Copyright Kelly Block & Dr. Michael Hites 2009. This work is the intellectual property of the authors. Permission is granted for this material to be shared for non-commercial, educational purposes, provided that this copyright statement appears on the reproduced materials and notice is given that the copying is by permission of the author. To disseminate otherwise or to republish requires written permission from the author.

Time for an Upgrade to IT Governance

March 23, 2009 – EDUCAUSE Midwest Regional Conference

Presented by: Dr. Michael Hites & Kelly Block





Presentation Purpose

- Share our experiences since adopting an inclusive IT Governance and Prioritization process in 2004. Utilizing this process, we've completed 208 projects, spending \$10+M and expending 500,000+ hours.
- Discuss our findings and changes resulting from a comprehensive, process review in 2008. The recommendations include nine specific changes aimed at improving prioritization while increasing collaboration.
- Describe the history of our governance, best practices in project prioritization, cultural concerns, and how the process has evolved to create a collegial and transparent method for prioritization.



Presentation Overview

- Original Process 2005-2008
 - Overview
 - Successes / Challenges
- > IT Governance Process Review 2008
 - > Structure, Process, & Timeline
 - > Findings
 - > Recommendations
 - > Implementation Highlights
 - Lessons Learned
- Current Economic Constraints



University of Illinois Structure

Chicago, Springfield, Champaign-Urbana

- Three physical campuses, one virtual campus
- Consolidated business and finance with highly decentralized student services.
- University Administration acts at the system level for some services along side mostly independent campus administrative structures



Enterprise System Structure

An ERP, surrounded by chaos

- Banner ERP
- > SunGard modifications
- > 3rd party software
- > Home grown add-ons
- Secondary administrative IT layer at the campus and college level

Information Technology Priorities Committee (ITPC)

Fundamental process for directing administrative IT projects & resources

- > Initiated in 2004, major overhaul 2008
- Customers define the business issues and opportunities where we can apply IT
- Customers select and prioritize in which order to execute projects
- > Transparency throughout the process



ITPC Overview – Scope / Size

What types of projects need to go through the priorities process?

- Any project that involves resources from a University Administration unit, or campus based unit that plans to offer an administrative system for the entire campus
- > Any project that will interface with an Enterprise system
- > Any project that is administrative in nature, and wishes to utilize funding from the central pool of administrative IT dollars allocated by AAMT (VP's and Provosts)

ITPC Overview – Scope / Size

Statistics

- > To date 300+ projects reviewed / 208 complete
- > 34 projects in progress
- > 35 projects approved to be scheduled
- > 7 projects submitted awaiting review
- ➤ ITPC allocates \$1.5M and approximately 60K 80K technology hours per year
- > Currently about 12-18 month project pipeline



ITPC Overview – Project Types

Discretionary vs. Mandatory

- > ITPC projects may be mandatory or discretionary
 - Mandatory projects are those mandated by the Board of Trustees or regulatory bodies or systems projects that must be pursued to maintain the integrity of the application infrastructure (such as system upgrades)
 - Discretionary projects are those that add new or improved functionality but are not required
- Typically mandatory projects receive automatic approval and only high level review
- Mandatory projects can have a significant effect on the availability of discretionary dollars and FTE



ITPC Overview – Project Sizes

Level 1, Level 2 & (Level 2) Large

Template classification thresholds:

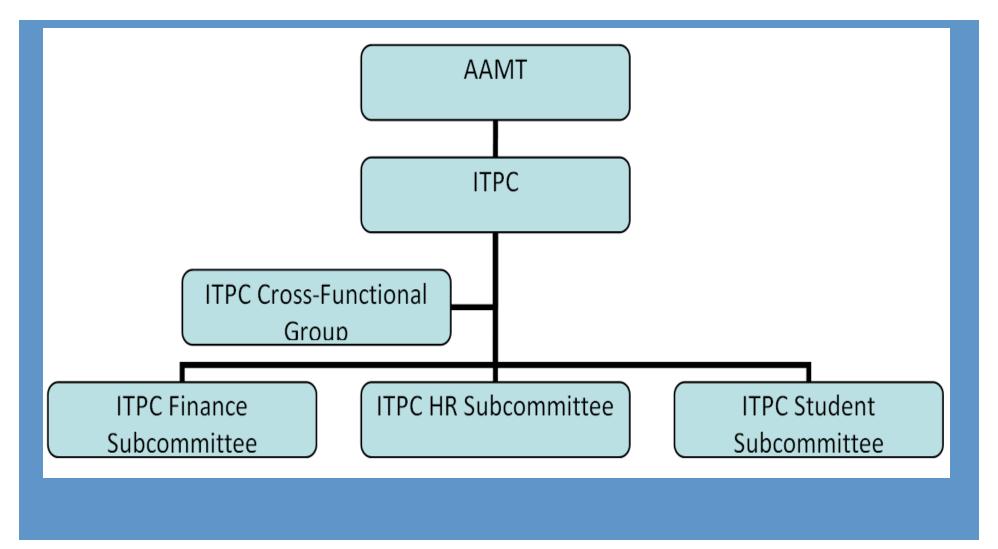
- Level 1 250 to 849 hours; up to \$100K Final approval by ITPC subcommittees (within set approval constraints for hours and dollars)
- Level 2 Standard 850 to 4,999 hours; or \$100K to \$250K Final approval by ITPC
- Level 2 Large > 5,000 hours or > \$250K Final approval by AAMT (once annually)

