.

Note(s): 1) Types of institutions within the NAEP database vary greatly, with some similar to UT but many dissimilar. NAEP data is provided to be directional and not intended to indicate the single appropriate number of suppliers, which is highly unique to each institution and can only be determined through a comprehensive institutional spend analysis.

Source(s): 1) National Association of Education Procurement

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Creating a Spend Management Strategy

Moving to a center-led procurement model will enable the University to employ a comprehensive procure-to-pay strategy that leverages demand to obtain better prices and drive compliance.

Elements of a Spend Management Strategy

# of Suppliers   ·   *$ of Spend*

Strategic Sourcing, Spend Leverage, and Audit Effort Focus

Top Spend / Primary Suppliers

System Strategically Sourced Contracts and Relationship Management

Mid-Tier Suppliers

Campus / Departmental Bids / Quotes / Contracts / Consortia

Low Value / Low Volume Transaction Suppliers

Dept. Contracts & PCard

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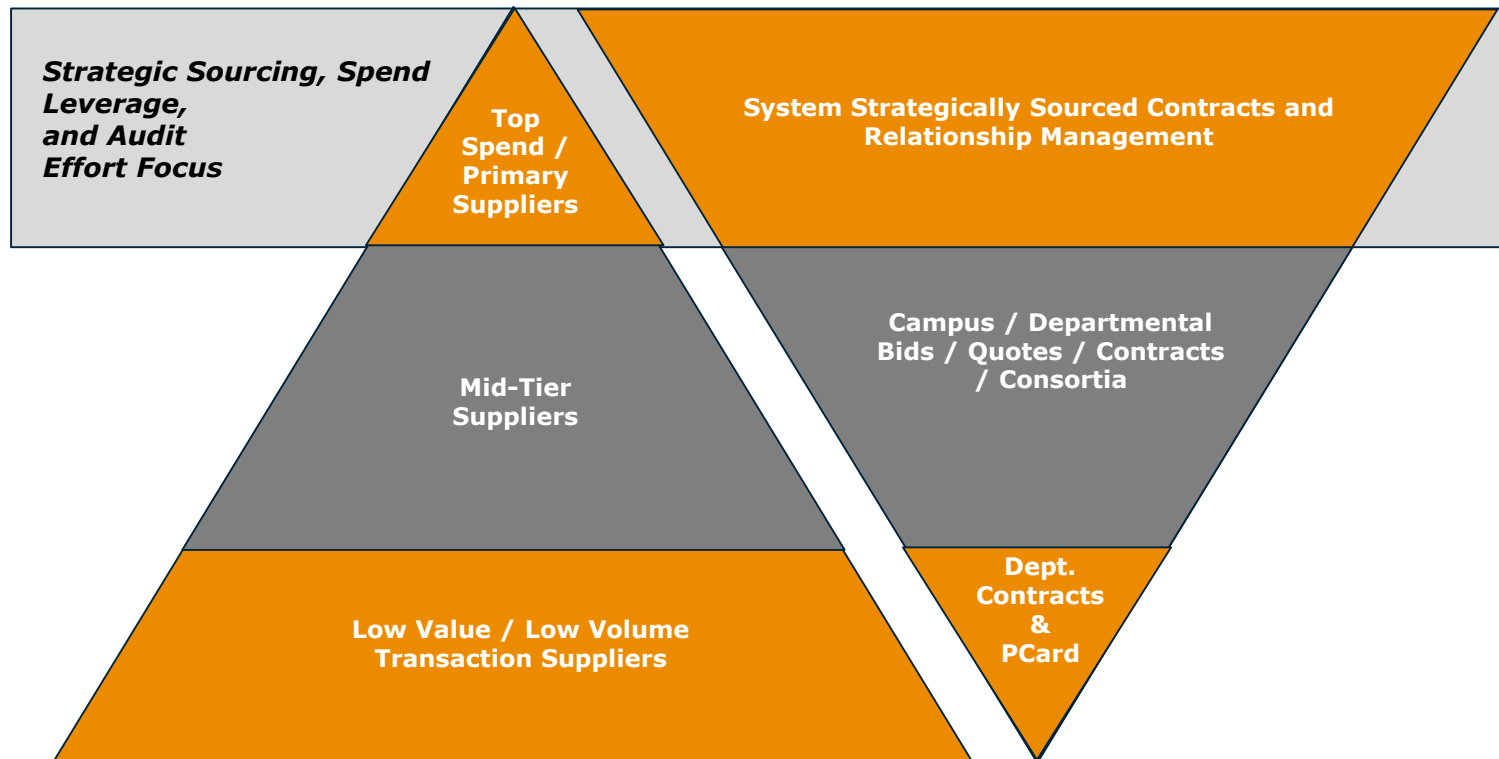
Roles and Responsibilities in Center-Led Model

Clearly delineating roles and responsibilities between the system and various campus procurement offices will be critical to ensuring success.

System Procurement Office

-Sets system procurement strategy and policy

-Responsible for sourcing and contracting of large, non-unique commodities (e.g., IT, office supplies, MRO, professional services, construction, life sciences, etc.)
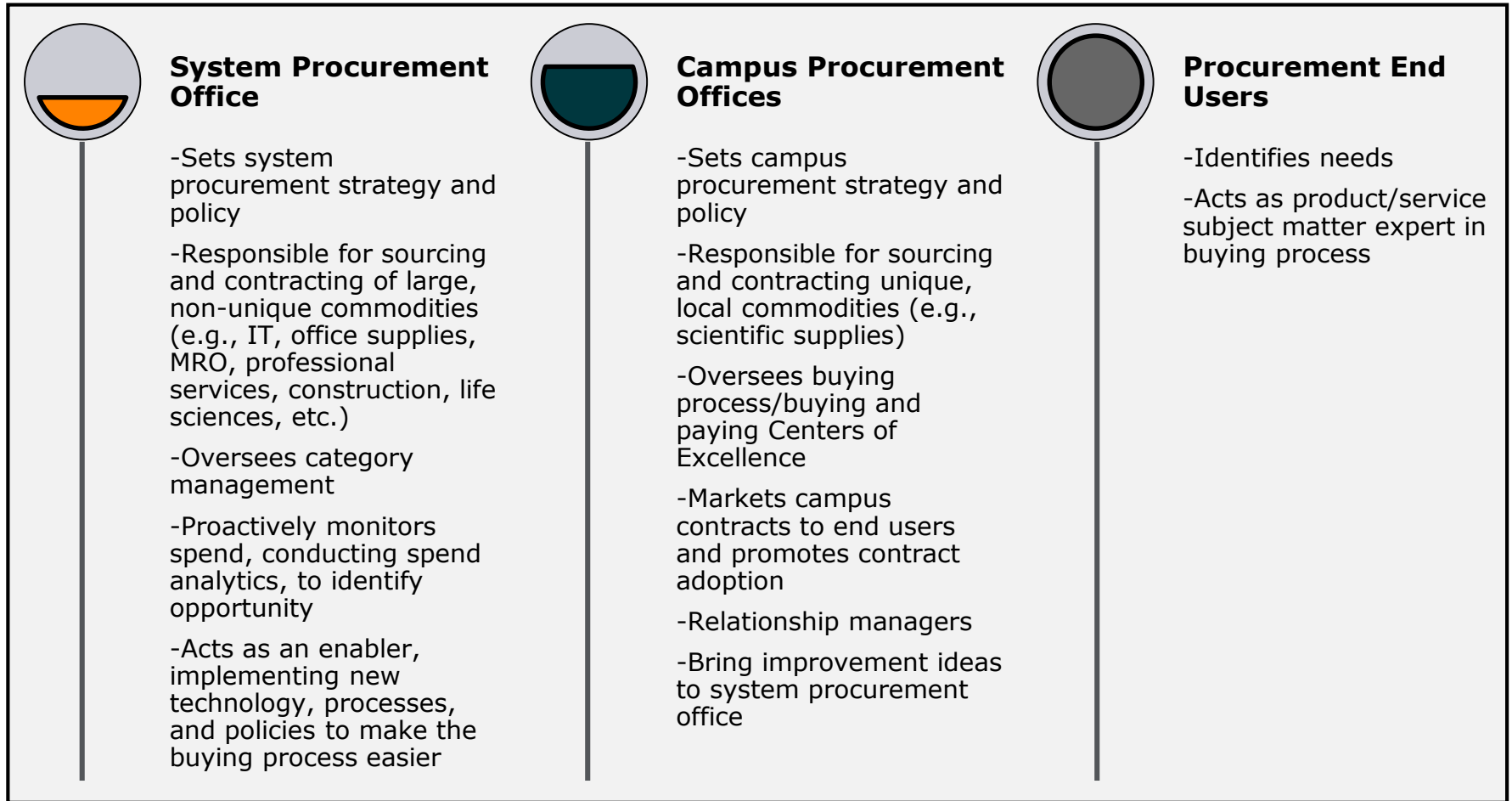
-Oversees category management

-Proactively monitors spend, conducting spend analytics, to identify opportunity

-Acts as an enabler, implementing new technology, processes, and policies to make the buying process easier

Campus Procurement Offices

-Sets campus procurement strategy and policy

-Responsible for sourcing and contracting unique, local commodities (e.g., scientific supplies)

-Oversees buying process/buying and paying Centers of Excellence

-Markets campus contracts to end users and promotes contract adoption

-Relationship managers

-Bring improvement ideas to system procurement office

Procurement End Users

-Identifies needs

-Acts as product/service subject matter expert in buying process

Enabling Effective Governance through Campus Participation

Systems have found success by implementing procurement governance groups that enable greater campus participation in system activities.

Procurement Leadership Council

Primary Objective

- Discuss, debate, and vote on recommended system-wide procurement changes.

Recommendation Activities

- Each campus procurement lead to participate on the council
- Meet monthly/bi-monthly to discuss procurement challenges and potential solutions
- Vote on system-wide procurement changes and priorities (e.g., new technology, process, policy, master agreements, etc.)
  - Each campus receives one vote and all votes are equal. If a motion does not pass, then it does not move forward.
- Provide improvement ideas derived from local challenges that can be applied to the system

Anticipated Benefits

- Federates strategic decision-making, promoting buy-in and ownership at the campus level
- Gives campus procurement groups the chance to surface issues and solutions
  - Often the most innovative ideas come from campus staff

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Utilizing Centers of Excellence

Centers of Excellence provide a valuable local process point in a center-led model.
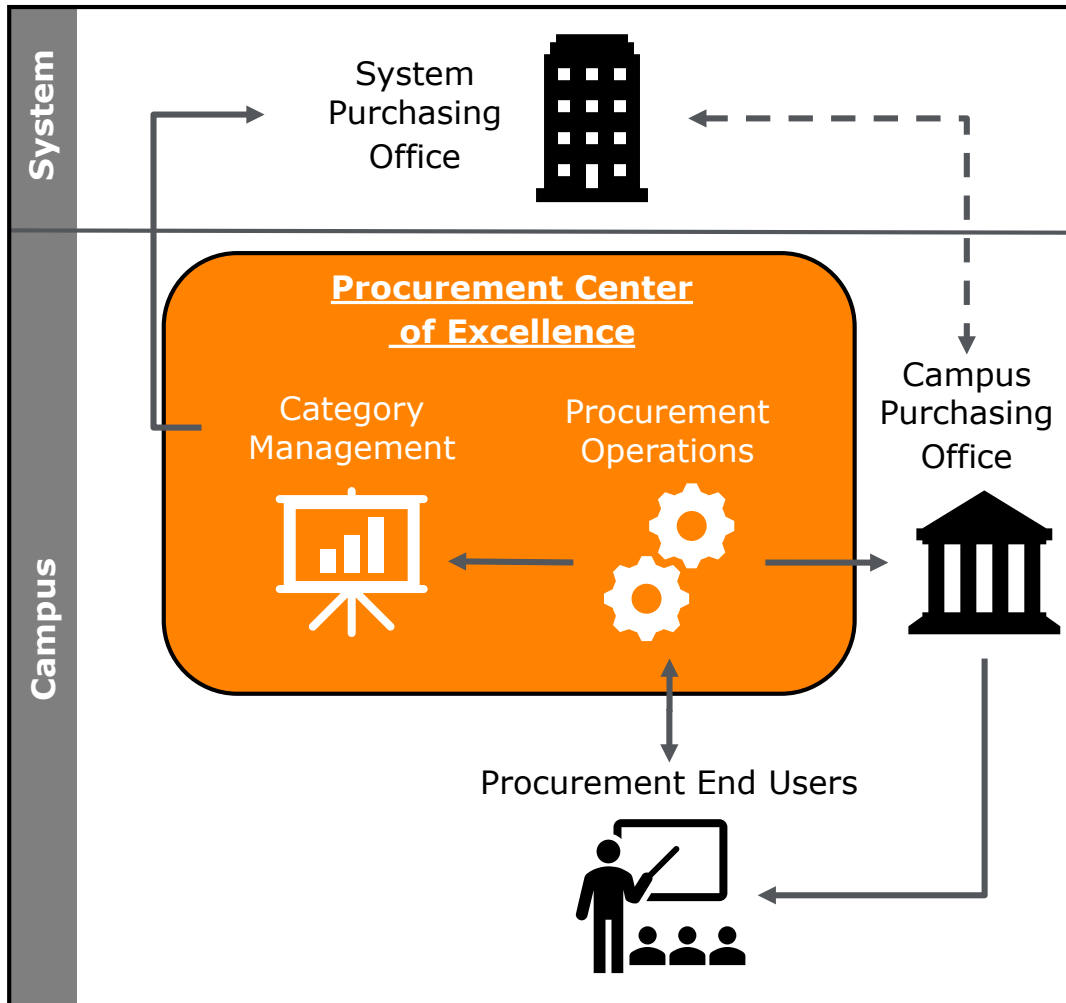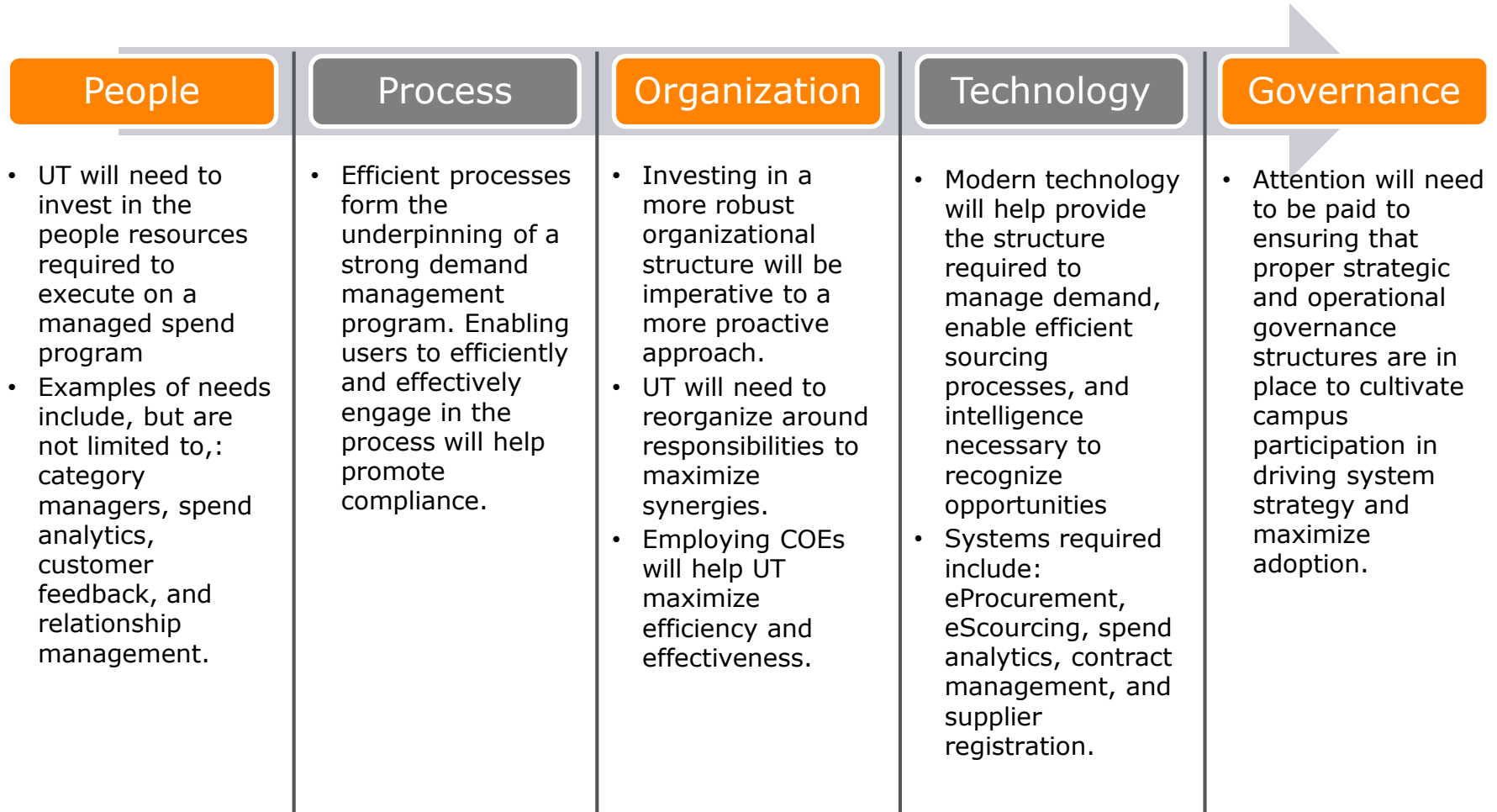

