Enterprise IT Decision Making – A Case for Change

Administrative Excellence – EITDM Future State Committee

Introduction

We at the UW-Madison have enjoyed a robust, if relatively recent, tradition of strategic planning around enterprise information technology (IT) services and delivery. For the past six years many parts of campus have participated in continuous improvement around IT planning, this in an environment perhaps without peer in terms of the speed of change and in the expectations of the customer base – which is all members of the campus community.

We have IT strategic planning documentation for many of the various missions of the university, from teaching and learning to research computing, from public service to service infrastructure, joined by a common set of principles. These reflect and commit us to a culture of transparency and participation, stewardship over existing resources, and financial soundness in our decision making. We seek to do this all without stifling the innovation that is the hallmark of every area of our campus.

What has been missing in the past has been a transparent, repeatable, operational structure and process for decision making that allows us to meet these goals. Contained within these pages is a proposal for such a system. This proposal is not about the outcome of any particular IT decision or question; rather, it is about how we make decisions. Perhaps unlike other Administrative Excellence projects, we are proposing no direct cost-saving measures – in fact, there is here a justification for a further investment in decision making, although a modest one. However, the whole-campus perspective provided for through this system will give campus leadership a greater view than possible before of our overall IT spend, highlight ways that IT might be managed more effectively, and provide for a greater coordination between university priorities and IT planning.

This document is divided into several sections. We begin with a short restatement of the findings of the Administrative Excellence EITDM Current State team, followed by a broader discussion of the problem to be addressed by this proposal. Next, we discuss the proposal in some depth, including the methodology of how we arrived at the model of decision making we are recommending. We then discuss some considerations in adopting this model at UW-Madison and some recommendations on implementation. We close with some case studies of recent and pending IT decisions and how they might be accomplished within the model we propose.

Fact Finding:

There is currently no clearly defined University-wide model in place to provide guidance and structure to IT decision making. Although there are many talented people and multiple committees working in this arena, we lack a common process to ensure that decisions on technical direction, policy, services provided, and IT expenditures are aligned with common goals in support of strategic university

priorities. There are ambiguous paths to approvals, with decisions often made based on the amount of financial resources held by schools, colleges, and administrative IT organizations seeking changes. Decisions made using these criteria often result in acquisition of systems that meet the purchaser's needs and not the needs of campus at large. Likewise IT-related policy and technical decisions are often made without an understanding of the wider implications and impact on the University as a whole. This results in sometimes significant expenditures made for multiple systems with similar functionality, leading to duplication of software licensing and IT staff support costs.

The current lack of a coherent IT decision-making process also makes it difficult to accurately assess the amount of institution-wide IT investments that have been made and the extent to which we have or have not realized a return on those investments. The Enterprise IT Decision Making (EITDM) Current State Team performed an analysis of the campus IT spend and found it difficult to accurately estimate current IT expenditures and staffing costs due to the inconsistency of reporting and the lack of IT project cost accounting. They found the minimum campus IT costs for fiscal year 2010-11 were estimated at $84M for salary and fringe benefits for 1,106 FTEs, and $37M for IT-related equipment including software, maintenance, leases, etc. However, the true costs are currently unknowable and the EITDM Current State Team therefore **estimates the annual IT spending may be as much as twice** the minimum amounts stated above.

Key findings by the EITDM Current State Team for how UW-Madison's IT enterprise investments, strategies, and services are currently managed include:

1) **There are few structured IT decision making processes across campus**
2) There is insufficient routine review of strategic IT priorities and their tie-in with campus strategies
3) It is difficult to accurately capture IT expenditures with the current chart of accounts and accounting practices
4) HR job codes and categories are insufficient to capture IT related FTEs
5) There is a clear disconnect between campus/divisional strategies and the realities of operational needs
6) **IT decision making is often driven by the availability of funds leading to inappropriately short-term, non-scalable IT services that are not aligned with campus strategies**
7) An array of services are provided at the divisional level with little overall campus visibility and/or coordination
8) **No routine, structured IT service evaluations exist**

Problem Finding:

We now turn to why we believe it's important to consider a new organizational structure and process for how IT decisions are made at UW-Madison. We start by defining the problems we're trying to solve. Simply stated, **the problem is in knowing how, why and by whom IT decisions are made, and**

how and to whom those decisions should be communicated. This is a particularly complex issue because IT touches every aspect of the university community and therefore any solution that is designed will necessarily impact all university structures and will likely influence the myriad cultural behavior patterns and norms that exist throughout campus. We will attempt to deconstruct this complexity by considering several components of this larger problem and by subsequently identifying ways in which we might reach a more desired state.

The committee's list of characteristics for an ideal IT decision-making process is exhibited in the textbox on this page. Although all of these characteristics are important, we believe that **we need to create a new infrastructure that will continue to facilitate innovation while simultaneously work to foster trust in the decision makers**.

There is a direct relationship between the heightened awareness of the campus community to be more efficient and a **fear that all autonomy will be removed and that IT decisions and services will become "centralized."** This component of the above-stated problem is significant in that there is a high likelihood that most of us will have to recognize a different locus of control – or, at the very least, will need to find new ways to communicate more widely and/or vet the solution more completely before the work can be done.

Desired Characteristics – IT Decision Making

- **Clear**: Establish clear process and entry points into the model
- **Transparent**: Document and communicate decision and rationale
- **Consistent**: Principles, policies and procedures are consistently applied
- **Accountable**: Focus on results
- **Agile**: Provide flexibility for quick response
- **Adaptable**: Allow change based on evolving needs of information and information technologies
- **Representative**: Provide for appropriate representation of various constituencies across campus
- **Collaborative**: Enable "cross-talk" across and within areas and stakeholders
- **Innovative**: Stimulate innovation as a common goal

In the next section of this paper we will be discussing a set of possible organizational models and how each of the models represent different approaches to solving our overall problem of IT decision-making. To foreshadow our recommendation, we believe that a hybrid of these different models would capture the **spirit of independence** that defines UW-Madison yet would stay away from the over used and often misunderstood terms like "centralized" and "decentralized." This spirit of independence certainly contributes to the complexity of how we approach IT decision-making on campus and it is something that we need to maintain to allow for innovation to occur without what might be viewed as bureaucratic roadblocks.