Examples:

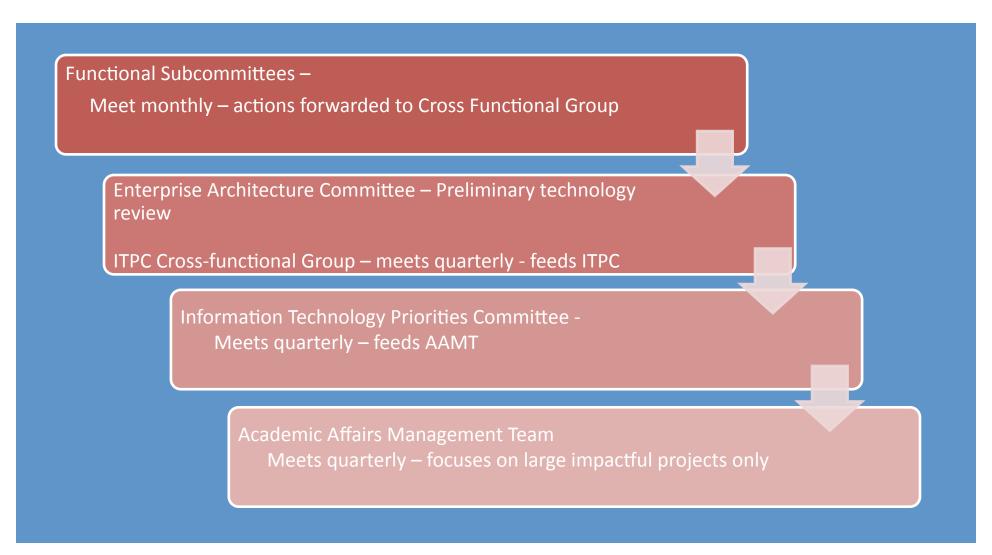
- Level 1 Grants and Contracts Accounts Receivable Report 395 hours / \$0
- Level 2 Compensation Statement Implementation 1,034 hours / \$19,350
- ➤ (Level 2) Large Electronic Settlement 5,149 hours / \$110,880

UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN: CHICAGO: SPRINGEIELD

ITPC Overview - Structure



ITPC Overview - Schedule

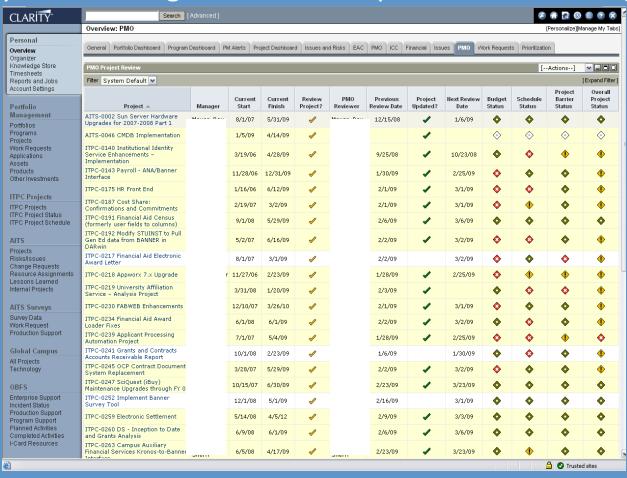




- ➤ ITPC and other IT Operations data is collected utilizing CA Clarity PPM tool. Seven organizations at UI using Clarity.
- Highly recommend investigating utilizing a PPM solution.
- Measures collected and published by PMO related to ITPC:
 - Portfolio status
 - Individual Project Status
 - > Financial Status
 - Project Performance
 - Work Requests (<250 hours)</p>
 - Resource Utilization / Capacity
 - Project Prioritization
 - Customer Satisfaction
 - Time Reporting

