Chancellor's Study Group: Implement IT

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In March of 2015 Chancellor Andrew Leavitt commissioned a study group whose charge was to develop three possible models for the administration of Information Technology on campus. The Chancellor's IT Study group submitted a report to the Chancellor and the campus community in July of 2015 outlining those three possible models. The next step, as directed by the Chancellor, was to develop the best or ideal model for IT administration and vet it to the governance groups across campus. Based on the Chancellor's Study Group report, a recommended model was developed and vetted to the governance groups and other interested units and divisions on campus. The following are the final recommendations for implementation of the model which includes responses gathered during the vetting process from interested parties.

IT continues to grow in importance for higher education, from wireless, to student services, to online content delivery. This is, of course, true for UWO as well. At UW Oshkosh, increasing enrollment is a crucial strategic effort for the institution, and the two principal initiatives (Constituent Relationship Management for recruitment and Student Success Collaborative for retention and completion) under way to increase enrollment and retain students are at their core, IT projects.

However, UWO has not focused attention and funding necessary for flawless delivery of information systems to its constituents. Realizing that the university faces a scarcity of resources, reorganization is necessary to improve the efficiency and quality of service.

The committee recognizes that there are advantages to centralizing more of the delivery of IT services on campus, including reduction in risk and increased efficiencies. However, too much centralization jeopardizes the ability of individual units to complete their mission and be innovative and flexible. Many of the recommendations in this report work to balance these two competing forces.

Guiding Principles

Since it is difficult to make blanket statements about every situation, the team used the following guiding principles in working through the recommendations. It is clear that one size doesn't fit all as we evaluate whether centralization is a good option for a particular unit or function of IT. In general, we recommend centralization of reporting lines unless compelling reasons indicate otherwise.

Applying the principles for any given unit will not provide a simple answer of centralization vs. keep decentralized, but instead provide input to a discussion about which elements are most important in a given situation as decisions have to be made. The principles are thus not prioritized and must be applied with great discretion by everyone involved in discussing/negotiating centralizing a specific unit.

- Favor centralization where jobs or skillsets are standardized across units i.e. people are doing similar jobs in similar ways.
- Favor centralization where institutional risks can be reduced by doing so.
- Favor centralization if economies-of-scale, efficiencies, or increased responsiveness are evident.
- Favor centralization where technical competencies and capabilities are greater in the established central team.
- Preserve and support unit mission recognize the importance of unit missions in contributing to the overall institutional mission and maintain practices to fulfill unit priorities in conjunction with institutional priorities.

- Find Best Fit work with individuals and unit leaders to find the best solution case by case. Create opportunities for people to grow in their career and focus on preferred tasks rather than forcing them into roles they don't like: maximize workplace joy and employee retention.
- Balance the competing values of the Key Performance Indicators:
 - Strategic Alignment
 - Constituent Experience
 - Operational Efficiency
 - o Risk Management

Recommendations Summary

Below is a summary list of initial recommendations from the study group, subject to continued refinement. Details of each recommendation follow in the subsequent section.

General

- 1. Give the CIO a central role in the leadership on campus with commensurate personnel and budgetary authority.
- 2. Give CIO authority by policy over all IT systems and personnel, supplemented by centralizing reporting lines in infrastructure and information layers (model 2/3 from original study group).
- 3. Establish a mechanism for ensuring innovation takes place.
- 4. Establish appropriate prioritization mechanisms to ensure a balance between meeting unit needs and institutional priorities.
- 5. Develop a centralized, independent, and predictable budgeting mechanism to ensure appropriate funding for IT.
- 6. Establish Service Level Agreements (SLAs) with units outlining service levels responsibilities, and funding required.
- 7. Establish a stakeholder group with broad representation from directors and students and a process to periodically evaluate performance.
- 8. Extend IT portfolio management to incorporate unit missions and innovation as priorities and to achieve more robust project management and communication practices.

Infrastructure Layer

- 9. Centralize all IT infrastructure services with appropriate funding and lifecycle management.
- 10. Standardize equipment lifecycle management for all departments.

Information Layer

- 11. Centralize reporting lines in the information layer for enterprise systems and integrations, providing appropriate staffing to meet business needs.
- 12. Regularly evaluate existing or proposed systems for potential overlap of functionality.

User Services Layer

- 13. Allocate space for Technology Centers at locations throughout campus to assist faculty, staff and students with IT issues.
- 14. Offer varying service level options to units for user support.

Recommendation Details

This section elaborates details associated with each recommendation, the rationale, as well as evaluative criteria of successful or unsuccessful outcomes. Details will need to be further elaborated and refined as we move through the process of working with units to implement, continually learning and improving along the way. Not all recommendations can be implemented immediately or simultaneously but many steps can be taken right away or run in parallel.

Recommendation #1

Give the CIO a central role in the leadership on campus with commensurate personnel and budgetary authority.

Note: The campus CIO, Anne Milkovich, recused herself and did not participate in any of the discussions leading to this recommendation.

- 1. The campus needs a single point of accountability for IT services on campus. IT straddles all areas of campus academic, administrative, students. It is clear that the divided nature of IT management on campus has not allowed us to efficiently pool resources to dedicate to major campus priorities or to improve constituent satisfaction. When there is a problem or decision, there should be one person with expertise responsible.
- 2. Major decisions on campus demand the expertise and experience that a CIO can bring to the table. As we move deeper into the information age, decisions are best informed by having the CIO participate and facilitate these discussions. Whether it is about student enrollment and retention, classroom design, or student services, the campus must be sure that IT structures, possibilities and costs are part of the decision process.
- 3. The External Review from 2013 recommended that the CIO be given a cabinet level position. Best practices in the field also suggest that CIOs be given increased authority on campus.
- 4. With greater centralization of services, the IT division will increase its number of employees, who should be managed by a professional in the field who can properly and fairly assess them. Budgetary authority for IT services should also be unified so that we can accurately know and shape the appropriate direction for campus. Flexibility in hiring and compensating IT staff is also crucial to make sure we can hire and retain top talent. In order for the CIO to effectively manage a centralized model of IT Administration he/she needs to have autonomy relative to IT issues on campus subject to review by the Chancellor. Without autonomy there would be no certainty as to the accountability or responsibility for IT outcomes across campus.
- 5. Two Key Performance Indicators are highly aligned with this recommendation:
 - a. Strategic Alignment: Allow IT to better align with institution's strategic priorities
 - b. Risk Management: CIO at cabinet level would lower risk of making high-level decisions without considering IT impact.

- 6. Below are six questions that must be answered by non-IT people (https://hbr.org/2002/11/six-it-decisions-your-it-people-shouldnt-make). These questions must be considered regularly and are best handled by the entire cabinet but this can only be done with strong input from the CIO.
 - a. How much should we spend on IT?
 - b. Which business processes should receive our IT dollars?
 - c. Which IT capabilities need to be campus wide?
 - d. How good do our IT services really need to be?
 - e. What security and privacy risks will we accept?
 - f. Whom do we blame if an IT initiative fails?

Details:

- The CIO should participate in all decisions involving IT on campus. The CIO should be a member of the Chancellor's cabinet in order to be able to provide the necessary expertise when campus leadership makes decisions which impact IT or require IT resources.
- The CIO should directly report to the chancellor. Effective IT leadership crosses all
 administrative boundaries and should not be under the control of any one division or
 unit. We leave the decision up to the chancellor as to whether this means that the
 CIO should be a Vice Chancellor or should simply be a direct report to the
 chancellor.

Success Looks Like:

- 1. Campus decisions relating to IT are made using the best judgment of technical efforts on campus.
- 2. IT capability and service improves across campus.
- 3. The recommendations in this report are successfully implemented.

Failure Looks Like:

- 1. Status Quo is maintained
- 2. IT remains a neglected step-child on campus.

Responses:

None of the groups who provided feedback expressed any reservations about this recommendation.

Recommendation #2

Give CIO authority by policy over all IT systems and personnel, supplemented by centralization of reporting lines in the information and infrastructure layer (model 2/3).

Rationale:

The University administration hired a CIO in response to a Consultant's report on IT at UW
 Oshkosh and the fragmented and disjointed nature of information technology efforts across UW
 Oshkosh's campus. The logical extension or inference from that act warrant that the IT decisionmaking should be centralized by policy and reporting lines should be centralized in cases where
an increase in coordination and effectiveness is clear.

2. Centralizing reporting lines in the infrastructure and information layer help mitigate risks of compliance in mission-critical systems on campus. It also will allow for increased efficiency where overlap and duplicated effort seems most prevalent. Particularly, in ResLife and PeopleSoft, better coordination should create more options for employees, better risk management, and more efficient operations. For more details, see recommendations 9 & 11.

There are several advantages to this approach:

- 1. Provides clarity about who on campus is responsible for the delivery of IT services on campus
- 2. Codifies compliance with central IT standards and policies for better risk management.
- 3. Provides a clearly defined authority (CIO office) over technology policy.
- 4. Increased transparency and better direction on policy and standards from the CIO will provide a better understanding of roles and responsibilities, thus generating efficiencies by making it clear what central IT does and does not provide to departments so that departments can stop doing some things central IT can do for them.
- 5. The majority of departments do not experience any major change.
- 6. Policy doesn't always assure compliance; Chancellor would need to strongly and persistently reinforce the policy authority alone to make it effective. Centralizing IT roles in infrastructure and information will allow the CIO to make important decisions at a university level without the need for intervention.
- 7. Under this model, the CIO will also need to review all new IT positions for appropriate classification, qualifications, and reporting line.

Disadvantages:

The pro bono work/services provided by decentralized technical experts would cease (examples
include ResLife SysAdmin that contributes door card access support to the whole campus with
no chargeback, Reeve SysAdmin that contributes digital signage support to whole campus with
no chargeback, Library WebDev that contributes Plone CMS support to whole campus at no
charge back).

Responses:

- The recommendation to centralize reporting lines generated the most concern among employees. Most worries were related to disrupting what has been a fairly successful system.
- There has also been dissent from managers about losing people who report to them for a variety of reasons. One set of concerns focuses on responsiveness of the proposed centralization of reporting lines. The other touches on disturbing traditional location of positions within the university structure.