Providing clarity around an organizational decision-making structure and process will work to build trust and buy-in to the campus mission. **It will take time**. The model that will be recommended later in this document allows for a good majority of decisions to be made by individuals who we consider to be at the domain/expert level of the organization. Currently we experience problems with domain experts who, despite the best of intentions, make decisions regardless of the impact that those decisions have on the

campus as a whole. Our goal is to find ways for domain experts **to be innovative without fear of losing control of their resources while also being accountable to the mission of the institution as a whole.**

There are many areas of campus that make decisions that affect IT. There are shared governance groups whose academic or administrative decisions may impact an IT spend or process, there are deans and directors, managers and team leads, and researchers and faculty who run their own projects and own their intellectual property. There are advisory committees and ad hoc groups that influence decisions, big and small. Inherent in this complex universe of decision makers, is the problem of **how communication occurs and whether there is sufficient trust and clarity of roles to communicate with each other before a decision is made**.

We urge the campus community to reflect whether our proposed solutions will help us to solve IT decision-making problems and whether these proposed solutions will add value to serving the mission of the University of Wisconsin-Madison. In summary, we have defined the IT decision-making problems as:

1) Needing to know how, why and by whom IT decisions are made
2) Needing to know how and to whom IT decisions are communicated
3) Needing to create an infrastructure that will facilitate innovation while also fostering trust
4) Needing to reduce – and eliminate – fear that autonomy will be removed and that IT decisions will become centralized
5) Ensuring that the UW-Madison spirit of independence is respected
6) Being clear about how, why and to whom IT resources are distributed

Idea Finding:

To evaluate our options for a new decision-making model, the project team established a matrix (Appendix A) upon which to plot the results of a peer review. Our peer review consisted of a guided interview with the CIOs or Deputy CIOs of eleven institutions selected for various important characteristics similar to our own. Our goal was not to interview a comprehensive set of CIOs; rather, we wished to interview enough schools (ones that represent us in some way) so that different models could emerge. Once interviewed, these schools appeared on our matrix. The X axis represents the *formality* of decision making at this school – the degree to which decision making is transparent, reproducible, the likelihood that one decision provides a path for others to follow. The Y axis represents the *relative number of actors* involved in the enterprise-level decision making of the campus.

The schools we reviewed fell into these quadrants in roughly equal distribution, and this allowed us to make some general statements about each of the four models of decision making represented by our matrix: we called these four models the Ad Hoc; Executive CIO, Domain-specific; and Unified Process. We optimized each model for applicability at UW-Madison, and then examined the advantages and disadvantages of each. A listing of these models and their characteristics is found at the end of this document as Appendix B.

At this point it is useful to consider some common features for *any* model we would propose for this campus; these are features of future-state university IT decision making which we would advocate regardless of the overall approach.

1) **Multiple tracks** through the decision making authority. All recognize that there exists different levels of IT decisions, even at the campus level. There is no need, for example, for a very routine decision to be burdened by process; nor should a very impactful decision be taken without due consideration. We are proposing a model with three or four tracks of decision making to accommodate this variation, based upon a schedule of considerations which get to scope, impact, and risk. The University of California-Los Angeles uses such a schedule, and an example version for UW use appears as Appendix C.

2) **A campus-level initiation and triage** through which all campus-level IT projects and related policies should go. It was a finding of the Current State team that duplication exists among campus services, even those that serve enterprise needs. Moreover, it is dificult to address this due to the fact that the IT spend for such services is not always known or apparent. We are proposing that an initiation/triage step be applied to all campus-level IT projects. This would make such projects more visible to the various constituencies on campus and allow for their comparison to other existing and proposed services. It is important to note that this proposed initation stage is not designed to decide on project outcomes; the goal instead is to decide on the proper decision track. Nor is it necessarily the goal to remove all duplication of services, for sometimes this is warranted – rather, it is to be mindful of and proactive about what is duplication, what is needed, and why.

Common Features – Future State

- **Multiple tracks** through the decision making authority
- **Campus-level initiation and triage** through which all enterprise-level IT projects should route
- **Staff dedicated to achieve this routing in a timely fashion,** to facilitate the triage and track projects through the appropriate route

3) To facilitate #1, and accomplish #2, we propose that a small **staff be assigned for this purpose** to the office of the CIO. Their job would be to establish enough information about a proposal to traige it and route it effectively. We imagine that this staff would be enhanced as needed by a small number of faculty and other experts depending upon the need for consultation. Critical throughought is that this staff will guarantee a date (within 1-2 days) on how a decision will be routed, and a date by which a final decision will be reached.

Returning now to our four quadrant models, and with the above features, **it is the recommendation of our committee that the UW explore the Uniform Process model for this campus**, with some modifications. The features of this model include:

1) A significant portion of IT decisions (as defined) flow through an IT Planning Board – an entity comprised of high-level faculty/staff (e.g. Deans, Department Chairs, and the CIO)
2) The Planning Board may have access to funds for projects, and oversight of a central IT budget
3) Major decisions route up to an Executive Board
4) A Service Management Board reviews all central services at a detailed level
5) The Planning Board convenes groups within the IT community to provide analysis and support the decision-making process

An organizational representation of this model is found as Appendix D. As stated previously, the committee would suggest a formal modification to this model to *ensure that the Planning Board and Service Management Board explicitly include domain specialists at both levels*. The committee feels that this model would be efficient, transparent, and adaptable to current needs via the flexible configuration of the Planning Board. It is a model scalable to the colleges and schools. It holds the potential for smarter/blended decisions with an institutional and strategic perspective, while at the same time increasing the focus on accountability and institution-wide financial transparency in IT decision making. The CIO would be a participant across all levels, and the composition of the Planning Board and the other committees could be designed to intersect with the membership of the Research Computing group and other domain-centered policy/service groups on campus.