Notes

- Centers of Excellence serve two vital functions in a center-led procurement model:
  1) Primary point of contact/responsibility for purchasing and payable operations
     - Reports to campus purchasing office who leads campus purchasing and payables operations
  2) Proactive assessment and management of purchasing categories
     - Reports to system purchasing office who identifies system opportunities to capitalize on scale and system-wide need
- COEs should be located out within the campus schools/units to provide a physical point of contact for end-users
  - This point of contact will promote better, more personalized service and help engender trust in the purchasing process

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Critical Enablers of Transformation

Transformation of the procurement function does not happen overnight, it takes dedication and investment.

People	Process	Organization	Technology	Governance
• UT will need to invest in the people resources required to execute on a managed spend program • Examples of needs include, but are not limited to,: category managers, spend analytics, customer feedback, and relationship management.	• Efficient processes form the underpinning of a strong demand management program. Enabling users to efficiently and effectively engage in the process will help promote compliance.	• Investing in a more robust organizational structure will be imperative to a more proactive approach. • UT will need to reorganize around responsibilities to maximize synergies. • Employing COEs will help UT maximize efficiency and effectiveness.	• Modern technology will help provide the structure required to manage demand, enable efficient sourcing processes, and intelligence necessary to recognize opportunities • Systems required include: eProcurement, eScourcing, spend analytics, contract management, and supplier registration.	• Attention will need to be paid to ensuring that proper strategic and operational governance structures are in place to cultivate campus participation in driving system strategy and maximize adoption.

Process Maps

The Procurement Operations COE would act as a initial touchpoint in the purchasing process prior to a requisition being created.
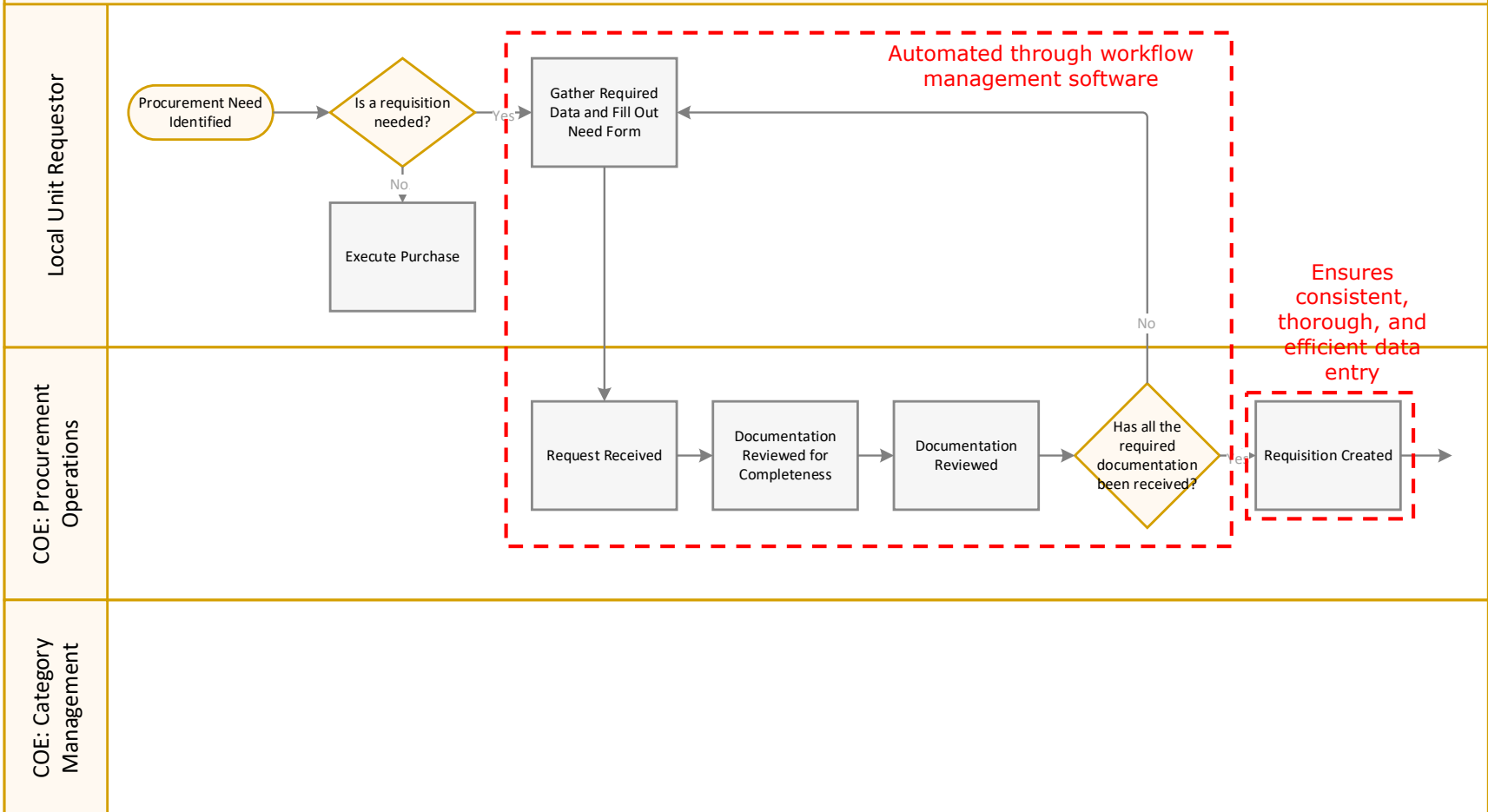
Process Maps

Once a requisition has been created, various COE touchpoints ensure that buys occur on contract, enabling the university to manage its spend.
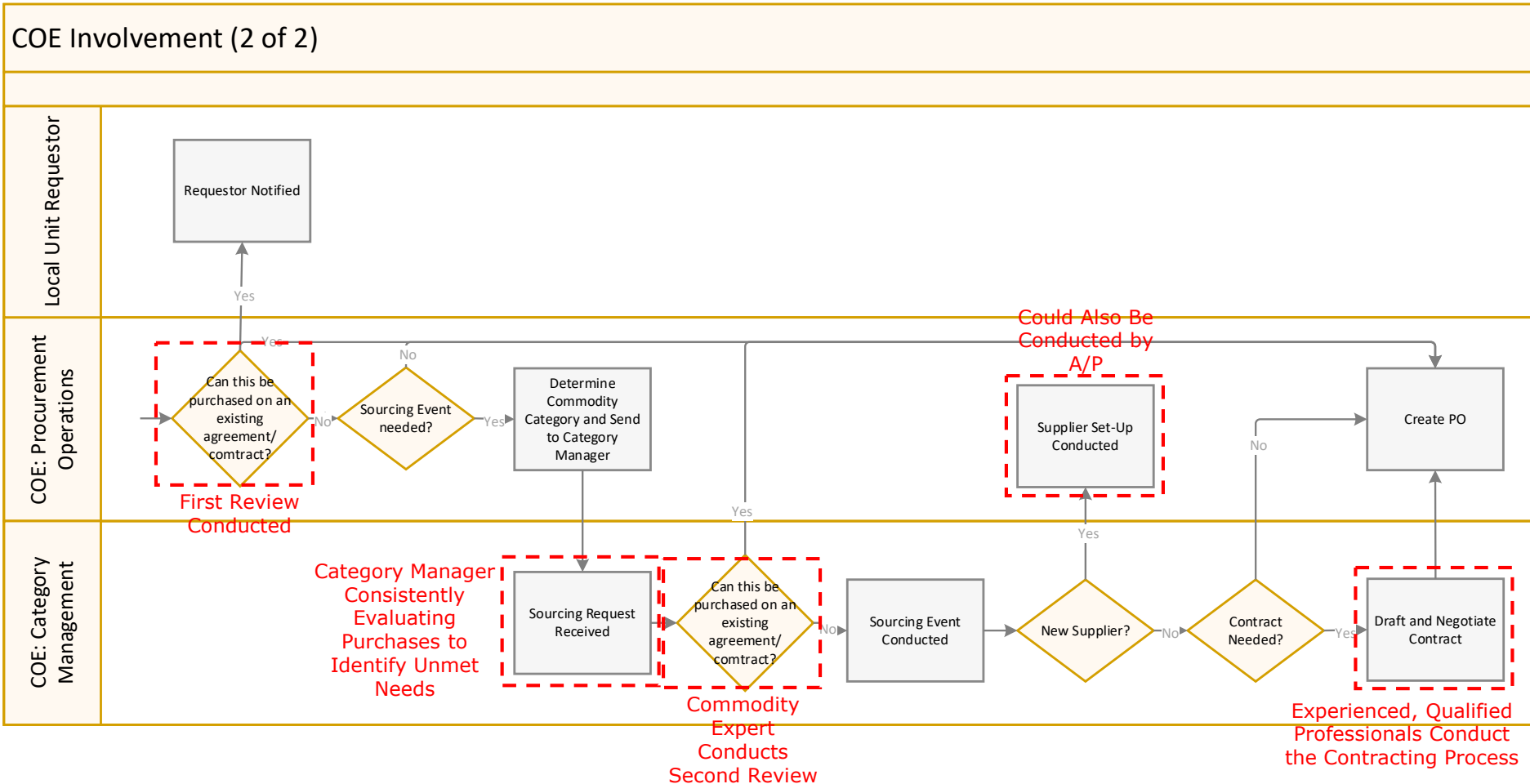
Campus Partnerships with Amazon

Even if an institution has existing strategic agreements with designated vendors, Amazon enables departments to make purchases easily on their own.

amazon.com®

Amazon functions similarly to p-cards, with some differences, including:

Unlimited choices for faculty and staff and discounts over brick-and-mortar stores

Limited system/university-wide ability to drive savings

To encourage faculty and staff to leverage existing strategically sourced contracts, some institutions have reported the amount of money they could have saved with such contracts over Amazon.

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Deloitte Leading Practices
Human Resources

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What Does "High-Impact" Mean in HR?

Consider the challenges a modern-day HR operation typically faces, before or after transforming:

A mandate to **drive the workforce and talent agenda**, creating a compelling experience that **attracts the right people** in a competitive market and **drives enterprise productivity**

The need to drive **alignment**, an engaging **culture**, and **performance**

The opportunity to provide **world-class customer service** through better use of **digital technology and analytical capabilities**

The need to support and build deep **leadership pipelines**—and **networks of teams** whose idea of being led is **not merely to follow**

Core Philosophies

The model is a blueprint built on adaptability, innovation, and expertise that can be used to inform and shape the future state of HR at UT

1 — **HR Customers** remain at the **center of the model** with a bigger voice than ever, driving a critical focus on workforce experience

2 — **The Digital Workplace empowers and connects the workforce**, with modern digital experience

3 — **Workforce Insights**, derived through digital solutions and strengthened analytical capabilities of HR, **inform the business strategy**

4 — **Fluid interaction among the HR components**, continues to be key to the model's strength, **breaking silos** created by traditional HR operating models and ways of working

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The High-Impact HR Operating Model

By focusing on these three pillars, HR can move from a function of "service delivery" to a driver of strategic workforce, talent, and business outcomes.

The move from Centers of Excellence to **Communities of Expertise** drives leading practices and processes by applying deep HR functional domain knowledge, a strong understanding of the business imperative, and market trends to deliver thought leadership.
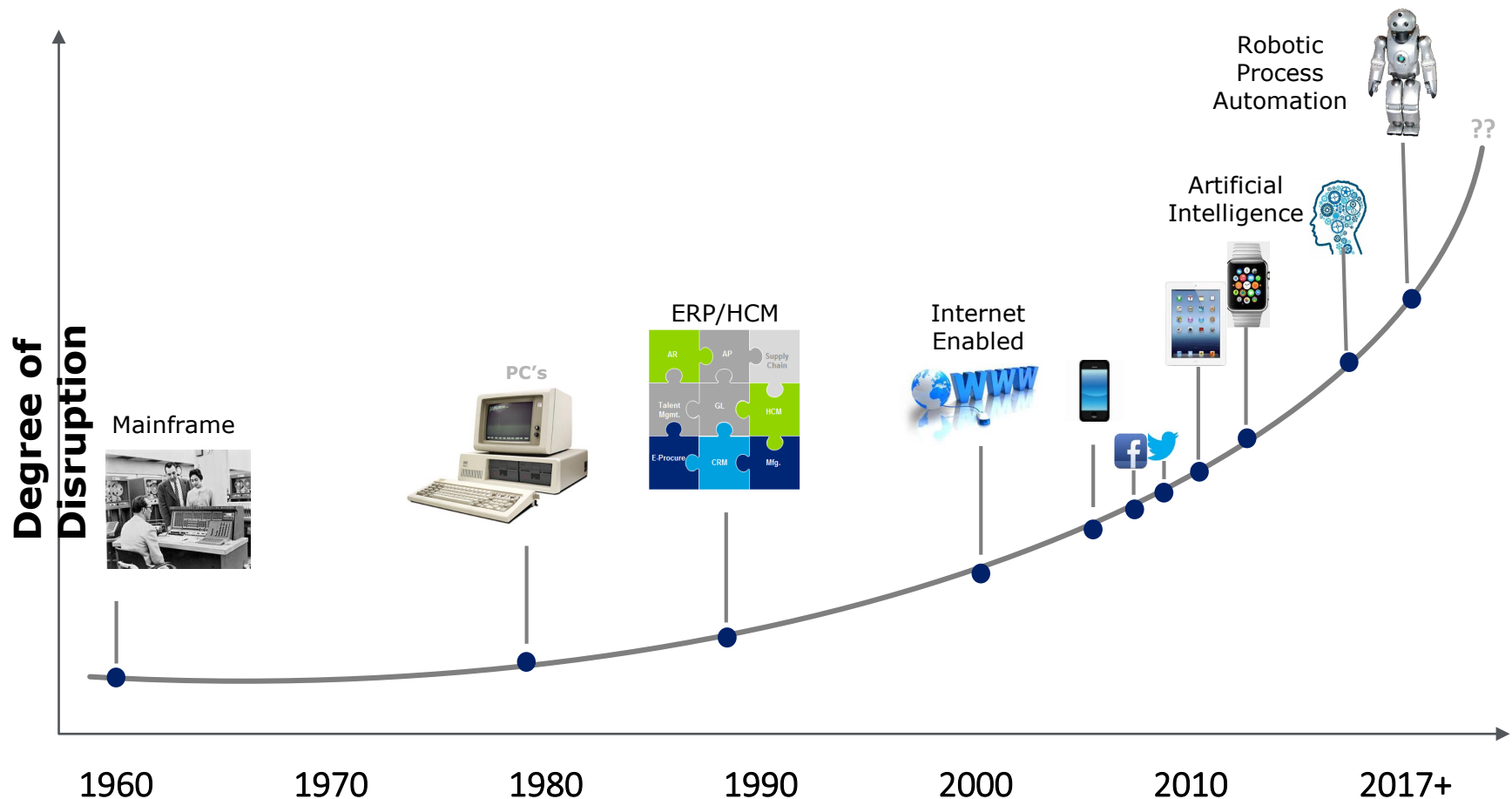
High-Impact **Business HR** collaborates primarily with business leaders and people managers, and play an important role in HR delivery by driving engagement, workforce and talent management, and organizational change.

