Thank you so much for setting aside time in this important upcoming CIO Council meeting on November 14. We will be discussing the potential impact of proposed Information Technology Capital Review Board (ITCRB) projects on your schools. We very much appreciate your engagement and the significant time that you are devoting to evaluating and supporting this process to prioritize Harvard’s IT investments.

Organizational Impact is a concept that the ITCRB has been grappling with for a couple of years as we try to understand and plan for the impact of these large IT projects on the schools and other organizations within Harvard. We have heard from you and others that these projects often require a significant effort from the schools and others to make these projects successful and we want to consider that not just for individual projects but also in the planning of the whole portfolio of ITCRB projects.

The ITCRB defines Organizational Impact as:

- The impact during the project (planning and implementation) and during the rollout of the solution with its changes to the user community.
- During Project
  - Effort from schools (and other organizations) to participate in the project’s requirements definition, process re-design, interface definitions, etc.
  - Effort from schools (and other organizations) to participate in the project’s governance
- During Rollout
  - Effort of school representatives directly or through engagement councils to rollout system to their school’s user community
  - Effort of user community to be prepared for system including training, communications about launch dates, etc.

In the past when a new project was proposed to the ITCRB, the proposer of the project had been asked to define what types of resources (outside the sponsoring organization and HUIT) that will be needed to support the project and for how long. While the proposers estimated this impact, in some cases what was actually needed from the schools did not match, resulting in additional stress and effort from the
schools to make the solution implementation a success. With this new process, we want to hear directly from you as representatives of your schools about the impact of the proposed projects so that each project’s resource plan, budget, timeline or other aspects may be altered before submission to align better with the schools’ schedules and needs.

Enclosed is a set of materials for your review in preparation for the meeting on November 14. The focus of this meeting is to hear from you about the anticipated effort that these proposed projects may require from your school.

**Background Materials about the Process**

- Memo to the ITCRB about the revised Organizational Impact process recommendation
- Overview of the process from the perspective of a committee member (PowerPoint)
- Organizational Capacity Assessment form (to be collected at the meeting)

**Materials about the Portfolio of Projects**

- List of ITCRB Intent to Submit proposals – This is the list of all projects coming forward seeking funding to start in FY18. You are reviewing the subset of the list that relates most closely to your area of expertise and that is likely to impact your area the most.
- HUIT Three Year Strategic Goals and IT Roadmap

**Proposals for Discussion**

- Centralized Video Storage
- IAM and AD Improvements

At the meeting we will provide you with an assessment form to collect your feedback about the organizational impact of each proposal on your school. Since this is a new process we will be sending to you a follow up survey after the meeting asking you for feedback about the organizational impact process itself so that we can improve next year.

Thanks again for your support of the ITCRB. We are looking forward to the discussion of these proposed projects as we continue to ensure that Harvard is making the best use of its investments in IT.
The Organizational Impact subgroup met with the following objectives:
- Define meaning and need for a more accurate assessment of organizational impact
- Define method by which project proposals will define organizational impact
- Define method by which a collective view of organizational impact will be generated for assessment of needs across the schools

We believe that we have refined the concepts and determined a more effective method to assess and manage the organizational impact needs of the projects and the schools. We want this process to be part of project planning but not onerous to the project team. We felt it was important that the proposed process give the schools (and other impacted units) a sense of what impact the project will have and obtain from the schools an agreement to support/absorb that impact.

**Definition of Organizational Impact**
- There are 2 components to organizational impact and those points of impact are during the project (planning and implementation) and the rollout of the changes to the user community.
- During Project
  - Effort from schools (and other orgs.) to participate in the project’s requirements definition, process re-design, interface definitions, etc.
  - Effort from schools (and other orgs.) to participate in the project’s governance - Every school should have opportunity for representation on an engagement or steering committee for each project and schools can choose to opt out
- Rollout
- Effort of school representatives on the project team directly or through engagement councils to rollout system to user community
- Effort of user community to be prepared for system including training, communications about launch dates, etc.

**Recommendation**

*When a project proposal is being developed, the proposal must be reviewed with an advisory group for the proposer’s functional area to advise on school support, rollout approach, and timeline. The feedback from the advisory group will be considered by the ITCRB and PRC as part of reviewing each proposal. Likewise when the project’s plan phase is nearly complete the project will be presented again to the functional area’s advisory group for a more detailed assessment by the school representatives of support and timing.*
**Proposal**

- Match project with an existing advisory group, such as Finance Deans, HR Deans and Directors, or CIO Council, based on functional area primarily benefiting from the project.
  - For projects without an obvious matching advisory group, such as projects with a very broad functional impact, the HUIT PMO will assist the project manager with convening a special advisory group specifically for the project. The school representatives who participate in the special advisory group would not necessarily become the school local implementation managers or part of the school’s engagement council.
- The proposal must be reviewed with the appropriate advisory group before submission to ITCRB.
- Project must be presented to the advisory group in context of the related functional roadmap of both active and planned projects so that the advisory group can assess the project taking into consideration the needs of all projects.
- The project manager explains the project’s timeline and anticipated effort from the schools to support the project.
- A set of open ended questions are reviewed with the group to delve into the expected support needs of the project.
- Group members indicate ability to support as Red, Yellow, or Green for their school’s capacity. These will be documented and included in the materials submitted for the PRC and ITCRB review.