At the end of this report we will look at how this decision-making model might be applied to current university IT questions. Before that, we offer some implementation notes about making the "Uniform Process Model" the "Wisconsin Model."

Solution Finding:

To implement this proposal, the Universal Process model must become the Wisconsin Model and must fit the culture and needs of this University. Adopting any of these models is a change, and an opportunity for more of the campus IT and non-IT staff and functional units to participate fully.

Of course, wide outreach to campus is a must, and a detailed implementation plan will need to be addressed in the next phase. It is expected that implementation will take time and that with additional experience the process will be adjusted and become more robust. However, the initial principles and scope of the process will set the tone for the long-term success.

We recommend that the scope of the process be broad and inclusive – potentially all IT decisions are within scope, instead of setting artificial boundaries. Within that, there are many ways that responsibility for IT decisions can be delegated to participating units on a case-by-case or other basis as

appropriate. It is equally important to recognize that while all IT decisions are "in scope", delegation is also within scope, and the unit or project with the delegated responsibility is a valued participant in the process.

In order to be practical and efficient, routine tasks cannot be subject to the IT decision-making process in each instance. Yet routine tasks reflect IT decisions that can have a great impact on the University overall. We describe one example in order to illustrate the scope and possibilities for how this might be handled:

Upgrading the version of the operating system (i.e., Windows) on a desktop computer is a routine task for most IT organizations. However, there is risk in being an "early adopter" and potential problems if University service providers cannot support the newest version of the operating system. Likewise, there is risk if a unit decides not to upgrade an operating system that can no longer be supported by other service providers, or has unresolved security issues, or cannot be used on modern hardware. Rather than subjecting each operating system upgrade (or decision not to upgrade) to the decision-making process, these decisions can be pre-approved or delegated in various ways. Two possibilities in this case are:

1) **University Standard:** If the Planning Board approves a set of University standards that specify which operating systems versions are generally approved for general purpose computing, any choice within that standard is automatically pre-approved, and does not need any further action with the decision-making process.

2) **Unit IT plan:** A unit could submit an IT plan for approval, which would include OS choices, criteria, scope, review dates, and other information as determined by the Planning Board. Operating within the scope of the approved plan would be delegated to the unit.

Another area of concern is IT support and integration in various research projects. On the one hand, University research projects are University activities, subject to the overall supervision and policies of the University. On the other hand, research is a major mission of the University, and the role of IT and IT decision-making is to support the mission in the most efficient and effective way possible. It should also be noted that research projects are, by their very nature, unpredictable and are often relatively short-lived and have specific goals and limitations. The decision-making process needs to be cognizant of the nature of research projects; flexible; and responsive in order to effectively support and not hamper the research. The approach here is one of agility and preserving wide latitude for innovation.

There are many ways for the Planning Board to handle research project needs. Research proposals with a large IT component could be reviewed before submission. That review could include delegation of some, or all project related IT decisions to the project, or a plan for how those decisions will be made if the project is funded. The review would become part of the proposal, if appropriate. Projects with more modest IT involvement would be handled like other IT issues before the Board, with deference where needed to the research-specific requirements and expertise of the research staff.

A third instance where delegation may be required is in areas where we are subject to quickly changing federal regulation. Our process would need to preserve the agility to accommodate those mandates.

Acceptance Finding: Case Studies

In this section we will apply our proposed model to some real examples of university IT decision making either a) important to campus at the moment or in the near future, or b) regarding a decision made in the past which is likely to come up anew in the future. It bears repeating here that *the object of these case studies is not to assume a particular outcome nor confirm an earlier one*. Rather we seek to model how such decisions would be made under the proposed model. The case studies will include:

- Case 1: The School of Business / campus Event Management System (EMS)
- Case 2: The Library Services Platform (LSP)
- Case 3: The Moodle Learning Management System (LMS) – In Process
- Case 4: The Security Baseline project – In Process
- Case 5: The Campus Access Control System – In Process

Respectfully Submitted,
Members of the Administrative Excellence EITDM Future State Committee

Steve Hahn – Team Lead	Graduate School
Phil Barak	College of Agricultural & Life Sciences
Joanne Berg	Division of Enrollment Management
Bobby Burrow	Administrative Information Mgmt. Services (AIMS)
Rhonda Davis	School of Veterinary Medicine
Karen Hanson	Division of Information Technology (DoIT)
Dan Jacobsohn	School of Education
Jennifer Klippel	Office of Budget, Planning and Analysis (OBPA)
John Krogman	Division of Information Technology (DoIT)
Bruce Maas	Office of the CIO
Greg Moses	College of Engineering
Dave Parter	College of Letters & Science (L&S)
Mike Pitterle	School of Pharmacy
Adam Fennel, Chris Slatter	Huron Consulting Group

February 2013

Case 1: The Wisconsin School of Business Event Reservation System (EMS) Process

Background

Wisconsin School of Business (WSoB) IT staff were notified in 2006, with approximately 18 months to get a system fully operational, that the new addition to Grainger Hall would require an EMS system for the 2008 opening. Through informal channels and the Office of Procurement Staff, WSoB IT staff were also notified that School of Education and the Athletics Department were looking into similar software to manage events in their new building additions. All three units collaborated on the selection of EMS and contributed to start-up costs for the software licensing. WSoB hosts the server for the campus and employs a 0.2 FTE to administer EMS, which it has never received compensation for from the other units.

