UIT All-Hands Meeting

September 30, 2015
IT Strategic Drivers

- Many higher education and medical services are moving online
- The Internet is becoming the new library, testing center, classroom, laboratory, and way to communicate
- Annual online enrollment has grown 70% since 2010
- Services must be accessible anywhere, at any time
- Online services provide rich data to better inform the institution’s decisions
Creating a Plan

UIT MISSION
(1) to support the University’s mission to foster path-breaking scholarship and providing high-quality, affordable education and health care,
(2) to provide timely, secure, reliable access to information, communication and technology services,
(3) to extend access to University resources to a diverse constituency regardless of time, place or device.

UIT VISION
A trusted partner and leader transforming information technology services and solutions.

UIT VALUES
• We seek effective solutions that meet the needs of our clients and can save time and money, minimize duplication and improve processes.
• We solve problems through a consensual, collaborative, best practices approach.
• We provide secure, reliable access to information and services.
• We protect University data and systems while respecting our community’s reasonable expectation of privacy.
• We keep our commitments.
• We value teamwork and the contributions of our employees and the campus IT community.
• We value open, honest communication.
• We listen.
• We are rapid followers in adopting leading-edge technology.

IT Strategic Goals

1. Improve Faculty and Student Success
2. Promote Business Efficiencies and Effectiveness
3. Advance Research Computing
4. Support Health Care
5. Strengthen Internal Operations

UNIVERSITY OF UTAH MISSION:
Foster Path-Breaking Scholarship and Provide High-Quality, Affordable Education and Health Care
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## Executing the Plan

### UIT Strategic Goals and Projects FY2016

<table>
<thead>
<tr>
<th>1</th>
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<tbody>
<tr>
<td>Support Faculty and Student Success</td>
<td>Support Business Efficiencies and Effectiveness</td>
<td>Advance Research Computing</td>
<td>Support Health Care</td>
</tr>
<tr>
<td>- Strategic Scheduling &amp; Student Success&lt;br&gt;- Online Scholarships, Financial Aid&lt;br&gt;- Online Transfer Student Processes&lt;br&gt;- Admissions Workflow and Document Management &amp; Sharing&lt;br&gt;- Migrate Teaching &amp; Learning Technologies infrastructure</td>
<td>- Procure-to-Pay, SciQuest Implementation&lt;br&gt;- Implement Benefits Administration&lt;br&gt;- Upgrade HR to PeopleSoft 9.2&lt;br&gt;- Implement workflow automation tool&lt;br&gt;- Roll out Lync communications</td>
<td>- Enable (and facilitate) the management and life cycle of research data&lt;br&gt;- Test, deploy, and explore novel and emerging technology&lt;br&gt;- Engage state, regional and national partners&lt;br&gt;- Communicate capabilities of research computing</td>
<td>- EPIC upgrade&lt;br&gt;- Backbone upgrade&lt;br&gt;- Call Center support&lt;br&gt;- UBox support&lt;br&gt;- Provide common services&lt;br&gt;- Identity &amp; Access Management</td>
</tr>
</tbody>
</table>

### 5A Governance, Partnerships
- Improve structure, processes, agendas<br>- Increase stakeholder involvement<br>- Address, resolve major political, financial issues<br>- Align IT services to University priorities

### 5B Enterprise Applications
- Develop administrative dashboards<br>- Mobile<br>- Standardize development tools, process<br>- Upgrade PeopleTools<br>- Upgrade PeopleSoft Finance

### 5C IT Funding Finance
- Develop a sustainable funding model<br>- Build business cases/total cost of ownership on all projects<br>- Audit current UIT inventory to understand capacity, capability and life cycle (obsolescence)

### 5D Teach/Learn Technologies
- Deliver support services for uonline initiative<br>- Manage Fusion server install and configuration project for law building<br>- Document and implement instructional design mode<br>- Improve service for installed classrooms

### 5E Research Computing
- Strategic planning<br>- Funding model<br>- Network upgrade and system patches<br>- Deploy module functionality on clusters<br>- Renew ACI-REF program<br>- UIT integration (KBs, help desk, etc.)