Recommendation #3 Establish a mechanism for ensuring innovation takes place.

- 1. Innovation results in new practices or solutions that further enable institutional effectiveness and mission.
- 2. Innovation is high-risk by nature and cannot be undertaken where the consequences are high, such as in an enterprise system where an experiment could bring down the entire university.

- 3. Innovation is fostered in distributed units where the consequences of failure are more contained. A fully centralized organization compromises capacity for innovation.
- 4. IT professionals generally find innovation opportunities to be rewarding and generally find central systems to be fairly boring.
- 5. Creating an environment that fosters innovation will enable institutional aspirations through creative solutions and will also foster workplace joy and employee retention.

Details:

- 1. Incorporate innovation into a scorecard of IT performance to assure measurement and accountability for maintaining innovation as a practice.
- 2. Create a culture that does not punish failure, but favors systematic and manageable risk taking.
- 3. Establish professional development plans and performance goals that incorporate innovation opportunities.
- 4. Reward innovation through public recognition, support and sponsorship.
- 5. Methodically deploy successful innovations to enterprise level, e.g. campus-wide.
- 6. Recognize and incorporate innovations from non-IT functions.
- 7. Establish a mechanism to notify central IT when a unit wants to purchase or experiment with a new system, balancing the need to innovate for growth and standardize for efficiency.
- 8. Experiment with a variety of practices to create a culture of innovation and adopt the most promising practices, such as:
 - a. Create tracks of "institutionally aligned" innovation like technology assisted pedagogy, sustainable practices for carbon footprint reduction, data visualization, mobile computing applications, and measurable service improvement initiatives.
 - b. Create cross-functional teams to identify and solve institutional problems.
 - c. Allocate a percentage of employee time toward developing new professional and/or technical skills.
 - d. Solicit ideas for innovation through tools and tactics such as: an electronic polling system, a reward mechanism for new ideas, virtual idea boxes through social media feedback mechanisms, and focus groups.
 - e. Gather/document ideas generated outside of central IT to be properly evaluated and potentially supported.
 - f. Create RATworks (Rapid Action Teams), expanding the successful ResLife MIO model that can assist units on campus with projects.
 - g. Create mechanisms for peer review that support continuous process improvement.

Responses:

- Multiple constituencies expressed concern over the potential slowdown of innovation through a centralized approach.
 - O This is a valid concern also shared by the study group, who brainstormed the details above to mitigate the risk of central stagnation.

Success looks like:

- 1. The IT scorecard consistently receives high marks for innovation and learning capacity.
- 2. IT staff report satisfaction with their opportunities to experiment and innovate.
- 3. An innovation management and reward system is established and well received.
- 4. Institutional leaders and stakeholders value innovation, understand the cost, recognize its importance as an institutional priority, and support the culture.

Failure looks like:

- 1. IT staff report lack of time or support to experiment with innovations.
- 2. Performance reviews indicate a lack of innovation goals or opportunity.
- 3. No formal mechanisms have been implemented to foster or reward innovation.
- 4. Institutional leaders and stakeholders dislike the cost of innovation and seek to reduce it.

Recommendation #4

Establish appropriate prioritization mechanisms to ensure a balance between unit and institutional priorities.

Rationale:

- 1. When units possess their own local IT resources they are able to prioritize according to their own individual missions.
- 2. Units are concerned that their individual missions will be consumed and overlooked if pooled with institutional priorities.
- 3. Units prioritize their IT tasks within the capacity of their IT resources and accept the trade-offs. However, they will be less likely to accept the trade-offs if their IT tasks are prioritized against other units.

Details:

- 1. Extend the practice of portfolio management to encompass unit priorities, i.e. incorporate all unit projects into the existing institutional portfolio.
- 2. Establish criteria that balance and protect unit priorities in conjunction with institutional priorities.
- 3. Broaden stakeholder involvement and decision-making in IT investment prioritization to assure appropriate unit balance.
- 4. Create mechanism for governance discussion and appeal of decisions.
- 5. Publish portfolio information and prioritization in a manner understandable to lay persons.
- 6. Incorporate the practice of investment prioritization and portfolio management into the evaluation of IT performance.
- 7. Communicate the reality of budget constrictions that reduce the capacity of IT to meet demand, whether centralized or not.

Responses:

- While most units accept that some institutional prioritization must occur and will change their service levels, they are consistently and deeply concerned about a mission-critical loss of service or comparative disregard for their unit's contribution to the overall mission.
 - This is an understandable concern. Portfolio management practices described above should mitigate this concern.
- Central IT is concerned about unrealistic expectations of sustained service levels; if units are angry about losing their resources their expectations of service will rise potentially to unattainable levels.
 - This is a realistic concern. Service Level Agreements described in a subsequent recommendation should mitigate this concern.

Success looks like:

- 1. Units understand the prioritization mechanism.
- 2. Units have ready access to prioritization information and understand their place in the queue.
- 3. Constituents know how to and are easily able to submit requests for new investments (projects or services).
- 4. A stakeholder meeting regularly meets to inform and understand prioritization and is satisfied with the outcomes.

Failure looks like:

- 1. Units are unaware of or do not understand the prioritization mechanism.
- 2. Units are unaware of or do not understand the prioritization information or their place in the queue.
- 3. Constituents do not know how to submit requests for new investments (projects or services) or are frustrated by the process.
- 4. Stakeholders do not understand prioritization or are dissatisfied with the process.

Recommendation #5

Develop a centralized, independent, and predictable budgeting mechanism to ensure appropriate funding for IT.

- 1. While the charge of the IT Recommendation Group excludes considering funding, it has been a consistent question at most feedback session. Some of the common questions include:
 - When a position is centralized will the funding/budget for that position also move to central or stay in the local unit?
 - What options will units have to 'buy' extra/dedicated support?
- 2. Because of the overarching reach of technology on the modern university campus, funding for IT should be considered at the same time as funding for other core projects of the university.

- 3. Historically, decentralized IT funding has weakened the ability of the campus to stay current and innovate. It has also spawned problems this study group is now addressing, such as lifecycle management of equipment, disparity of resources, competing and redundant products, inefficiencies and high costs of support.
- Industry leaders recognize IT investment as a driver of the rising cost of higher education for students. It is a significant institutional investment yet it is often inadequately managed or understood.
- 5. Distributing funds to IT at the same time as it is disbursed to other major units on campus will help us make wise investment decisions that support the needs of faculty, staff, and students more efficiently.
- 6. Reporting IT investment projections and expenditures will give constituents and stakeholders insight into institutional IT spend.

Details:

- 1. Develop a centralized IT investment funding and budgeting model.
- 2. Charge the CIO with managing the budget, projecting investment needs, and reporting on investment actuals and performance.
- 3. Require transparency of decision-making, process, and outcomes in a manner understandable by a lay person.
- 4. Ensure that funding and budgeting model allows for flexibility for individual units in acquiring additional support beyond base level campus support.
- 5. Study best-practices and peer institutions to understand appropriate funding levels for IT on this campus.

Responses:

- This recommendation was formed as a result of the initial round of meetings and was not articulated at this level of detail.
- Almost every conversation about IT wanted to discuss funding. As it was outside the direct charge of the committee, we took note, but did not pursue information in detail.
- Several groups expressed that IT currently isn't receiving enough funding to adequately meet the needs of both campus-wide strategic projects and unit-level IT needs.

Success looks like:

- 1. IT investments (e.g. projects, innovations, and services) are funded to enable the desired level of quality.
- 2. Constituents have ready access to IT investment information.
- 3. The budget model aligns with service delivery in a manner understandable by a lay person.
- 4. The budget model provisions existing services and also accommodates growth, innovation, personnel changes, and new initiatives.
- 5. Campus leadership conducts regular discussions about the appropriate level of funding for IT.

Failure looks like:

- 1. Desired services and quality levels are underfunded.
- 2. Constituents are not able to access IT investment information.
- 3. IT investment funding and performance information is incomprehensible to a lay person.
- 4. The budget model stifles innovation and growth and does not account for personnel changes or new initiatives.

Recommendation #6

Establish Service Level Agreements with units outlining service levels, responsibilities, and funding required.

Rationale:

- 1. Loss of service is a fundamental concern to all distributed units when they consider a model of centralization.
- 2. Service Level Agreements are a standard IT practice that defines the scope of services, expectations, escalation procedures in the event of a problem, and regular review to discuss and revise as needed.
- 3. Central IT has already implemented Service Level Agreements with some units, who so far have greater confidence having them in place to manage expectations and resolve issues.
- 4. While the study group has been instructed to disregard funding models for the time being, funding is a primary concern and discussion point with constituents who have cannibalized other priorities for the sake of funding IT resources. We can only address those concerns if we discuss funding to some degree.

Details:

1. Work with individual units to customize a Service Level Agreement defining the scope of services, level of quality and reliability, escalation procedure, and review schedule.

Responses:

 Constituents generally expressed satisfaction with the idea of Service Level Agreements, especially those who have already piloted the program.

Success looks like:

- 1. Units understand and agree with their IT Service Level Agreement.
- 2. Service Level Agreements are monitored and updated when needed.
- 3. When units have an issue with the level of service they receive, they know how to raise the issue with IT and are comfortable doing so.
- 4. Constituents report satisfaction with the Service Level Agreement process and the services they receive.

Failure looks like:

- 1. Units do not understand their Service Level Agreement.
- 2. If units disagree with the service levels available, they understand the reasoning.

- 3. Service Level Agreements are not monitored or updated and fall out of date.
- 4. When units have an issue with their services or agreement, they don't know how to resolve it or don't resolve it appropriately, or are not comfortable with the resolution process.
- 5. Constituents report dissatisfaction with the Service Level Agreement process and the services they receive.

Recommendation #7

Establish a stakeholder group with broad representation from directors and students and a process to periodically evaluate performance.