WSoB spoke with DoIT at the time about developing a campus-wide EMS system. DoIT planning and implementation would have likely taken about three years to complete, which involved a review of all campus business needs through discussion with an inclusive campus-wide committee. This time frame can be a challenge for divisional IT staff who report to Deans that want to implement new initiatives quickly upon arrival and often find several years too long to wait for the IT components of new initiatives.

Current State

There are currently nine units besides WSoB operating on the EMS system. All ten units fund software licenses and upgrades collectively, but the costs for server maintenance and IT staff are currently covered entirely by WSoB. The WSoB Technology Support Center coordinates all of the EMS systems and facilitates monthly meetings across divisions.

IT staff working on the system acknowledge that the backup systems on EMS do not meet the same redundancy, reliability and dependability standards as an enterprise solution. They note that because of budgetary restrictions divisions face more risk is often taken on as a cost savings measure than an enterprise solution would allow.

Future State

WSoB IT staff have been in consultation with DoIT about making EMS a campus-wide resource due to the funding challenges and risk factors of the current structure. One area for consideration is that the EMS license UW currently owns would allow the system to also be used as classroom scheduling software. However, UW already has different enterprise classroom scheduling software (Resource 25). IT staff familiar with EMS note that software has strengths in planning for catering and AV needs as well as invoicing, which are not the main strengths of Resource 25. Right now, it is difficult to analyze data from the two parallel systems to determine which classrooms in the same building (controlled by the two

different systems) might be available at any given time. This is especially concerning if a campus emergency were to arise requiring large-scale classroom rescheduling on short notice.

If our proposed model had been in place: The WSoB, School of Education, and the Athletics department all would have approached the initiation/triage staff about their need for an event reservation system and would not have had to rely on informal networking to be aware that multiple people were looking for a similar solution. The committee would likely have deemed this request important enough to send to the Planning Board. The Board would have the necessary campus representation, so that an ad-hoc committee needing an extended review process would not have been necessary. The Board likely could have made a decision regarding an enterprise level solution within a few months instead of years.

Because an enterprise solution would have been created from the beginning, each of the initial participating divisions would likely have had to put up less of their own funding. This would have been especially true for WSoB, as they would not have been hosting a server or tying up a percentage of one of their staff. Also, the parameters for new divisions joining EMS would have been established by the Board and would not require the extensive involvement and coordination of the WSoB Technology Support Center. The risk currently borne by WSoB would also have been mitigated by aligning the system with the standard enterprise risk management protocols. The Board would have been aware of the potentially duplicative nature of the campus license for Resource 25 and could have discussed from the onset of the project whether Resource 25 should have served as the EMS, whether EMS should have replaced Resource 25, or whether both system should have been established in parallel but with a better interface to make all room reservation data more easily available to building administrators.

Case 2: The Library Services Platform Decision Making Process

Dan Jacobsohn (information collected via interview with Lee Konrad)

Background: Library Services Platform definition and motivation to replace Voyager

A Library Services Platform (LSP), historically known as an Integrated Library System, is a suite of integrated software the supports the essential administrative library functions such as acquisition, description, and resource management. While such functions are still required for the management of print and analog resources, modern systems add significant functions that meet the modern library environment, including integrated services for link resolution, management of electronic resources and licenses, collection analytics, and report generation.

Our current system, Voyager, has few of the affordances of a modern LSP. Voyager is focused on the management of print resources and run locally with multiple instances for multiple campuses (as opposed to a single SaaS model). This is in contrast to the hopes for a new system, as outlined by Paula Ganyard, the director of CUWL (Council of University of Wisconsin Libraries) in a memo on December 6, 2012: "Today's cloud-based computing environments, coupled with new library resource management needs, are dramatically changing the library management system landscape. Library vendors are ... now offering next generation library management systems that allow libraries to integrate the management of all resource types into one system: improving resource management, providing new analytics capabilities, improving staff and system efficiencies, and providing libraries greater flexibility in terms of staffing and budgetary allocations. These next generation library systems also provide a structure and system that facilitates collaboration and cooperation across libraries."

Current Decision Making Process

Because of the needs a modern library exerts on administrative systems and potential significant cost savings over time, the CUWL directors voted to launch an RFP process to find a new LSP. The need for a new system was highlighted to CUWL by the attempted integration of Voyager with more modern discovery software as well as encouragement from the system CIO. The decision bolsters the CUWL concept of 'One System One Library'. To the degree it is practicable, there is hope that this integration will facilitate further normalization of library policies, encourage collaboration across campuses, and lead to a somewhat more uniform experience for users.

Applying an EITDM Governance Model

Like other large-scale system applications (cloud-based or locally hosted), Madison is the only campus with the resources and technical expertise available to support a system-wide LSP. Currently, all Voyager server administration is performed by DoIT (for both Madison and UW System schools). Thus a Uniform or Domain decision making process would have significant impact on governance within groups

like CUWL. As Lee and I discussed this, we saw the advantages of this system in terms of how these kinds of decisions play out. Envision the following scenario: a decision is made to advocate for a large investment in an LSP. Each campus' library director must now appeal to his or her provost for money and support. Should we have a decision-making process in place, both the provost and the library director could rely on an efficient and known process to make sure the 'right people' were involved in the vetting and review process. The resultant RFP would also benefit from questions collected by various domains, especially IT architecture.

However, there is at least one way in which an official review process could be problematic for decisions made at system scale. If the groups get into the judgment of business cases instead of examining the more objective business aspects of the proposal, we view it as likely that the IT decision-making process will run counter to the spirit we hope to foster in creating these decision-making models. While IT voices are critical to IT decision-making, it should be stressed that IT groups do not and should not drive operational decision-making with respect to service needs. Thus, while the intent behind the models is to standardize processes for making IT decisions, it is critical that, in practice, domain experts, service experts, and others feel that the governance committees around IT decision-making are viewed as facilitators to help ensure good decision-making, rather than overseers of operational and service level needs and interests.