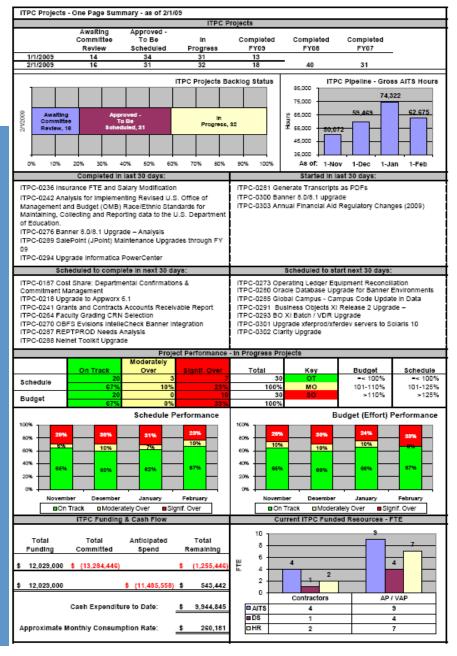


Clarity PPM – Brings thousands of pieces of IT data together



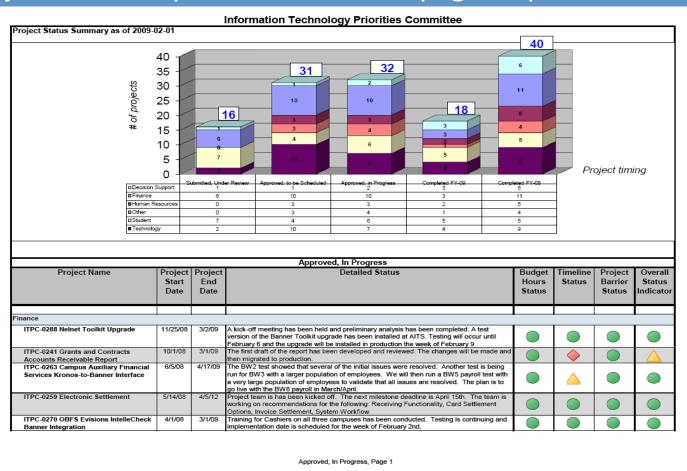
Portfolio Status – 1-page snapshot showing:

- > Overall project count
- Project pipeline effort
- Projects completed and started and scheduled to complete/ start in next month
- Project performance against schedule / budget
- Financial status and cash flow
- Outsourcing counts





Project status report – standard stoplight report

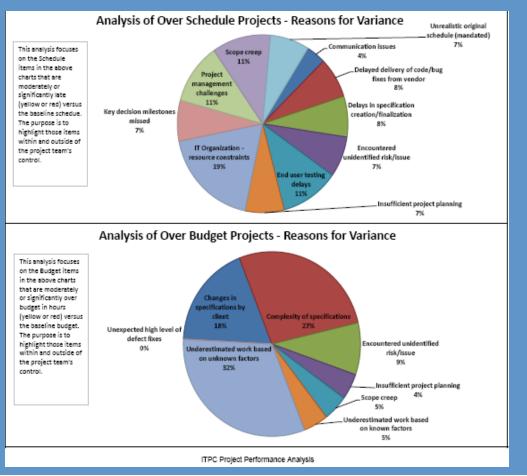


Project performance – drill down into why we are over budget or

schedule.

Such as.....

- Key decision milestones missed
- Scope creep
- Communication issues
- Delivery of code/fixes from vendor
- Unrealistic original schedule
- Unexpected high level of defect fixes
- Complexity of specifications
- Underestimated work based on unknown factors
- Changes in specifications by the client
- IT organization resource constraints
- Functional organization resource constraints