### 5F Service Management
- Common platform<br>- Refine service catalog<br>- CMDB<br>- Improve fulfillment processes<br>- Written SLAs and MOUs

### 5G Enterprise Architecture
- Define architecture<br>- Data quality and management<br>- Business Analytics<br>- Location reference object

### 5H Unified Comm
- Develop private cloud<br>- Financial plan for completion of Lync by 2018<br>- Hire network architect<br>- Integrate hosted and cloud (ex. Google/O365)<br>- Robust common services

### 5I Project, Process Management
- Develop, implement processes and capacities for product management<br>- Manage programs, portfolios, projects<br>- Develop business process improvements

### 5J Upgrade Network
- Backbone upgrade<br>- NextNet<br>- Campus wireless assessment<br>- DAS update<br>- 7x24 monitoring/metrics

### 5K Security, Privacy
- Data Loss Prevention<br>- Identity and Access Management<br>- Malware defense<br>- Risk Management<br>- Improve baseline security policies and training

### 5L Develop Talent
- Strategic recruitment<br>- Leadership development<br>- Improve physical spaces<br>- Employee evaluations<br>- Professional development plans<br>- Student mentoring
Getting Work Done

- **42 of 72** projects from strategic plan completed or showing substantial progress made

- **110+** additional significant University IT projects completed since January 1

- At least **95** strategically significant projects currently in UIT pipeline
New Directors

- Deputy CIO — Ken Pink
- CTO — Jim Livingston
- Business Process/Project — Paula Millington
Launch of New Process/Project Office

- **Gather, Evaluate Ideas, Plans**: Ideas can come from anywhere: from strategic plans, individuals, process analysis, previous projects, executive mandates, etc.

- **Concept Proposal Decision**: Review ideas to determine the value and rank of the project: strategic alignment, payback, risks reduced, business/academic processes enhanced.

- **Analyze, Design Process Workflow**: A holistic approach is taken to improve end-to-end processes crossing functional boundaries with a focus on the experience of participants/users.

- **Propose Project Charter**: Solution(s) are identified, evaluated; business plan/proposal is iterated until it includes detail on functionality, costs, benefits, return on investment, etc.

- **Project Stop/Go Decision**: CBO and CAO approve proposals against criteria such as: strategic fit, impact, cost/benefit, likelihood of success, legal, safety, health, environment, etc.

- **Implement Solution**: Create project plan (scope, approach, milestones, tasks, timelines); manage project (track, monitor, report issues, risks); manage project team and cross-functional experts.
Which Projects? Data-Driven Decisions

A 1-2 Page Project Proposal

- Review needs assessment and product or service definition.
  - End-user/client needs
  - Product/Service purpose
  - Deliverables
  - Metrics
  - Technologies used
  - Systems affected

- Review business plan.
  - Benefits
  - Costs/resources
  - Risks and mitigation
IT Drives Cost Savings

- **Procure-to-pay** — Consolidating purchasing to monitor costs and leverage our buying power; estimated to save $7.2M annually
- **VOIP telephones** — Network-connected Lync phones offer better service and features at a competitive price
- **Service management** — A common platform will help campus and hospital IT teams maximize efficiency
- **Benefits administration** — Automated a manual HR process, saving hours of analysis, data entry, and corrections
Improve Services

- PeopleSoft HR 9.2 upgrade
- Scholarship and Financial Aid
- Student Strategic Scheduling
- Server virtualization
- Indoor/outdoor cellular signal coverage
- Disaster recovery study
- Network and application monitoring
Everything Rides on the Network (The Internet of Things)

- More than 31,000 students and 18,000 faculty and staff use campus IT networks, applications and services — that’s roughly the population of Logan.

- The average user has 3 network-connected devices.

- Nearly every facet of the University uses the network: telephones, fire alarms, building access, HVAC, security cameras, patient care.

- Internet usage on the campus network has increased dramatically in the past decade.
Internet Bandwidth Usage, 2004-2015

Internet bandwidth usage, in GB (7-day rolling average)
UIT manages more than 5,300 devices that comprise the network, including 3,500 wireless access points.

The capital cost to replace just the hardware:
- Edge and Wireless AP’s — $13 million
- Core network — $5.3 million
- Data Center networks — $4 million

There are additional networking expenditures outside central IT that are not accounted for in this estimate.
Improving Capability and Reliability

- Network backbone — A new fiber backbone now allows the University to upgrade buildings from 1GB connections to 10GB.

- The University has added 2.6 million square feet of space in six years, not including new off-campus clinical locations.
Administrative Monitoring