Administrative Excellence
Enterprise IT Decision-Making – Future State

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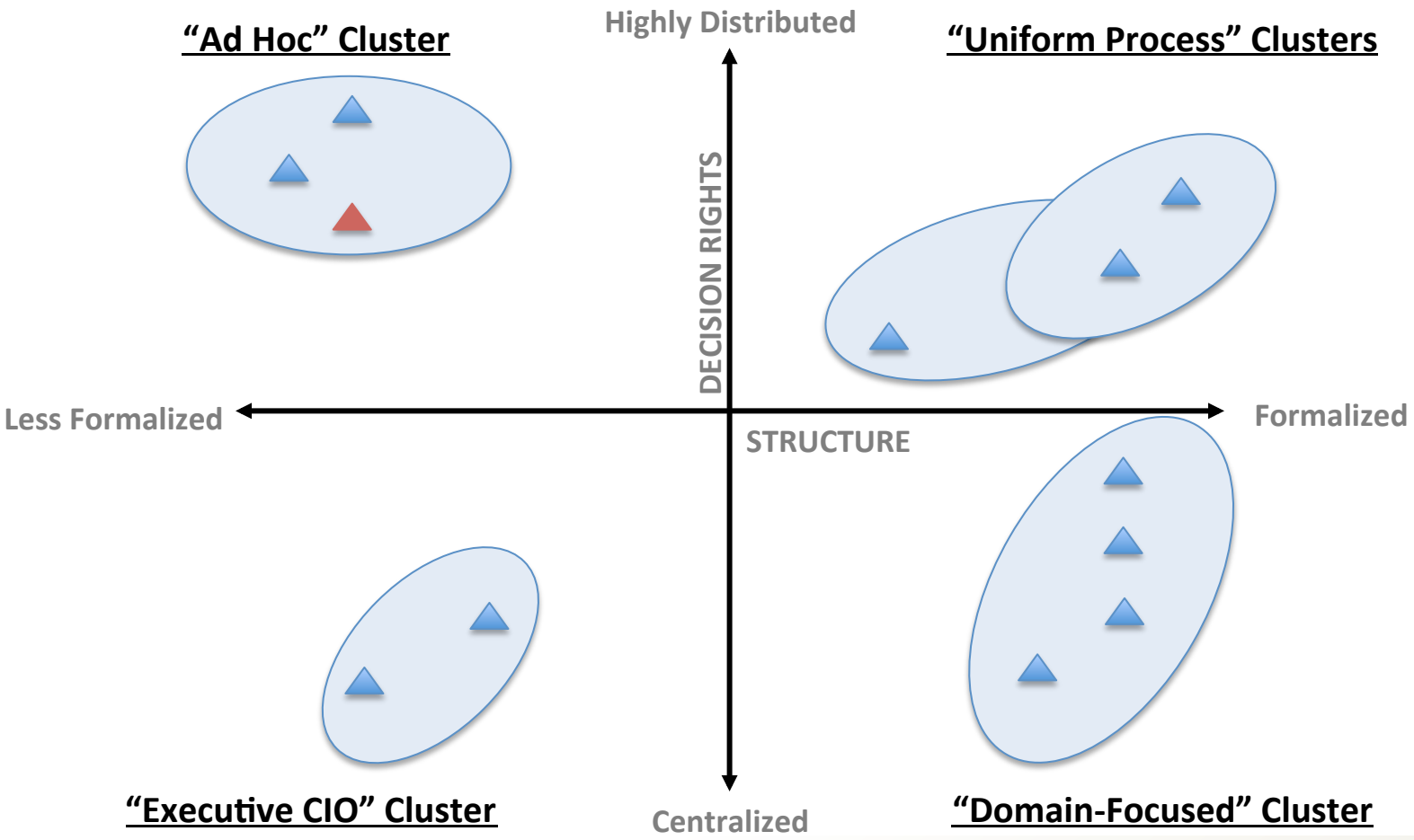
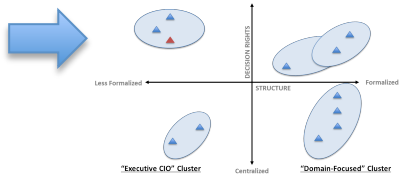
A Case for Change - Appendices

IT Decision-Making Models



Ad-Hoc



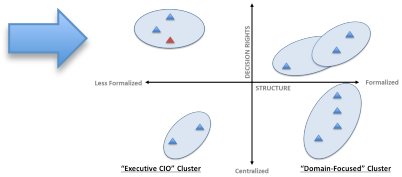
Summary

- Decisions are routed on single or multiple paths based on issue/type and stakeholders involved (e.g. routed via CIO, ITC, school/college level)
- Alongside the CIO, a second entity (e.g. ITC) serves as a major decision-making body for the academic and research communities
- Major decisions route up to Executive Leadership
- The CIO and ITC convene groups within the IT community to provide analysis and support the decision-making process

Versions of This Model Seen at:

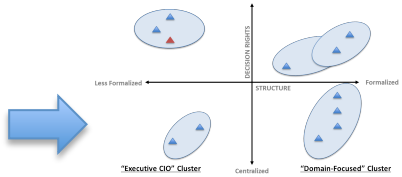
- Johns Hopkins University, Harvard University

