Information Technology Presentation

Charge: Review options that result in standardized ERP & other applications across UA, outsourcing, and transition to the cloud.

Goals: Reduce operating costs by minimum of 20%, Implement continuous process improvement in order to reduce costs on ongoing basis.

August 17, 2016

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- Pat Shier
Key Stakeholders

▶ Students
▶ Faculty
▶ IR
▶ Staff
▶ IT Staff
▶ Executive Leadership
▶ Community

Options

Organizational
1. Option A: Reduce distributed/embedded IT Personnel in University Campus departments
2. Option B: Consolidate all Central IT Organizations Into a Single Shared Service Organization
3. Option C: Federated IT

ERP Re-Implementation
1. Option A: ERP Re-Implement Banner Internally
2. Option B: ERP Outsource Banner
3. Option C: Pursue Different ERP

Service Delivery
1. Option A: Prioritize Services (optimize service catalog)
2. Option B: Optimize Service Delivery & Self Service/Automation
3. Option C: Outsource Specific Services of IT Service Portfolio
Organizational Option A - Reduce Distributed / Embedded IT Personnel in Campus Departments – Provides a Centralized/Decentralized Hybrid Approach

Key Change Elements

1. Institutional standards compliance
2. Possible outsourcing
3. Enhanced remote management
4. Improved communication

Pros
1. High potential for reducing cost
2. Immediate savings
3. Drives standardization
4. Promotes innovation

Cons
1. Accomplishes only part of the 20% goal
2. Reduces morale
3. Eliminates some services

Organizational Option B – Consolidate all Central IT Organizations Into a Single Shared Service Organization

Create a centrally accountable distributed organization with existing departmental-based staffing and resources unchanged

Key Change Elements

1. Standardize service offerings
2. Focus on central core services with frontline services that differentiate campuses
3. Increased communication with governance
4. Better understanding of community needs

Pros
1. Streamlines and clarifies priorities
2. Highlights long-standing issues
3. Provides vertical alignment
4. Facilitates student navigation

Cons
1. Elimination of some services
2. Reduces campus oversight
3. Possibly not a good fit for all services
4. Staff potentially less connected to local needs
Organizational Option C – Federated IT
Specialized functions located at centers of excellence and delivered as a shared service UA wide.

Key Change Elements
1. Staff reduction focused around areas of specialization
2. Services more consistent from student perspective
3. Streamlining possible with facilities/technologies changes
4. Formalized agreements among service organizations

Pros
1. Requires least amount of change
2. Builds on strengths
3. Eliminates redundancies
4. High capacity for innovation
5. Fosters sense of collaboration

Cons
1. Requires lasting commitment to provide specific services and resources
2. Competing priorities in taking on specialization
3. Risk of rejection of ideas by higher echelons

ERP Option A – ERP Re-Implement Banner Internally -
Simplify and streamline based on contemporary needs, goals and processes

Key Change Elements
1. Long term reduction in ERP support staff and required space.
2. More integrated resource management and operations support.
3. Reduction/elimination of legacy modifications
4. Better reporting

Pros
1. Standardizes business practices modernize business processes
2. Improves students experience
3. Reduce complexity and increase value of ERP

Cons
1. High initial resource needed to implement
2. High risk, can be fraught with failure
3. Staff turnover
ERP Option B – ERP Outsource Banner –
Outsource the entire ERP vertical to Ellucian

Key Change Elements
1. Banner would be accessed via the cloud in a model run and supported by Ellucian
2. Reduction in UA infrastructure and staffing related to support and management
3. Would require up-front investment

Pros
1. Constrained to best practice-no customization
2. Potential cost savings in business process areas
3. Better student experience

Cons
1. Our $ go out of state
2. High up-front cost for long term return
3. Potentially lowered service levels

ERP Option C – Pursue Different ERP –
Replace Banner with another ERP solution (Kuali, Peoplesoft, Jenzabar, etc)

Key Change Elements
1. Program/offering changes would include UA no longer running Banner
2. Extensive retraining and transitioning
3. Other changes depend on on-prem vs. XaaS – see options A and B

Pros
1. Improves students experience
2. Opportunities to reduce cost
3. Potentially good for morale
4. Drives process re-engineering
5. Generates opportunities for collaboration

Cons
1. Will lose staff
2. Politically damaging
3. Very high costs
4. Steep learning curve
5. Higher data conversion risk
6. Potential for failure
Service Delivery Option A – Prioritize Services (optimize service catalog) -
Streamlines service catalog by reducing number of services provided. Asks “should UA be in this business?”