Communities of Expertise

Business Partners

Operations Center

HR Operational Services enable operating excellence by delivering the end-to-end experience efficiently and effectively across HR processes, with an emphasis on inquiry management, transactions, and specialized functional services.
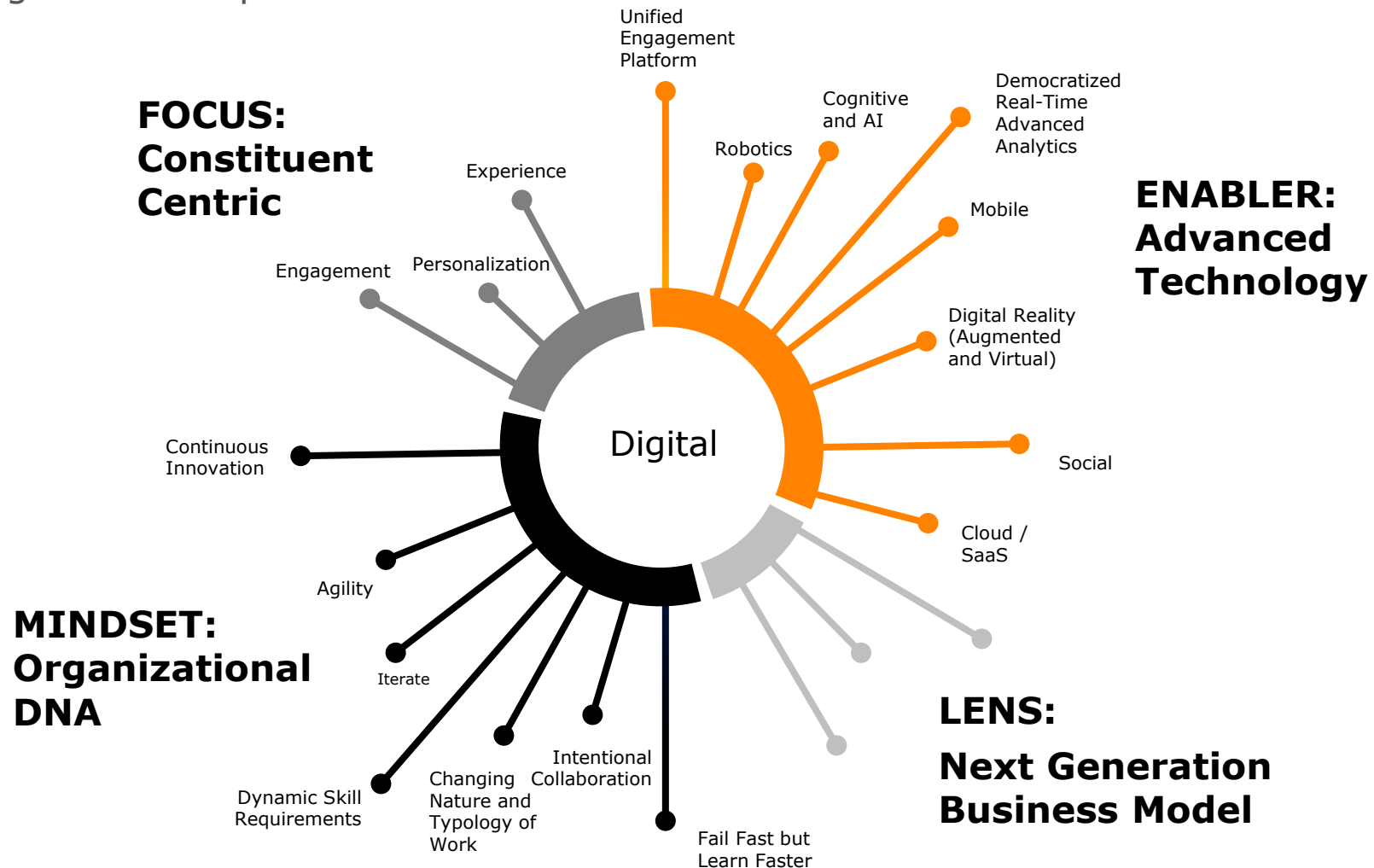
Innovation Curve

Technological innovation is outpacing higher educations' on-premise solutions, limiting universities' ability to access the capabilities of modern technology.

Degree of Disruption

Mainframe

PC's

ERP/HCM

Internet Enabled

Artificial Intelligence

Robotic Process Automation

??

1960   1970   1980   1990   2000   2010   2017+

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The Digital University

Technology alone does not translate to digital: the application of a new mindset, customer centricity and advanced technologies through the lens of the next generation business model to optimize the organization to deliver sustainable organizational performance.

FOCUS: Constituent Centric

- Experience
- Engagement
- Personalization

ENABLER: Advanced Technology

- Unified Engagement Platform
- Robotics
- Cognitive and AI
- Democratized Real-Time Advanced Analytics
- Mobile
- Digital Reality (Augmented and Virtual)
- Social
- Cloud / SaaS

MINDSET: Organizational DNA

- Continuous Innovation
- Agility
- Iterate
- Dynamic Skill Requirements
- Changing Nature and Typology of Work
- Intentional Collaboration
- Fail Fast but Learn Faster

LENS: Next Generation Business Model

Digital

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Planning & Selection

Scope Functional and Technical Areas

- Identify the scope
- Functional areas (e.g., HR/Payroll)
- Technical scope, approach for conversion, integrations and reporting
- Other impacted systems
- Project Charter

Business Case (including high level Budget)

- Budget should Include the core scope
- License and/or subscription fees, testing environments and tools
- Post implementation support.

Software Selection

- Key scenarios/criteria
- Software company HE vision
- Decision making approach scoring and weighting
- Participants include Colleges, Centers and Administrative units

Planning & Selection

Identify Project Roles

- Leadership
- Functional
- Technical
- Change
- Training

Project Launch

- Leadership – Sponsors identified
- Project roles filled for launch
- Space – for combined project team (includes SI)

SI Selection

- Experience implementing selected software
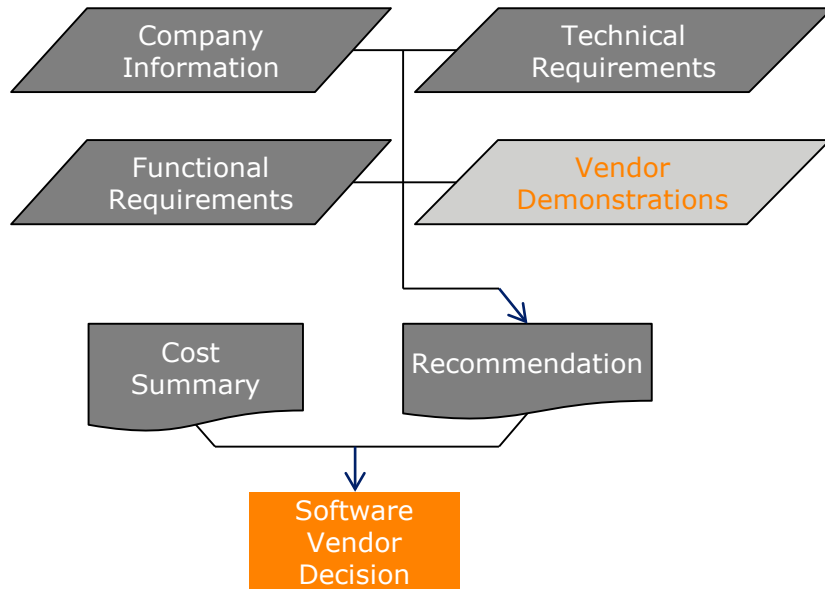- Qualifications in Higher Education with similar size organizations
- Bench strength
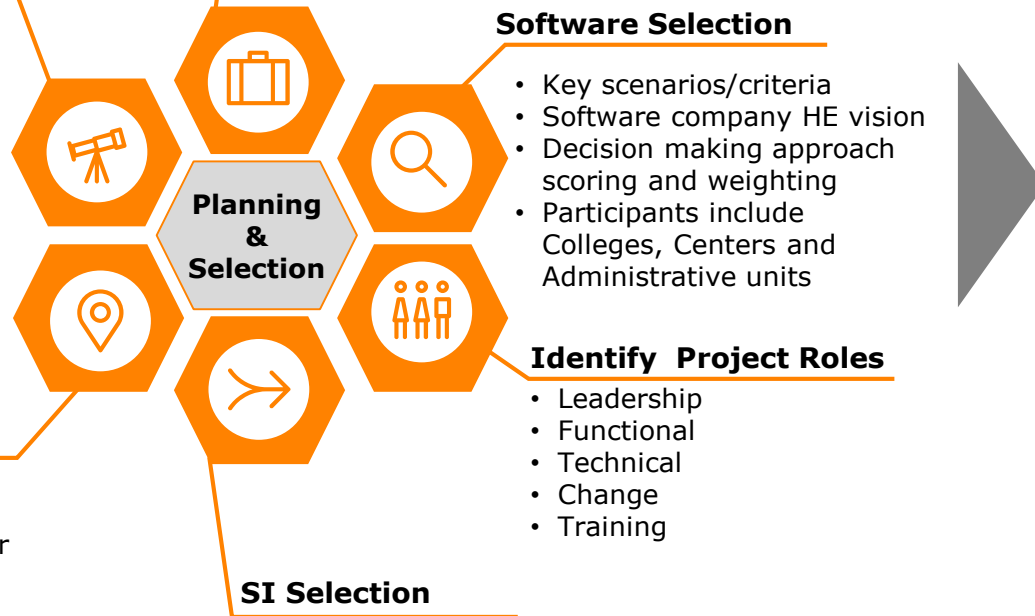
Start with a small core team for this phase and expand to a larger team once the project officially starts

Decision Framework for Vendor Selection: HCM Software Vendor

Decision Making Approach

Company Information → Technical Requirements → Functional Requirements → Vendor Demonstrations → Cost Summary → Recommendation → Software Vendor Decision
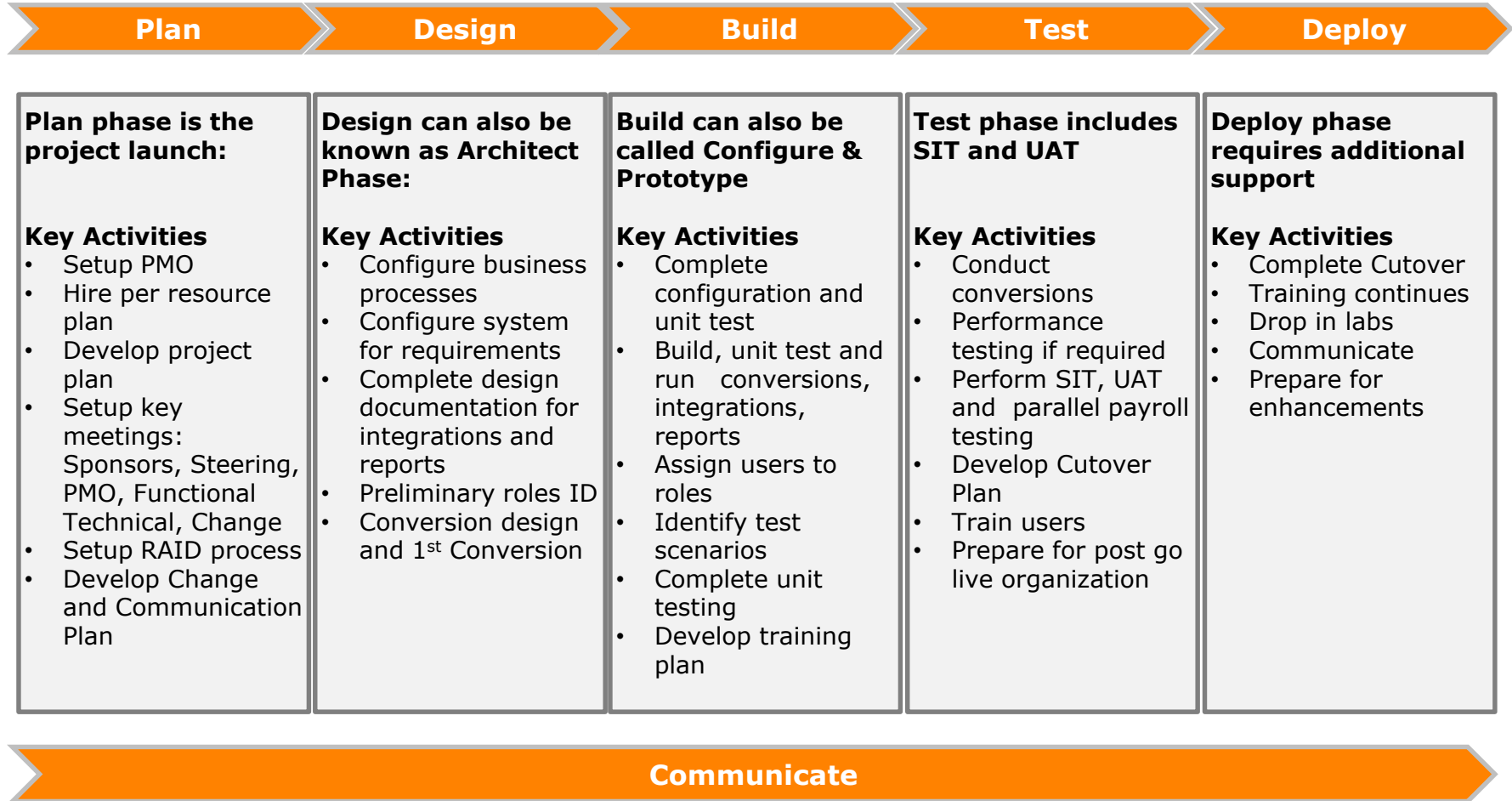
Legend:
- HCM Project Team Deliverable
- HCM Vendor Evaluation Team Deliverable
- Steering Committee Deliverable
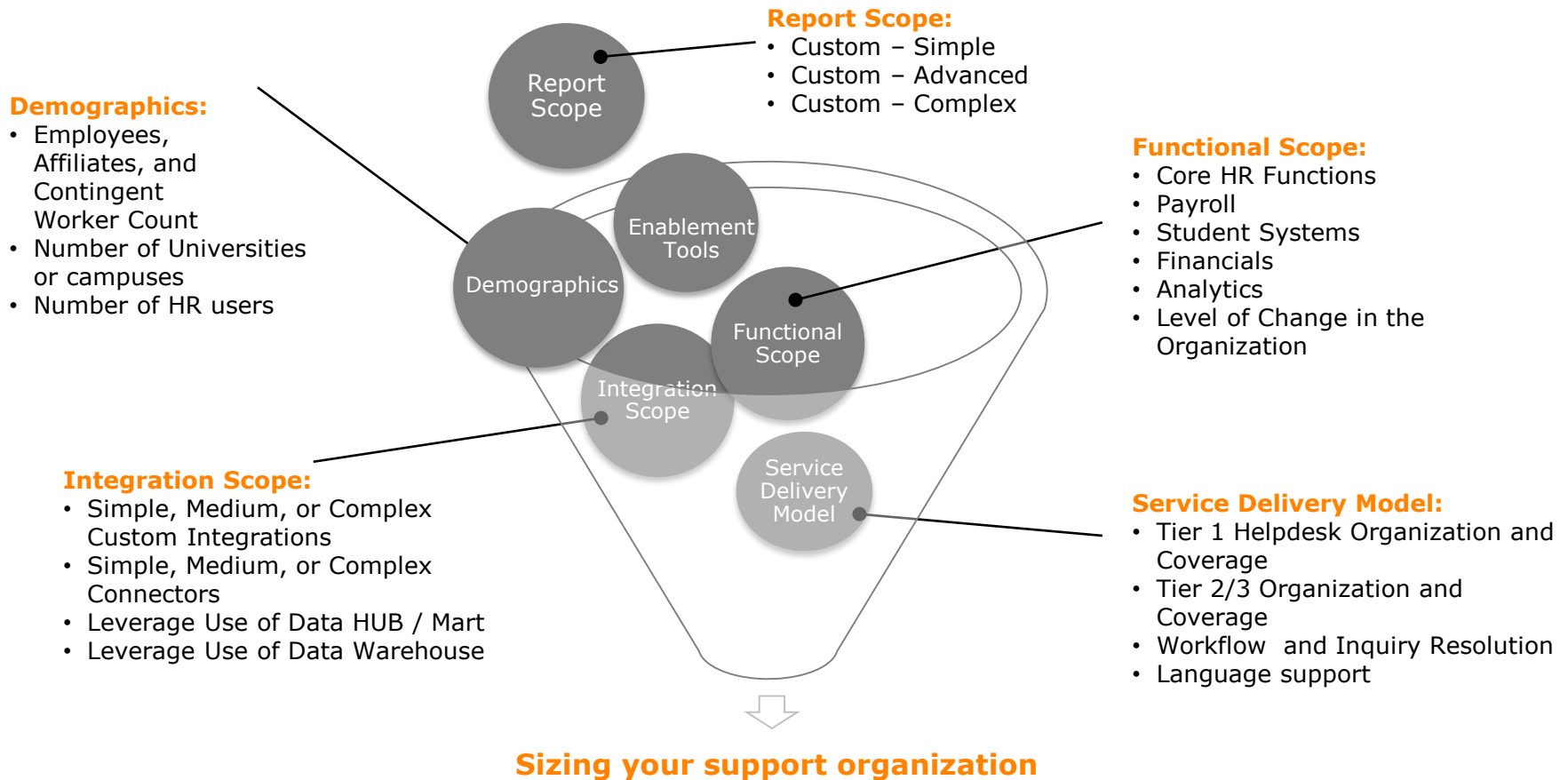
Sample Selection Criteria and Weighting