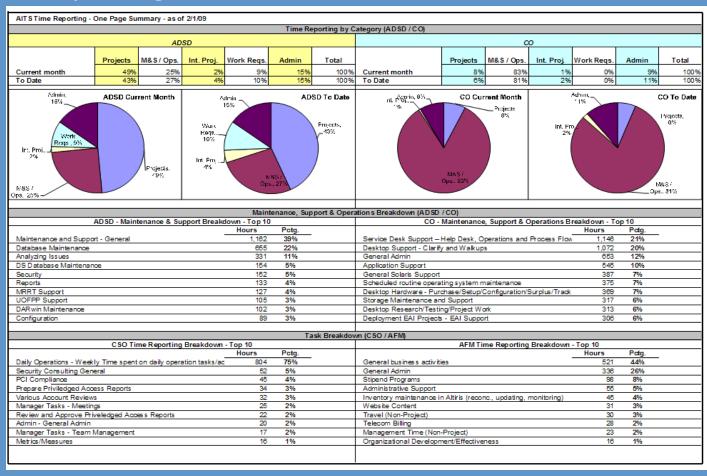




Work Request Performance – Discretionary work < 250 hours



Time Reporting Data - Can't do without it



Organization-wide selection and understanding of priorities

Quarterly P	agement Group roject Prioritization - January 2009 itical and High Priority Technology Projects																				
Project Nan	ne	Priority / Functional Ranking	Current Start	Current Finish	1/1/09 AITS ETC	Project Manager	0c1-08	Nov-08	Dec-08	Jan-09	Feb-09	Mar-09	Apr-09	May-09	90-unr	60-107	Sep-09	Oct-09	Nov-09	Dec-09	Comments
Technology	Projects																				
TPC-0276	Banner 8.0/8.1 Upgrade – Analysis	1	5/5/08	1/31/09	400	Charan															On Track - mods coming soon
TPC-0300	Banner 8.0/8.1 upgrade	2	2/1/09	11/30/09	20,000	<u>s</u>	:h			Ц	Н					F					Scoped and scheduled Scope and size unknown, but will be
AITS-0005	Hardware Replacement Project	3	3/1/09	6/30/09	TBD	_	┺					4		Ŧ		-		_	_		significant. Critical to complete so we have
TPC-0287	REPTPROD Needs Analysis	4	10/1/08	2/12/09	240	-	₽											\vdash	\vdash		implementation options.
TPC-TBD	REPTPROD Alternative Implementation	5	3/1/09	8/30/09	TBD	-	╁											+	+		Pending results of analysis phase.
TPC-0218 TPC-0266	Upgrade to Appworx 6.1 Campus Help Desk Software Replacement	2	11/27/06 5/1/08	2/9/09 3/10/09	1,000	<u> </u>	er	+	Н	Н	+	+	+	+							Additional work if not in by Dec. Vendor unsupported / 3rd party support available.
TPC-0294	Upgrade Informatica PowerCenter	3	9/22/08	1/31/09	130	_	,	T		П			\dagger	1					T		Out or compriance.
TPC-0301	Upgrade xferprod/xferdev servers to Solaris 10 operating system	4	1/1/09	8/30/09	1,665	c	ob														Hardware / software severely out of date. May be able use phases.
TPC-0291	Business Objects XI Release 2 Upgrade – Implementation	5	1/1/09	4/10/09	950	_	\perp														Desupported 6/08.
TPC-0293	BO XI Batch / VDR Upgrade	6	2/2/09	8/17/09	1,300	_	퇶			Ц	4	4	4	4	_	1		L			Desupported 6/08.
TPC-0232	BO XI Upgrade for AITS Distiller reports	7	2/12/07	TBD	250	_	\downarrow	_		Ц	4		4	4					_		Desupported 6/08.
TPC-0302	Clarity Upgrade	8	2/1/09	6/30/09	1,100	<u>r</u>	in	-		Ц	4	4	4	4				-	_		Desupported 6/08. Template needs reestimation.
TPC-0220	EAS Administration Enhancements	9	TBD	TBD	250	_	+	+		\vdash	+	\dashv	+	+	_	+		+	+		Considerable security issues w/o.
Critical	This project is a critical priority. Any resou	rces required	for timely co	ompletion sh	ould be allo	ated. Any i	imped	liment	s to p	rogre	ss sh	ould	be co	mmı	ınicate	d to	senio	r mar	nagen	nent	!
High	This project is a high priority. Any resource utilized if possible to stay on track. Any in	es required fo	r timely com	pletion shou	ıld be allocat	ed unless th	ney ar	e com	_	_											
Medium / Low	This project is a medium / low priority. Cr								s. An	y dela	ays in	the	projec	t sch	edule	shou	ld be	comr	nunic	ated	to senior management and the



Existing process - Successes

- ➤ It is an operating, documented and repeatable process for the evaluation and execution of information technology projects.
- > 300+ projects reviewed
- 208 projects completed
- Process transparency
- > Improved communication
- Improved project scheduling
- > Improved picture of resources vs. demand



Existing process - Challenges

- Business strategy & IT alignment in project selection
- Funding limitations
- Process participation
- Communication outside of the process is seen as weak
- > Cross-functional prioritization of projects

ITPC Process Review – FY08

Scope

- > Identify issues affecting the efficiency, effectiveness and responsiveness
- Propose recommendations for improving the process

Methodology (5 phases)

- 1. Preparation (11/07—12/07)
 - ➤ Solicit feedback from ITPC & SCs
 - ➤ Identify areas for discussion
- 2. Information Gathering (01/08-05/08)
 - Conduct interviews to identify issue details and options

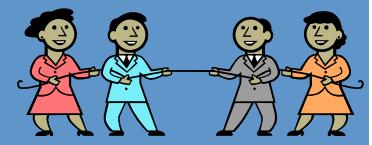
- 3. Focus Group (04/08-05/08)
 - Discuss issues with broad constituent work group
 - Outline recommendations
- 4. ITPC Review (05/08-06/08)
 - Submitted to AAMT
- 5. AAMT Review / Approval (07/08)



Findings – Significant Issues



- 1. A strategic element is desired but there is uncertainty about how to achieve it.
- 2. Cross functional prioritization is not being adequately addressed.