- Dashboards report network and application health from several points inside and outside the system
# UIT Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Status</th>
<th>Trend</th>
<th>Target</th>
<th>Current</th>
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</thead>
<tbody>
<tr>
<td><strong>Customer Service Excellence</strong></td>
<td></td>
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<tr>
<td>Project Alignment with University/UIT Goals</td>
<td>![Green]</td>
<td>➪</td>
<td>95.00%</td>
<td>95.00%</td>
</tr>
<tr>
<td>Availability of Critical Applications</td>
<td>![Green]</td>
<td>➪</td>
<td>99.00%</td>
<td>97.46%</td>
</tr>
<tr>
<td>Availability of Campus Network</td>
<td>![Green]</td>
<td>➪</td>
<td>99.95%</td>
<td>99.68%</td>
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<tr>
<td><strong>Operational Efficiency</strong></td>
<td></td>
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<tr>
<td>Mean time to recovery of Critical Systems</td>
<td>![Green]</td>
<td>➪</td>
<td>2.00</td>
<td>0.56</td>
</tr>
<tr>
<td>Orders Fulfilled within Service Level Agreement time</td>
<td>![Green]</td>
<td>➪</td>
<td>95.0%</td>
<td>90.0%</td>
</tr>
<tr>
<td>Projects Executed on Time</td>
<td>![Yellow]</td>
<td>➪</td>
<td>90.0%</td>
<td>70.0%</td>
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<tr>
<td><strong>Accountability &amp; Performance</strong></td>
<td></td>
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<tr>
<td>% High-risk Systems Assessed</td>
<td>![Red]</td>
<td>➪</td>
<td>90.0%</td>
<td>10.0%</td>
</tr>
<tr>
<td>Tier 1 Research University spending benchmark (Central IT Compensation as a % of total Central IT spending)</td>
<td>![Green]</td>
<td>➪</td>
<td>56.0%</td>
<td>53.0%</td>
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<tr>
<td><strong>Expertise &amp; Commitment</strong></td>
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<tr>
<td>Professional Development Plan for Each Employee</td>
<td>![Red]</td>
<td>➪</td>
<td>100.0%</td>
<td>24.6%</td>
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<tr>
<td>Employee Engagement</td>
<td>![Yellow]</td>
<td>➪</td>
<td>4.00</td>
<td>3.35</td>
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<tr>
<td>Employee Commitment</td>
<td>![Yellow]</td>
<td>➪</td>
<td>4.00</td>
<td>3.58</td>
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<tr>
<td><strong>Shared Services</strong></td>
<td></td>
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<tr>
<td>Percent of Campus Buildings where networks are centrally managed</td>
<td>![Red]</td>
<td>➪</td>
<td>95.0%</td>
<td>58.1%</td>
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<tr>
<td><strong>Innovation &amp; Leadership</strong></td>
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<td>Student workers as a percentage of Central IT staff</td>
<td>![Green]</td>
<td>➪</td>
<td>17.00%</td>
<td>18.00%</td>
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The Deloitte Consulting Engagement

• Goal: To align IT governance, organization, and services with current leading practices, and position the U to meet future operational needs

Vision for Technology at the U

• Technology is a powerful enabler for the University’s mission to foster path-breaking scholarship and provide high-quality, affordable education and health care:
  • Transform lives via student success
  • Develop, Transfer New Knowledge
  • Improve Health and Quality of Life
  • Ensure Long-term Sustainability of the University

• Central and local IT organizations provide efficient, cost-effective, reliable and secure IT products and service

Assessment Objectives

• Conduct a baseline review and assessment of central IT’s current environment

• Assess the University’s estimated total cost and distribution of IT-related spending for the campus (excluding University Hospitals and Clinics)

• Recommend improvements for services, spending, and funding
Deloitte Areas of Focus

- **People**
  - Employee skillsets, skills gaps, organization, facilities, backup and redundancy, succession planning, culture, development

- **Process**
  - Governance, Collaboration, project management, budgeting, accountability, procurement, customer service, business model, communications, asset management

- **Technology**
  - Applications, infrastructure, architecture, communications, cloud services, data center
Deloitte Study Timeline

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<th>Week</th>
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<tr>
<td><strong>Phase 1: Current State Assessment &amp; Benchmarking</strong></td>
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</table>
* Assess and evaluate data collected by the university
* Verify, validate, and confirm understanding of UIT’s data
* Conduct benchmarking and compare data
* Draft initial findings

**Deliverable A**

| **Phase 2: Gap Analysis** |
* Perform gap analysis
* Identify gaps, redundancies, and improvement opportunities
* Refine initial findings

| **Phase 3: Leading Practices & Recommendations** |
* Establish framework and guiding principles for strategic changes to enable operational and financial efficiencies for the University of Utah
* Identify alternative options based on guiding principles, industry leading practices and past experience in higher education sector
* Recommend most appropriate operating model and plan for strategic improvements and implementation

**Deliverable B**

| **Area 1: People** |
| **Area 2: Processes and Capabilities** |
| **Area 3: Technology** |
| **Area 4: Total Annual Spend**

**Deliverable**
- Draft Deliverable
- Final Deliverable
Deloitte Potential Recommendations

- Centralize commodity IT
  - Network (wired and wireless), fiber, phones, ERP, email, DAS, security, data center, identity and access management
- Unified security policy and plan
  - CISO responsible for entire campus security posture, including risk management for distributed systems, data, and personnel
- Comprehensive service management based on ITIL
- Consolidate data centers/develop University cloud
- VOIP with unified communications components
- Unified online student experience
Deloitte Potential Recommendations