Ad-Hoc



Pros	Cons
• More inclusive than Executive CIO model – more local decision-making, and representative decision-making at higher levels • Closest model to current decision-making environment • May present least resistance, both culturally and politically • More flexible at divisional level and departmental level • May encourage local innovation • Project funding may be dependent on the local availability of funds	• Model may blur lines on decision-making lines of authority • Less accountability • More ambiguity • Efficiency may be compromised • May limit integration with strategic planning • Local innovation may be difficult to scale • Highest risk, with a greater potential for duplication

Executive CIO

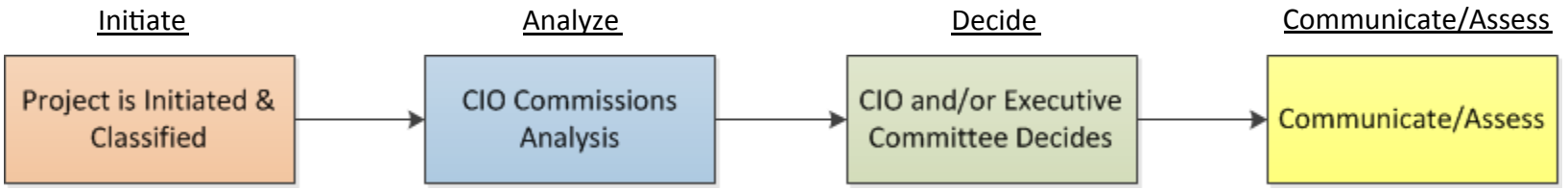


Summary

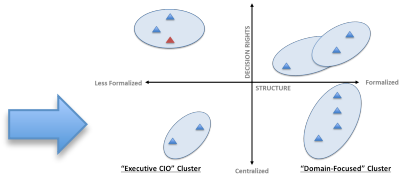
- Centralized decision-making model – a significant portion of IT decisions (as defined) flow through the CIO's office
- Major decisions route up to Executive Leadership
- The CIO convenes groups within the IT community to provide analysis and support the decision-making process

Versions of This Model Seen at:

- Arizona State University, Indiana University



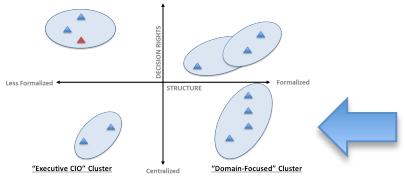
Executive CIO



Pros	Cons

• Nimble, simple, clear
• Decisive role for CIO
• All significant campus IT decisions would route through the CIO (informed role)
• Aligns decision-making process with the organizational chart
• Potential for a clear, defined, centralized funding structure
• Facilitates link between strategy, decisions, delivery, and economics
	• May be contrary to culture of campus engagement
	• May stifle innovation
	• Highly dependent on CIO's office for many aspects of the process
	  • Personality dependent to CIO
	  • Potential for bottleneck in CIO's office
	• May encourage large, centrally funded projects
	• May not be a stable model

Domain-Focused

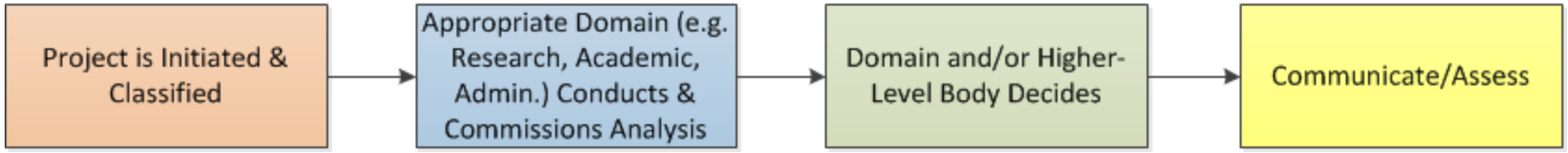


Summary

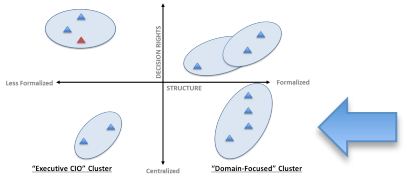
- Three or more IT domains (e.g. Research, Academic, Administrative) serve as decision-making entities, in addition to a higher-level body (e.g. ITC)
- An IT Infrastructure/Architecture Committee links the domains and supports decision-making analysis in terms of IT cohesiveness and efficiency
- Major decisions are vetted by Executive Leadership

Versions of This Model Seen at:

- University of Michigan, University of Texas at Austin, University of Illinois, Northwestern University

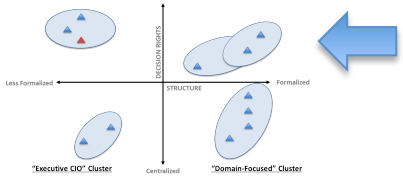


Domain-Focused



Pros	Cons
• Optimizes decisions within functional IT domains • Builds communities of focus with unique needs • Proxies for domains already exist on campus • Academic domain may be natural home for decision-making around educational innovation initiatives • Scalable model – expertise exists in abundance within domains	• Siloed approach • May artificially separate faculty into missions • May limit the leveraging of investments across domains • Domains may be competing for funding/a limited set of resources • May require the “buying out” of faculty time to appropriately support the process