**Planning**

- The Project Manager returns to the advisory group in advance of submitting an implementation fund release to present a more detailed implementation/rollout plan.
- Project is presented again in context of related functional roadmap of both active and planned projects so that the advisory group can re-assess the project, taking into consideration the needs of all projects.
- A set of open ended questions are reviewed with the group to delve into the expected support needs of the project roll-out.
- Group members indicate ability to support as Red, Yellow, or Green for their school’s capacity. These will be documented and included in the materials for the PRC review for implementation fund release.
Example of Matching of FY16 ITCRB Projects and their Advisory Group

<table>
<thead>
<tr>
<th>ITCRB Project</th>
<th>Advisory Committee to assess impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peoplesoft 9.2 Upgrade</td>
<td>HR Deans and Directors</td>
</tr>
<tr>
<td>Collaboration</td>
<td>CIO Council</td>
</tr>
<tr>
<td>MOFR Phase II</td>
<td>Controllers Roundtable</td>
</tr>
<tr>
<td>PI Dashboard</td>
<td>Specially formed committee</td>
</tr>
<tr>
<td>Harvard Training Portal</td>
<td>Specially formed committee</td>
</tr>
<tr>
<td>Travel and Expense (Concur)</td>
<td>Controllers Roundtable</td>
</tr>
<tr>
<td>HUBS Upgrade</td>
<td>Budget Directors</td>
</tr>
<tr>
<td>Harvard Invention Reporting and Tracking</td>
<td>Specially formed committee</td>
</tr>
<tr>
<td>AA&amp;D and HR Reports migration from CREW</td>
<td>HR Deans and Directors + AAD Reps</td>
</tr>
</tbody>
</table>

Example: Advisory Group Meeting Project Materials Provided

- Functional roadmap which includes the project
- Scope of project
- Project Timeline
- Intended direct users of new/enhanced system
- Rollout strategy, e.g., all at once, pilot school and then the rest, rolling waves of schools, etc.
- Staffing support the project will need – LME, SME, representatives on steering committee, pilot users, participants in UAT etc. – and rough estimate of the expected timing such as fall semester or April to July. (No expectation of specific hrs.). Include Job families likely impacted (ex. payroll, benefits, data analyst, etc.) and how they will be impacted during both the project and the rollout.

ITCRB Proposal Content

- Advisory Group: <name>
- Review Meeting: <date of meeting>
- Feedback from schools:
  - Concern/Risk 1
  - Concern/Risk 2

Example: Summary of Support Available for Project XYZ

<table>
<thead>
<tr>
<th>Job Family 1</th>
<th>HKS</th>
<th>SPH</th>
<th>HMS</th>
<th>FAS</th>
<th>HDS</th>
<th>GSD</th>
<th>HBS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Family 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Information Technology Capital Review Board (ITCRB)
FY18 Organizational Impact:
The Role of the Advisory Group
Agenda

- Organizational impact goals and process
- Role of the advisory group members
- Key Questions to Consider and Impact ratings
Goals of the Organizational Impact Process

Goals

• Improve decision-makers’ understanding of a potential project’s impact on University faculty and staff.

• Allow senior school leaders to influence the project’s timeline, resources, and plans

• Provide feedback to the ITCRB so that they can make more informed decisions about project proposals.

• Allow project teams to understand school needs and adjust plans for project to ensure success at all schools

Anticipated Result

• Better outcomes for funded projects since schools and impacted organizations will be informed, prepared, and committed to projects earlier in the process.
Process overview

1. Proposed projects for ITCRB and HUIT Project Management Office (PMO) identify appropriate advisory group(s) of senior school leadership.
   • Potential groups include: Fin Deans, CIO Council, and Research Admin Systems Executive Committee.

2. Organizational impact presentation given to advisory group:
   • Functional area’s strategic goals and IT roadmap
   • For each proposed project:
     • project vision, benefits, timeline, and anticipated organizational impact.

3. Project team documents feedback received from advisory group and submits as part of ITCRB proposal.

4. Approved/funded projects will return to advisory group during planning phase for re-assessment of impact.
Role of advisory group members:

• **Goal**: Begin a conversation between your school and the project team about potential impact of the project on your school.

• Actions before meeting:
  • Review functional area and project specific materials
  • Discuss the projects with any impacted groups within your school to gather feedback about impact

• Attend meeting to discuss projects’ impact on your school.