Criteria	Weight	Source
Functional Requirements – Match to Base Product, User Interface, Roadmap	**30%**	Excel / Or other existing Tool
Technical Requirements – Integration, Reporting Capabilities/Tools, System Performance	**25%**	Technical Selection Team
Company Information – Financials, Higher Ed Experience, Partnerships, References, Support	**25%**	Procurement Team
Vendor Demonstrations – Ability to Address Script Requirements, Ease of Use	**20%**	Vendor Evaluation Team
Cost Summary – Subscription Fees, Maintenance Fees, Fee Adjustments	**N/A**	Rationalized By Project Team, Presented to SC with Final Recommendation

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Design, Build and Implement

Plan	Design	Build	Test	Deploy
Plan phase is the project launch: **Key Activities** • Setup PMO • Hire per resource plan • Develop project plan • Setup key meetings: Sponsors, Steering, PMO, Functional Technical, Change • Setup RAID process • Develop Change and Communication Plan	**Design can also be known as Architect Phase:** **Key Activities** • Configure business processes • Configure system for requirements • Complete design documentation for integrations and reports • Preliminary roles ID • Conversion design and 1st Conversion	**Build can also be called Configure & Prototype** **Key Activities** • Complete configuration and unit test • Build, unit test and run conversions, integrations, reports • Assign users to roles • Identify test scenarios • Complete unit testing • Develop training plan	**Test phase includes SIT and UAT** **Key Activities** • Conduct conversions • Performance testing if required • Perform SIT, UAT and parallel payroll testing • Develop Cutover Plan • Train users • Prepare for post go live organization	**Deploy phase requires additional support** **Key Activities** • Complete Cutover • Training continues • Drop in labs • Communicate • Prepare for enhancements

Communicate

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Post-Implementation Support

Support organizations are not a "one size fits all" model. To assess the resources required to maintain your solution investment, consider the scope of what has been implemented, the support model and processes, and future goals to simply maintain or to also continuously enhance functionality.

Report Scope:
- Custom – Simple
- Custom – Advanced
- Custom – Complex

Demographics:
- Employees, Affiliates, and Contingent Worker Count
- Number of Universities or campuses
- Number of HR users

Functional Scope:
- Core HR Functions
- Payroll
- Student Systems
- Financials
- Analytics
- Level of Change in the Organization

Integration Scope:
- Simple, Medium, or Complex Custom Integrations
- Simple, Medium, or Complex Connectors
- Leverage Use of Data HUB / Mart
- Leverage Use of Data Warehouse

Service Delivery Model:
- Tier 1 Helpdesk Organization and Coverage
- Tier 2/3 Organization and Coverage
- Workflow and Inquiry Resolution
- Language support

Circles in funnel: Report Scope, Enablement Tools, Demographics, Functional Scope, Integration Scope, Service Delivery Model

Sizing your support organization

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Deloitte Leading Practices
Capital Projects

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Capital Planning and Budget Approval
Leading Practices

1 Use outside consultants to develop **detailed capital program requirements** (e.g. number of seats, building condition assessment surveys, student growth projections, etc.)

2 Determine **cost, benefits and risk profile** of the program and/or projects

3 **Prioritization criteria** should consider cost, the expected benefit and the risks of projects proposed for the capital plan to maximize the return

4 **Overarching governance process** that ensures key milestones are met and signed off before moving to next project stage (i.e. planning, design, pre-construction, pre-closeout, etc.)

5 Manage all relevant stakeholders from pre-planning through validation to ensure **well-defined scope of work and appropriate expectations**

6 Comprehensive **representation by all stakeholders** at capital planning meetings

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Project Planning and Design
Leading Practices

1 For smaller projects, Design and Engineering services are in-sourced or outsourced to **preselected vendors**. Design and engineering services for larger projects are out-tasked or outsourced to **service providers**.

2 Establish a **set design process** (number of reviews, dates for completion, communications plan) early on in project planning

3 The A/E fees are contingent on their ability to design a space **within the project budget** (utilize a "design to" clause)

4 Design and engineering activities incorporate **latest tools for 3D and conflict visualization**

5 Process performance management should include **cross-functional performance metrics** (i.e. collaboration with other functions such as IT, HR)

6 A/E payments are linked to **design deliverables that are clearly defined** (schematic design, design development, construction documents)

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Project Planning and Design
Leading Practices

7   Meet agreed-upon design schedule as set in the project planning process to avoid design changes; design changes should **only be driven by business changes**

8   Offer a **limited range of material finishes** to choose from (e.g. colors, fabrics) in order to expedite the design process

9   Design review process includes **external review** for large projects, and **all projects are reviewed by stakeholders**

10   **Owner participates** in Design Review process

11   Strong cost estimating and reconciliation process to keep project **on budget and within scope**

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Project Execution, Monitoring, and Reporting
Leading Practices

1 Establish a Program Management Office that serves as a **hub for project coordination** and integrates overall portfolio of project activities using **enterprise project management system**

2 Dedicated function to conduct project planning and project scheduling; using **standardized templates** to forecast/monitor schedules, budgets, and provide reports

3 A **standardized reporting workflow** should be developed and used consistently across all projects. Project Key Performance Indicators should be tracked and updated on a timely basis and reported to management.

4 Overall project checklists and management procedures should **be consistent across all projects**

5 Leverage **strategic sourcing** and aggregate organizational purchasing for standard materials and services; supplier relationships are managed by procurement

6 Risk Management- Design a **communication process** with appropriate mechanisms to identify, quantify and mitigate potential conflicts and issues

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Project Execution, Monitoring, and Reporting
Leading Practices

7 Day-to-day supplier management (e.g. architectural and engineering, contractor) for project execution is a **core activity** of the Capital Projects/RE organization

8 Suppliers and vendors are paid **based upon agreed-upon timeframe or earlier** in order to obtain discount

9 Bidding conducted by strategic partners is **reviewed by project owner**

10 Policies and procedures surrounding project execution and management should be **published and continually updated** for ease of reference

11 Clearly communicated compliance requirements and penalties to **ensure accountability** during project execution

Project Execution, Monitoring, and Reporting
Leading Practices

12   **Real-time** standardized project and portfolio status reports generated through project management information system

13   Institute formal **documented cost-tracking** process with set deadlines

14   Project costs are coded and tracked based on **industry standard categories** to facilitate accurate and meaningful reporting

15   **Project budget tracking should** include cost categories such as Budgeted Costs, Estimated Cost at Completion, Cost Committed and Cost Exposure, Cost to Date and Variance

16   Cost accounting, controls and reporting support an **accurate and transparent** view of how budgeted funds are spent

17   Project Managers focus particular **attention on items requiring substantial deviation** from budgeted amounts

Project Execution, Monitoring, and Reporting
Leading Practices

18   Provide cash flow projections to management on a **monthly basis**

19   **Utilize key performance metrics** to monitor project cost and schedule status, as well as assess leading indicators

20   All projects should be maintained in a **standard format**. Standardized document nomenclature should be used.

21   At completion of project, all required **internal and external project sign-offs and inspections** should be tracked and completed. All project commissioning should be tracked and completed.

22   All project documents should be **stored in a system that can be accessed** (with controls) by all project members and Management team

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Deloitte Leading Practices
Information Technology

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Deloitte's IT Transformation Framework

IT Leadership and Governance

| CIO | Academic Leadership | Administrative Leadership | Data Governance |
| Structure, Process, Tools, & Standards | IT Mission Alignment | IT Risk Management | Project and Portfolio Management |

IT Financial Model

Funding → Budgeting → Procurement → Financial Management → Monitoring and Reporting

IT Talent Model

Recruiting and Hiring | Training and Competency | Career Path and Org Model | Performance Management and Rewards | Culture

Academic, Research, and Administrative Unit Applications and Data

Academic Unit App 1 | Administrative Unit App 2 | Research App 3 | Administrative Unit App 4 | Administrative Unit App 5

Campus-wide Applications and Data

Financial | HR / Payroll | Student Info. System | Learning Mgmt. System | Research Admin. | Advance-ment | Document & Records Mgmt. | Additional Campus Apps

Foundational Services and Infrastructure

Service Management | Compute & Storage | Data Center (with DR/BC) | Email & Collaboration | Network & Communications | Security | Identity & Access Management | Platform / Middleware

Enabling Capabilities

BI / Analytics | Vendor Mgmt. | Business Relationship Mgmt. | Enterprise Architecture | Service Planning & Mgmt.

- **IT Governance:** A structure that supports effective IT and data oversight, strategic direction, decision-making, risk management, benchmarking, and coordinated budgeting across the entire organization

- **IT Financial Management:** Functions that establish effective financial planning and budgeting, increased oversight of vendors / contracts, and tighter controls for IT spending across the organization

- **IT Talent Management:** An organization orientated towards strategies for talent growth, retention, and attractions

- **Technology Capabilities:** Opportunities that utilize modern technologies – across infrastructure, applications, data, and security – along with defined services and coordination with customers

- **IT Services:** Foundational support that enables IT to function effectively, with strong focus on IT Service Management (ITSM) processes, an enhanced service catalog, and options for outsourcing certain services or levels of support

Develop Career Paths for IT Staff

The approach below provides a model by which promotion readiness is determined according to defined career paths.

Step 1	Step 2	Step 3
Define High Level Skill Sets Required Across Roles	Identify Core Competency Requirements for a Specific Role	Determine Different Levels of Proficiency Related to Competencies

Sample Evaluation Criteria to Determine Readiness for Promotion

Technical Knowledge and Skills
- Core Technical Skills
- Technical Proficiency & Throughput
- Proven Results & Value

Interpersonal Skills
- Effective Communication
- Stakeholder Management
- Cultivating Relationships & Networks

Managerial Skills
- Planning & Management
- Motivating & Leading Others
- Developing Self & Others

Personal Skills
- Alignment with Culture
- Creativity, Empathy, etc.
- Innovation Mindset

Sample IT Career Path

Developer I → Developer II → Developer III *or* Senior Developer

Sample CSSD Career Path

Help Desk Analyst → NOC Monitor → Consultant

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Build a Unified IT Training Program

The sample approach below provides a framework by which a training curriculum could be organized.

Unifying	Advancing	Mastering	Innovating
Training created for all IT staff to have the same basic foundation	Customized training as needed for specific IT staff populations	Advanced learning to develop subject matter experts and architects	Developed to encourage creativity and keep up with technology trends

Suggested Technical Topics:
- IT Infrastructure Library (ITIL) Basics
- The Open Ground Architecture Framework (TOGAF) Basics
- Software Development Life Cycle (SDLC)
- Project Management Foundation
- Cyber Security Awareness
- Accessibility

Suggested Soft-Skill Topics:
- Quality Customer Service
- Supervisory Leadership
- Business Communication

Suggested Technical Topics:
- Cloud Platforms; Software as a Service (SaaS) to Platform as a Service (PaaS)
- Networking
- Security
- Agile
- Enterprise Data Management

Suggested Soft-Skill Topics:
- Leadership
- Cyber Security vs. Privacy
- Financial Management / Budgeting

Suggested Technical Topics:
- Advanced Certifications
  - Agile
  - Networking
  - PMP
- Enterprise Data Management

Suggested Soft-Skill Topics:
- Executive Leadership
- Strategic Problem Solving
- Information Management
- Business of IT

Suggested Technical Topics:
- Big Data and Analytics
- Hybrid Cloud
- Internet of Things (IoT)
- Blockchain
- Social Impact of Exponential Technology

Suggested Soft-Skill Topics:
- Innovation in Higher Education

Basic
(All IT Employees)

All IT staff participate in unifying training

Specialized
(Select employees, as relevant to job)

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Deloitte Leading Practices
Communications & Marketing

Higher Education Communications Challenges
Institutions often cite the obstacles below related to communications activity.

Campus Silos	Central and unit offices may not coordinate communications
Channel Silos	Email notifications can be sent without planning for impact on phone and in-person service channels
Functional Silos	Communications may be planned separately by each functional area
Process-Focused	Tone of some messages can be distant and process-focused, rather than inviting and stakeholder-focused

Enhancing Coordination

There are potential opportunities to better coordinate communications efforts across campuses and units, building on leading practices at other institutions.