- 3. Some topics are not represented well in the 3 subject area structure.
- 4. The ITPC process does not have a current charter.



Findings – Significant Issues



- 5. The current practice of approving a long queue of projects for which there are not resources is damaging to ITPC operation and perception.
- 6. Direct representation of the interests of front-line college/department units in the process is minimal.



- 7. Cross-campus development of project proposals is problematic.
- 8. Project proposal development is seen as a barrier, particularly by those outside the process.

Findings – Significant Issues



9. Campus participation is perceived to be out of balance.

10. Outcomes of ITPC projects are not evaluated.



11. Communication outside the process is suboptimal and has negative effects on the process.

12. The resource picture for ITPC is unclear, particularly as it affects the queue and scheduling of projects.



Findings – Significant Issues

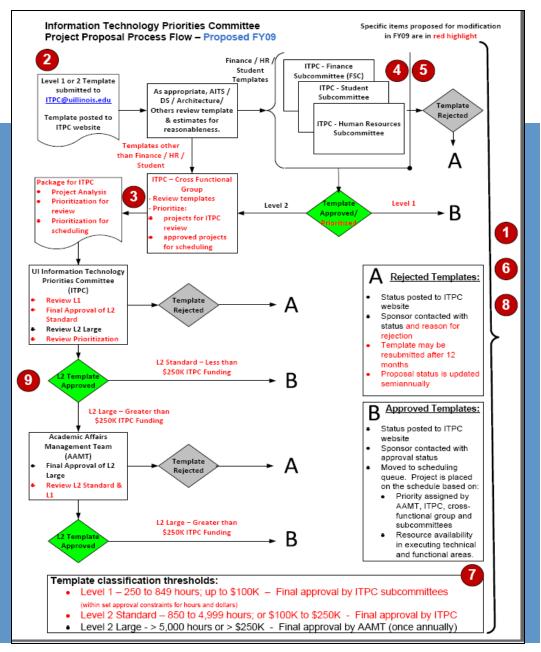


- 13. The threshold for Level 1 projects results in a mismatch between the cost of developing the business case and implementation costs.
- 14. AAMT time would be better focused on larger projects, rather than all Level 2 projects.



Recommendations

Nine recommendations across the ITPC process. Described individually in following slides.



UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN · CHICAGO · SPRINGFIELD

Recommendations

1. Develop ITPC Charter

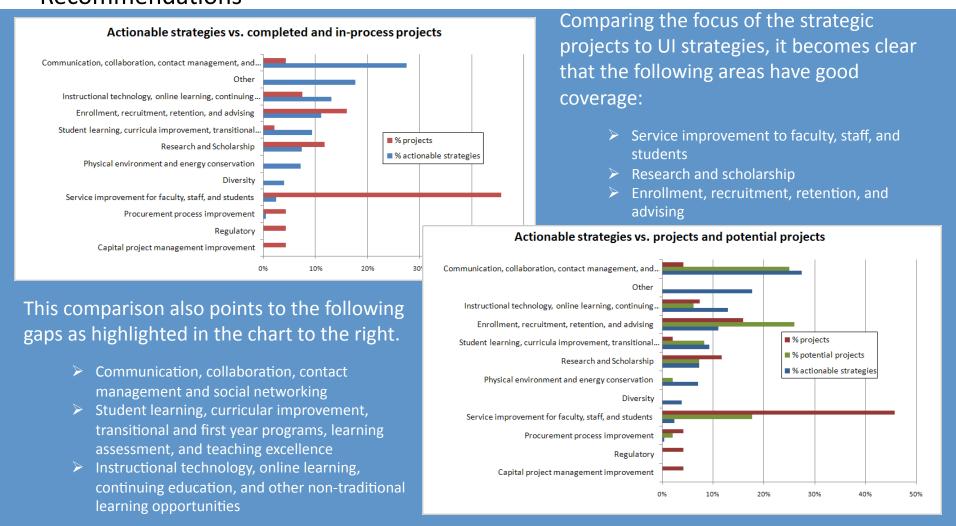
- Document ITPC role, structure, membership, authority, responsibilities, operations and calendar.
- > Define relevant processes for all committees / subcommittees in one document.
- > Point of reference for all constituents
- Endorsed/updated annually

2. Increase alignment with strategic direction

- Define administrative information technology strategy
- > Seek projects supporting UI strategic initiatives
- > In-depth analysis of alignment to date and opportunities for alignment in the future.