• Give feedback to project team on any concerns that your school may have.

• Advise project team on how to continue the impact discussion at your school.

• Fill out organizational impact grid on behalf of your school and share with PMO and project team (after the meeting).
Advisory Group Meeting Agenda and Materials

• Review Organizational Impact process and objectives (5 min)
• Review Functional Area strategic goals and IT roadmap (15 min)
• Review IT projects from functional area seeking FY18 ITCRB funding
  – Project Proposal A (10 min) review and impact discussion
  – Project Proposal B (10 min) review and impact discussion
  – Project Proposal C (10 min) review and Impact discussion
• Gather additional feedback from group (10 min)
Key questions for the advisory group to consider

Rollout
- Is the project rollout timed in a way to make the most positive impact on the affected users in your schools?
- Is the rollout approach (e.g. big bang, phased) appropriate?
- Could the proposed project rollout approach/timing negatively impact any key school processes?

Resources
- Are there any internal school initiatives that would impact the same resources as the proposed project?
- Has the project appropriately defined the resources that will be impacted in your school?
- Would the support resources needed by the project be available during the proposed timeline?

Impact
- Has the project accurately identified the project’s long term operational impact to your school?
Impact grid to be completed by each advisory group member

<table>
<thead>
<tr>
<th></th>
<th>Your school</th>
</tr>
</thead>
<tbody>
<tr>
<td>During Project</td>
<td>Yellow</td>
</tr>
<tr>
<td>Go-live and stabilization</td>
<td>Yellow</td>
</tr>
<tr>
<td>Ongoing post-live operations</td>
<td>Green</td>
</tr>
</tbody>
</table>

GREEN = Fully committed, impact can be absorbed

YELLOW = Tentatively committed, impact issues identified

RED = Uncommitted, significant impact issues need to be addressed
**Org. Impact Info to be included in ITCRB Project Proposal**

- Information about advisory group meeting, such as date and members
- Key feedback from schools and proposal adjustments to address concerns
- Plans for continued engagement with schools if project approved

Example of grid (one column for each school/impacted unit):

<table>
<thead>
<tr>
<th></th>
<th>HKS</th>
<th>HChan</th>
<th>HMS</th>
<th>FAS</th>
<th>HDS</th>
<th>GSD</th>
<th>HBS</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>During Project</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Go-live and stabilization</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ongoing post-live operations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**GREEN** = Fully committed, impact can be absorbed

**YELLOW** = Tentatively committed, impact issues identified

**RED** = Uncommitted, significant impact issues need to be addressed
ITCRB Organizational Impact Assessment Form

Name: _____________________________________________________________

School/Org: _______________________________________________________

<table>
<thead>
<tr>
<th>Impact (R/Y/G)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centralized Video Storage</td>
<td></td>
</tr>
<tr>
<td>During Project</td>
<td></td>
</tr>
<tr>
<td>Go-Live and stabilization</td>
<td></td>
</tr>
<tr>
<td>On-going post-live operations</td>
<td></td>
</tr>
<tr>
<td>IAM and AD Improvements</td>
<td></td>
</tr>
<tr>
<td>During Project</td>
<td></td>
</tr>
<tr>
<td>Go-Live and stabilization</td>
<td></td>
</tr>
<tr>
<td>On-going post-live operations</td>
<td></td>
</tr>
</tbody>
</table>

Return to Ellen Gulachenski (ellen_gulachenski@harvard.edu) by 11/18/16
# FY18 ITCBR Funding Cycle - Intent to Submit