Rationale:

- 1. We have many dedicated individuals who deeply value and work hard to fulfill their unit's contribution to the institutional mission.
- 2. Almost every unit contribution to the institutional mission relies on IT to fulfill its purpose.
- 3. Every unit needs a say in IT performance and priorities in order to fulfill their contribution.
- 4. While central IT regularly consults with Vice Chancellors and IT users, unit heads do not feel that they have a direct voice in IT performance and unit outcomes.

Details:

- 1. Create an IT stakeholder group either as an expansion of the existing IT Executive Council consisting of Vice Chancellors or as a separate and broader advisory group.
- 2. The current advisory group (Academic Computing User Group, soon to be renamed IT Advisory Group) will continue to provide feedback.
- 3. The group should include unit leaders, such as but not limited to:
 - a. College Deans
 - b. Student representatives
 - c. Residence Life Director
 - d. Reeve Union Director
 - e. AVC of Enrollment
 - f. AVC of Integrated Marketing and Communication
 - g. AVC of Assessment
 - h. AVC of Human Resources
 - i. AVC of Finance
 - j. AVC of Facilities Management
 - k. Representatives from shared governance
 - I. Library Director
- 4. Develop an IT "Balanced Scorecard" of metrics to evaluate IT performance. The metrics will be determined in conjunction with stakeholders and will reflect the four Key Performance Indicators (Strategic Alignment, Constituent Experience, Operational Efficiency, Risk Management) as well as incorporate organizational capacity for knowledge and innovation, or other lenses as recommended in the Balanced Scorecard model by Kaplan and Norton.
- 5. Regularly review (quarterly or annually) the performance of IT against the scorecard.

6. Regularly advise IT of unit needs and priorities.

Responses:

- This recommendation emerged as meetings unfolded and feedback was received. It was only
 informally articulated and discussed with the latter groups.
- Those who heard the concept of this recommendation received it favorably.

Success looks like:

- 1. Stakeholders report satisfaction with their involvement in IT prioritization, performance, and decision making.
- 2. Stakeholders understand the rationale behind decisions.

Failure looks like:

- 1. Stakeholders report dissatisfaction with their involvement in IT prioritization, performance, and decision making.
- 2. Stakeholders do not understand the rationale behind decisions.
- 3. Stakeholders feel left out of the process.

Recommendation #8

Extend IT portfolio management to balance unit missions and innovation as institutional priorities and to achieve more robust project management and communication practices.

- 1. IT has initiated IT investment portfolio management but it is in fledgling stages.
- 2. As IT solutions become more comprehensive, i.e. involving a wider range of institutional functions, they begin to overlap and compete for limited resources not only in IT but also in already-strained functional areas.
- 3. Constituents have consistently expressed concern that centralization of resources will result in a loss of priority for unit missions that are clearly of lower impact than larger-scale missions but still an important contributing factor.
- 4. Constituents have expressed concern about getting their needs onto the priority list and moved through the selection and execution process if resources are centralized.
- 5. Historically, selection and execution of IT solutions has been opaque while constituents have consistently expressed a desire for greater transparency.
- 6. Robust portfolio management practices address intake (getting on the list), selection and prioritization (based on shared governance), execution (through appropriately rigorous project management, inclusive of functional area workload), communication (to assure transparency and improve performance) and evaluation (to demonstrate or correct performance).
- 7. Through portfolio management, stakeholders define what their priorities are, which in turn drives the investment prioritization. For example, if preserving unit missions is incorporated as a priority, portfolio management will require that a certain percentage of investments are dedicated to unit missions as part of the whole. Or, if innovation is defined as a priority, innovation projects will have room carved out for them in the portfolio so those opportunities are not lost.

8. Managing a comprehensive IT investment portfolio is a best practice to manage institutional IT expenditures and assets and assure transparency to constituents.

Details:

- 1. To address unit concerns about loss of priority in the larger pool of needs, the portfolio management criteria will balance unit mission as a performance criterion. In other words, projects that support unit missions and projects that support innovation must be included in parallel with projects of broader institutional mission.
- 2. The recommended stakeholder group (Recommendation #7) will participate in managing the portfolio to assure unit needs are adequately met.
- 3. Projects will be comprehensively managed across the institution to assure workload balance and capacity to complete, both in IT and functional areas.
- 4. More robust project management practices will be put in place to schedule, direct, support and report on progress.
- 5. The portfolio of investments, costs, schedules, status of projects, process and performance will be published to constituents.
- 6. The stakeholder group suggested in Recommendation 7 will evaluate the performance of the overall IT investment portfolio and give input into its future management.
- 7. A PMO (Project or Portfolio Management Office) typically manages the intake, stage-gates, execution oversight, prioritization process, stakeholder engagement, reporting, and communications of the portfolio. A PMO can be virtual with its functions fulfilled by assigned staff or it can be more formally staffed with a Portfolio Manager. While the university might be ready for portfolio management as a means to organize and maintain insight into IT investments and priorities, any formal PMO function will need to be gradually introduced into the culture with continual feedback to make sure it is cost-effective and not simply added bureaucracy.

Responses:

- Numerous constituents expressed concern about their unit mission priorities getting lost in the demand of institutional priorities, where limited resources are available to meet total demand.
- Constituents in the information layer suggested that based on past and recent experience, the practice of better intake, prioritization, project management, and communication was essential for success, regardless of reporting lines.

Success looks like:

- 1. Stakeholders and governing bodies recognize the importance of unit missions to overall success.
- 2. Stakeholders and governing bodies recognize the importance of innovation to overall success.
- 3. Unit missions are being met in parallel with broader institutional missions.
- 4. Innovation projects are accommodated in parallel with broader institutional or unit projects.
- 5. Resource allocation, i.e. funding and staff time, is aligned with portfolio priorities.
- 6. Functional-area schedules and capacity are factored into project plans and overall portfolio scheduling.

7. Constituents have easy access to understandable information about the performance of the institutional IT investment portfolio.

Failure looks like:

- 1. Stakeholders and governing bodies disregard the importance of unit missions to overall success.
- 2. Stakeholders and governing bodies disregard the importance of innovation to overall success.
- 3. Unit missions are not being met.
- 4. Innovation projects are not accommodated.
- 5. Resource allocation, i.e. funding and staff time, does not take into account the importance of unit missions or innovation and is allocated solely to broader and immediate institutional needs.
- 6. Functional-area schedules and capacity are disregarded in individual project plans or in portfolio scheduling of competing projects.
- 7. Constituents do not have access to or do not understand information about the performance of the institutional IT investment portfolio.

Recommendation #9

Centralize all IT infrastructure services with appropriate funding and life cycle management.

- Infrastructure services are networks, switches, servers, endpoints (desktops, laptops, tablets, phones, signs, printers, projectors, card readers, clocks, security cameras, video conferencing, copiers, scanners, telephones) and hardware-management software that end users do not interact with.
- 2. Under the current system most core infrastructure services, such as networks, are centralized; however, many peripheral systems such as card readers, clocks, and digital signs are not.
- 3. Distributed infrastructure systems allows for multiple non-integrated systems to proliferate, compounding support costs and reducing buying power.
- 4. The number of possible systems in the world is not feasible to support with limited staff. Inability to support an array of competing technologies creates the perception that central IT is non-responsive.
- 5. Distributed systems are introduced as a unit solution that then spreads and grows into an enterprise service with no staffing identified to support it. Distributed systems are also typically undocumented and therefore difficult to assume responsibility for. Meanwhile, users have become dependent on them to meet business needs.
- 6. Technical consultation often occurs only after contracts signed or equipment purchased.
- 7. IT has inherited unsustainable systems that were purchased or developed without central IT involvement, when staff or students departed and no one in the unit had the ability to maintain it.
- 8. Lack of asset management, limited system automation or deployment of one off systems or solutions incurs unnecessary costs and inefficiencies.

- 9. Budget reductions for all departments have created technology depletion and decay furthering unsustainable expectations for the reallocation of surplus equipment.
- 10. Multiple competing systems increases the overhead of vendor management.
- 11. A disparity of infrastructure resources exists across campus due to varying budget priorities.
- 12. Infrastructure systems are commodity services that do not add value to institutional mission but do consume value. Economies of scale are most easily realized in the infrastructure layer, if consolidated.

Details:

- 1. Centralize the reporting lines of all infrastructure roles.
- 2. Require CIO approval of infrastructure purchases and contracts.
- 3. Explore leasing programs to reduce the overall cost of technology ownership and delivery.
- 4. Implement a lifecycle management model for all infrastructure equipment that projects replacement cycles and allows us to smooth out the cyclical investment of money and effort.
- 5. Continually evaluate cloud solutions for all existing and proposed systems to reduce physical footprint, costs, labor, and risk.
- 6. Continue the virtualization strategy to reduce dependencies on physical infrastructure.
- Systematically evaluate the deployment of one off server solutions, desktop/mobile devices, copiers/printers or other devices, for cost-effectiveness and to reduce the overhead of nonstandard equipment.
- 8. Establish campus-wide hardware inventories.
- 9. Establish campus-wide property management policies.

Responses:

- Polk Library Statement: It is impossible to have our complete infrastructure centralized. Many are remotely located and are managed in cooperation with other UW libraries.
 - Infrastructure for the Library is already centrally supported. Desktops, printers, labs, wireless, networks are supported by the infrastructure layer.
 - Central IT manages multiple remotely located and syndicated systems in collaboration with other campuses and the UW System, comparable to the Library system.
 - There is no intent to change "syndicated services" currently delivered by the Polk Library in collaboration with other system wide libraries.
- Faculty Senate: Departments will be unable to make independent decisions regarding IT matters including software purchases and implementation priorities.
- Reeve Union: Concerns were shared about the pervasiveness of starting with an assumption of centralization to see where it doesn't work rather than starting with an assumption of non-centralization to see where centralization might work. Concerns were shared about the potential loss of FTE, unit access to shared resources, and responsiveness in a 24/7/365 operation. There is a perception that Central IT operates on a limited office hour approach. Concerns were also shared about the workloads/functional responsibilities of people left outside of a centralized effort.