Recommendations





Recommendations

- 3. Improve cross-functional processes and project review paths
 - Form new cross-functional group to improve prioritization across areas

ITPC XFG - Rankings of projects for scheduling Projects for Review by ITPC - December 3, 2008

			Final
Project Name	ITPC Functional Area	Functional Priority	Overall Ranking
ITPC-0281 Generate Transcripts as PDFs	Student		Kaliking
		1	1
ITPC-0251 Payroll Voucher Process	Finance	1	2
ITPC-0269 Academic NOA Rewrite Implementation	Human Resources	1	3
ITPC-0213 Financial Aid Employment Earnings Load Modifications	Student	2	4
ITPC-0220 EAS Administration Enhancements	Technology	1	4
ITPC-0155 USFSCO: Direct Deposit Enrollment Page	Finance	2	6
ITPC-0206 Contractor's Annual Prequalification System (CAPS)	Other	1	7
ITPC-0250 Banner Obsolete Record Purge Process – Analysis Project	Technology	3	8
ITPC-0267 Compensation Statement Implementation	Human Resources	2	9
ITPC-0194 Password Sync NetID Project	Technology	4	9
ITPC-0210 Employee/Jobs Mass Changes Web Application Enhancements	Technology	2	11
ITPC-0278 GCO: Total Employee Work Load – Cost Share Effort & Pay Lines	Finance	6	12
ITPC-0195 Capital Project Collaboration Tool Evaluation (PRZM)	Other	2	12
ITPC-0215 FinAid TW Eligibility 'UIC Campus Care' Modifications	Student	3	14
ITPC-0272 General Ledger Equipment Reconciliation	Finance	4	15
ITPC-0268 Implementation of Payroll Calculator for "What-if" Scenarios	Human Resources	3	15
ITPC-0252 Implement Banner Survey Tool	Student	4	15
ITPC-0273 Operating Ledger Equipment Reconciliation	Finance	5	18
ITPC-0144 InfoEd Human Subjects Module Deployment	Finance	3	19
ITPC-0282 Payroll: System-Initiated Leave Balance Adjustment	Finance	7	20
ITPC-0254 Interface Clockwork to Banner for UIC Police	Finance	8	21

Mandatory Projects in the Scheduling Queue

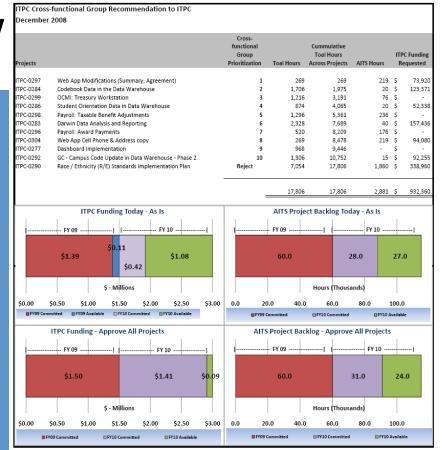
ITPC-0288 Nelnet Toolkit Upgrade

ITPC-0293 BO XI Batch / VDR Upgrade

ITPC-0291 Business Objects XI Release 2 Upgrade - Implementation

ITPC-0280 Oracle Database Upgrade for Banner Environments

ITPC-0232 BO XI Upgrade for AITS Distiller reports



All proposals have a path through initial review groups before ITPC



Recommendations

4. Manage demand and queue

- Request separate funding for "massive" and "mandatory" projects
- Request funding for unfunded maintenance
- > Allocate resources to subcommittees to apportion to their select projects

Possible representation of the annual allocation process

The table below is for illustration purposes only.