Key Change Elements
1. Requires program/offering changes to be evaluated by each service
2. Could result in significant staffing changes and space needs
3. Costs of analysis and communication depending upon services

Pros
1. Aligns services to customer needs
2. Opportunity to review business processes
3. Eliminates redundancies
4. Focuses on the core
5. Promotes collaboration and transparency

Cons
1. Potential to cut wrong services
2. Unpopular for users of services that would be cut
3. Could grow “Shadow IT”

Service Delivery Option B – Optimize Service Delivery & Self Service/Automation –
Explores what business processes are currently time/paper/process intensive and looks to automation to for savings and improved services

Key Change Elements
1. Program/offering changes would include ceding greater control to departments, students, and staff
2. Create a more collaborative environment
3. No big investment up front, but time and investment might be required for innovation

Pros
1. Empowers users
2. Reduces cost of delivering services (staffing)
3. Standardizes services

Cons
1. Need to maintain specialized skill sets
2. Culture change for IT
3. Tendency is toward “one size fits all”
4. Could lead to “Shadow IT”
Service Delivery Option C – Outsource Specific Services of IT Service Portfolio –

An initial look at services in the IT Service Portfolio to determine what models should be reviewed for efficiency and/or outsourcing

<table>
<thead>
<tr>
<th>Key Change Elements</th>
<th>Pros</th>
<th>Cons</th>
<th>Further Analysis Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Services offered by UA could potentially be outsourced</td>
<td>1. Outsourcing could lead to use of more industry standards</td>
<td>1. Loss of institutional control over service</td>
<td></td>
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<tr>
<td>2. Staffing changes and physical space required would vary</td>
<td>2. 24/7 support</td>
<td>2. Could remove strategic planning from UA</td>
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<tr>
<td>3. Effect on students would depend upon service offering changes</td>
<td>3. Increased enterprise focus on core mission</td>
<td>3. Security concerns</td>
<td></td>
</tr>
<tr>
<td>4. Vigilant vendor management and contract administration expertise required</td>
<td>4. Might be employing fewer Alaskans</td>
<td>4. Might be employing fewer Alaskans</td>
<td></td>
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</tbody>
</table>

1. Examine fund source impacts on ability to pursue any of the options.
2. Pursue better benchmarking to better inform decision making.
3. Use “Buy vs Build” analysis where appropriate.
Other Opportunities for Change

1. Continue enhancing engagement with customers e.g. improving UA online and class registration
2. Generating /enhancing revenue streams
3. Cost sharing with state of Alaska and other entities
4. Streamlining and standardizing processes/systems where practicable
5. Establish/ strengthen UA IT governance
6. Seek best practices within UA system

Addendums- all addendum materials available on the UA Strategic Pathways Google Drive

1. IT employees and expenditures
2. Shared Model
3. Purpose based alignment model
4. IT key metrics data
Information Technology Report

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Options

Organizational

- Option A: Reduce distributed/embedded IT Personnel in University Campus departments
- Option B: Consolidate all Central IT Organizations Into a Single Shared Service Organization
- Option C: Federated IT

ERP Re-Implementation

- Option A: ERP Re-Implement Banner Internally
- Option B: ERP Outsource Banner
- Option C: Pursue Different ERP

Service Delivery

- Option A: Prioritize Services (optimize service catalog)
- Option B: Optimize Service Delivery & Self Service/Automation
- Option C: Outsource Specific Services of IT Service Portfolio
Organizational Option A – Reduce Distributed/Embedded IT Personnel in University Campus Departments

This option would look for opportunities that reduce/consolidate departmental IT Staff outside of the current central IT units and produce a hybrid approach (centralized & decentralized) that provides the most cost effective and high quality information services for the University Campuses.

