IT STRATEGY BOARD February 24, 2021

INFORMATION TECHNOLOGY

UNIVERSITY of WASHINGTON



AGENDA

- > Call to Order
- > IT Governance Updates
- > Student Information Systems Current State
- > Enterprise Standards: Revising APS 2.3
- > UWFT Combined Quarterly Report
- > UW Finance Transformation
- > IT Project Portfolio Executive Review
- > Wrap up



IT Governance Updates

Erik Hofer

Associate Vice President for Academic Services, UW-IT

Student Information
 Systems Current State

Erik Hofer

Associate Vice President for Academic Services, UW-IT

Background (1)

- > The foundation of our Student Information System (SIS) is a large, mainframe application developed at the UW over the past 40 years
- > This homebuilt application is augmented by a collection of complementary applications that are either built in-house (using a variety of technology stacks) or licensed from vendors and integrated into the ecosystem
- > A major initiative to overhaul this systems ecosystem is anticipated, but is some years off
 - Institutional capacity
 - Lack of viable solutions on the market
- > The institutional strategy to date has been to leverage the historical investments in these systems as much as possible



Background (2)

- > In recent history, the SIS has required continual development work to keep up with evolving institutional demands
 - Operations and Maintenance also has to include some degree of nondiscretionary enhancement work
- > External factors contribute to operations and maintenance costs
- Over the past several years, evolving student needs and institutional demands have led to a series of modernization projects to address major functional gaps
 - MyPlan
 - Undergraduate Admissions Modernization
 - Financial Aid Modernization
- > These modernization projects have led to increases in the costs to operate and maintain these system



Student Systems – Temporary Funding

Temporary Funding*	2015	2016	2017	2018	2019	2020	2021	Total
Undergrad Admissions Mod								
Implementation	250,000	690,000	365,500	365,500	240,000			1,911,000
Ongoing Support			240,000	240,000	240,000			720,000
Finance Aid Management Sys	-	310,000	781,474	981,474				2,072,948
MyPlan/Academic Explorer**	995,000							995,000
Total	1,245,000	1,000,000	1,386,974	1,586,974	480,000	-	-	5,698,948

Provost/OPB has provided temporary funding for these modernization initiatives, with no funding for ongoing support.



^{*}Source: Provost Reinvestment Funds (UW-IT & Enrollment Mgmt)

^{**} In FY15, partial funding for MyPlan from STF

Student Admin System - Budget

Permanent Funding \$4.4 M

-GOF/DOF/TRF

Current FY21 Budget 6.0 M

Labor & Non-Labor – (Servers, Kuali)

Funding Gap* -\$1.6M

Use of "Carryover Funds" related to temporary investments has covered the gap through end of FY21.



Issues

- The need for "project capacity" remains due to continued institutional and external change
- 2. The current foundation of permanent funding does not cover the operations and maintenance of the SIS
 - Use of UW-IT Reserves
 - b. Cost saving measures
 - Temp dollars from partners to address some new major enhancements,
 but do not address (and exacerbate!) the underfunding of O&M
- 3. The Student Program is in the midst of a wave of retirements of long time technical staff, leading to challenges of both institutional knowledge and reduced capacity while new staff are onboarded
- 4. With a full transformation effort several years off, we **should** be investing in a set of projects to ensure that the SIS is operable until a replacement can be adopted



Discussion / Next Steps

- > The structural deficit is real, and UW-IT's reserves to lessen the impacts will not hold out much longer
- > How might we balance current financial constraints with downstream operational risk?
- > How might we accommodate a high rate of change and churn in the academic / student space in a period of very constrained resources?



QUESTIONS

Enterprise Standards: Revising APS 2.3

Jim Phelps

Director of Enterprise Architecture & Strategy

Charge to Enterprise Architecture

"At the direction of the VP for UW-IT and CIO of UW,
Enterprise Architecture (EA) helps stakeholders maximize
the architectural value of their services, solutions, data,
processes, or organizations on behalf of the UW in an
environment of constant change. The EA team is
accountable to the broad, long-term interests of the
UW and advocates for decisions that make the most of
the UW's investments. The Director of EA will arbitrate
architectural tradeoffs where they occur."

The scope of the standards are meant to be UW-wide services and technologies not just UW-IT services.

APS 2.3 history

First drafted in July 2005 as a joint effort with the Strategy Board.