Recurring Funding / Base Effort Capacity
 Project Types

c Mandatory Projects Banner 8.1 Other Mandatory

d Large AAMT Approved Projects

e Subcommittee Allocation for Projects

Strategic Allocation for Projects

g Reserve for Unexpected Projects

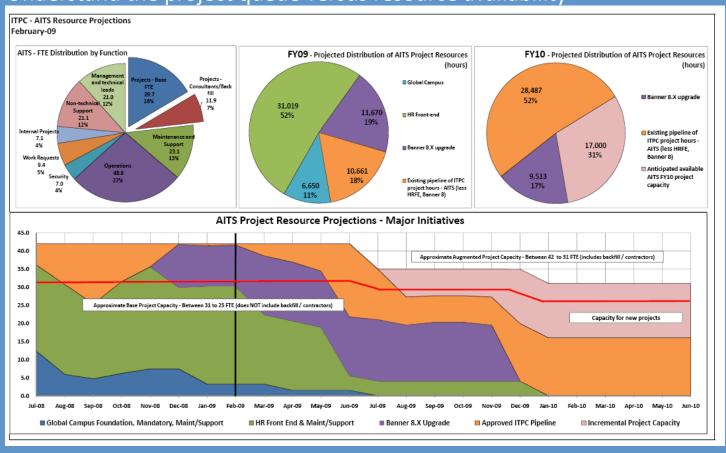
Remaining Resources

Resource Pools											
Scena	ario 1		Scena	ario 2	Scenario 3						
Dollars Hours			Dollars	Hours		Dollars	Hours				
\$ 1,500,000	65,000	\$	2,000,000	65,000	\$	2,500,000	65,000				
\$ (500,000)	(12,000)	\$	(500,000)	(12,000)	\$	(500,000)	(12,000)				
\$ (200,000)	(6,000)	\$	(200,000)	(6,000)	\$	(200,000)	(6,000)				
\$ (400,000)	(10,000)	\$	(700,000)	(10,000)	\$	(1,100,000)	(10,000)				
\$ (150,000)	(15,000)	\$	(250,000)	(15,000)	\$	(300,000)	(15,000)				
\$ (150,000)	(15,000)	\$	(250,000)	(15,000)	\$	(300,000)	(15,000)				
\$ (100,000)	(7,000)	\$	(100,000)	(7,000)	\$	(100,000)	(7,000)				
\$ -	-	\$	-	-	\$	-	-				



Recommendations

- 4. Manage demand and queue continued
 - > Understand the project queue versus resource availability



Recommendations (continued)

5. Improve cross-campus development of proposals

- > Task subcommittees with better facilitation of proposal development
- > Introduce process controls to improve collaboration

6. Hold annual event for review and planning

- > First annual summit held March 2009
- > Focused on:
 - Overview of the process
 - Accomplishments to date
 - Large project review for next FY (projects > \$250K or 5,000 hours)
 - Discussion of project alignment with university strategic initiatives
 - Discussion of IT project selection in the context of poor economic environment

7. Perform post-project surveying to measure success



Recommendations (continued)

- 8. Create a comprehensive communication plan for ITPC
 - > Identify audiences, deliverables, communication schedule and responsibilities
 - > Adapt communications to maximize constituent awareness and participation

ITPC Communication Matrix - DRAFT August 2008

				Audience									
Deliverable / Communication	Frequency	Method	Who Responsible?	AAMT	ITPC	Subcommittees	X-funct Group	Proj. Sponsors	User Communi				
-													
Individual Project Status Report	Monthly	email, website	PMO		×	х	х	х	×				
ITPC Overall Project Timeline	Monthly	email, website	PMO		×	x	x		x				
ITPC One-page Summary	Monthly	email, website, meeting distrb.	PMO	х	×	х	х		х				
ITPC Financials	Monthly	email, website, meeting distrb.	PMO	х	×	х	x		х				
ITPC Performance Analysis	Monthly	email, website, meeting distrb.	PMO			х	х		x				
ITPC Resource / Pipeline Overview	Quarterly	email, meeting distrb.	PMO	x	×	x	x		×				
ITPC Annual Report	Annually	email, website, meeting distrb.	PMO	х	×	х	х		×				
Project Templates	Ongoing	website	PMO	×	×	×	×	×	×				
Process Description	Ongoing	website	PMO	x	×	x	×	x	×				
Work Request Detail	Monthly	website	PMO	×	×	x	×	x	×				
ITPC & Subcommittee Meeting Minutes	Upon Approval	website, meeting distrib.	PMO		×	x	x	x	×				
AAAAT Daalalaaa			PMO										
AAMT Decisions	After meeting	email, website			×	х	х	х	x				
ITPC Decisions	After meeting	email, website, meeting distrb.	PMO, SC			х	×	x	×				
ITPC Subcommittee Decisions	After meeting	email, website, meeting distrb.	PMO, SC		×		х	х	x				
X-functional Group Decisions	After meeting	email, website, meeting distrb.	PMO, XFG, SC		×	x		х	х				
ITPC Project Prioritization	Ongoing	email, website, meeting distrb.	XFG, ITPC	x	×	х	х	х	x				
		email, website, meeting distrb.,											
ITPC Strategic Focus for Projects	Annually	annual meeting	ITPC	х	x	х	х	х	×				
Survey Data	Semi-annually	meeting distribution, annual report	PMO		×	×	×						
Quarterly Newsletter	,	,											
- projects completing													
- projects starting													
- major project updates													
- ITPC timeline / key dates													
- Procedure/resources for submitting a													
request	Quarterly	email	PMO		×	x	×	х	×				
			Hites, Block,										
Manadana wish Hann Community	Periodic/ TBD	presentations plus annual meeting											
Meetings with User Community Report on ITPC Annual Meeting	Annually	email, website, meeting distrb.	Hites. PMO	x	×	×	×	×	×				
Report on 11 FC Annual Meeting	Annually	email, website, meeting distro.	nites, PIVIO	×	×	×	×	×	× ×				