 These are all valid concerns that can be mitigated with included recommendations for Service Level Agreements, stakeholder advisory and evaluation council, balanced scorecard and performance metrics, and working with units and individuals to find best fit

Success looks like:

- 1. Infrastructure equipment is managed on a lifecycle basis.
- 2. Investment cycles are managed and smoothed according to capacity.
- 3. All infrastructure equipment is inventoried for proper support, protection, and disposal.
- 4. All servers reside in a properly equipped data center.
- 5. Infrastructure services are reliable, available, and compliant with Service Level Agreements.
- 6. Procurements and contracts are centrally managed and properly vetted.
- 7. Constituents understand how to request and procure infrastructure support and services.
- 8. Fewer competing systems and less resource disparity exists on campus.

Failure looks like:

- 1. Equipment is unaccounted for and improperly supported or protected.
- 2. Multiple competing and redundant systems continue to proliferate.
- 3. Purchases or contracts are made without consultation.
- 4. Constituents are frustrated by a slow consultation process.
- 5. Constituents have inadequate equipment to meet their business needs.

Recommendation #10

Standardize end-point equipment lifecycle management for all departments.

- Currently, departments are expected to manage their own computer or other end-point
 lifecycles and establish plans to replace them (end-points include computers as well as printers,
 projectors, scanners or other devices that attach to the network). Most departments lack the
 staffing, time and expertise to adequately manage computer lifecycles. Inadequate planning and
 funding lead to lack of timely replacements, lost worker productivity and unnecessary IT repair
 costs.
 - a. IT staff spend excessive time supporting devices that are past their warranty due to lack of planning or funding at the departmental level to purchase new computers.
 - b. Supporting out of warranty computers is costly both to IT and the department for parts and labor, as well as lost user productivity.
 - c. Lack of timely replacements creates crisis situations, increases helpdesk traffic, and results in multiple purchase orders for small numbers of computers.
- Lack of planning and uneven funding distribution creates haves and have not departments.
 Departments with resources do plan and manage computer lifecycles giving them access to adequate computing power. Departments without the resources end up in a reactive mode, with inadequate computing power to serve their business needs and academic programs.

Details:

- 1. Create a policy for lifecycle management standards across campus to reduce labor and costs of managing out-of-warranty equipment.
- 2. Develop a centrally administered lifecycle management program for all campus IT equipment projecting schedule and costs for equipment replacement.
- 3. Centrally fund all computing equipment replacement schedules to reduce departmental labor and eliminate disparities between departments. This is also part of the overall funding model proposed in recommendation #5.
 - a. Alternatively, provide reports to departments projecting their replacement funding requirements.
- 4. Centralize purchasing of computer hardware, reducing the number of purchase orders and leveraging volume discounts for all users.

Responses:

- This recommendation was formed as a result of the initial round of meetings and was not articulated at this level of detail.
- No responses to date.

Success looks like:

- 1. A campus-wide computer lifecycle management tool projects schedule and cost of replacement.
- 2. Equipment replacement is centrally funded or budgeted in advance by departments.
- 3. Central IT creates bulk purchase orders generating volume discounts and efficient purchasing.
- 4. Units understand the plan and schedule to keep their computers current.

Failure looks like:

- 1. Units submit individual computer purchase orders, for small numbers of computers.
- 2. Departments are not budgeting the amount specified by their lifecycle management plan to replace computers on a regular basis.
- 3. Departments have large numbers of out of warranty computers in service.
- 4. IT is spending time and money servicing out of warranty computers.

Recommendation #11

Centralize reporting lines in the information layer for enterprise systems and integrations, providing appropriate staffing to meet business needs.

- 1. Some enterprise systems on campus are operated without oversight or accountability to the CIO for risks, effectiveness, or information security.
- 2. Critical information systems are staffed by only a single individual and are negatively impacted by absences and vacancies.
- 3. System capabilities and functions are not fully realized due to inadequate staffing.

- 4. The existing system-wide information reporting tool is to be replaced by a new Business Intelligence (BI) platform that requires new data management roles to implement and maintain and that will fundamentally change the way information is managed, curated, and reported.
- 5. Aggregating information staff into a larger pool enables better cross-training and backup staffing of systems and services.

Details:

- 1. Centralize reporting lines to the Office of the CIO of anyone who currently develops, maintains, or integrates enterprise applications.
 - a. Enterprise applications are those that:
 - i. Provide linkages to multiple constituencies
 - ii. Integrate with the ERP (PeopleSoft)
 - iii. Serve or span multiple units
 - iv. Require data management
 - b. Using or configuring an application does not necessarily constitute developing or maintaining and may require judgment call to determine.
 - c. Some units have already moved staff reporting lines to central IT with Service Level Agreements developed to assure unit functional needs are met and continually reviewed. Those include roles in Finance, Financial Aid, and Registrar.
 - d. Information-layer areas also include staff and students supporting ResLife systems, Reeve Union systems, Library systems, and Institutional Reporting.
 - i. Application administration of systems in ResLife and Reeve would benefit from consolidation with central IT and reduce overall risk. Application administration is the technical maintenance of a system, such as upgrade maintenance, permissions management, system integration, and problem resolution. This is a different function from end-use of the system, or user support of the system, although in small departments those functions are sometimes combined in a single role. For example, a user of a room scheduling system might use the system every day to schedule rooms and manage occupancy, but does not need to know how to install or upgrade the system. They might participate in troubleshooting a problem, but would not be expected to have the technical knowledge to work with product programmers to resolve it. Where a system is complex enough, some individuals might develop the knowledge to provide user support that is more advanced than end-use of the system, but still not at the depth of technical administration. End-use should not be consolidated in central IT as it is a part of the business function of the organization. User-support roles can optionally be consolidated, see Recommendation 14 for information on user support roles. Information systems in ResLife and Reeve Union that should be centralized, including the roles that administer or develop those systems, include scheduling software, student portal, CBORD, TitanCard, etc. Where the same individual has responsibility for both technical administration and end-use or user-support, IT should work with the unit to find best fit for that individual and also balance the workload so that neither the unit nor central IT is left the

- work but not the resource. This has to be worked out on a case-by-case basis and might take time to unravel.
- ii. The Library systems are well supported by the UW System and do not pose a significant risk to the institution. Library systems *are* information systems and in some institutions are administered under the CIO or wholly converged. While centralizing the system developer roles could create opportunities for efficiency and continuing transformation, it is an opportunity and not a risk. Given the specialized nature of the library systems, only modest efficiencies could be gained, if any. Centralizing reporting lines is a means to closer collaboration but not the only means. The study group recommends exploring closer collaboration between information systems and library systems and reevaluating the organization at a future date. See Appendix B for additional information about the future and organizations of academic libraries.
- iii. Institutional Reporting (IR) is supported by IT and does not pose an institutional risk. The new Business Intelligence platform will drive convergence of report writing performed by IR with query development performed by IT and with the newly emerging data modeling function soon to be required. Centralizing IR roles with other report writers and data managers in IT would create opportunities to increase synergies, provide backup coverage, and develop merged skillsets but it is a means to an end and not the only means. The study group recommends exploring closer collaboration between institutional reporting and information systems and reevaluating the organization at a future date. See Appendix C for additional information about the future of Business Intelligence relative to institutional information management and reporting.
- 2. Identify backup coverage and provide appropriate staffing for mission critical information systems and key new initiatives, including but not limited to:
 - a. PeopleSoft
 - b. ImageNow
 - c. HRIS
 - d. Student Success Collaborative "SSC"
 - e. Customer Relationship Management "CRM" (Salesforce)
 - f. D2L
 - g. Web CMS (Plone, WordPress)
 - h. 25Live
 - i. Google Apps
 - j. TitanCard and related systems
- 3. Where moving reporting lines does not yield sufficient capacity to support a critical information system, add additional FTE at the discretion of the Office of the CIO to meet business needs.

Responses:

 The Provost's Office is a primary consumer of assessment and institutional reporting and feels their needs cannot be met if the institutional research team is centralized.

- The Chancellor's Office, Provost's Office, accreditation and assessment programs are the highest priorities of institutional reporting services and would remain so. Closer alignment and collaboration among all report developers and information providers will better serve those needs.
- Centralizing reporting lines is the most expedient and effective way to improve alignment and collaboration but is not the only way. The institutional research team could be viewed as Provost's Office functional staff, with additional IT resources hired to serve broader institutional reporting needs and business intelligence roles.
- Polk Library strongly objects to all Enterprise systems operations on campus being managed and administered centrally. Library Enterprise systems need to be managed by Polk Library staff with specialized library skills, in cooperation with staff across the UW System. Staff need specialized skills to manage library systems. See also the Polk Library Statement in Appendix A.
 - All information systems have specialized applications and require specialized skills and knowledge to support and manage. Staff are assigned to specialize in those applications and develop the requisite specialized skills and knowledge.
 - o Three models for library organization are commonly used in higher education today:
 - a) complete separation of Library from IT with some system oversight;
 - b) complete convergence of Library with IT (about 15% of institutions);
 - c) commodity services maintained by IT with custom services provided by Library staff.
 - Due to the specialized nature of these systems and skillsets, there is limited capacity to cross-train and provide system backup staffing but there is opportunity to reduce risk and share resources.

Success looks like:

- 1. All campus units have access to needed information that is consistently and reliably reported.
- 2. All critical information systems are identified and supported by well trained and fully staffed teams, as determined by the Office of CIO.
- 3. Newly emerging data science roles are staffed enabling a BI implementation in support of all campus information consumers.
- 4. Minimum and ideal staffing levels are determined with a plan outlined to achieve that staffing level.
- 5. All staff that develop, support, or report from key systems report to the Office of the CIO.
- 6. Each key system has no less than one primary and one backup IT staff person devoted to its support.
- 7. Each critical information system ideally is staffed to a level that evolution and innovation of the system's functionality and not simply maintaining the status quo.

Failure looks like:

- 1. Information consumers, especially high-priority institutional information consumers, do not have access to needed information.
- 2. A key system has no primary support person.
- 3. A key system is not able to have new functionality added due to inadequate staffing.