Potential opportunities:

Shared Practices: Common policies and procedures to balance flexibility with fidelity of approaches to medium, format, frequency, etc.

Unified Calendar: Shared communications calendar providing a common perspective on timing and volume of communications.

Thematic Approach: Link between individual communications and broader communications themes and objectives.

Shared Practices

Approach should balance providing flexibility across campuses and units with the need to have unified approaches, expectations, and standards.

Key considerations:

Channel

Guidance on appropriate use of various communications channels, including criteria for using text messages and non-traditional channels

Identity

Standards on branding of messages along campus, functional, and system lines

Format

Shared message design, including templates for various channels, particularly email

Tone

Suggestions for message tone across both informational messages and transactional compliance communications

Frequency

Standards for how often messages are sent, with specific parameters by audience and channel

Timing

Recommendations for timing of messages in relation to other university messages and events

Channel Leading Practices

Several forces are fundamentally reshaping multi-channel communications, and these changing capabilities are influencing individuals' expectations across sectors.

Channel shifts:

Channel Growth: The number of communications channels continues to expand, shifting away from traditional channels such as call centers.

Declining Silos: Single-channel interactions are struggling to deliver the desired experience. New models enable interactions across multiple channels.

Emerging Technology: New technologies are driving rapid change across channels, processes, operations, analytics, and infrastructure.

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Channel Portfolio

Both existing and potential communications channels should be evaluated against Tennessee's communications objectives to determine appropriate levels of investment.

Traditional Channels	Emerging Channels	Future Channels
In-person service	Web self-service	Augmented assistance
Email messages	Mobile apps/web	Virtual agent
Phone calls	Text messages	
	Chat (e.g., Slack)	
	Social media	

SOURCES: 1. Deloitte Customer Operations 2018. 12 ICMI 2017. 3. Smart Insights 2018 4. Omnisend 2018 5. BAI 2015.

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Traditional Channel Analysis

Channel	Strengths	Weaknesses	Norms
In-person service	• High-touch • Stakeholder preference for topics where they seek advice or reassurance	• High staff effort • Limited service hours • Not stakeholder preference for transactions	• Expected wait of no more than 10 minutes[2]
Email messages	• Can broadcast messages to large audiences • Provides choice in when to view and respond	• Inundation of messages makes it difficult to know what is truly important • May be ignored or unopened	• Average open rate in education is 35%[3] • For consumer firms, typical email volume is 1-9 per month[4]
Phone calls	• Mixes personalization of in-person service with flexibility of digital service	• High staff effort/significant expense • Limited service hours • Difficult to share detailed information or steps	• Expected wait of no more than 5-10 minutes[5]

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Emerging Channel Analysis (1/2)

Channel	Strengths	Weaknesses	Norms
Web self-service	• Efficiency • 24/7 availability • User preference for some transactions	• High upfront setup cost • Limited advising / personalization	• Develop a unified and consistent experience across all platforms
Mobile apps/web	• Meet users where they are – no laptop needed • User preference for some transactions	• High upfront setup cost • Continually evolving technology platforms	
Text messages	• Immediacy (speed of receipt) • Salience (high open rates)	• Limited message length • Frequent messages quickly annoying • Overuse reduces impact of truly-urgent messages (e.g., security alerts)	• No more than 5 SMS messages per month[2]

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Emerging Channel Analysis (2/2)

Channel	Strengths	Weaknesses	Norms
Chat (e.g., Slack)	• Mixes personalization of in-person service with flexibility of digital service • Moderate staff effort • User preference for some transactions	• May require shifts in contact staffing model • Students may have unrealistic expectations of immediacy (i.e., not expect to be on hold)	• Expected wait of no more than 2 minutes[2]
Social media	• Meet users where they already are • Share stories beyond typical transactional messages	• Requires incremental staff effort • Unclear expectations (e.g., how students react to multiple accounts)	Recommended[3] posts: • Facebook: 5-10 / week • Instagram: 5-10 / week • Twitter: 20-30 / week

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Future Channel Analysis

Channel	Description	Strengths	Weaknesses
Augmented assistance	Staff provided with live recommendations for transactions and services based on topic area and student characteristics	• Increase staff efficiency, particularly for chat responses • Increase fidelity to standard practices	• High upfront investment
Virtual agent	Fully automated "chat bot" for students to interact with before reaching human staff member	• Deploy staff only for high-value interactions • 24/7 availability	• High upfront investment • Ineffective deployments can lead to frustrating user experience

Unique-To-University Channels

In addition to communications channels similar to those used in other sectors, Tennessee should consider how to effectively communicate with students using channels uniquely available to it as an academic institution.

Major Events: Consider how and what to share as messages at in-person events including orientations and commencement.

Classes & Organizations: Determine how messages around key themes are shared with (and through) student organizations and classes.

Physical Spaces: Leverage daily on-campus interactions in classrooms, cafeterias, housing bulletin boards, etc.

Official Documents: Consider the messages and identity conveyed to students on important documents such as admissions letters and transcripts.

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Enhancing Message Clarity

Delivering consistently clear messages will enable students to differentiate the most important messages and needed action items from informational messages.

Potential opportunities:

Message Hierarchy: Differentiate between important and informational messages using visual style, clear wording, and relevant channel mix.

Tracking Transparency: Provide clear insight on the status of open action items for both the student and university.

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Continuous Improvement Practices

Shared goals and data will focus Tennessee on improving the stakeholder experience across functions, channels, and campuses.

Potential opportunities:

Data-Based Decision Making: Common measures of success for communications using accurate, consistent, and comparable data.

Student Focus: Grounding improvement in an understanding of student needs and experiences.

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Outbound Metrics Examples

Outbound messages can be measured by their open rate, clickthrough, and conversion. Messages should be evaluated in context, to determine the most effective ways to communicate about specific topics. Potential measures include:

Data Point	What it Measures	Why It's Useful	Additional Notes
Messages Sent	• Number of outbound email, text, or other messages sent • Reach (sent / audience) • Bounce rate (bounce / sent)	• Compare messages sent to audience to measure reach, and to later data to measure message effectiveness	• For commercial firms, typical email volume is 1-9 per month[1]
Messages Open	• Number of users who open a message • Open rate (open / sent)	• Measure message and wording relevance and salience	• Open rates vary by message type, but typical ranges are 15-35%.[2] In higher education, one study found 19% average.[3]
Click Throughs	• Number of users who click on a link or other call to action • Clickthrough rate (click / sent or click / open)	• Measure message effectiveness at initiating further engagement	• Clickthrough rates also vary, but typical ranges are 3-6%.[2] One study found 8% average in higher education.[3]
Actions Taken	• Conversation rate (action / sent)	• Measure cost to achieve a certain outcome (e.g., form completion) by channel	

Note: Objectives based on email communications, but similar approach could apply to any medium.

SOURCES: 1. Omnisend 2018 2. Hubspot 2015. 3. Constant Contact 2018.

Case Studies

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Case Studies
Procurement & Contracting

Procurement & Contracting: University of California System (1/5)

The University of California System includes 10 campuses, five medical centers, and three national laboratories located across the state, serving more than 238,000 students and 190,000 faculty and staff. The system supports 430,000 jobs and has contributed $46.3B to the state economy.

Berkeley UNIVERSITY OF CALIFORNIA   **UCDAVIS** UNIVERSITY OF CALIFORNIA   **UC IRVINE**

Ucla   UNIVERSITY OF CALIFORNIA **UCMERCED**   UNIVERSITY OF CALIFORNIA **UCRIVERSIDE**   **UCSF**

UC San Diego   **UC SANTA BARBARA**   UNIVERSITY OF CALIFORNIA **SANTA CRUZ**

Working Smarter" Initiative	→	**P200 Project**
The UC System launched the "Working Smarter" initiative in 2010 to challenge the "status quo" in administrative structure and processes. Projects across various functional areas intended to deliver streamlined, common systems and highly integrated administrative frameworks, while balancing between campus autonomy and University-wide systems.		The P200 project was launched in 2012 as a full transformation of the procurement governance, structure, systems and metrics. UC campuses collectively spent more than $7 billion a year to procure goods and services. P200 aimed to deliver $200 million in savings annually by the end of fiscal year 2016-17.

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Procurement & Contracting: University of California System (2/5)
Implementing Virtual Centers of Excellence

The original idea for the Centers of Excellence came out of a workshop in which campus procurement leadership and campus Controllers thought about different ways to organize systemwide strategic sourcing efforts in order to achieve results more quickly and effectively.

The Centers are small, focused groups of commodity and sourcing specialists working virtually across the system. The teams come together (via technology) as needs dictate, function as a unified entity, and use standardized, streamlined, and scalable processes.

The COEs span the following groups:

- Information Technology
- Maintenance, Repair, and Operations
- Professional Services
- Construction
- Life Sciences

Procurement & Contracting: University of California System (3/5)
Roles and Responsibilities Across the UC System

UNIVERSITY OF CALIFORNIA

System Procurement Services

Staff Size: 56 personnel part of the system organization, including more than 20 based at campus locations and four individuals with multi-location agreements

Responsibilities:
- Leverage the University's purchasing power and volume of spend, use the latest technology and build strong relationships, to source the highest quality products and services at the least total cost
- Establishes systemwide agreements for goods and services that are commonly purchased across each of the university's location
- Oversees or is at least connected to the IT Strategic Sourcing Center of Excellence
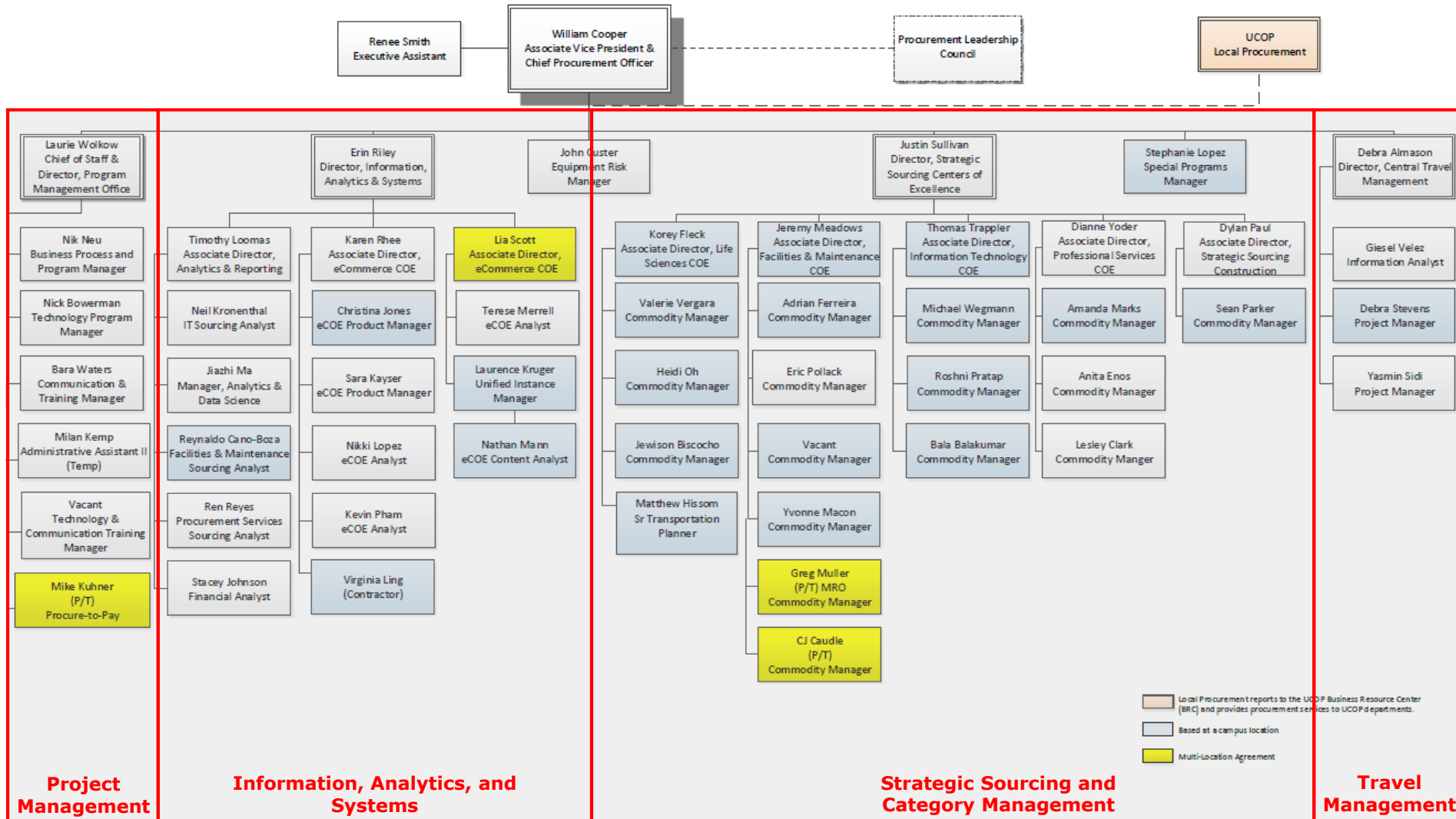
Campuses, Medical Centers, and Labs

Staff Sizes: Vary (e.g., UC-Berkeley has 27 personnel on staff)

Responsibilities:
- Facilitates the procurement of goods and services to support the research, programs, and activities of the university
- Aligned with the system procurement office's strategic goals
- Personnel include buyers, commodity managers, and business systems analysts with campus buyers located in different functional units as well

Procurement & Contracting: University of California System (4/5)

The University of California made a conscious decision to invest in its skills and capabilities to maximize the value obtained from the procurement function.