Reduce Distributed/Embedded IT Personnel in University Campus Departments - Key Change Elements

1. Program/offering changes would include homogenous services, greater compliance with institutional standards, and execution of IT strategy.
2. Could consider some outsourcing some services when considering staffing.
3. Changes in use of facilities/technology could include better remote management, would see release of space. May need to consider new dispatch capabilities or need investment in tech to increase remote capabilities.
4. Access for Students could see a net decrease in personalized support for students, though it could improve availability of student positions.
5. The potential reduction of administrative burden, likely to require improved communication plans and interfaces with campus governance groups.
6. Establishing service level expectations ramping up to meet expectations will need initial investment.
Reduce Distributed/Embedded IT Personnel in University Campus Departments

Pros
1. High potential for reducing cost
2. Immediate savings
3. Operationally minimal potential disruption impact on service delivery
4. Highly politically favorable
5. Help drive standardization
6. Promotes innovation

Cons
1. Only gets us part of the way to our 20% goal
2. Challenging selection criteria; mission impact
3. Painful to the departments and university community from service reduction
4. Will lower morale
5. Will drive some degree of service elimination
6. Perception of loss of control
7. Concern for ability to execute well
8. Potential blowback from departments

Organizational Option B – Consolidate all Central IT Organizations Into a Single Shared Service Organization

This option would create a centrally accountable distributed organization. Existing departmental-based staffing and resources are unchanged.
Consolidate all Central IT Organizations Into a Single Shared Service Organization - Key Change Elements

1. Program/offering changes would include UAA, UAS, and UAF / SW (OIT) including extended campuses merge into a single shared services organization ultimately accountable and centrally controlled by to the UA CITO. Standardized service offerings, greater alignment with UA initiatives, and execution of IT strategy.

2. All central staff report to single organization, optimization of staffing at all levels and examine opportunities for outsourcing.

3. Changes in use of facilities/technology could include a focus on streamlining commodity/core services centrally and feature frontline services that differentiate the local campus. Still reports up through central CITO.

Consolidate all Central IT Organizations Into a Single Shared Service Organization - Key Change Elements

1. Single door, consolidated service portfolio, campus focus on technologies contributing to differentiation could improve access for students.

2. Could potentially go to one C-Level IT person. Less coordination overhead, increased consultation with governance. Governance must be effective for this option to be successful.

3. Service expectations around the service portfolio must be defined and communicated. Time and effort to better understand the user community needs and expectations will take upfront investment.
Consolidate all Central IT Organizations Into a Single Shared Service Organization

<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Politically a good move</td>
<td>1. Uncertain cost saving</td>
</tr>
<tr>
<td>2. Kills the scapegoat</td>
<td>2. Some services may need to be eliminated</td>
</tr>
<tr>
<td>3. Streamlines and clarifies priorities</td>
<td>3. Tends to lead to lowest common denominator solutions</td>
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<tr>
<td>4. Makes governance easier</td>
<td>4. May not be a good fit for all services</td>
</tr>
<tr>
<td>5. Fosters sense of unity of IT staff</td>
<td>5. Reduced campus oversight of local IT staff</td>
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<tr>
<td>6. Highlights long standing issues</td>
<td>6. Staff potentially less connected to local needs</td>
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<tr>
<td>7. Potentially removes a layer of administration</td>
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Consolidate all Central IT Organizations Into a Single Shared Service Organization

<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
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</thead>
<tbody>
<tr>
<td>1. Provides for vertical alignment</td>
<td></td>
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<tr>
<td>2. Easier for students to navigate between campuses (same system)</td>
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<tr>
<td>3. Potential to achieve economies of scale</td>
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<tr>
<td>4. Saves time spent deliberating</td>
<td></td>
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<tr>
<td>5. Done well can create more accountability</td>
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</tbody>
</table>
Organizational Option C – Federated IT

This option would have central IT organizations report as they do now. Specialized functions are located at centers of excellence and delivered as a shared service UA wide.