- 4. Support for a key system is fragmented in different units.
- 5. Development for a key system is fragmented in different units.
- 6. Reporting from a key system is unavailable or fragmented in different units.
- 7. Information security is compromised by lack of accountability to the Director of Information Services.

Recommendation #12 Regularly evaluate existing or proposed systems to reduce redundancy and risk.

Rationale:

- 1. Over time, independent departments tend to make redundant purchases or even create redundant custom solutions that are providing essentially the same functionality. Periodic review is required to identify where these systems exist.
- 2. Where redundant systems are identified, further study is required to analyze how these systems are being used in each unit's process. Where overlapping functionality is identified, there is an opportunity to consolidate systems and create efficiency in purchasing power and support.
- 3. When systems are procured without proper consultation, risks and redundancies are potentially introduced into the enterprise.

Details:

- 1. Establish a periodic (ideally annual) review process by which an audit of all IT systems on campus is completed. Audit must include meeting with all college and business unit heads to create a full listing of systems used in their department or college business processes.
- 2. Assign a team to complete the annual audit of IT systems, ensuring adequate authority, resources, and personnel time.
- 3. Where Student Information System (SIS) data is found to be duplicated in databases outside of the SIS, establish a process by which the needed functionality can be provided inside the SIS in order to reduce the risk to data security. Ensure adequate staffing resources under the Director of Information Services to provide development of the required functionality in the SIS.
- 4. Where multiple systems are found to provide the same functionality, create a user group of stakeholders from all units using the software to develop requirements toward a common solution. Also recommend communicating the formation of such affinity groups to the entire campus, so that any other units with emerging needs for the same type of system can self-identify and join the requirements gathering process.
- 5. When needs for new systems emerge through this audit process, ensure that new FTE can be hired to provide ongoing support for the new software solution.
- 6. Reestablish a process with the Purchasing Office to monitor and assure consultation by the Office of CIO for all IT purchases and contract reviews.
- 7. Establish simple mechanism to notify IT when a unit wants to purchase or experiment with new software and systems that provides a quick response time for flexibility and innovation, recognizing the need to balance innovation for growth with standardization for efficiency.

Responses:

- This recommendation was formed as a result of the initial round of meetings and was not articulated at this level of detail.
- Faculty expressed a related concern that department ability to purchase products may be impeded by a more centralized process.

Success looks like:

- 1. All IT procurements are approved by the Office of CIO.
- 2. Systems are routinely reviewed for effectiveness, risks, and potential redundancy.
- 3. Stakeholders collaborate on requirements gathering, RFP process and support under the Office of CIO.
- 4. Student data is protected inside the SIS, or duplicated only with the approval of the Office of the CIO.

Failure looks like:

- 1. Departments are maintaining redundant systems.
- 2. Departments are unable to realize purchasing and support efficiency with limited technical staff and resources.
- 3. Products or services are acquired without proper integration, security assessment and requirement gathering.
- 4. Student data is duplicated to systems external to the SIS, in cases where it is not necessary.
- 5. Student data is duplicated to systems outside the SIS without the approval of the Office of CIO.
- 6. The Office of the CIO does not learn about the purchase of a software system until it is too late to consult with the department on the best way to purchase and support system.

Recommendation #13

Allocate space for Technology Centers at locations throughout campus to assist faculty, staff and students with IT issues.

- 1. All constituents need assistance with or training in IT issues.
- 2. It is human nature to want assistance promptly, by someone close by, and by someone you know and trust to care about your needs.
- 3. Students in particular also need tutoring in better utilizing technology for their academic assignments and in better development of technical skills for future employment or education.
- 4. Technical problems in classrooms and labs need quick response times.
- 5. Central IT recognizes that it cannot provide optimal support from a single obscure location in Dempsey Hall and has plans to create an "eco-system" of technology support centers geographically distributed around campus in high-traffic areas.
- 6. Some of this vision can be realized with existing space and staffing; more can be realized with additional space allocation and by centralizing the reporting lines of distributed IT staff.

Details:

- 1. The Helpdesk will remain in Dempsey Hall as central management of the ecosystem and as a Technology Center for Dempsey. Other Technology Centers will serve as extensions or outposts of the Helpdesk.
- 2. The Student Technology in Polk Library basement will remain in place unless better space in Polk can be identified.
- 3. IT will work with Facilities Management and departments to identify existing or new space for Technology Centers.
- 4. The Technology Centers will be consistently branded, equipped, and easy to locate.
- 5. The Technology Centers will be open during regular business hours and as needed by the use of the building.
- 6. The Technology Centers will be managed centrally, staffed primarily by students to be costeffective, with supervision by one to two technical staff members.
- 7. Distributed IT support staff will report to central IT.
- 8. IT will work with department heads and newly centralized IT staff to determine the best fit role. In some cases, those IT staff may become Technology Center supervisors; in other cases where Service Level Agreements define the need for a fulltime support role, they may become an Account Manager for that unit, in collaboration with staff in the Technology Centers.
- 9. Newly centralized IT staff may be assigned to staff different Technology Centers to cover for absences or vacancies.
- 10. Staff will be trained in classroom equipment troubleshooting and resolution.
- 11. Staff will be trained in specialized needs of nearby departments, in excellent customer service, and will be available to make office calls as needed.
- 12. Staff will establish and maintain close working relationships with local constituents.
- 13. Staff will be trained in entering and managing incidents in the ticket system.
- 14. Students will receive tutoring in software skills for their academic assignments, such as basic office software, library research, portfolio development, poster design, etc.

Responses:

- Faculty Senate:
 - Users who are not tied to a single department/location will lack familiarity with IT staff in the Technology Centers.
 - Faculty wanted to make sure they would have a Technology Center in their building, particularly Arts & Communication.
- Students responded favorably to the idea of technology tutoring and more widely available Technology Centers.

Success looks like:

- 1. Faculty and staff are satisfied with the location and operation of the Technology Centers.
- 2. Departments are satisfied with the level and quality of support and service they receive.
- 3. Classroom incident response times are consistently acceptable.
- 4. Technology Centers are highly utilized.
- 5. Students are satisfied with the availability and quality of help they receive.
- 6. Students report improved technical skills allowing them to focus on academic achievement.

Failure looks like:

- 1. Faculty and staff are dissatisfied with the location and operation of the Technology Centers.
- 2. Departments are dissatisfied with the level and quality of support and service they receive.
- 3. Classroom incident response times are unacceptable.
- 4. Technology Centers are poorly utilized.
- 5. Students are unaware of or dissatisfied with the availability and quality of help they receive.
- 6. Students report lack of technical skills impeding their academic achievement.

Recommendation #14

Offer varying service level options to units for user support.

Rationale:

- 1. Some divisions have invested in fulltime IT resources, at the expense of other priorities, and don't want to lose the support or the funding, while other divisions have not invested.
- 2. The missions and needs of all units are not the same: some units rely heavily on IT support as a strategic advantage or mission-critical service where some units need only occasional assistance.

Details:

- 1. Work with units to identify the best reporting arrangement for their current IT support technicians.
- 2. Establish practice where the CIO reviews new proposed IT roles for appropriate classification, qualifications, and reporting line.
- 3. Where units do not have their own support staff, assign Account Manager roles among central IT staff who are assigned to units as primary care providers, coordinating specialists,

- documenting unit and individual needs, monitoring incident management, and managing Service Level Agreements.
- 4. Offer multiple levels of service, selected by the unit and defined in the Service Level Agreement:
 - a. Full-time unit-owned role: the position is owned and funded by the unit. The unit is responsible for hiring, training and managing the employee in accordance with IT standards and qualifications, as well as covering absences and vacancies. IT is responsible for monitoring compliance. Supplemental support or guidance is defined in a Service Level Agreement.
 - b. Managed Service: IT owns the position and is responsible for search/hiring, training, managing, and coverage of absences and vacancies. Services are defined in a Service Level Agreement. As staffing permits, an Account Manager is assigned to provide primary care to each unit. Funding is proportional to consumption of services. Cost of use will be reported quarterly and budget transferred accordingly.
 - i. Full-time equivalent service: High-volume units may opt to fund full-time equivalent support, where an Account Manager is co-located with the unit to provide primary care and coordinate specialists as needed. The Account Manager is also a specialist available to other units as needed, but full-time equivalent support is maintained within a range of tolerance.
 - ii. Part-time equivalent service: Moderate-volume units may share and proportionally fund an Account Manager, location dependent on circumstances.
 - iii. Dispatch service: for units who have light support needs, they can forego funding any support unless needed, submitting requests for support as needs arise. IT specialists will be dispatched to provide support.
- 5. Work with formerly distributed IT staff to decide what kind of a role they would like to have and what specialization, if any.
 - a. By pooling resources and assigning specializations, UWO has more bench depth to serve the broader institution with the same number of FTE than they would if each remained a generalist isolated in a department.
 - Offering specializations of choice to IT staff, with commensurate professional development, gives them career paths, tasks they are interested in, promotes retention and workplace joy.
- 6. Support newly centralized IT staff with career pathways and professional development.
- 7. Identify gaps in institutional expertise after IT staff have selected specializations of choice and pursue solutions to fill those gaps, such as hiring or outsourcing.

Responses:

- Departments with limited resources see this approach as a big win for them, while other college units (CON, COB) with established technical teams see the move as an unfair redistribution of technical assets.
 - Offering multiple support and funding options should mitigate this concern. CON and COB can retain their technical assets if they choose. While the individual with specialized expertise may be deployed to another unit short-term, support to the college will be backfilled by others.

- Polk Library Statement: Polk Library is strategically committed to funding support staff for our core operations. We need support staff to report to Polk Library, but we can work collaboratively with IT, as we have in the past.
 - Central IT is working with Polk Library to establish a Service Level Agreement and fulfill their need for endpoint support, following the loss of their local resource. This is a separate function from the management of library information systems.

Success looks like:

- 1. Newly centralized IT staff are satisfied with their role and opportunities for advancement.
- 2. All IT staff have opportunity and support to pursue professional development in specializations of choice.
- 3. Unit heads are satisfied with their IT support.
- 4. The institution has access to a wider and deeper range of IT expertise.
- 5. Absences and vacancies are covered with available staff.