Recommendations (continued)

9. Delegate authority for ITPC to manage project levels and scope

- > Request authority to monitor project levels and change as needed:
 - Level 1 250-850 hrs. / < \$100K</p>
 - Level 2 850+ hrs. / > \$100K
 - Large projects 5,000 hrs. / > \$250K
- > Request project approval authority for all projects less than \$250K or 5,000 hours. AAMT will continue to review large projects and monitor ITPC decisions.

AAMT Review Coverage Based on Current and Proposed Standards													
				% of Total	Total AITS	% of Total	Total ITPC	% of ITPC					
	# of Projects	% of Projects	Total Hours	Hours	Hours	AITS Hours	Dollars	Dollars					
AAMT Review Coverage Under													
Current Standards	13	48%	43,636	89%	18,307	83%	\$ 2,099,847	92%					
AAMT Review Coverage Under													
Proposed Standards	5	19%	31,971	65%	11,944	54%	\$ 1,632,810	72%					

Based on the projects reviewed and approved in FY08, there would not have been any change in the outcome of project review/approvals from the perspective of AAMT's review responsibilities. All projects approved by AAMT would have been approved under the proposed guidelines. All projects rejected by AAMT would have been rejected by AAMT under the proposed guidelines.

Lessons Learned – Process Review

We discovered the following takeaways regarding the process review itself:

- > Seek input from throughout the organization.
- > Be honest and transparent regarding process weaknesses.
- > The review helped to baseline some level of knowledge of the process among the review participants.
- ➤ Fashion the recommendations so they are doable. To overcome resistance, include in the report an implementation plan for the recommendations. This addressed on the front end the questions of "how are you going to do this?" or "it will never work."



Lessons Learned –

IT Governance Models

In evaluating IT Governance and Prioritization in your organization, pay attention to the following:

- > Do you have the right people involved at the right levels? Do these people have the right background and information to make thoughtful decisions?
- > Focus more time evaluating the business issues and less time on the technology.
- > Be prepared to make hard decisions and work within the constraints of your resources.
- > Push down smaller decisions for efficiency and let executives focus on the projects with high costs and impact.



Lessons Learned –

IT Governance Models

In evaluating IT Governance and Prioritization in your organization, pay attention to the following: (continued)

- Actively align toward the business strategies of the institution– this won't happen on its own.
- ➤ Know resource capacity and demand in order to provide context for making decisions. Don't forget to account for non-discretionary projects (upgrades) and incremental maintenance growth levels, these take away capacity for discretionary projects.



Lessons Learned –

IT Governance Models

In evaluating IT Governance and Prioritization in your organization, pay attention to the following: (continued)

- > The leader(s) of the process and components need to have a vested interest in the success of the process or else results will be substandard.
- Must have a dedicated resource to manage the day to day operations and overall coordination of the process.
- After a period of time step back, take stock and upgrade your process.



Postscript – Economic Constraints

- Subsequent to the completion of the process review, the economic constraints on the university sparked an increased focus on the mission criticality of projects.
- All material projects were required to assess:
 - Mission Critical Would this project be defined as mission critical? Does it fall into any of the following categories and if so, how?
 - Provides competitive advantage or prevents competitive disadvantage in recruiting and serving students, faculty and staff.
 - Addresses situations where operational efficiency is severely compromised or there is severe customer dissatisfaction.
 - Provides significant incremental revenue or cost savings to the university.
 - Return on Investment
 - > Tangible support of strategic initiatives of the UI / campuses
 - > Unit contribution to project labor effort / funding



Postscript – Economic Constraints

Fifteen projects were subject to the initial Mission Criticality review. 5 Projects deemed 5 Projects deemed **Mission Critical Not Mission Critical** Results 3 projects pulled back 2 projects tabled at to build in-house the request of sponsors (\$249,691) (savings \$200,561)



ITPC Overview - www.itpc.uillinois.edu

Comprehensive ITPC information Source

- Submit a proposal
- Copies of all project proposals
- Project status reports
- Process information
- > ITPC membership information
- > ITPC meeting schedules
- > ITPC Charter, Annual Report, Minutes
- Contact the ITPC



Questions?

Thank You!