- Central IT space to combine staff for better efficiency and communication
  - UIT staff situated in eight different on/off-campus buildings
- Holistic governance and funding for central IT projects
  - Focuses on areas where line authority does not exist
  - Looks at overall importance to University
  - Bridges multi-area needs and solutions
- Strategic funding model
  - Takes into account total cost of ownership
Security

- Visionary security and risk policy — Newly approved rules and processes focus on data rather than people, and let administration properly evaluate risk vs. cost for security
- PCI compliance — Completed overhaul of payment card infrastructure to meet required industry standards
- Identity and Access Management — Key component of a mature operation allowing provisioning and de-provisioning
Challenges Ahead

- The financial model must account for network maintenance and growth as more devices and services move online
- Security threats — Universities are among the most targeted entities, especially research universities
- Continued device growth — More wi-fi enabled devices requires expanded wireless infrastructure to meet demand
- Space — Crowded conditions in current IT facilities lead to difficulty attracting high-level talent
- Hot tech job market — Utah is a tech magnet; the market for IT talent is fierce, and the joblessness rate is just .4%
Ken Pink, Deputy CIO
Employee Recognition

Armed Forces Service Member Recognition

UIT Employee Certifications and College Degrees
IT Service Management Program Update
Jim Livingston, CTO

ServiceNow Platform Implementation Project Overview
09.30.15
Guiding Principles

- We use best practices
- We use ITIL as the Service Management best practice framework
- We define processes BEFORE tool implementation
- We assess value at every step to ensure the benefits justify the costs
- We collaborate with other potential service providers and stakeholders to ensure buy-in for the future
- We establish goals and objectives with associated metrics to ensure success
Project Scope

- **People**
  - An organizational structure that will ensure the continued successful practice of the unified ITSM processes

- **Process**
  - Unified UIT and ITS IT service management (ITSM) policies and processes

- **Platform**
  - Enable the practice of the unified processes through a common ITSM tool (ServiceNow)
Project Phases

PHASE I
- Incident
- Problem
- Change
- Release
- Knowledge
- CMDB (lite)

PHASE II
- Service Catalog
- CMDB
- Service Automation
- Application Creation
- System Dashboards

Team Onboarding and Training Complete: 12/1/2015
Phase I Complete: 6/30/2016
Phase II Complete: 12/31/2016

Today: 2/1/2016
ITIL Process Alignment

- Process Discovery
  - Incident Management
  - Problem Management
  - Change Management

- Gap Analysis
  - Current State
  - Future State
  - Requirements to bridge gaps between Current and Future states
Current Initiatives

**People**
- ITSM Governance Group created
- Process Ownership being defined
- Onboarding Technical support team

**Processes**
- Unified policies ready for approval
- Process development for Incident, Problem, and Change in progress

**Platform**
- New contract with ServiceNow
- Upgraded to latest release of product
- Developing Requirements for process implementation
- RFP for Professional Services in progress (2 months for partner selection)
UIT All-Hands Meeting

September 30, 2015
2015 Kevin Taylor Service Award

Committee Members

Judy Yeates, Chair
Dave Adams
Jan Lovett
Anita Sjoblom
Cassandra Van Buren
Kevin Taylor
1950-2014
Beloved
UIT Director of Policy and Planning
2001-2011
2015 Award

Service Excellence | Commitment to UIT & the University of Utah

Embodying the Legacy of Kevin Taylor

   Inclusivity

   Creative problem-solving

   Humility

   Empathy, compassion, and kindness

Open to discussing a wide range of topics and issues with others
2015 Process

UIT-wide call for nominations

Thank you to nominators!

- Dan Bowden
- Jill Brinton
- Adam Howsley
- Lisa Kuhn
- Paula Millington
- Debbie Rakhsha
2015 Nominees
Kiston Finney, ISO
Brad Grow, USS
Doug Kenner, USS
Peter Panos, Finance

Peter Panos, Finance, Finance

KUED vital
Procure different manager solved many
become task help service
always others Accounting leadership
takes problems improve
projects always service
takes problems improve
University excellent people
gracious respect
true join approach
projects project transition
performs lead purchased
building routine initiative
team mark culture
service-oriented vision
result clear
also Pay found
And the winner is ...
Congratulations to all!

Please consider a tax-deductible donation to the Kevin Taylor Service Award fund – ask us for info
Q&A

Steve Hess, Ken Pink, and Jim Livingston
UIT All-Hands Meeting

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