Failure looks like:

- 6. Newly centralized IT staff are unhappy with their role and opportunities for advancement.
- 7. IT staff are unable to pursue professional development in specializations of choice.
- 8. Unit heads are dissatisfied with their IT support.
- 9. The institution lacks access to a wider and deeper range of IT expertise.
- 10. Absences and vacancies adversely impact unit or institutional priorities.

Summary of Process

- 1. The CIO asked governance groups to assign representatives to join the original team.
 - a. Original team included Anne Milkovich, Brandon Heise, Jakob Iversen, and Victor Alatorre.
 - b. University Staff Council assigned Ricky Johnson, IT.
 - c. Academic Senate assigned Mike Watkins, Library.
 - d. Faculty Senate assigned Karl Loewenstein, Letters & Science.
 - e. Oshkosh Student Association assigned Brenda Peterson, Student.
- 2. The study group met to share perspectives, get caught up on history, and plan an approach.
- 3. Recognizing that one solution would not fit all layers of technology or units of the university and that the optimal solution set would be found somewhere on the continuum of models presented in the original study, Jakob proposed and the group agreed to start with the most centralized model and work with constituents to learn where that doesn't work well.
- 4. Members of the study group reviewed the previous study report independently as needed.
- 5. It was noted that the external review conducted on IT at UWO a couple years earlier had made numerous recommendations, including that UWO hire a CIO and the CIO sit on the Chancellor's

- cabinet. All of the recommendations of that review are completed or in progress, except for the cabinet role of the CIO.
- 6. The study group decided to incorporate the role of the CIO across campus into the study. The CIO recused herself from that part of the study after requesting that:
 - a. Authority and accountability must match; the CIO cannot be held accountable for functions or services beyond her control.
 - b. Everyone on campus needs a shared understanding of the scope of the CIO role.
- 7. The study group prepared a presentation outlining the centralized model at each layer: user support, information, infrastructure, and CIO role.
- 8. The study group met with each governance group to gather input on the centralized model and also met with as many other groups of constituents, or in some cases individuals, as possible.

 Most members of the study group were able to attend most meetings. Those meetings include:
 - a. Faculty Senate
 - b. Academic Senate
 - c. University Staff
 - d. Polk Library
 - e. Academic Computing User Group
 - f. Central and distributed IT staff
 - g. Residence Life (Tom Fojtik and Emily Al Bulushi)
 - h. Reeve Union (Randy Hedge and Matt Suwalski, separately)
 - i. Carleen Vandezande, Provost's Office
 - j. United Residence Hall Association executive council and assembly
 - k. Oshkosh Student Association executive council and assembly
- 9. The study group, with the exception of Anne Milkovich and Victor Alatorre who were absent, decided on and drafted the recommendations, with which Anne and Victor later concurred.
- 10. The recommendations included the responses of various constituents, explicit or summarized, for or against the centralized model.
- 11. Anne compiled, formatted, and edited the drafted recommendations into a single report, conferring with the team on any substantive edits.
- 12. The team reviewed and approved the drafted report.
- 13. The drafted report was then published to the study group web page for campus-wide comment; the study group followed up with the governance groups for feedback, revised and re-posted the draft.
- 14. The study group is scheduled to present the report to Leadership Council on December 9, 2015.

Conclusion and Next Steps

After the presentation to Leadership Council and approval (or revision) by the Chancellor, the study group proposes a phased approach to implement the approved recommendations. Below is a general order of events, many of which may run in parallel or unit by unit as schedules allow. Recommendation details will be continually refined as we learn more through the implementation process.

Phase I

- 1. CIO role is defined and communicated across campus.
- 2. With the exception of Library IT staff and IR, staff working in campus infrastructure, information systems, and support staff as determined with unit, begin reporting to the Office of the CIO under the appropriate Director of the functions they perform:
 - a. Infrastructure roles report to Victor Alatorre, Director of IT Infrastructure.
 - b. Information roles report to Mark Clements, Director of Information Services.
 - c. Support roles report to Laura Knaapen, Director of User Support.
- 3. The study team works with units to identify campus IT staff where the roles are not clear.
- 4. The Office of the CIO works with unit heads to define support options and Service Level Agreements.
- 5. The Office of the CIO works with constituents to define a stakeholders group to continually evaluate and advise IT performance across campus using a balanced scorecard approach.
- 6. The lifecycle management model is developed and implemented.
- 7. The CIO and study group work with the budget model team to design centralized IT funding model.
- 8. Campus-wide inventory of IT systems is initiated.
- 9. Campus-wide prioritization model is initiated in collaboration with stakeholders to assure unit missions are preserved.
- 10. Progress will be evaluated and plans revised as needed.

Phase II

- 11. Opportunities for Technology Center locations will be identified and planning initiated.
- 12. In the interests of maximizing Workplace Joy, wherever possible and without compromising institutional performance, staff will be given options to define their role, such as but not limited to:
 - a. Choosing a more focused IT role of personal preference
 - b. Choosing between an IT role or functional role
 - c. Choosing to remain in a multi-purpose role with multiple lines of accountability
- 13. Similarly, wherever possible and without compromising institutional performance, staff will be given options to choose their location, such as but not limited to:
 - a. Remaining physically located in a department

- b. Moving to join the central team
- c. Moving to a Technology Center or location of choice, where possible
- 14. Position Descriptions will be reviewed and updated to reflect any changes.
- 15. All positions will be reviewed for appropriate classification and reclassified as needed.
- 16. Professional development plans and performance goals will be created in conjunction with new supervisors.
- 17. Library IT functions will be revisited for appropriate organization.
- 18. Performance metrics will be defined with a balanced scorecard for evaluation.
- 19. Progress will be evaluated and plans revised as needed.

Phase III

- 20. A framework will be implemented to regularly review campus IT systems for effectiveness, redundancy, and risk.
- 21. Needed campus policies will be identified, drafted, and vetted through the institutional process.
- 22. Student technology learning outcomes will be defined.
- 23. Staff will be trained in providing student academic technology tutoring.
- 24. Progress will be evaluated and plans revised as needed.

Appendix A: Statement from Polk Library

To: Chancellor's IT Implementation Committee,

Chair Anne Milkovich

From: Patrick Wilkinson, Polk Library

Date: November 5, 2015

Subject: Objections to Centralizing Polk Library's Information Systems Staff in

Central IT

Thank you for the opportunity to have Polk Library staff meet with members of the IT Implementation Committee on October 16th. Also, I appreciate your sharing with us *External Review, "Campus-wide Information Technology Services at UW Oshkosh,* (June 12, 2013), which I understand was an important source for the study group's research.¹ Polk Library reaffirms here its objections to centralizing the Library Technology Services (LTS) staff into Central IT. I will explain the reasons regarding our objections as concisely as possible.

1. Centralizing LTS staff within Central IT is not a logical extension of the External Review report.²

The *External Review* makes several points about distributed IT that do not readily apply to the library. First, the report observers that a key disadvantage of the current partially decentralized structure results in a parochial focus "... by units... on the needs of individuals or units." This does not apply to Polk Library. Our technology resources by intention are focused on the needs of the entire campus community and the academic component of the university's strategic mission. We are focused on providing an intuitive, complete library experience through our library systems and web presence. Our focus is giving students, faculty and staff at UW Oshkosh and in UWS the benefits of a world-class library collection and collaborative services. This is not a narrow-minded focus on our "turf"; it is our major mission in serving campus. It is the core function of a future-oriented academic library.

Second, the report remarks that distributed IT units seem to have access to more financial resources than Central IT. Again, this does not apply to Polk Library. Among UW comprehensives, Polk Library is regarded as a leader in effective programs and service to its campus, despite staffing levels substantially below those of sister libraries in the UWS. For instance, Polk's staff is only 80.0% of its two historical peers, Eau

¹ https://drive.google.com/a/uwosh.edu/file/d/0BzyaPoami870b1k4SUxSaDNRM0U/view

² External Review, pp. 5-12. This section, "Detailed Report on Each Priority," does not mention the library.

Claire and Whitewater (library positions/student FTEs). That number drops to 69.9% against the average for all comprehensive campuses. How have we managed to be so successful with such a small staff? One key reason is the use of library technology as a force multiplier. Our home-grown Course Pages platform is a good example. Virtually all academic libraries provide research guides for subject areas and individual courses. typically through a third-party CMS service called LibGuides. Individual LibGuides must be hand built, maintained, and updated by reference librarians in static HTML templates. Our Course Pages system automates creation of guides and provides most of their bibliographic content dynamically by use of API calls on external data sources like Alma and Primo. The end result is a full and effective set of automatically updating research guides - despite low staffing levels in the library. Not surprisingly, the CP platforms itself requires updating by library technology staff as the data systems with which it integrates change and evolve. There are many other examples of this sort of technologyleveraged service in Polk. One problem with redirecting library technology resources to Central IT is that we risk losing the force-multiplier effect and seeing a steady degradation of library services to faculty and staff. There are several examples of how Polk uses technology to increase operational efficiencies, act as a force multiplier and improve services to campus.

2. Library "enterprise systems" have a different specialized skill set and knowledge requirements and are supported by a national and international system of library vendors, libraries and librarians.

The *External Review* identifies the centralization of networking, server support groups, and Enterprise Resource Planning (ERP) as one area where efficiencies might be realized, In particular, it states the head of ERP "needs to focus on project management and prioritization of application development **to meet the administrative functions of campus.**" [emphasis added]. The report tight focus on administrative functions and computing is appropriate and important. The technology employed by Polk Library focuses on the academic and educational needs of campus by providing scholarly and academic information and related services to campus as accurately, fully and quickly as possible. This is the library's main mission. It directly supports the university's academic and research mission.

3. LTS staff plays an essential library role in leveraging Polk Library's resources and the resources of all the libraries in UWS.