<table>
<thead>
<tr>
<th>#</th>
<th>Title</th>
<th>Organization</th>
<th>Project Description (Business Value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Class Reports Production Platform</td>
<td>A&amp;O</td>
<td>An industry standard platform that provides better capabilities for the collection and production of books leading to better engagement of alumni and activation of interest in reunions and reconnecting with classmates, as well as increased value of data A&amp;O can then leverage for other business purposes.</td>
</tr>
<tr>
<td>2</td>
<td>New CRM for University-wide A&amp;O - Discovery</td>
<td>A&amp;O</td>
<td>A more robust, University-wide Contact Relationship Management system with improved capabilities, user experience, workflows, and integration will allow staff to re-focus time on more critical programmatic activities as well as implement new programs and services.</td>
</tr>
<tr>
<td>3</td>
<td>File-fundraising Platform</td>
<td>A&amp;O</td>
<td>Implementing a new platform for A&amp;O’s call center for fundraising activities with integrated data model and enhanced analytics will not only provide operational efficiency and reduce manual effort, but will also allow dynamic adjustments to calling strategies ensuring optimal revenue generation, increased donor participation, and alignment with future strategic growth plans.</td>
</tr>
<tr>
<td>4</td>
<td>Broadcast Communications</td>
<td>CS</td>
<td>University-wide messaging to inform and engage the Harvard community with timely and relevant broadcast communications in support of University business, culture, and campus safety, resulting in productivity and efficiencies by replacing duplicate local solutions, processes, and resources.</td>
</tr>
<tr>
<td>5</td>
<td>Buy 2 Pay - Planning Project</td>
<td>FAD</td>
<td>Removing the inefficiencies that plague Harvard’s buy-to-pay system would reduce the administrative time required to manage procurement, leverage buying power to get good pricing, and capture discounts, thus saving millions for the University.</td>
</tr>
<tr>
<td>6</td>
<td>Concur T&amp;E implementation</td>
<td>FAD</td>
<td>A single platform for expense reimbursement, one consolidated system for processing corporate credit card and PCARD expenses, and an integrated platform for travel booking and expense, enabling numerous administrative, end user and financial benefits.</td>
</tr>
<tr>
<td>7</td>
<td>Research Compliance Initiative</td>
<td>FAD</td>
<td>Organizations will be able to self-serve with platform as a service offering, assuming independent control and reducing dependencies on HUIT, and address various compliance areas that have emerged as audit and risk “hot spots.” Business units and project teams will be able to operate more efficiently, providing greater availability of resources to address strategic problems.</td>
</tr>
<tr>
<td>8</td>
<td>Research Finance: Cash Management and Reporting (FRAP Implementation)</td>
<td>FAD</td>
<td>The GSP’s Research Finance team automates many of the 5,000 deliverables, but the FRAP system is unable to handle deviations from the automated processes, thus forcing the staff to pull deliverables out of FRAP to prepare them manually. Improved FRAP functionality would result in a reduction in backlog, increased on-time submission rates, timely payments, and improve management.</td>
</tr>
<tr>
<td>9</td>
<td>Integrate Campus Service Time and Absence systems with PeopleSoft</td>
<td>IHR</td>
<td>Campus services has two separate groups of systems that also do Time and Attendance tracking in order to enable local time cards sweeping and an integrated work order billing process. Providing a better system integration will reduce duplication of data entry, lower the risk of error and increase the accuracy of data and reporting.</td>
</tr>
<tr>
<td>10</td>
<td>Position Management</td>
<td>IHR</td>
<td>Harvard’s systems will transition to a position-based model that for the first time exposes vacant positions, provides a common link between the current and past state of the workforce and organization, and provides a means for integrating the HR, Budgeting, talent acquisition and financial transaction systems, data and processes.</td>
</tr>
<tr>
<td>11</td>
<td>Retro-Costing in PeopleSoft</td>
<td>IHR</td>
<td>Using retro-costing will improve the data coming out of Qlikview, enable all retro-adjustments in PeopleSoft at the job level, and will automatically feed the GL in the form of journal adjustments, thus making it easier for line staff, particularly grant managers, to make retroactive cost changes consistent with federal effort reporting.</td>
</tr>
<tr>
<td>12</td>
<td>Centralized video storage service planning and start-up</td>
<td>HUIT</td>
<td>By providing this centralized solution, we have the opportunity to reduce the cost and complexity that users are experiencing today. Through guidelines and policy (excluding metadata) definition and implementation, we also will provide the underpinnings for more robust use of the video assets that we have today.</td>
</tr>
<tr>
<td>13</td>
<td>Collaboration - Administrative File Sharing</td>
<td>HUIT</td>
<td>This project is expected to deliver easy to use file storage and sharing tools that improve collaboration across Harvard, increase security and compliance, and reduce costs.</td>
</tr>
<tr>
<td>14</td>
<td>Data Management Services (DMS)</td>
<td>HUIT</td>
<td>The fundamental objective of DMS is to enable improved decision making and enhanced productivity through the effective use of administrative data and information management services. A more streamlined process leveraging modernized technology will remove barriers and expand Harvard’s ability to maximize its administrative data assets.</td>
</tr>
<tr>
<td>15</td>
<td>IAM and AD Security Improvements</td>
<td>HUIT</td>
<td>Improved security leads to fewer data breaches. This means less impact to the community in the form of password resets. More importantly, it means less risk of reputational or financial harm or regulatory penalties to the University.</td>
</tr>
<tr>
<td>16</td>
<td>Transformative Title IX Awareness and Engagement Program Leveraging Dynamic</td>
<td>HUIT</td>
<td>Reduces legal and reputational risk to the university by providing immediate access to resources, increasing reporting, and building trust with the community through responsive and innovative solutions.</td>
</tr>
<tr>
<td>Title</td>
<td>Project Description (Business Value)</td>
<td>FY18</td>
<td>FY19</td>
</tr>
<tr>
<td>-------</td>
<td>-------------------------------------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>FY18</td>
<td>FY18 ITCR8 Funding Cycle - Intent to Submit</td>
<td>$345</td>
<td>$464</td>
</tr>
<tr>
<td>FY18</td>
<td>FY18 ITCR8 Funding Cycle - Discoveries</td>
<td>$370</td>
<td>$463</td>
</tr>
<tr>
<td>FY18</td>
<td>FY18 ITCR8 Funding Cycle - Developing Leaders</td>
<td>$1,065</td>
<td>$1,701</td>
</tr>
<tr>
<td>FY18</td>
<td>FY18 ITCR8 Funding Cycle - Enhancing Our Communications</td>
<td>$6,000</td>
<td>$0</td>
</tr>
<tr>
<td>FY18</td>
<td>FY18 ITCR8 Funding Cycle - Planning Project</td>
<td>$465</td>
<td>$50</td>
</tr>
<tr>
<td>Title</td>
<td>FY18</td>
<td>FY19</td>
<td>FY20</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>Research Compliance Initiative - GMAS</td>
<td>$1,000</td>
<td>$3</td>
<td>$3</td>
</tr>
<tr>
<td>Research Compliance Initiative - OBI/reporting</td>
<td>$1,900</td>
<td>$1,900</td>
<td>$1,900</td>
</tr>
<tr>
<td>Research Compliance Initiative - Conflict of Interest (COI)</td>
<td>$7,400</td>
<td>$7,400</td>
<td>$7,400</td>
</tr>
</tbody>
</table>