Renee Smith — Executive Assistant

William Cooper — Associate Vice President & Chief Procurement Officer

Procurement Leadership Council

UCOP Local Procurement

Project Management
- Laurie Wolkow — Chief of Staff & Director, Program Management Office
- Nik Neu — Business Process and Program Manager
- Nick Bowerman — Technology Program Manager
- Bara Waters — Communication & Training Manager
- Milan Kemp — Administrative Assistant II (Temp)
- Vacant — Technology & Communication Training Manager
- Mike Kuhner (P/T) — Procure-to-Pay

Information, Analytics, and Systems
- Erin Riley — Director, Information, Analytics & Systems
- Timothy Loomas — Associate Director, Analytics & Reporting
  - Neil Kronenthal — IT Sourcing Analyst
  - Jiazhi Ma — Manager, Analytics & Data Science
  - Reynaldo Cano-Boza — Facilities & Maintenance Sourcing Analyst
  - Ren Reyes — Procurement Services Sourcing Analyst
  - Stacey Johnson — Financial Analyst
- Karen Rhee — Associate Director, eCommerce COE
  - Christina Jones — eCOE Product Manager
  - Sara Kayser — eCOE Product Manager
  - Nikki Lopez — eCOE Analyst
  - Kevin Pham — eCOE Analyst
  - Virginia Ling (Contractor)
- Lia Scott — Associate Director, eCommerce COE
  - Terese Merrell — eCOE Analyst
  - Laurence Kruger — Unified Instance Manager
  - Nathan Mann — eCOE Content Analyst

John Custer — Equipment Risk Manager

Strategic Sourcing and Category Management
- Justin Sullivan — Director, Strategic Sourcing Centers of Excellence
- Stephanie Lopez — Special Programs Manager
  - Korey Fleck — Associate Director, Life Sciences COE
    - Valerie Vergara — Commodity Manager
    - Heidi Oh — Commodity Manager
    - Jewison Biscocho — Commodity Manager
    - Matthew Hissom — Sr Transportation Planner
  - Jeremy Meadows — Associate Director, Facilities & Maintenance COE
    - Adrian Ferreira — Commodity Manager
    - Eric Pollack — Commodity Manager
    - Vacant — Commodity Manager
    - Yvonne Macon — Commodity Manager
    - Greg Muller (P/T) MRO — Commodity Manager
    - CJ Caudle (P/T) — Commodity Manager
  - Thomas Trappler — Associate Director, Information Technology COE
    - Michael Wegmann — Commodity Manager
    - Roshni Pratap — Commodity Manager
    - Bala Balakumar — Commodity Manager
  - Dianne Yoder — Associate Director, Professional Services COE
    - Amanda Marks — Commodity Manager
    - Anita Enos — Commodity Manager
    - Lesley Clark — Commodity Manger
  - Dylan Paul — Associate Director, Strategic Sourcing Construction
    - Sean Parker — Commodity Manager

Travel Management
- Debra Almason — Director, Central Travel Management
- Giesel Velez — Information Analyst
- Debra Stevens — Project Manager
- Yasmin Sidi — Project Manager

Legend:
- Local Procurement reports to the UCOP Business Resource Center (BRC) and provides procurement services to UCOP departments.
- Based at a campus location
- Multi-Location Agreement

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UC Procurement Transformation Outcomes

Savings Goals of

$200M

- The UC system exceeded its initial savings goals with:
  - $268M in year 4
  - $385M in the current fiscal year
- The system has set a new goal of $500M of future savings

Partnership with

CSU **The California State University**

- UC and CSU launched a shared procurement system in 2018 across all 33 campuses to:
  - streamline operations, reduce costs
  - generate more competitive bids
  - improve contract management processes

Case Studies
Human Resources

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TENNESSEE

Human Resources: University of Iowa

The University of Iowa is a flagship public research university with 33,564 students. Founded in 1847, it is the state's oldest institution of higher education and is located in Iowa City. In 2014, University of Iowa launched TIER (Transparent Inclusive Efficiency Review), a university-wide administrative and academic review to identify and implement opportunities for more efficient and effective university operations. TIER consisted of over 20 projects across IT, Procurement, Finance, Academic Affairs, and HR.

The Human Resources initiative was a three year effort with **three central goals**:

1. **Improve HR service delivery** for all functions
2. **Reduce costs and time to hire** for faculty and staff
3. **Support internal mobility** across campus

THE UNIVERSITY OF IOWA

Case for Change	Transformation Activities	Impact
The University of Iowa's distributed HR model was facing multiple challenges: • 80% of unit-level HR representatives only spent 25% of their time on their HR responsibilities • Representatives' multiple functional responsibilities diverted them from providing HR services efficiently and effectively • Distributed staff lacked clear reporting structure to Central HR • Hiring processes often unnecessarily required time-intensive search committees	• Revised senior HR rep and HR unit rep roles to be full-time dedicated HR staff • Evaluated and consolidated all HR staff responsibilities to encourage greater role specialization • Established direct reporting lines from HR representatives to Central HR or senior HR reps to increase service delivery consistency • Streamlined operations to reduce time-intensive and manual processes	• Successfully redesigned and implemented new HR processes and organizational structure across **25 different colleges and divisions** • **81% of all HR staff now devote 100% of their time to HR work.** Full-time staff have been able to perform work more effectively and spend more time on particularly complex and strategic tasks • Hiring process redesign **reduced time to hire by 40% which already has saved 60,768 employee hours** through reducing search committee frequency and size

Human Resources: Texas A&M University System
Systemwide Implementation

TAMUS' objective was to implement an integrated and standardized HCM system that met the critical business requirements of the 21 system members by eliminating outdated and redundant systems, paper processes across the system, and improving transparency.

Challenge

- TAMUS is made up of 13 Universities/Colleges, 7 State Agencies and one System Member for a total of 21 member entities
- The employee count in the system is over 65k (including Retirees)
- The overall budget for TAMUS is nearly $4.5B
- TAMUS had a 30+ year mainframe system to support their HR and Payroll needs
- The mainframe system, which included many bolt-ons and paper-based processes, was nearing its end of life

Solution

- Implemented Workday, DWH and Labor Dist Bolton
- Deloitte provided an experienced team with both Higher Education and Workday experience
- TAMUS fielded a team of dedicated hard working team members dedicated to the project
- The team configured the system, converted data, and built over 100 integrations and reports
- Conducted numerous training and coaching activities
- Dedicated sponsors

TAMUS successfully went live, on time and on budget, with the following Workday modules: Recruiting, HCM, Benefits, Time and Absence, Payroll, DWH and labor distribution Bolton. This is currently the largest Workday HCM/Payroll system-wide Higher Education implementation.

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Human Resources: Yale University (1/2)
Technology-Enabled Transformation

Guiding Principles

Leadership alignment and governance were key to success – the Program Sponsors defined and agreed upon **five key strategic objectives**:
1. Simplify and standardize processes
2. Make it easy to get work done and harder to make mistakes
3. Establish an accurate, trusted and timely reporting environment
4. Minimize administrative overhead for faculty and end users
5. Lower operating costs and improve effectiveness

Key Accomplishments

Working with diverse stakeholders from across the institution, Yale focused on redesigning core Human Capital and Finance processes. This included a few key accomplishments:
- **Reducing paper forms**
- Automating manual processes and **creating consistent processes** across the University
- Making core Human Capital and Finance processes easier by **streamlining workflow and simplifying the approval process**
- **Introducing mobile capabilities** for core functions

Yale was able to increase efficiency, reducing cycle time by 70-90% in key areas while also allowing for more focus on strategic activities versus transaction processing.

Human Resources: Yale University (2/2)
Efficiencies achieved as of Fall 2017

Faculty / Staff Lifecycle	Baseline: Pre-Workday	With Workday 1st Year	With Workday 2nd Year	With Workday 3rd Year
Efficiencies Gains				
Compensation (One-time/Ongoing payments & salary adjustments; excludes merit)	≥ 1 Month	4 Days	2 Days	2 Days
Job Requisition/Hire (Creating a job requisition in Workday and the process to fill the position)	≥ 1 Week	2 Days	2 Days	2 Days
Job Changes (Transfers, promotions, location change)	≥ 1 Month	4 Days	2 Days	2 Days
Onboarding (I-9, update personal information, payroll forms, benefits enrollment)	≥ 1 Month	9 Days	5 Days	1 Day
Terminations (Voluntary/involuntary separations; retirements)	≥ 1 Month	2 Days	1.5 Days	1.4 Days

Source: Efficiencies as presented at NACUBO Annual Meeting July 2018.

Human Resources: University of Maine System

Overview	The University of Maine System is comprised of seven universities – some of which are spread across multiple campuses – a law school, 31 course sites, and Cooperative Extension. The system enrolls nearly 30,000 students each year and is the state's largest educational enterprise. Since 2013, the system has embarked on several initiatives to review and improve organizational effectiveness across various functions, including facilities management, information technology, procurement, and human resources.

The HR Administrative Review outlined a plan to deliver high quality services systemwide at a lower cost, with the goals of supporting HR strategy and increasing efficiency.

Case for Change	• Prior to the transformation, the system had a situation of "haves" and "have-nots," in which some campuses had more resources than others, setting up inequalities in how they could fulfill their HR responsibilities. • Differences in system goals, campus goals, and HR organizational goals caused tension among the units.
Steps Taken	• The system combined resources across all of the institutions to create function-specific centers, including Compensation, Labor Relations, Equal Opportunity, Learning and Organizational Development, and Benefits. • Campus business partners work directly with employees in each unit but ultimately report up to the system chief human resources officer. • A centrally managed operations unit is now responsible for payroll, HR data management, and the HRIS, removing transactional services from the campuses. • The system dissolved a dedicated system office and instead HR employees sit across the state. • Leadership implemented a more strategic approach by building the HR organization's goals around individual campus goals, to be synthesized for the system Board of Trustees.
Impact	• Despite an initial investment into technology upgrades and recurring support costs, the estimated net savings amounted to $1.1M in FY17, with total cumulative savings amounting to nearly $3.9M through FY19. The significant cost savings have helped to convince the campuses of the efficacy of the new model.

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Case Studies
Information Technology

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TENNESSEE

Information Technology: Texas A&M University System (1/2)

To facilitate a complex, multi-entity ERP implementation, the Texas A&M University System restructured its governance model to allow for **collaboration and greater oversight of strategic priorities**, involving both business and IT perspectives.

The Case for Change:

- Historically, each of TAMUS' 11 universities and seven state agencies worked with its IT department independent of the System Office to provide supporting technologies for student needs.
- Each entity leveraged its own assets and capabilities to purchase new licenses or technology software, and these new purchases were loosely managed by System Office IT Service; there was no updated service catalog with existing technologies.

The Redesigned IT Model:

In TAMUS' new IT governance model, the business units are primarily responsible for decision-making, but IT leadership plays a critical role in the discussions to voice project needs and ITS capabilities.

1 **Executive IT Council**: Governing body with CIO, CEOs/presidents, CFOs, CAOs, CIOs, Teaching and Learning Council Chair, Research Council Chair; responsible for alignment of TAMUS mission and major decision-making

2 **Strategic Technology Councils:** Collaborate to provide recommendations to key IT issues across functions

3 **Collaborating Councils:** Partner with the Academic Technology Council and CIO Council to identify key areas of opportunity and strategic direction

4 **Committees:** Serve under the Collaborating Councils as the academic, research, and administrative voices

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Information Technology: Texas A&M University System (2/2)

The system's strategic priorities for the IT organization also included addressing their internal talent pools, career pathing, and training.

1

Establish a strategy that will allow the System to appropriately source required IT skills

2

Establishing an IT career path framework for the System

3

Establish a formal training and mentoring program for all IT staff

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Information Technology: Michigan State University

MSU partnered with Deloitte to assist in the ongoing transformation of its IT operating model that would align MSU's **technology governance, organization, and services** with current leading practices in the industry to position MSU to meet future operational needs.

Transformation Activities	Impact and MSU Benefits
After conducting interviews with university and student stakeholders to assess the current state, the Deloitte team recommended the following activities: • Reduce IT fragmentation • Consolidate project management efforts • Migrate IT infrastructure • Redesign the IT organization	• Increased transparency, visibility, and control of IT campus-wide • Improved IT responsiveness by simplifying processes • Provided consistent services for MSU stakeholders and reduced IT fragmentation • Improved IT efficiency and reduced costs • Aligned MSU's IT infrastructure with ITIL leading practices • Enhanced strategic alignment across IT with the vision of the CIO and University • Expanded IT engagement throughout MSU's campus • Improved IT leadership and planning capabilities

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Information Technology: University of Michigan (1/2)

Overview

Students: 44.7K	Campuses: 3	Budget: $7.9B

The strategic governance structure was established in 2010 and is intended to:

- Better integrate IT strategic planning with campus strategic planning.

- Set campus-wide priorities for IT services, resources, and facilities.

- Provide guidelines and support to establish complementary governance at the unit level.

- Make decisions employing a campus-wide funding model (still under development) that rewards cost-effectiveness and discourages non-strategic IT spending.

Strategic Governance Model

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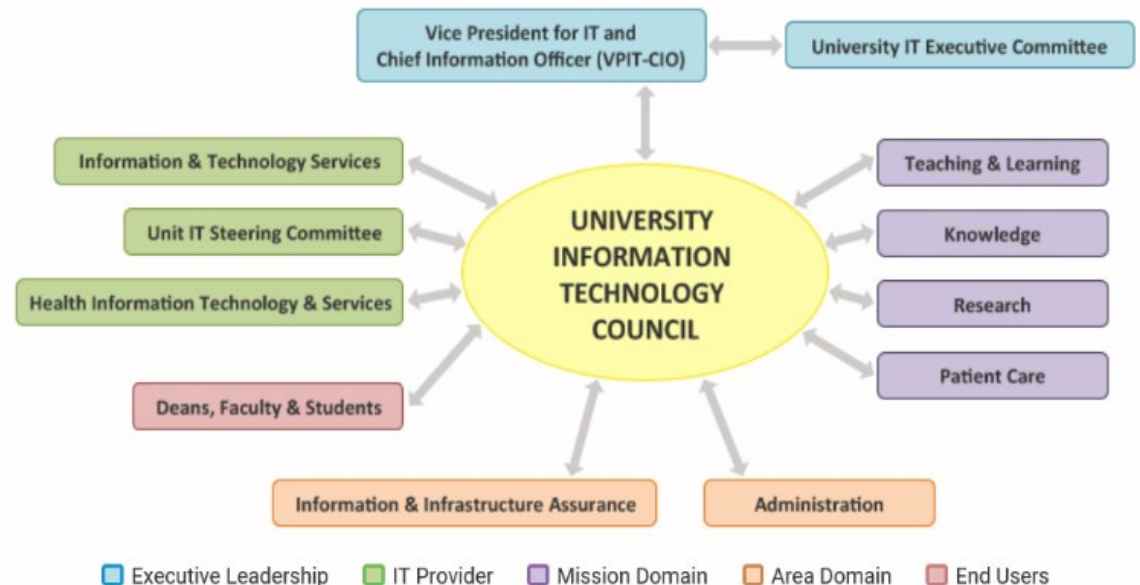
UNIVERSITY OF MICHIGAN

Membership and Operations

1) **Strategic Governance Committee Membership:** University IT Executive Committee: 5 members, including a Chief Information Officer (CIO), CFO, and executives for research, academic affairs, and medicine.
2) **University IT Council:** 13 members, including students, administration, academic leadership, CIO, and Chief Information Security Officer.

Governance Tiers

1) **Strategic Governance:** Faculty-led to incorporate decision making by academic representatives, with the intention of maintaining a connection to the core missions of teaching, learning, research, and patient care.
2) **Service Governance:** Advisory groups who provide frequent input on improvement priorities, service level expectations, and adoption levels to guide the delivery of specific shared services.
3) **Data Governance:** Data stewards across campus that establish decision rights with respect to University data for the purpose of ensuring accountability; define processes and standards associated with their proper use.
4) **Program/ Project Governance:** Temporary staff support that is organized around a specific program or project to provide oversight to ensure it meets budget, schedule, scope, quality, and delivery objectives; also provides sponsorship for changes to a program or project and are the escalation mechanism for issues and risks.

Information Technology: University of Maine System

In July 2012, the UMS Trustees published a comprehensive new set of goals to move the system forward in program and workforce development, cost control, and student success. The Board of Trustees directed leadership to implement the goals quickly to create savings for reinvestment and improve services, including IT. Upon internal review, the IT team found **significant duplication of teams, staff skills, and training** throughout the system.