The most obvious example of this leverage is the new "integrated library system," that allows students and faculty to easily search over 17 million physical items in UWS libraries within a single search box and then limit the results by facets. This 17 million physical item collection is approximately the size of the physical collections of the total library collections at Harvard! In addition, this new library system allows with this one simple search access to 150 million journal articles that Polk licenses and over 600 million more articles that can be obtained through resource sharing.

This significant enhancement for campus took three years of planning and project work by integrated teams of library staffs at all of the campuses. LTS and other library staff took leadership roles in many of the specific parts of this project. This all required deep levels of cooperation and large amounts of time. It required specialized library skills and knowledge of theory, practice and operations. For example, the library metadata and schemas, requires breadth and depth of specialized knowledge, these skills and knowledge are different than the knowledge and skills to run important campus enterprise systems. If LTS staff who administer these library systems are expected to provide support for general enterprise systems on campus, they are unintentionally being set-up to fail as are Central IT staff in the reverse position. In our best judgement, this would create inefficiencies and/or degrade library services.

 Library systems, including its web presence, require continuous maintenance and enhancement to maximize the usability of its collections and services for students and faculty.

Polk web site is the second most used site on campus after the university homepage. It is the hub or gateway to library collections and services. It is a dynamic site with a limited amount of static content. The site integrates information, books, articles, media and services from a range of different sources to comprise a fully complete library experience for researchers and students. It incorporates 200 research databases as well as the holdings of all UWS libraries. Library services are integrated into the site also, services like resource sharing, 24/7 chat reference, group finder, video tutorials and ANVIL.

The library web site is an essential tool for researchers now and will be even more important as Polk endeavors to help the university become recognized as a "research enhanced" comprehensive. The web site plays a direct role in the University Studies Program through its video tutorials and gamified quiz supporting information literacy instruction which complements the library's successful program of face-to-face instruction for classes. It is easy to overlook the role the library web presence and eservices plays in the recruitment and retention of both faculty and students. Providing a comprehensive range of scholarly information as quickly as possible to scholars is vital for faculty. This means a library web presence that meets or sets the best practices for academic libraries. For students raised on electronic services and information, they have little tolerance public-facing information systems that are static, function poorly and are not engaging. Moreover, students' expectations naturally keep rising as innovation constantly continues in the service and information world generally. It is in the interest of the university and the core mission of the library to get the best educational and research information available, as easily as possible, into the hands of our students.

We understand how people concerned with administering essential and large administrative systems may see certain library innovations as low priority. Yet, the gamification of an important USP learning objective or a kiosk in the library lobby that engages students, prospective students and their families as they walk in our doors, sends a clear message that Polk Library and UW Oshkosh is going to use the best practices of library services to help them or their daughters and sons succeed in college. Other projects that we have done or are working demonstrate to prospective faculty that despite our size that Polk Library can enhance their teaching and research success. The innovations that we do are not based on having fun with IT. They are based on the professional assessment we do of academic library best practices and the formal and informal assessments we do of faculty and student needs.

5. Library accountability for providing its collections and services will be eroded if LTS is centralized within Central IT.

Responsibility for the strategic development of library technologies is vital for a modern academic library and essential for Polk Library to carry out its mission. Library technologies, services and operations have matured and interweaved in such a manner that they are literally impossible to separate from most library operations and services. If administrative authority for LTS staff would move to Central IT, accountability for library performance would shift away from the library, and its professionals and staff that have special skills and knowledge from education, experience and involvement (deep collaboration) with other academic libraries. Polk Library has taken the potential of the digital library very seriously and has taken leadership internationally, nationally and on campus to provide innovative services that have greatly benefitted students, faculty and staff. In addition, what we have done to improve library services using technology has benefitted campus and academic libraries across UWS. We strategically look at best practices of academic libraries nationally and when appropriate, we have adapted them for campus. At times we have improved what we have adapted and shared them freely with academic libraries around the United States and the World which helps to raise the profile of UW Oshkosh.

Conclusion

We fully recognize that UWS and UW Oshkosh face major challenges over the next several years. Polk Library can help the university to meet those challenges in many areas. We can aid the university to become a "research enhanced" comprehensive university, to attract and retain faculty and students through the innovative use of library technologies and collections, to embed library services into distance learning, to work with faculty to improve student information literacy skills and to contribute to faculty and student success. We have a proven track record of accomplishment and need to have the authority and responsibility to continue.

We also recognize that Central IT has been underfunded and staffed, as has Polk Library. Central IT is under real pressure to meet vital university needs and has several short-term projects that need immediate attention. The library is certainly willing to collaborate with Central IT on a short-term project to help meet some of their most pressing short-term issues as long as it does not compromise the library's basic

mission, and the library retains responsibility for the strategic development of its library technologies and LTS staff. We want to help, but we do not want to compromise the basic mission of Polk Library by centralizing LTS staff into Central IT.



Appendix B: Library Opportunity

As stated in the recommendations, the information systems in the library are comparable to other highly-specialized, federated information systems that central IT manages. While some skillsets involved in maintaining any of those systems are highly specialized, some skillsets are also somewhat interchangeable and could be leveraged to provide better coverage both for the library and for other needs on campus. However, current organization and operation of the library systems does not pose a significant risk to campus. In the event of a technical problem, UWS provides support for those systems. The library is a core function of the academy and requires concentrated support. Any efficiencies gained by sharing resources in the information layer would be minimal and the library staff have expressed strong reservations about the disruption that would cause to their operations. Where the risk is low and the efficiency gains are low, the study group principles favor constituent satisfaction and recommend no change to current library information systems administration. Infrastructure services, i.e. end-point management, are already in the process of centralizing, and the selection of user support services is at the discretion of the unit.

That said, a research-enhanced university should have a strong and leading-edge academic library. Academic library systems have evolved into information systems that while specialized, are interdependent with institutional information systems. The future of academic libraries is predicted to have even tighter integration between scholarship, information assets, and technology. Opportunity exists to strengthen and advance our academic library through tighter collaboration between the library and IT, on a scale we have not previously attempted. Some academic libraries have converged with IT to achieve better integration to that end. This appendix describes the convergence trend and the opportunity we have to further build our library into a research-enhanced academic core. The study group recommends exploring this opportunity through closer collaboration between the library and IT.

Over the last couple decades, academic libraries and IT organizations have explored and experimented with varying models of convergence, with varying degrees of success and failure. In 2015, approximately 15% of CIOs surveyed reported dual responsibility for library services and information services in their institutions (Brown, 2015. Center for Higher Education CIO Studies.), which is consistent with other survey data indicating 14-18% of academic libraries report to IT leadership (Massis, 2011. "Academic Libraries and Information Technology." New Library World.). Some mergers have been sustained and some have reverted to their previous organizations, which has also been the case among the campuses of the UW system.

Since the trend began in the early 1990s, numerous case studies are now available illustrating successful and unsuccessful approaches. Christopher Barth provides a summary of practices and pitfalls in his monograph Convergence of Libraries and Technology Organizations (2011) and lists the most common drivers of convergence cited by institutions who have converged, whether successfully or unsuccessfully. Those drivers include saving money, simplifying organizational structures, leadership vacancies, improving user service, alignment with institutional goals, evolution and prediction of continued convergence of information systems, and a history of either strong collaboration or weak collaboration between the academic library and the IT organization (p. 25). At UW Oshkosh, we are facing many of those challenges, which are opportunities at the same time. Barth emphasizes that reactive drivers, such as vacancies and budget shortfalls, are less likely to produce positive results and that the most successful cases are those that sought transformative improvement in support of institutional vision. The key distinguishing criterion between successful and unsuccessful convergences is the collective leadership of the organization, through which "an integrated organization can become much more than the sum of its parts" (p. 46).

Like the challenges we face, the opportunities that library and IT convergence can realize at UW Oshkosh include many of the same opportunities that other institutions are pursuing as the world of information management evolves every more rapidly:

- Users want a seamless experience and are often unable to distinguish between tool and content, are confused about whom to consult for assistance, and really don't care how it's organized (Barth, 2011; Ferguson, Spencer & Metz, 2004. "Greater Than the Sum of Its Parts: The Integrated IT/Library Organization", EDUCAUSE.).
- The desired learning outcome of information literacy requires education in navigation of information and in critical discernment, as well as proficiency with technology.
- A research-enhanced undergraduate experience will require and teach stronger information literacy, which in turn requires a new quantity and quality of academic student support encompassing library science and technology.
- As the emerging opportunity of digital scholarship³ gains ground in higher education, library systems will continue to converge with enterprise systems, both infrastructure and information ("A Tale of Two Centers: Incubators for Digital Scholarship at Emory and Georgie State," EDUCAUSE 2015). Coupled with the vision of a research-enhanced comprehensive university, UW Oshkosh has opportunity to join the stage of institutional leaders in digital scholarship at the undergraduate level. This cannot be achieved with barriers between library and IT organizations and can only be cost-effective with tight collaboration.

The Technology Centers envisioned for campus are proposed to provide not just technical support to students but also technical-skills education in support of student success. By advancing student technical skills, students can complete their assignments with greater technical proficiency freeing them to focus on academic goals rather than expend energy on technical distractions, while better preparing them for future workplace expectations. In a research-enhanced university, students will also need more accessible education and support in information navigation and discernment, as it becomes an integrated aspect of their undergraduate experience. With the Technology Centers, perhaps renamed as Information Centers, we have an opportunity to extend information support to students in addition to technical support, bringing it closer to their point of need and reducing barriers to academic achievement. As information and technology systems continue to converge, support for students in the use of those systems will also need to converge if we want to provide a seamless support system. This can only be achieved through a transformative collaboration between library and IT services, on a greater scale than we have achieved to date.

Both Polk Library and Information Technology have faced resource challenges that have impeded each organization from reaching its full potential. Meanwhile, the future of information systems and library systems appears to continue its trajectory of convergence at an increasingly rapid rate. The goals of student success and academic excellence in a research-enhanced university are ambitious and are less likely to be achieved in a business-as-usual approach. We have an opportunity and responsibility to explore and evaluate options, but transformative changes also involve risk, and literature supports that while many library/IT convergences in various models have succeeded, many have also failed. Any large-

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³ Digital Scholarship presents and stores research in interactive digital formats and enables new methods of research that could not be accommodated through traditional studies or publishing methods. For example, interactive technologies allow research consumers to experience the science and outcomes in multiple dimensions.

scale changes to the current intersections of library and IT services can only succeed if they are thoroughly and jointly explored for optimal outcomes and probability of success.