**Research Compliance Initiative:**

1. **Compliance:** The project would establish an electronic database for tracking and reporting all compliance-related information. This will enhance transparency and accountability across the University.

2. **Governance:** The project would create a governance structure to oversee the implementation and maintenance of the new processes.

3. **Executive Seating:** The project would provide executive-level visibility into compliance-related activities, ensuring that key stakeholders are informed and engaged.

4. **Implementation:** The project would include a phased approach to implementation, ensuring that all stakeholders are prepared for the changes.

5. **Financial:** The project would result in a reduction of administrative costs and increased revenue through more efficient processes.

**Project Description:**

- The project would involve the development of a comprehensive compliance management system, including policy development, training, and ongoing monitoring.
- This system would enable the University to comply with regulatory requirements and reduce the risk of non-compliance.
- The project would also include the development of a compliance monitoring and reporting tool to facilitate ongoing compliance oversight.

**Project Contacts:**

- Vice President for Finance and Chief Financial Officer
- Vice President for Research

**Investment Type:**

- $1,000
- $7,400
- $1,900
FY18 ITCRB Funding Cycle - Intent to Submit

Research/Finance - Cash Management and Reporting (FRAP Implementation)

FY18, ITCRB's research finance team (including FRAP) managed approximately $1.6B in annual sponsored reporting, and billing and collections. This work required over 20% additional headcount relative to baseline, and thousands of transaction, financial reports and grant reviews, which FRAP helped automate approximately 10% of these transactions. The automation has decreased delays, over the past year because FRAP is able to handle deviations from the automated processes through assigning the staff to pull deliverables out of FRAP to prepare them manually. The system has been asked to replace and over single point of contact that require immediate change in research and development time. Supporting, improving, and scaling these functions is critical to the sponsored function of the University. Nearly 20% of the University's operational budget is derived from external sponsored funding. It is imperative that those funds are managed efficiently and effectively.

Some key benefits of this functionality include:
- Reduction in report and invoice backlog for sponsored grants and contracts
- Improved on-time submission rates, while the number of deliveries has decreased
- 8x increase in on-time invoice submissions and 7x increase in on-time financial report submissions
- The number of overall deliveries decreased by almost 80% from FY16 to FY18
- Improved cash position
- On-time invoicing has resulted in more timely payments and less issues with sponsors. Since the inception of FRAP Harvard's overdue 411AR has decreased significantly from 481AR to FY17 to 158AR in FY18, a 65% decrease. Revenues over 60 days old decreased by 50% during that time.
- The write-offs on FY18 were $365K of our expenditures, which is a fraction (on average) of materiality. Maintaining low accounts receivable and write-offs has become more critical over the past two years. The AR reserve was moved out of the individual school's balance sheet for FY17.
- Increased capacity for the staff to focus on more complex invoice resolution and "value add" activities.
- Financial analysts now meet regularly with their departments which improves grant management of awards and ensures issues are resolved timely and proactively.
- Departments have access to a supplemental help desk to better manage deadlines and financial
- Improved quality and standardization of reporting and invoicing, which also leads to improved credibility and reputation with our sponsors and subcontractors.

- Reduction in administrative burden through the automation of electronic invoice submissions and automated record retention of invoices and financial reports in QBO.