Uniform Process

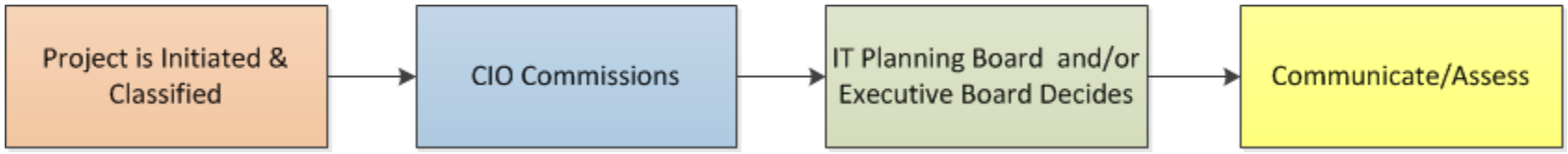


Summary

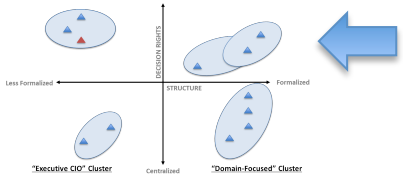
- A significant portion of IT decisions (as defined) flow through an IT Planning Board – an entity comprised of high-level faculty/staff (e.g. Deans, Department Chairs, and the CIO)
- The Planning Board may have access to funds for projects, and oversight of the central IT budget
- Major decisions route up to an Executive Board
- A Service Management Board reviews all central services at a detailed level
- The Planning Board convenes groups within the IT community to provide analysis and support the decision-making process

Versions of This Model Seen at:

- University of Washington, MIT, University of Minnesota



Uniform Process

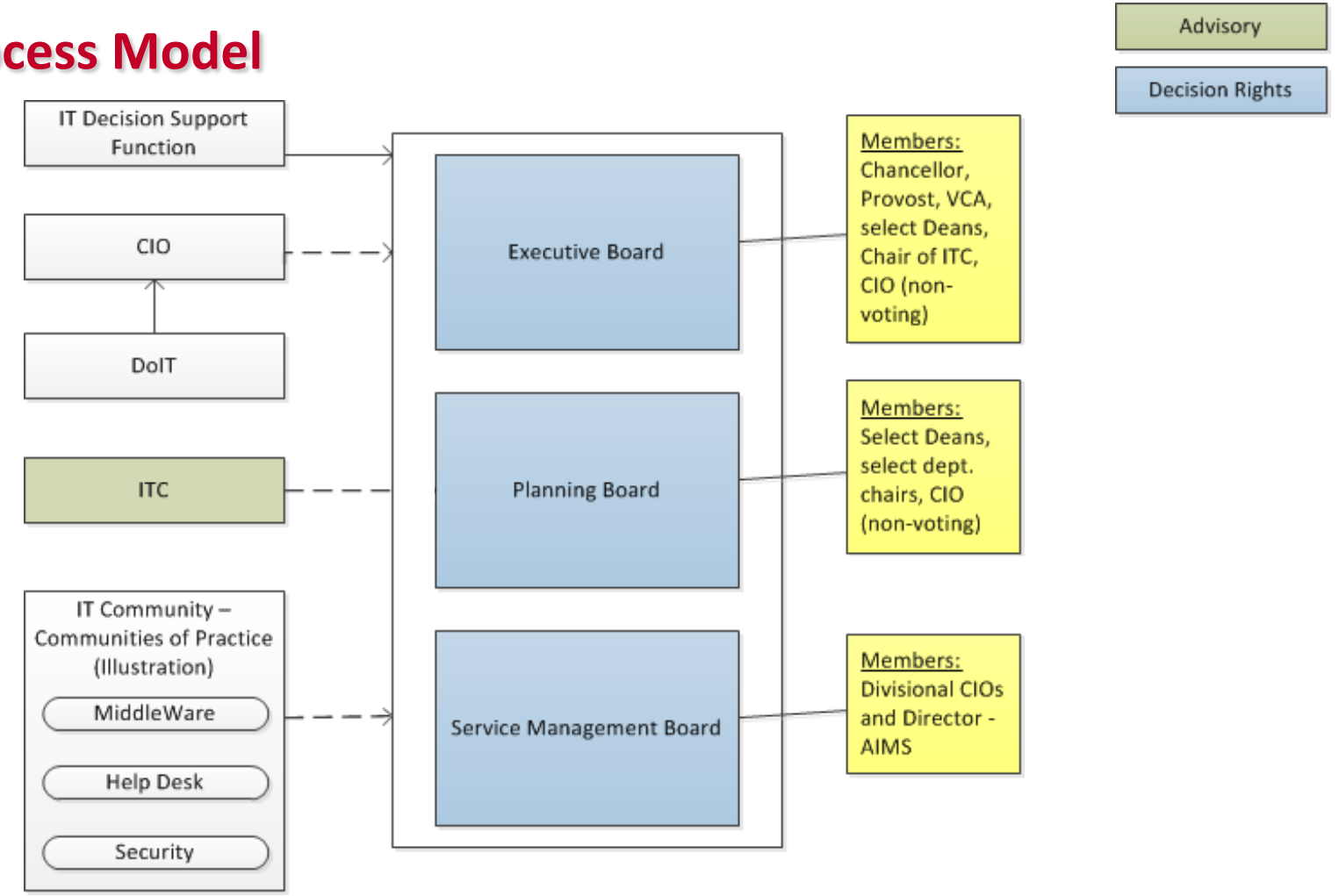


Pros	Cons
• Simple, representative model better suited for both efficiency and transparency • Flexible and adaptable – IT Planning Board can be staffed, configured as needed • Potential for smarter/blended decisions with an institutional and strategic perspective • Scalable service model focused on coordination and alignment • Potential for an increased focus on accountability • Elevates divisional CIOs to a more active and prominent role in institution-wide IT prioritization • May facilitate institution-wide financial control across both local and central IT	• Prominent role for IT Planning Board would be dependent on adequate staffing, oversight, and accountability • Potential for a decision bottleneck • Balancing institutional priorities is complex, and covers a mix ranging from large to small, and from administrative to research needs • Potential for difficulty in constructing a planning board that would be truly representative