Appendix C: Institutional Research Opportunity

The function of Institutional Research (IR) analyzes data and provides information to support decision making. In the enterprise architectural model, it is an information service. IR offices at higher education institutions vary in organizational structure and outputs provided; the area has not been studied to provide any evidence supporting one structure or another, or even indicating which structures are most common. The Association for Institutional Research is in the process of developing an annual survey to benchmark IR practices and performance, expected to be released in 2016 (Association for Institutional Research, National Survey of Institutional Research Offices,

http://www.airweb.org/Resources/ImprovingAndTransformingPostsecondaryEducation/Pages/National-Survey-of-Institutional-Research-Offices.aspx, accessed 11/15/2015).

In the first Chancellor's Study Group of IT organization in the spring of 2015, feedback from constituents indicated that the function of IR is an information service and should be included in the modeling. The current study group designing implementation is therefore considering the best option to recommend for the optimal organization of IR within the information layer, if at all. The present structure poses no risk to the institution; however, with the anticipated arrival of a new Business Intelligence platform, an opportunity may exist to further develop the IR function at UW Oshkosh to provide broader and deeper service to information consumers.

As they begin their study of IR offices, the Association for Institutional Research defines the IR function in a recently drafted high-level statement:

The institutional research function uses inquiry, action research, data, and analytics to intentionally inform operational, tactical, and strategic accomplishment of an institution's student success mission. The function—occurring inside and outside of an institutional research office—provides timely, accurate, and actionable decision support to administrators, faculty, staff, students, and other stakeholders.

As already noted, IR offices vary widely in structure, services provided, and constituents served. At UW Oshkosh, the IR office primarily supports the Academic Affairs and the Chancellor's office with information reporting that is both high priority and often ad hoc or time sensitive. The IR office also provides all of the required external reporting to federal, state, or UW System. The IR office provides all program assessment information requirements.

The IR office develops queries and also relies on Information Services (IS) staff in central IT to develop queries for them needed to extract the data from the enterprise information system. In some cases, IS staff design and maintain the report structure used by IR while in other cases IR staff design the report. While IS staff primarily provide information reporting to student and administrative functions such as Finance, HR, Registrar, or Financial Aid, IR staff are also sometimes called upon to provide similar service. Information reporting functions therefore exist both in IR and IS and rely on query development from IS. Some functional offices, such as student services, international studies, or the graduate school, do not use information reporting either from IR or IS, instead manually collecting and analyzing data from their own sources to inform strategies and operations, for reasons not fully understood by IR or IS

The number of data sources has proliferated in the past 10 years, from a single ERP (PeopleSoft) to an array of present and proposed systems that are loosely or tightly integrated and that have the potential to inform institutional decision making, such as the Student Success Collaborative system, the Constituent Relationship Management system, the anticipated Content Management System, MapWorks, Maxient, and numerous other sources that could inform institutional leaders if the data could be better pieced together and enhanced with robust modeling and analysis, which currently is beyond our capacity. Figure 1 below illustrates the current flow of institutional information and the lack of statistical modeling and analysis.

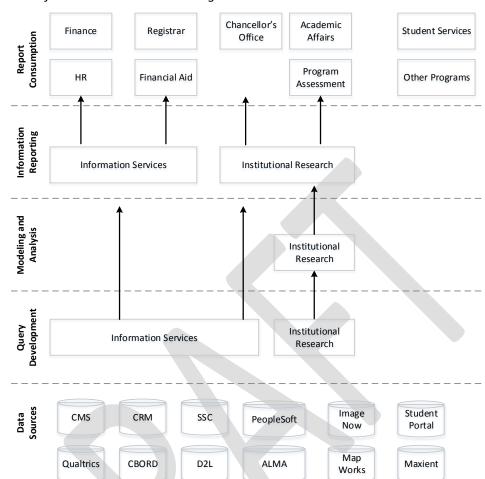


Figure 1 Current Information Flow with Existing Tools

As the universe of information expands into new capabilities and potential for more sophisticated decision support, the tools and functions are also changing. The current information reporting tool used by the UWS has reached the end of its lifecycle and must be replaced. A contract for a new tool is under negotiation and while still in a confidential phase of procurement, we have enough information from UWS to know that the tool will take us a significant step closer to a modern Business Intelligence platform. It will change the way we access information from our data sources and will require more sophisticated functions and roles among our staff.

Figure 2 illustrates the most significant change with the coming BI systems as we currently understand it. A "semantic layer" will translate consumer requests into data queries of multiple sources. Consumers will not need to navigate multiple sources of information or understand how to create queries. However, the semantic layer must be developed and maintained by "data modelers:" a new role in information services we have not previously had. New visualization tools will also provide capability for dynamic dashboards to synthesize complex data into digestible graphically displayed information on the fly, giving decision-makers constant access to institutional information—if properly deployed and maintained.

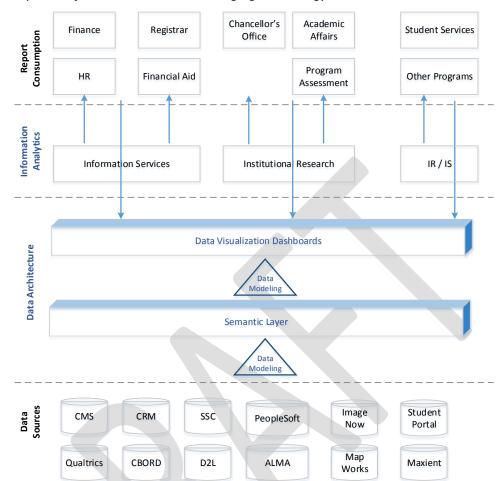


Figure 2 Anticipated Information Flow with Emerging Technology

While we don't yet exactly know how our information world will change with the arrival of the new BI tool expected in 2016, we do anticipate that the function of information reporting will dramatically change in the near future. New roles and responsibilities will be needed, with institutional researchers and information analysts spending less time on operational reporting and query development and more time on value-added activities, such as semantic data modeling or statistical analysis. The technical and analytical roles will very likely be less distinctive from each other and require a stronger blend of capabilities.

Hiring appropriately skilled FTE to fill new roles is one possible strategy to address the disruptive change in the information world as we know it. Growing existing skillsets to meet new requirements is an alternative strategy that might be more practical than attempting to compete for newly emerging, high-demand skillsets. Through tighter collaboration between IR and IS, we have opportunity to address the coming changes and better serve current high-priority information consumers as well as our underserved constituents. Pooling resources to leverage strengths might help us bridge the gap.

Appendix D: Statement from Residence Life

Recommendation #2 Give CIO authority by policy over all IT systems and personnel, supplemented by centralization of reporting lines in the information and infrastructure layer (model 2/3).

- -I am unsure what is meant by "Particularly, in ResLife and PeopleSoft, better coordination should create more options for employees, better risk management, and more efficient operations." While I agree the management between PeopleSoft and us has been challenging, it has been mostly due to lacking PeopleSoft programmers, which this does not address.
- -I would agree that better risk management is important, however that can be handled through policy and discussions.
- -While it is true that policy doesn't assure compliance, this has generally not been an issue for ResLife.

Recommendation #9 Centralize all IT infrastructure services with appropriate funding and life cycle management.

-Residence Life shares Reeve Unions concern about 24/7/365 responsiveness. While it can certainly be overcome, Residence Life as well as Gruenhagen Conference Center have many infrastructure needs that do not fall during normal office hours. It is important to have a plan in place to address this.

Recommendation #11 Centralize reporting lines in the information layer for enterprise systems and integrations, providing appropriate staffing to meet business needs.

- -None of the rationale specifically speak to the MyUWO Portal.
- 1) While there is no direct accountability to the CIO for the MyUWO Portal currently, this can be done through policy, which Residence Life has a history of honoring.
- 2) MyUWO Portal's current staffing model supports absences and vacancies by training multiple staff members for critical functions.
- 3) Since it is completely student staffed, there is currently no inadequate staffing.
- 4) This is ambiguous and can likely be handled through policy and discussions.
- 5) Currently cross training takes place within the MyUWO Portal staff where competencies/unit understandings are similar.
- -MyUWO Portal certainly fits in the bounds of what is classified as a Enterprise application in this recommendation.
- -"Information-layer areas also include staff and students supporting ResLife systems, Reeve Union systems, Library systems, and Institutional Reporting." "Application administration of systems in ResLife and Reeve would benefit from consolidation with central IT and reduce overall risk"
- 1) This is ambiguous. What specific risk is being reduced?
- 2) ResLife may benefit from consolidations in some way, but any benefit would be overshadowed by the loss of housing it within their department. Losing the direct connection will hinder project management, requirement gathering, testing and bug fixing. Currently being imbedded in ResLife the MIO Manger is part of the Central Staff team, which allows very direct communication not only about IT related concerns but everything related to that unit. This allows for technology to get involved prior to it being brought to them, to be more proactive. Technology supports so many things, however non technical users may not see that right away, and many times it will come far later down the road when their was an easier solution. Project management, requirement gathering and testing are superior with a close connection to the department they are severing because it allows IT to have a deep understanding of business needs and respond appropriately. While it may be true that projects can still be accomplished through a centralized model, it is likely that any would take longer and be less likely to fit the need of the department. Support of currently applications, specifically OPE and Fly By will be harder to maintain as well. Many process changes effect an applications implementation, and these can only be streamlined when IT is present at the time of discussion on these process changes.

Final Note: While it is true that many units on campus are only slightly impacted, these recommendations require huge changes to ResLife. Some of these changes are necessary and will better serve the campus and potentially even ResLife and others would ultimately lower service to both students and staff. It is also important to consider the overall impact of these IT changes specific to ResLife, as too many changes too quickly will de detrimental to day to day and future operations. There is already significant changes happening to account for staff losses.

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