<table>
<thead>
<tr>
<th>Program Description</th>
<th>Business Value</th>
<th>FY18</th>
<th>FY19</th>
<th>FY20</th>
<th>FY21</th>
<th>Total $</th>
<th>Previous Award</th>
<th>Organization</th>
<th>Sponsor</th>
<th>Title</th>
<th>Project Contact</th>
<th>Investment Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research/Finance - Cash Management and Reporting (FRAP Implementation)</td>
<td>$18,426</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$6,062</td>
<td>$14,364</td>
<td>Harvard-IDEAS</td>
<td>Vice President for Finance and Chief Financial Officer</td>
<td>ITCRB</td>
<td>Alpen O</td>
<td>Francis Newell</td>
<td>Nature Alpex</td>
</tr>
</tbody>
</table>

Integrate Campus Service Time and Attendance Systems with PeopleSoft

Campus Services has two separate systems that are both time and attendance tracking. As both the software are not communicating, there is a need to have one common system that can support the needs of 30,000+ employees. FY18 is the final year of this project and the focus will be on integration of these two systems. This will provide a single system for time attendance that can be used across the University.

$4,000 | $3 | $3 | $3 | $4,000 | $3,451 | Harvard-IDEAS | Vice President for Finance and Chief Financial Officer | ITCRB | Weenick Vice President | Isabelle Margulies | Nature Alpex | 0.6% |

Position Management

A position management solution will give University and School/unit leadership the tools to not only streamline time in the administrative tasks associated with managing their workforces, but also to make well-informed and strategic decisions in response to changing conditions. Harvard's systems will transition to a position-based model that is the first step of a three-step project. This will provide a single-source record of all positions, and facilitate reporting on workloads.

$100 | $3 | $3 | $3 | $100 | $690 | Harvard-IDEAS | Vice President for Finance and Chief Financial Officer | ITCRB | Weenick Vice President | Isabelle Margulies | Nature Alpex | 0.6% |

Enterprise Costing in PeopleSoft

Enterprise costing will enable Harvard to make the most of other adjustments in PeopleSoft, at the job level, and will then automatically feed the GL in the form of journal adjustments. This will make it much easier to make cost, staff, and other department adjustments and help with future trends. The cost of the project is $1,200, which will take a minimal time to implement.

$1,200 | $3 | $3 | $3 | $1,200 | $1,200 | Harvard-IDEAS | Vice President for Finance and Chief Financial Officer | ITCRB | Weenick Vice President | Isabelle Margulies | Nature Alpex | 0.6% |

Centralized video storage service planning and design

The objective of this project is to provide a centralized solution where users can easily access videos that are stored on our local, lost, and remote systems. This will provide a single place where users can search for videos and quickly access them.

$1,500 | $3 | $3 | $3 | $1,500 | $1,500 | Harvard-IDEAS | Vice President for Finance and Chief Financial Officer | ITCRB | Weenick Vice President | Isabelle Margulies | Nature Alpex | 0.6% |

Collaboration - Administration File Sharing

This project is expected to deliver easy to use storage and sharing tools that support collaboration across Harvard, enhance security and compliance, and reduce costs.

$1,000 | $3 | $3 | $3 | $1,000 | $1,000 | Harvard-IDEAS | Vice President for Finance and Chief Financial Officer | ITCRB | Weenick Vice President | Isabelle Margulies | Nature Alpex | 0.6% |

State Management Services (SMS)

Harvard's data transformation will enable people to work more efficiently and reduce cost efforts toward innovation.

$5,000 | $6,000 | $6,000 | $4,487 | $6,000 | $26,000 | Harvard-IDEAS | Vice President for Finance and Chief Financial Officer | ITCRB | Weenick Vice President | Isabelle Margulies | Nature Alpex | 0.6% |

State Manager Services (SMS)

This project is expected to deliver a single source for data and sharing tools that will help streamline the process of managing data.

$5,000 | $6,000 | $6,000 | $4,487 | $6,000 | $26,000 | Harvard-IDEAS | Vice President for Finance and Chief Financial Officer | ITCRB | Weenick Vice President | Isabelle Margulies | Nature Alpex | 0.6% |

Child/Adult & Security Improvements

The fundamental objective of SMS is to enable improved decision-making and enhanced productivity for our staff, faculty, and students through the effective use of administrative data and information management services. Through the course of these efforts we will also increase efficiency, simplify data exchange, enable cross-school and cross-functional collaboration, and empower Harvard’s ability to manage its administrative data.

$4,000 | $6,000 | $6,000 | $4,487 | $6,000 | $26,000 | Harvard-IDEAS | Vice President for Finance and Chief Financial Officer | ITCRB | Weenick Vice President | Isabelle Margulies | Nature Alpex | 0.6% |

Transformation: HEDS Awareness and Engagement Program leveraging Dynamic Multimedia

This project is expected to deliver a single-source platform that can be used across the University for the delivery of multimedia content. This will provide a single-source platform that can be used across the University for the delivery of multimedia content.