Federated IT - Key Change Elements

1. Program/offering changes would be highlighted by areas of specialization serviced by each university developed and implemented for the whole UA system.
2. Staff reduction focused around areas of specialization. Differential talent pools.
3. Some streamlining may be possible with changes in use of facilities/technology
4. Services may be more consistent from a student perspective. Must continue to be responsive as student needs change.
5. Formalized agreements among service organizations for accountability and awareness could improve administrative efficiency and effectiveness.
6. Building a process for formalized agreements among service organizations for accountability and awareness will take a significant upfront time investment.
Federated IT

Pros
1. Potential to best meet mission
2. Requires least amount of change
3. Easiest to implement
4. Builds on our strengths
5. Fosters sense of collaboration
6. Eliminates redundancies
7. Highest capacity for innovation
8. Single point of arbitration
9. Greater engagement between CITO and campus IT

Cons
1. Risk of ideas getting squashed by higher ups
2. Currently no Service Level Agreements in place
3. Must be a lasting commitment to providing a specific specialized service and to resource it
4. Lack of clarity of what is institutional and what is system
5. Competing priorities in taking on specialization
6. Potentially not politically attractive
7. Collaboration takes time

ERP Option A – ERP Re-Implement Banner Internally

This option would re-implement the Enterprise Resource Planning Technologies based on contemporary needs, goals and business processes to simplify and streamline.
ERP Re-Implement Banner Internally - Key Change Elements

1. Program/offering changes would include more integrated resource management and operations support; reduction/elimination of legacy modifications. Higher quality reports. Fewer auxiliary reporting tools.

2. Long term reduction in ERP support staff.

3. Less space needed.

4. Could have impact on personalized / local support for students (indirectly via staff support?).

5. Potential for reduction or shifting of administrative burden, likely to require improved communication plans and interfaces with governance groups and administration.

6. ERP projects are typically complex mid to long-term initiatives that can have massive initial monetary, time, and resources requirements.

ERP Re-Implement Banner Internally

Pros

1. Standardizes business practices
2. Improves students experience
3. Opportunities to reduce cost
4. Prep for cloud services
5. Potentially good for morale
6. Drives process re-engineering
7. Generates opportunities for collaboration
8. Opportunity to modernize business processes

Cons

1. High initial resource needed to implement
2. High risk, can be fraught with failure
3. Staff turnover

(Continued on the next page)
ERP Re-Implement Banner Internally

Pros Cons
1. Reduce complexity and increase value of ERP
2. Need fewer staff
3. Staff turnover
4. Improved analytics

ERP Option B – ERP Outsource Banner

This option would seek to outsource the entire ERP vertical to Ellucian.
ERP Outsource Banner- Key Change Elements

1. Program/offering changes would include UA would no longer having Banner on site. All Banner access would be via the cloud in a SaaS model run by Ellucian.
2. Staffing changes would be significant, Ellucian would provide all support.
3. Reduction in servers and datacenter space and electrical needed to run Banner.
4. Impact on student access is unknown.
5. Reduction in Banner management on site at UA.
6. Reducing Banner modifications in preparation for meshing with Ellucian Saas model would take up front investment.

ERP Outsource Banner

Pros

1. Good optics
2. Gives us opportunity for phase-in of complete implementation
3. Constrained to best practice-no customization
4. Potential cost savings in business process areas
5. Better student experience
6. Shifts the technology debt to vendor

Cons

1. Our $ go out of state
2. Loss of in house expertise
3. High up-front cost for long term return
4. Potentially lowered service levels
5. Can lose ability to set priorities and customize
6. Vendor relationship /contract management
ERP Option C – Pursue Different ERP

This option would look at replacing Banner with another ERP solution.

Pursue Different ERP - Key Change Elements

1. Program/offering changes would include UA would no longer running Banner, would move to a different ERP (Kuali, Peoplesoft, Jenzabar, etc)
2. Staffing changes would be significant if outsourced. Potential long term reduction in ERP support staff if kept in-house.
3. Reduction in servers and datacenter space and electrical needed if outsourced. Less space needed if kept in-house.
4. Impact on student access is unknown if outsourced. Could have impact on personalized / local support for students (indirectly via staff support?) in kept in-house
5. Reduction in vendor management on site at UA if outsourced. Potential for reduction or shifting of administrative burden, likely to require improved communication plans and interfaces with governance groups and administration if kept in-house.
6. Will have to re-train all.
Pursue Different ERP

Pros

1. Standardizes business practices
2. Improves students experience
3. Opportunities to reduce cost
4. Prep for cloud services
5. Potentially good for morale
6. Drives process re-engineering
7. Generates opportunities for collaboration
8. Provides for full reset and modernize business processes

Cons

1. Will lose staff
2. Politically damaging
3. Very high initial costs
4. Steep learning curve
5. Higher data conversion risk
6. Potential for failure

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Pursue Different ERP

Pros

9. Reduce complexity and increase value of ERP
10. Need fewer staff
11. Staff turnover
12. Improved analytics
13. Affirmative decision
14. Implement with current best best practices and eliminate technology debt
15. Large opportunity for transformation

Cons

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Service Delivery Option A – Prioritize Services (optimize service catalog)

This option seeks to streamline the service catalog by reducing the number of services provided. Key to this would be seeking to identify the higher expense service functions and asking “should UA be in this business?” The larger objective is to focus IT on what is absolutely central and core to the mission.