Internal Review Team Recommendations

Leadership & Governance

- Create a new position in a system CIO
- Create an IT Service Management Committee comprised of academic and other leaders
- Redefine responsibilities among the presidents' council, CIO, CIOs Cabinet, and advisory councils

Infrastructure Consolidation

- Consolidate campus and system support and help desk services
- Centralize end user provisioning, management and maintenance functions
- Consolidate Data Center locations, management and operations
- Unify communications systems to be managed by one campus

Academic & Administrative Technologies

- Restructure delivery of end user technology (e.g., expanded virtual desktop delivery, implemented mobility solutions)
- Identify, review and organize IT services into a shared services model with campus IT management

Expected Total Savings after Transformation-Related Expenses
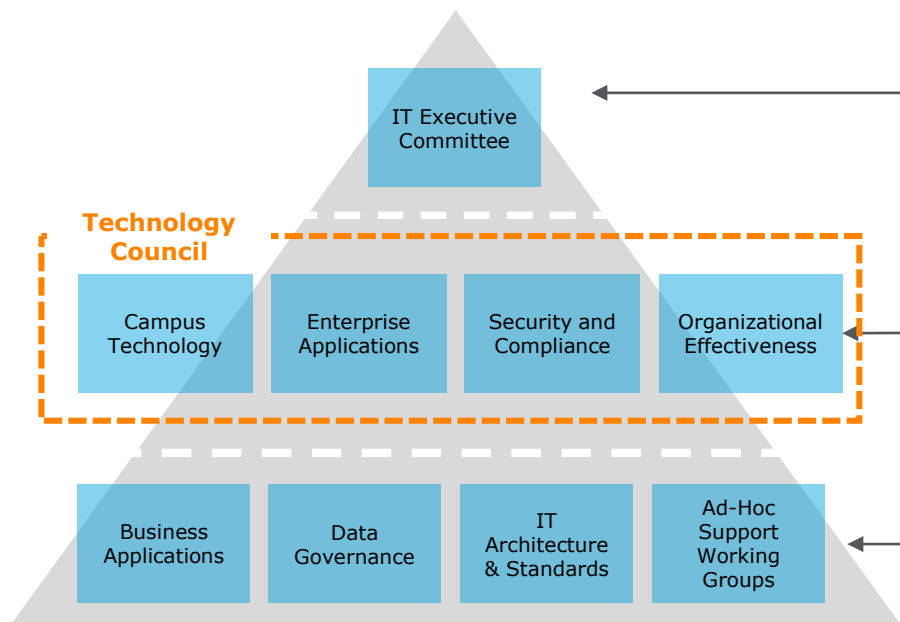
$174K
FY2014, Year 1

$1.9M
FY2015, Year 2

$3.3M
FY2016, Year 3

Information Technology: Virginia Community College System

The future state governance model is designed based on effective approaches used by other universities and leading edge IT organizations and the priorities and needs of VCCS.

The **IT Executive Committee** oversees VCCS enterprise-wide IT strategy. Enables executive level sponsorship of IT decisions and holistic oversight of IT investments and their impact. This committee interacts with **EPIC** for the timely and thorough review of ITS projects.

Subcommittees are cross-functional and provide oversight, coordination, and collaboration on specific domain and mission focused IT areas. Allows for broad stakeholder involvement in IT decision making and direction setting.

Working Groups are operational and provide recommendations to support the development of a common approach to VCCS IT. In addition to the standing working groups, ad hoc groups can be convened to drive specific initiatives.

The model enables sponsorship and partnership across diverse IT constituencies to drive mutually beneficial strategies, standards and solutions

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Information Technology: Virginia Community College System (2/3)

The future state IT governance model enhances collaboration with a range of existing VCCS governance bodies and supports the effectiveness of EPIC's project-focused work.

Types of Engagement

- Allocate
- Align
- Advise
- Decide
- Execute
- Escalate

State Board

Chancellor's Office

Advisory Council of Presidents (ACOP)

Enterprise Portfolio Investment Council (EPIC)

EPIC Project Criteria

Under Review

IT Executive Committee

Technology Council

- Campus Technology
- Enterprise Applications
- Security and Compliance
- Organizational Effectiveness

- Business Applications
- Data Governance
- IT Architecture & Standards
- Ad-Hoc Support Working Groups

Key Features

- IT strategy and operations decision rights reside within the IT Executive Committee
- Enterprise projects are reviewed and considered by the Executive Committee to align the opportunities presented to EPIC with the broader IT strategy

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Information Technology: Virginia Community College System (3/3)

Our governance model needs to be equipped to address how we best leverage our IT investments across the system in service of our students.

How can we eliminate duplication of efforts across the System where they do not add value?

How do we ensure the security and integrity of VCCS data?

What is the System-wide roadmap that outlines core technology investments over the next five to ten years?

Where can we deploy standards across the System to increase efficiency and effectiveness?

How do we leverage technology to support student success?

How do we ensure decisions are both made in a timely manner yet not made before they are properly vetted and communicated to stakeholders?

There are no IT projects, only organizational initiatives with a technology component

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Working Group Future State Recommendations

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Working Group Future State Recommendations

Procurement & Contracting

Procurement & Contracting Recommendations
Timeline: Initiate within the Next 6 Months

#	Recommendation	Impact
PC 1	Implement a **Procurement Leadership Council** that would comprise of campus and system procurement leadership who would gain consensus on motions	A Procurement Leadership Council will provide a governance structure across the system, enabling all units to participate in systemwide discussions will equally distributed representation. Furthermore, a council would formalize the existing collaboration among units, helping to make sure that such collaboration continues even as lead procurement officers may transition out of their roles over time. The council co-chairs would include a permanent system representative and a rotating campus representative.
PC 2	Provide system procurement leadership with **more formal access to system and institutional leadership** – as a regular CBO agenda item – to increase the visibility and influence of the procurement function	Greater visibility with campus and system executive leaders (the council co-chairs and CBOs) will help to align the procurement function with the university system's larger strategic mission. In doing so, the procurement area will be able to better support other business areas of the university. The new council co-chairs could represent the procurement function at the regular CBOs' meeting at an identified cadence, providing updates and standard reports.
PC 3	Clearly **define guidelines for when a purchase order versus contract** ought to be used – for example, purchase orders for goods and contracts for services	The Leadership Council will work to establish clear guidelines will allow end users in the departments, in addition to procurement and contracting employees, move more quickly and efficiently. End users should not need to reach out to the procurement and contracting officers for support as frequently, and standardization of these processes will help to mitigate overall risk.

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Procurement & Contracting Recommendations
Timeline: Initiate within the Next 12-18 Months

#	Recommendation	Impact
PC 4	Streamline **procurement operations/data entry** within a smaller group of dedicated experts	Fewer staff members who are responsible for data entry will help to maintain a higher standard of quality for data quality, as the team can be trained more effectively. This group can support the entire system's buying processes from any geographic location.
PC 5	Make finding and navigating **online policy** easier for departmental users	Current procurement policy is difficult to navigate, with important clauses hidden in longer policies not targeted to departmental buyers. Online resources that are easier to identify will allow departmental buyers to answer their own questions more quickly.
PC 6	Provide **greater levels of training** to purchasing staff and develop a certificate program to ensure consistency and quality of staff and services	Standardized training across the system will help to mitigate the wide variation in talent among current purchasing staff. Including training requirements in position descriptions and developing a mechanism that asks staff members to maintain a specified level of training, such as a certificate program, will ensure quality across the entire procurement area.
PC 7	**Reduce departments' abilities** to buy outside of purchase orders	Limiting departmental flexibility in making purchases to purchase orders will give procurement offices greater control over university-wide spend and better standardize terms and conditions across departmental buys.

THE UNIVERSITY OF TENNESSEE

Procurement & Contracting Recommendations
Timeline: Initiate within the Next 12-18 Months

#	Recommendation	Impact
PC 8	Implement **feedback loops** into the procurement process to improve the customer experience	Feedback loops will give the procurement area greater insight into how it is serving departments and will therefore be able to improve customer service. Allocating adequate resources will be required to implement feedback mechanisms.
PC 9	**Evaluate the current staff size** and increase staff, as needed	Should the procurement function take on responsibility for additional areas, such as strategic sourcing, it may be necessary to adjust staffing levels.
PC 10	Evaluate **contract and PO signature policies and practices** to streamline minor approvals	Granting senior purchasing officers greater authority to sign contracts – up to a recommended dollar threshold – would allow more paperwork to flow through the purchasing offices rather than needing to be escalated to system-level executives. Current practices, including appropriate separation of duties, should be evaluated and restructured as needed.
PC 11	Update **procurement policy** to provide greater clarity, reduce procedural aspects, eliminate ambiguity • Involve end users in the creation/modification of this policy	Simplifying the procurement policy and developing attendant procedures will result in both procurement staff and departments developing a better understanding of the processes, workflows, and relevant guidelines. It is also important to involve end users in these conversations to ensure they fully understand the policies and the implications for their purchases. Once established, ongoing roles and responsibilities related to maintenance and coordination with the policy committee should be identified.
PC 12	**Standardize processes** in each procurement and contract area	Standardization of processes across the entire system will help to make sure the system operates in a consistent manner, mitigating contractual risk.

Working Group Future State Recommendations

Human Resources

Human Resources Recommendations
Timeline: Initiate within the Next 6 Months

#	Recommendation	Impact
HR 1	**Codify and document resources available** to employees for all HR areas	Clear documentation on resources available to faculty and staff across the system on all HR areas (including benefits, equity and diversity, policy, and more) can better support employees seeking answers. While the new call tree routes callers to each unit office and employees can walk directly into those offices, public documentation of who to contact, and when, could reduce the volume of questions that units need to address. This could be particularly impactful for smaller HR offices.
HR 2	Submit recommended job description content for the **future system CHRO position**	Providing input on desired qualifications and experience of the future system CHRO will help to lay the foundation for greater coordination among the campuses and institutes, as well as to set expectations with the system around the areas where units would like to see more system-level support.

Human Resources Recommendations
Timeline: Initiate within the Next 12-18 Months

#	Recommendation	Impact
HR 3	Explore existing **employee engagement tools** and determine objectives and how to administer activities for each local unit	Campuses and institutes currently lead the majority of their own employee relations and engagement efforts. Units should share their existing tools and activities with one another, determine what their own objectives are, and discuss how to execute these goals. In collaboration, the units can also develop common resources such as survey questions that they can all use.
HR 4	Continued dedicated **attention at the system level to equity and diversity**, including ensuring that resources are easily accessible	While the breadth of equity and diversity goes beyond HR (for example, curriculum and student affairs questions), it is important that students, faculty, and staff are clear on who to contact for immediate assistance in this area. Questions or concerns on equity and diversity need to be addressed as quickly and effectively as possible.
HR 5	As part of the future ERP initiative, **standardize the transactional parts of employee onboarding** through electronic experiences	Some units can currently ingest transactional documents for onboarding electronically – even prior to official orientation sessions in person – but some remain paper-based. Standardizing this experience to be electronic rather than manual will both improve the employee onboarding experience and reduce risk.
HR 6	**Codify standard data entry practices** for all HR systems	Consistent data entry into all HR systems will for easy extraction of data for clear trends and identification of common needs.

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Human Resources Recommendations
Timeline: Initiate within the Next 12-18 Months

#	Recommendation	Impact
HR 7	Formalize **leadership development and succession planning practices** across the system	The system can identify succession planning as a strategic priority across the HR function, helping to coordinate efforts and support units in leveraging existing tools or lessons learned from one another.
HR 8	Within the future ERP initiative, **develop resources for managers who create job descriptions**, such as similar language of tasks that can be used for similar positions	A job bank of tasks would provide managers with standardized functions they could leverage to write different job descriptions, which can often be a frustrating endeavor for managers. The job bank could also provide greater insight into how HR evaluates compensation for new positions across the system.
HR 9	Develop **system-level resources to support training** curriculum development, instructional design, and training system needs	A system-level role could support needs assessments across all of the units, identifying common needs – for example, the current Administrative Professionals Retreat that is open to systemwide audiences – that would benefit from system-level input and presence. Expertise in instructional design and the technological system itself would provide more consistent experiences for employees across the system.

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Human Resources Recommendations
Timeline: Initiate within the Next 1-3 Years

#	Recommendation	Impact
HR 10	Implement **electronic time reporting process** across the system	Limited areas across the different campuses and institutes currently use Kronos while others still use paper-based timekeeping. Manual processes can slow down the timeline and introduce opportunities for error.
HR 11	Invest greater resources into **system-wide analytics capabilities**, including access to real-time dashboard that can drill down to unit-specific views	The system currently has limited resources to provide analytics and reporting to the campuses and institutes, making it difficult to view or extract real-time data. A real-time technology solution can provide greater insight at the unit level and allow units to move more nimbly.
HR 12	Explore organizational alignments and functions to **enhance collaboration** among the system and local units	The working group expressed desire to continue these conversations as a forum to explore additional opportunities to enhance collaboration.

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System CHRO Position Description Brainstorm

The working group conceived the following ideal competencies for the future system CHRO position description.

Demonstration of strong interpersonal and relationship skills	Experience building HR capacity	Experience creating and implementing strategic plans	Experience with workforce development and succession planning initiatives
Experience with HCM and/or other major technology implementations	Participation and association with relevant professional organizations (SHRM, CUPAHR)	Experience with building teams and leveraging existing organizational capabilities	Experience delivering results in a shared governance models at multi-institution system
Experience leading collaboration in a decentralized organization (ideally a decentralized higher education setting)	Experience managing leadership without formal or direct reporting lines	Experience evaluating and understanding business risk and compliance environment (including conducting assessments and gap analyses)	

Working Group Future State Recommendations

Capital Projects

Capital Projects Recommendations for Roles and Responsibilities

#	Activity	Current State	Proposed Future State
CP 1	**State Building Commission Approvals** 37-49. Preparation, funding, review, etc.	Central/ Coordinated	Central
	Members of the working group noted that the SBC approval process for capital outlay projects can be cumbersome on individual units because of the time needed to develop robust program statements that can quickly out of date or no longer aligned with state priorities. Some members expressed interest in system administration office dedicating resources to review THEC's comments on individual projects, synthesize the findings for themes, and liaise directly with the campuses.		
CP 2	**Construction Services Process** 175. Pay Applications 177. Substantial Completion 178. Close Out Documentation	Central/ Coordinated	Coordinated
	Some members of the working group want to establish a larger role on behalf of the campuses and institutes in this process to be able to escalate outstanding items in the closing process and provide input into the final retainage release.		
CP 3	**Team Evaluations** 181. Facilitate Designer Evaluation meetings at Design Development Phase (or any other review time as deemed appropriate by all parties), Bidding, and Close-Out.	Central	Coordinated
	Campuses and institutes should be involved in the new process for team and contractor evaluations to provide input into performance.		

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Capital Projects Recommendations
Timeline: Initiate within the Next 6 Months

#	Recommendation	Impact
CP 4	Submit recommendations to modify capital outlay, maintenance, and lease/disposal **approval thresholds** *(details on page 128)*	Current thresholds essentially require that almost all projects – as simple as painting a room, for example – must go through the approval process. Increasing the thresholds will allow UT to initiate projects and work more quickly, without the need to go through lengthy approval processes for relatively small projects.
CP 5	Clearly **define what a capital outlay project** is and designate all other project types as maintenance	The lack of clear definition on what is considered maintenance rather than value improvement currently leads to lengthy approval timelines. By agreeing to the definition of a capital outlay project, all other project types can, by default, fall within the definition of "maintenance," which will allow the units to more quickly initiate and execute on smaller projects that are not significantly modifying existing property. The Capital Projects working group agreed to work on drafting a clear definition for proposal and approval.
CP 6	Submit recommendations to revise the **matching fund percentage requirement and sources** that can be used to fulfill this requirement	For non-Engineering and Business-focused facilities, as well as for smaller campuses, the matching funds requirement is burdensome in executing capital improvements to existing facilities and developing new facilities. Revisions to the percentage requirement and allowing campuses to leverage long-term bonds or student fees would help the campuses to modernize all types of facilities.