$6,000 | $6,000 | $6,000 | $6,000 | $6,000 | $6,000 | Harvard-IDEAS | Vice President for Finance and Chief Financial Officer | ITCRB | Weenick Vice President | Isabelle Margulies | Nature Alpex | 0.6% |

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Business Value</th>
<th>FY18</th>
<th>FY19</th>
<th>FY20</th>
<th>FY21</th>
<th>Total $</th>
<th>Previous Award</th>
<th>Organization</th>
<th>Sponsor</th>
<th>Title</th>
<th>Project Contact</th>
<th>Investment Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY18 ITCRB Funding Cycle - Intent to Submit</td>
<td>$22,426</td>
<td>$11,141</td>
<td>$6,078</td>
<td>$4,487</td>
<td>$6,000</td>
<td>$26,000</td>
<td>Harvard-IDEAS</td>
<td>Vice President for Finance and Chief Financial Officer</td>
<td>ITCRB</td>
<td>Weenick Vice President</td>
<td>Isabelle Margulies</td>
<td>Nature Alpex</td>
</tr>
</tbody>
</table>
### Harvard University Information Technology Mission

We strive to make it easier for faculty, students, and staff to teach, research, learn, and work through the effective use of information technology.

### Harvard University Information Technology 3 Year IT Strategic Goals

<table>
<thead>
<tr>
<th>Strategy</th>
<th>FY18</th>
<th>FY19</th>
<th>FY20</th>
<th>Future state</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Service Delivery</strong></td>
<td>Deliver IT services that meet the needs of faculty, students and staff</td>
<td>• #1 Develop a next generation campus network roadmap, including an Allston regional design</td>
<td>• #1 Implement next generation campus network roadmap</td>
<td>HUIT delivers high quality services which meet the evolving needs of the Harvard Community</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• #2 Develop UX policy, tools and supporting service</td>
<td>• #2 Roll out UX service and evolve tools and support</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• #3 Enhance end-user support experience through knowledge management and self-service portal</td>
<td>• #3 Continue to enhance end-user experience through broader knowledge base</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• #4 Rationalize and mature service ownership</td>
<td>• #4 Rationalize and mature service ownership</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• #5 Define a set of sustainable and centralized video storage services</td>
<td>• #23 Upgrade Oracle/PeopleSoft Campus Solutions</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• #6 Assess current state of tools used by HUIT to deliver services</td>
<td>• #5 Evolve video storage services and define a set of sustainable and centralized services for other growing storage needs</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• #6 Rationalize tools used by the HUIT community to deliver services</td>
<td>• #6 Rationalize tools used by the HUIT community to deliver services</td>
<td></td>
</tr>
<tr>
<td>Implementation of New Systems</td>
<td>Strategies, Plans and Process</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Implement new technology through programs and strategic initiatives</strong></td>
<td><strong>Develop IT strategies, plans and process</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• #7 Complete phase one and launch phase two of the Collaboration program</td>
<td>• #12 Partner with CIO Council to develop new CIO Council Strategic Initiatives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• #8 Create a data management strategy, roadmap and service model</td>
<td>• #13 Plan Develop and roll out Information Security Risk Governance structure and Information Security Controls Framework</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• #9 Build a University Cloud Service and continue migrations</td>
<td>• #14 Leverage Research Computing Council to drive alignment in research computing resources across the university</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• #10 Continue to roll out Aurora for FAS</td>
<td>• #15 Establish and roll out Enterprise Architecture policy, standards and reference architecture for the University</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• #11 Deliver Harvard Phone VoIP program</td>
<td>• #16 Continue to mature VMO, PMO, ITSM and Account Management focusing on adoption of Agile and key ITIL processes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• #7 Launch phase three of Collaboration program focused on group file shares</td>
<td>• #12 Prioritize and launch CIO Council Strategic Initiatives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• #8 Implement data management strategy and continue data management services initiative</td>
<td>• #14 Leverage Research Computing Council to plan for increased need for data science facilitation across the University</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• #9 Roll out University Cloud Service</td>
<td>• #24 Develop holistic strategy for leveraging operational technology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• #10 Complete Aurora project and retire ASPeRIN.</td>
<td>• #15 Continue roll out of Enterprise Architecture standards and policies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• #11 Deliver Harvard Phone VoIP program</td>
<td>• #16 Continue to mature VMO, PMO, ITSM and Account Management focusing on adoption of Agile and key ITIL processes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• #8 Continue data management services initiative</td>
<td>• #12 Launch CIO Council Strategic Initiatives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• #13 Launch CIO Council Strategic Initiatives</td>
<td>• #25 Explore strategy and opportunities related to Internet of Things</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• #14 Launch CIO Council Strategic Initiatives</td>
<td>• #15 Continue roll out of Enterprise Architecture standards and policies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• #15 Continue roll out of Enterprise Architecture standards and policies</td>
<td>• #16 Continue to mature VMO, PMO, ITSM and Account Management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• #15 Continue roll out of Enterprise Architecture standards and policies</td>
<td><strong>HUIT has a strong foundation from which to deliver services and implement new technology</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>The Harvard community has best in class technology</strong></td>
<td><strong>The Harvard community has best in class technology</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUIT Administration</td>
<td>Create the best work environment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------</td>
<td>----------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• #17 Implement recommendations from master space plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• #18 Continue to reduce complexity of HUIT finances</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• #19 Continue focus on employee engagement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• #20 Implement business process redesign for contingent labor and travel/expenses</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• #21 Enhance external and internal communications</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• #22 Explore opportunities to strengthen and streamline talent acquisition</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Note:</strong> Numbers are intended to show how the strategic goals in this plan span over the years. The numbers do not relate to the HUIT FY17 Top 10 or the CIO Strategic Initiatives.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Project Overview