Sample Project Classification Matrix

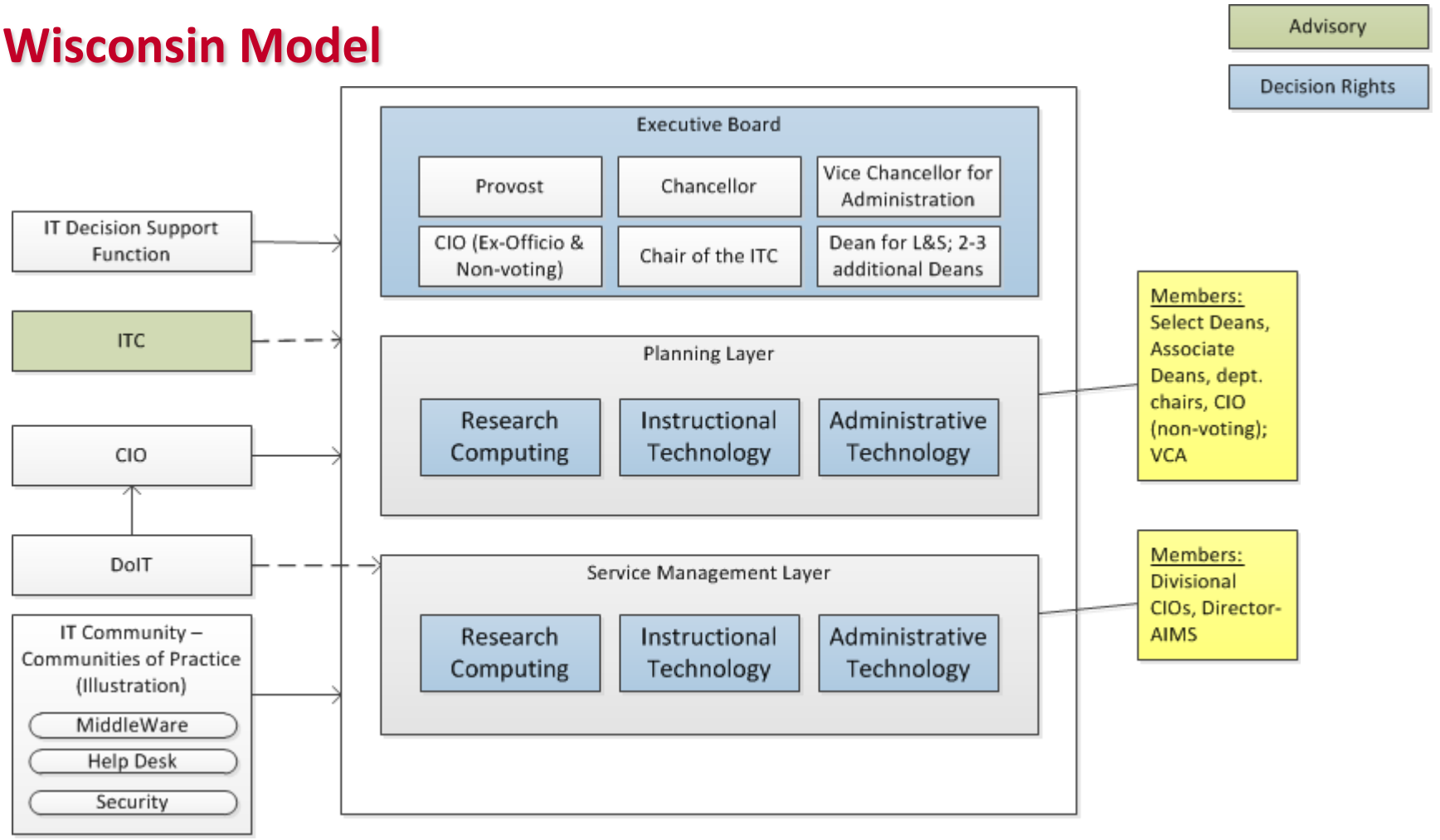
UW Madison Project Classification - Impact Assessment				
Risk Factor	Low (0)	Medium (1)	High (2)	Score
Project Management Complexity				
1. Team size	< than 3	3 to 8	> than 8	
2. # of Units Involved	1	2 to 3	> than 3	
3. Duration	< 6 months	> 6 months - 18 months	> 18 months	
IT Solution Complexity				
4. Technology/Technique/Process	UW Expertise	Familiar	New to UW	
5. Product maturity (if purchased)	Product implemented & working in >1 university of UW's size	Product implemented & working in 1 university of UW's size and/or smaller universities	Product not implemented in any university	
6. Solution complexity	Solution is well defined and no problems are expected	There is more than one approach to achieving the project goal and/or some problems are expected	The solution is not known or is only vaguely defined	
7. System/Interface profile	No other system interfaces	1 to 2 interfaces	3 or more interfaces	
8. IT architectural impact	Follows UW approved design patterns, principles, practice	Not in use at UW but follows established standards	Evolving 'industry' standard and/or leading edge technology	
9. Maintenance required	Maintenance requires user-level skills	Maintenance requires readily available and ubiquitous IT programming skills	Maintenance requires high level and difficult to obtain IT skills	
Deployment Complexity				
10. Process impact	Department	Division	Campus-wide	
11. End user scope of impact	Department staff/faculty only	Divisional	Large campus-wide faculty, staff, or student cohort or greater	
12. Project profile	Fully accepted by target constituency	Accepted but particularly high visibility	Controversial for target constituency	
13. Project motivation	No Federal/State or UW System mandate	Project responds to impending (>1 yr) mandate	Project responds to impending (<1 yr mandate)	
Estimated project budget:	**$**		**Overall Score**	
Project type I	0-5	**Project Classification**		
Project type II	6-15			
Project type III	16-26			

Uniform Process Model



This model most closely resembles the decision-making approaches within the "Uniform Process" cluster and is structured to manage IT services as an enterprise-wide portfolio.

Wisconsin Model



This model is an expanded version of those found in the "Uniform Process" cluster and is structured to manage IT services as an enterprise-wide portfolio while providing for decision-making in functional areas.