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CP 4: Recommendations to Revise Thresholds or Requirements

1 **Maintenance vs. Capital Outlay Projects**

- Capital Outlay: Increase threshold to $1M with a more clear definition of what constitutes capital outlay
- Maintenance: Increase threshold to $500,000

2 **Lease Acquisition**

- Increase threshold to $500,000/year

3 **Lease Disposal**

- Institute a new threshold at $100,000 over a five-year term

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Capital Projects Recommendations
Timeline: Initiate within the Next 12 to 18 Months

#	Recommendations	Impact
CP 7	Implement a system in conjunction with the state to streamline, standardize, and automate the **project approval process and flow of information**	The current process to transmit information between UT and the SBC, OSA, or THEC is extremely manual, with UT offices needing to complete and submit spreadsheets to the state. An automated solution would mitigate the potential loss of information between entities and reduce the amount of time needed to transfer information for project approvals.
CP 8	Implement a **project management system** with automated and standardized processes rather than manual workflows and spreadsheets	The current manual execution of project management activities can result in inconsistent or inadequate identification of project risks and issues. By moving to a project management system with standardized workflows and reporting, project managers can more easily track and mitigate any risks to the project quality, timeline, or budget in real time.
CP 9	Implement a **standardized project reporting** framework	A standardized reporting workflow should be developed and used consistently across all projects. Project Key Performance Indicators should be tracked and updated on a timely basis and reported to management. This level of reporting will allow capital projects and university leadership to monitor the entire portfolio of ongoing projects across project quality, timelines, and budgets.

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Capital Projects Recommendations
Timeline: Initiate within the Next 12 to 18 Months

#	Recommendations	Impact
CP 10	Revise the **Conflict of Interest form** to define what is allowable context for bidders to know	Although the current version of the Conflict of Interest form aligns with the system procurement form, it now prevents designers from having any prior knowledge of the project. Defining allowable context would enable a greater number of firms to bid on the project but still draw a hard line on what is appropriate information.
CP 11	Revise the existing **designer selection process for minor projects**	Execute Master Service Agreements with a pool of qualified designers with agreed-upon rate cards. Campuses and institutes could then assign minor projects to the selected pool based on workload distribution, resulting in a reduced procurement cycle, increased design cost predictability, and standardized design requirements and standards.

Capital Projects Recommendations
Timeline: Initiate within the Next 1 to 3 Years

#	Recommendation	Impact
CP 12	Design a **risk management process** with appropriate mechanisms to identify, quantify, and mitigate potential conflicts and issues	Currently the UT project management process does not have a defined risk management process, centralized hub to store information, or standardized documentation. A standardized risk management process promotes ongoing review of risks in a collaborative format among key stakeholders, including the risk group, the project controls group, and the project management team. As a group, the stakeholders can leverage standardized mechanisms – such as a risk management plan template or risk register – to identify, quantify, and mitigate potential conflicts and issues. Doing so will allow individual project managers to manage risk more effectively, but also enable capital projects leadership to understand trends across the entire portfolio.

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Working Group Future State Recommendations

Information Technology

Enabling Areas Key to Undertaking Functional Initiatives

Enabling Areas

IT/Business Mission Alignment

Formalize IT Governance Structure

Strategic Planning

IT Talent Budget

Formalizing the IT governance structure underpins the IT functional initiatives that the system will be able to take on collectively.

IT Functional Initiatives

Active Directory, Identify Management, and Authentication

Data Governance

Business Intelligence and Reporting

Security Standards and Policies

Network and Infrastructure

Academic Technology

Pre-ERP Planning

Cloud Migration and Management

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Information Technology Recommendations across Enabling Areas
Timeline: Initiate within the Next 6 Months

#	Opportunity	Impact
IT 1	**IT/ Business Mission Alignment**	Expand existing CIOs meeting to include CBOs and CFOs to formally identify, document, and prioritize the most pressing system-wide business issues for IT, especially those where collaboration is required. After issues have been identified, they will serve as inputs to committees within a new governance structure.
IT 2	**Formalize IT Governance Structure**	Establish a governance structure with sub-committees and/or ad-hoc working groups that are formally assigned systemwide issue areas and priorities, thresholds for decision and advisory authority, and accountability mechanisms and ongoing progress reporting requirements and deliverables.

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Information Technology Recommendations across Enabling Areas
Timeline: Initiate within the Next 12-18 months

#	Opportunity	Impact
IT 3	**Strategic Planning**	Launch a System IT Strategic Planning Initiative that identifies system-level priorities and plans for their implementation across campuses inclusive of aligning leadership, building core teams, developing high level timelines, and documenting deliverables. • Strategic Plan should include the establishment of a governance structure to enable initiatives.

Information Technology Recommendations across Enabling Areas
Timeline: Initiate within the Next 1-3 Years

#	Opportunity	Impact
IT 4	**IT Talent Budget**	Ensure campuses have the funding to hire and retain resources with critical IT skills and experience; enable preservation of salary savings to fund performance increases or other competitive advantages like flexible work schedules for high performing staff. Include this as a priority for an IT Governance sub-committee.

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Information Technology Functional Initiatives Recommendations
Timeline: Initiate within the next 6 Months

#	Opportunity	Impact
IT 5	**Data Governance Initiative***	Continue early efforts and establish a data governance strategy, inclusive of roles and responsibilities, standards, and policies; form an attendant IT Governance sub-committee to execute this initiative.

*Continues current effort

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Information Technology Functional Initiatives Recommendations
Timeline: Initiate within the Next 12-18 Months

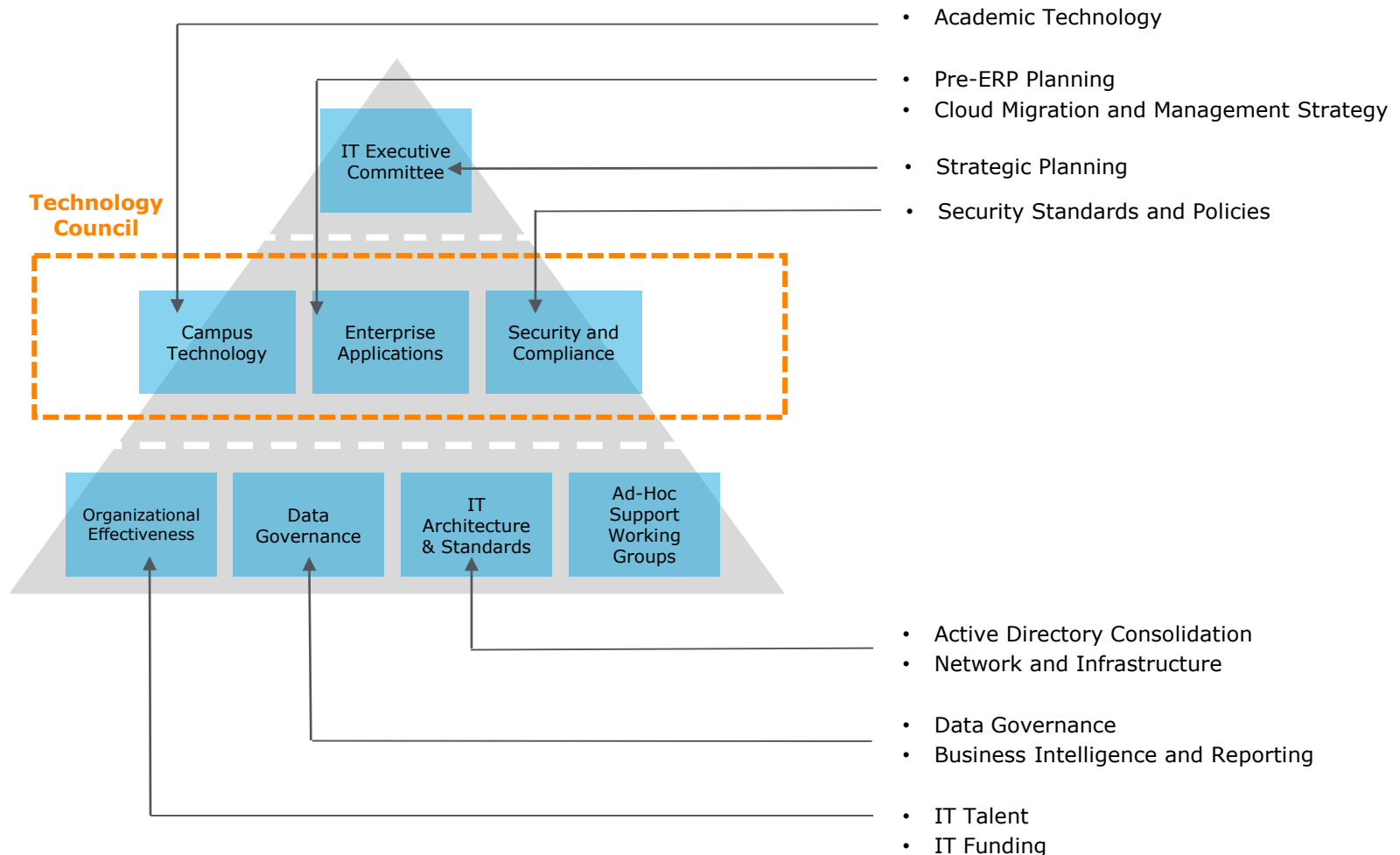| #	Opportunity	Impact
IT 6	**Active Directory, Identity Management, and Authentication Initiative***	Continue work to consolidate into a single active directory to streamline identity management processes. Assign this as a priority for an IT Governance sub-committee.
IT 7	**Business Intelligence and Reporting Initiative**	Build an approach for managing, sharing, and leveraging data across the system which clearly defines ownership, tools, processes, and promotes collaboration; form an attendant IT Governance sub-committee to execute this initiative or align to Data Governance sub-committee.
IT 8	**Security Standards and Policies Initiative***	Continue to develop a system-wide information security strategy that defines standards, policies, and tools to manage people, processes and technology proactively and maintain the confidentiality, integrity, and availability of all of the System's information assets; form an attendant IT Governance sub-committee to execute this initiative.
IT 9	**Cloud Migration and Management Strategy***	Continue to explore systemwide cloud migration and management strategies to inform stakeholders of potential advantages and disadvantages to different cloud-based solutions and vendors.

*Continues current effort

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Information Technology Functional Initiatives Recommendations
Timeline: Initiate within the Next 1-3 Years

#	Opportunity	Impact
IT 10	**Network and Infrastructure**	Review IT policies and standards, capabilities, and existing architecture related to network and infrastructure across units.
IT 11	**Academic and Instructional Technology**	Identify a portfolio of technology services and solutions that support the academic mission and develop guiding principles, standards, and a strategy for integrating across the system where possible to support a more standardized academic experience. Any discussion on this topic needs to involve the chief academic officers.
IT 12	**Pre-ERP Planning Initiative**	Continue to develop a pre-ERP planning initiative to begin reviewing current state pain points and identifying future state business requirements; this initiative should be cross-functional to ensure there is input from across all relevant functional areas; in addition, an IT Governance sub-committee should be formed to help coordinate this initiative.

Formalize IT Governance Structure

Each of UT's identified focus areas can fit within the subcommittees and working groups outlined in this example IT governance structure.

- Academic Technology

- Pre-ERP Planning
- Cloud Migration and Management Strategy

- Strategic Planning

- Security Standards and Policies

IT Executive Committee

Technology Council

Campus Technology

Enterprise Applications

Security and Compliance

Organizational Effectiveness

Data Governance

IT Architecture & Standards

Ad-Hoc Support Working Groups

- Active Directory Consolidation
- Network and Infrastructure

- Data Governance
- Business Intelligence and Reporting

- IT Talent
- IT Funding

THE UNIVERSITY OF TENNESSEE

Working Group Future State Recommendations

Communications & Marketing

Communications and Marketing Recommendations
Timeline: Initiate within the Next 6 Months

#	Recommendation	Impact
CM 1	**Select an annual communications theme** that is reinforced throughout the year by various communications stakeholders and media across the system	The communications theme would be selected for each calendar or academic year to help foster a sense of community across the system. Consistent content and messages that are reiterated throughout the year would amplify the significance of the theme or priority. Potential examples include key research topics and safety and crisis management.
CM 2	Gain **clarity on the distinctive brand identity and key representatives** for the Knoxville campus versus the system administration	Establishing clarity should including delineating key roles and responsibilities (i.e. the role of system president versus campus chancellors) and when/why the "University of Tennessee" terminology is used to communicate about each entity.
CM 3	**Establish standards of terminology and references** to individual campuses, institutes, and the system	Determining campus and institute preferences related to names, logos, and references will ensure the system is coordinated in how it communicates about the portfolio and that the unique branding and identify of each entity to preserved.
CM 4	**Review public records request policies and procedures** and identify any potential change recommendations	A review could identify opportunities to policies and procedures to mitigate administrative burden while preserving the need for public transparency.

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Communications and Marketing Recommendations
Timeline: Initiate within the Next 12-18 Months

#	Recommendation	Impact
CM 5	**Expand professional development programming** to include external opportunities including conferences and industry associations	Attending and contributing to conferences and establishing memberships and activities in industry associations will enable communications professionals to be exposed to industry best practice, build meaningful relationships with other institutions, and provide the opportunity to implement learnings across the system.
CM 6	Conduct an **annual communications strategic planning workshop** to define collaborative communications activities	Building on the system strategic planning exercise, the communications strategic plan would outline how to support system priorities via communications platforms and to define the tactics communications professionals will employ throughout the year. This exercise could also plan for the annual communications theme, monthly tweetstorms, and other system-coordinated activities.
CM 7	**Share innovative ideas and risks/failures** across the system at biannual in-person communications meetings with campus communicators	Including this discussion in the agenda for regularly scheduled meetings will encourage communications staff to stay abreast of trends and other industry practices. The topics of the innovation discussion should include both content and operations.
CM 8	**Streamline public record request processes** by enhancing system communications and coordination	Redesigning the public records request processes should help to eliminate redundant effort on requests that are sent to multiple entities and ensure all relevant stakeholders are engaged on requests to one unit that might impact others.
CM 9	Clarify or develop further **guidance regarding information transparency and preservation standards**	Clarity around where and how long information should be made publicly available would enable communications staff to consistently uphold transparency standards and key compliance requirements.

THE UNIVERSITY OF TENNESSEE

Communications and Marketing Recommendations
Timeline: Initiate within the **Next** 12-18 Months

#	Recommendation	Impact
CM 10	Establish **strategic community relations functions at all campuses/institutes** (where such a function does not exist) and at the system level in order to achieve key organization goals within the strategic plan	The proposed community relations function would identify where campus, institute, and system leaders are engaged in the community and identify a strategy where representation would benefit all system members.
CM 11	Explore **opportunities for common resource sharing**, including technology and contracts	Identifying opportunities to share media buys and monitoring, negotiate printing and other major contracts, and technology resource sharing would best deploy financial resources across all communications operations.
CM 12	Conduct a **shared audience research initiative**	Developing a baseline survey on attitudes about higher education from the Tennessee public would benefit all campuses and institutes and allow them to better tailor and disseminate messages.

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Task Force for Effective Administration and Management

David Miller (Chair)
UT System
Chief Financial Officer

Richard Brown (Co-Chair)
UT Chattanooga
Executive Vice Chancellor for
Administration

Tonja Johnson
UT System
Executive Vice President and Chief
Operating Officer

Chris Cimino
UT Knoxville
Senior Vice Chancellor for Finance
and Administration

Petra McPhearson
UT Martin
Vice Chancellor for Finance and
Administration

Tony Ferrara
UT Health Science Center
Vice Chancellor and Chief Financial
Officer

Tim Fawver
UT Institute of Agriculture
Chief Business Officer

Gail White
UT Institute for Public Service
Budget Director

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TENNESSEE

Deloitte Team Contact Information

Scott Friedman
Principal
scottfriedman@deloitte.com
267.290.5973

Megan Cluver
Senior Manager
mcluver@deloitte.com
802.281.2979

Kim Dunham
Manager
kdunham@deloitte.com
617.416.6096

Irene Kan
Senior Consultant
irkan@deloitte.com
571.317.5692

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