• Problem Statement
  • Video is a critical component of the evolving teaching and learning landscape. We are seeing an expanded need to support the use and storage of video throughout the video production workflow. There is an opportunity to provide a set of sustainable infrastructure, process, and policy solutions to support this growing need in a cost-effective manner

• Business Value from “intent to submit”
  • By providing this centralized solution, we have the opportunity to reduce the cost and complexity that users are experiencing today. Through guidelines and policy (including metadata) definition and implementation, we also will provide the underpinnings for more robust use of the video assets that we have today

• This project is a sub-component of the Strategic Storage effort

• This is a cross HUIT effort. Many groups are expected to be involved including Academic Technology, ITS (storage and networking), Cloud/DevOps, LTS, IAM, ATS, and Research Computing

Note: we are aware of the temporal disconnect between the goal of retiring the Science Center SAN at the end of FY’17 and the start of this implementation in FY’18. We are exploring approaches to mitigate this (e.g. operational cost solutions, temporary storage)
Timeline

• Planning 12/1/16 – 6/30/17 (not funded by ITCRB)
  • Use case validation
  • Vendor selection
  • Pilot
  • Migration planning (SAN is targeted to retire at end of FY17)
  • Business case development
  • Service desk coordination
  • Network testing

• Implementation 7/1/17 – 6/30/18
  • Network mitigation
  • Video file migration
  • Service Startup (e.g. installation, configuration)

• Roll-out Strategy
  • Support current clients HarvardX, FAS (IMS), and HPAC during planning in FY17 and migration work in Q1 FY18
  • Present the service to other groups who have expressed interest for implementation in FY18
Anticipated Impact on Schools

• Planning (12/1/16 to 6/30/17)
  – Each school may, at their discretion, provide a subject matter expert(s) to participate in service offering validation, process review sessions and, later, pilot validation
  – Existing Science Center SAN clients (HarvardX, HPAC, FAS) will participate in migrating a subset of files to pilot solution and confirm applicability to need

• Implementation (7/1/17 to 6/30/18)
  – Decide to participate in the initial launch of the service
  – Determine which solutions to leverage and what content to move over
  – Work with HUIT to integrate solution into workflow
  – Decommission current video storage solutions
  – Integrate the new service into their current video workflow
ITCRB Organizational Impact for: IAM and AD Security Improvements

November 14, 2016 | CIO Council
Project Overview

This project is to redesign the Active Directory implementation for the University and transition the existing Active Directory implementations across the University into the new, more secure architecture.

Problem Statement:
• Our IAM and Active Directory systems provide critical underpinning to management of user access to sensitive data. Our Active Directory systems were designed many years ago and are not currently resilient to attacks. We have made tactical efforts to address this but the problem requires a strategic re-evaluation and, potentially, redesign.

Business Value:
• Improved security leads to fewer data breaches. This means less impact to the community in the form of password resets. More importantly, it means less risk of reputational or financial harm or regulatory penalties to the University.
Timeline

Timeline:
• FY18: primarily assessment and analysis work
• FY19: primarily implementation work

Rollout strategy:
• We are not yet clear on what changes will be required, however, we would expect to work with each School on rolling out one large set of defined changes as opposed to an ongoing series of smaller changes
Anticipated Impact on Schools

We are not clear on what the implementation, and therefore, the impact, will be at this point. We expect it to be on a spectrum that ranges from:

• A set of standards that must be implemented in each School’s Active Directory, with accompanying guides and tools to audit against the standards. These would be much more robust than what we’ve done so far; to:

• Some version of Microsoft’s “red forest” design in which HUIT would provide a new top-level AD domain that any School that wanted to federate with University AD services would have to join

The needs that we currently understand are:

• **During Project**: Each school will need to provide a subject matter expert to participate in analysis and design

• **Rollout**: Each school will need to provide resources to make the necessary changes to their local Active Directory environment

• **Post Rollout**: We will continue to convene AD SMEs likely 1-4 times/year (a process we have already begun) to talk about ongoing and continuing evolution of these environments