Prioritize Services - Key Change Elements

1. Program/offering changes would need to be evaluated by each service.
2. Staffing changes could be significant if services are eliminated.
3. Space needs could be significantly less if we close services.
4. Impact on student access would depend on services being cut.
5. Administrative changes could yield potential savings depending on services being cut.
6. Analysis and communication/messaging could be a significant up front expense depending on services being cut.
Prioritize Services

Pros

1. Cost savings and increases financial responsibility
2. Eliminates redundancy
3. Focuses on the core
4. Opportunity to review business processes
5. Permission to say no and or stop
6. Lets you do better with we retain
7. Promotes collaboration and transparency
8. Very attractive to politicians
9. Aligns services to customer needs

Cons

1. Unpopular for users of services that will be cut
2. Potential to cut the wrong service
3. Could grow “shadow IT”

Service Delivery Option B – Optimize Service Delivery & Self Service/Automation

This option explores what business processes are currently time/paper/process intensive and streamlining or automating. It looks to automation and self service principals to realize savings and improve services.
Optimize Service Delivery & Self Service/Automation - Key Change Elements

1. Program/offering changes would include ceding greater control to departments, students and staff. Can add new services with degree of standardization, could provide greater security, and automated clean up

2. Staffing changes could include less call center/help tech’s.

3. Less physical space needed for help staff.

4. Would provide better student access by self service.

5. Could create a more collaborative environment, potential to transform the way we do IT.

6. No big investment up front- time is needed to work on innovative designs. Development investments may be needed. Achieving efficient self service would likely require significant identity and access management work.

Optimize Service Delivery & Self Service/Automation

Pros

1. Empowers our users
2. Reduces cost of delivering services (staffing)
3. Standardizes services

Cons

1. Need to maintain a degree of specialized skill sets
2. Overcoming resistance internally
3. Significant culture change for IT
4. Tend to get less granular customization
5. Drives institution to “one sized fits all”
6. Customer’s deploying shadow IT if service does not fit the need
Service Delivery Option C – Outsource Specific Services of IT Service Portfolio

This option is an initial look at services in the IT Service Portfolio whose service delivery model should be reviewed for efficiency and/or outsourcing.

Outsource Specific Services of IT Service Portfolio - Key Change Elements

1. Services offered currently by UA could potentially be outsourced to a third party provider. Examples include: helpdesk, videoconferencing, Banner, project management, datacenter, etc.
2. Staffing changes would vary based on service outsourced.
3. Physical space needed would vary based on service outsourced.
4. Student access changes are unknown, depends on service offering changes.
5. Depending on service outsourced, some reduction in administrative staffing may occur. Vigilant vendor management will be required.
6. Identification of services to be outsourced, researching options and cost models will take significant upfront investment of time.
Outsource Specific Services of IT Service Portfolio

Pros

1. Potentially reduced staffing if not reduced cost
2. Outsourcing could move the institution to more industry standard approaches
3. Can create the opportunity for consortia
4. 24/7 support
5. Can focus the enterprise more on core mission

Cons

1. Can remove strategic planning from the enterprise
2. Lose institutional control over service development
3. Security concerns
4. Disentanglement can be very problematic
5. Poorly developed exit strategy
6. May be employing less Alaskan’s
7. Requires substantial expertise in contracts administrations and vendor management

Further Analysis Needed

1. Examine fund source impacts on ability to pursue any of the options.
2. Pursue better benchmarking to better inform decision making.
3. Use “Buy vs Build” analysis where appropriate.
Other Opportunities for Change

1. Continue enhancing engagement with customers e.g. improving UA online and class registration
2. Generating/enhancing revenue streams
3. Cost sharing with state of Alaska and other entities
4. Streamlining and standardizing processes/systems where practicable
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6. Seek best practices within UA system

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