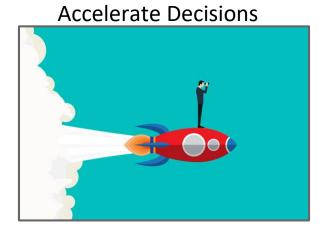
A couple of recent examples

- > UWFT Deloitte
- > IT Service Management Board

UWFT – **Deloitte** asking...

Because we didn't have any, UWFT caused a lot of spin and swirl around things we thought were "decided" already.

"Where are the standards that we need to comply with?"



SMB: Enterprise Service Management Investment

"The UW Connect Service is now utilized by 25 UW Schools/units ... there is a recognized need for continuing to advance a UW-wide Service Management approach supported by shared practices, templates, and tools. ... An Enterprise Service Management Investment to minimize this barrier would support scale and repeatable processes and create a common platform facilitating collaboration and service delivery across organizational boundaries."

Building a Community



SMB: 25Live

"Implementing 25Live will improve efficiency at multiple levels in multiple offices across all three campuses. Instead of a chaotic playing field, it provides a single source for scheduling/room assignment needs. Additionally, it can reduce the cost spent by multiple offices implementing multiple solutions.

UW-Tacoma has already seen that happen with a nearly complete implementation across its campus. By implementing 25Live as an enterprise-wide solution, users looking for spaces could find them in a single online location without having to search all around campus."

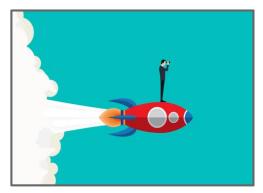
Good Stewards



Improve User Experience



Accelerate Decisions



Improve User Experience



Good Stewards



Building a Community





Why? What is my (EA) goal for this?

- > Decision Making Reduce the noise of false choices, reduce the tyranny of choice. Accelerate decision making where the answer is obvious.
- > Reducing Complexity / Technical Debt using one tool to solve the same problem is better than using and managing many tools.
- > Leveraging Investment both in technology and staff / training.
- > **Security, Resiliency, etc.** Easier to manage one solution such that it meets the "ities"* than many solutions.

<u>Steven Carmody</u>,IT Architect at Brown University and friend of R.L. Bob, introduced me to the idea of "The Ities" way back in 2002. See examples from other institutions at the end of this deck.



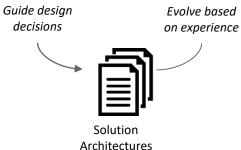
How will standards be developed?

Based on best practices

- High level approaches to technology, applications, data, and business architecture
- From experience in higher education, IT, and related industries

Community sourced

- Developed by contributors at the UW
- Grounded in existing practices and feasible goals
- Facilitated by the EA team



Reference Architectures

What is this NOT meant to do?

- > Stifle Innovation we will still want to pilot new solutions and new tools.
 We will need a good way of doing those pilots. Edge Leverage Core is key.
- > **Force misfit solutions** if the standard doesn't fit, then let's find a solution. Try the standard first. See if it meets the business needs before buying something else.
- > **Command and Control local decisions** it should help local decisions move faster if step one is obvious *try the solution, if it works, great we're done*.



What I don't know:

- > We would need to determine and document what the funding model is for each standard as it is developed.
- > We would need to decide what the enforcement level would be (should vs. must) for each standard.

Final questions

- > Do you support this vision and the direction and approach to standards?
- > Do you support drafting changes to APS 2.3 to insert setting of IT Standards as part of the CIO role?



Thank You.

Questions or Comments: phelpsj@uw.edu



SMB Recommendations – Feb. 2020

SMB Recommendations from 2020 include things that look like standards

"The top seven IT Service Management Board recommendations are:

- 1. Enterprise Service Management investment
- 2. Standardize and consolidate Admissions applications and review systems
- 3. Implement Student Database improvements and application interface
- 4. Develop a centralized online software registry
- 5. Develop and publish guidance for "pre-qualified" Customer Relationship Management systems
- 6. Promote and support the implementation of 25Live for space scheduling and management
- 7. Adopt Zoom as the preferred campus-wide solution for video conferencing and collaboration"



Good peer examples of standards

- > University of Wisconsin Madison
- > University of Michigan
- > <u>Harvard University</u>
- > Miami University
- > Penn State University



Example red-line edits to APS 2.3

These slides are examples of the types of changes that we would be making to APS 2.3

Change:

"The Vice President for UW Information Technology and Chief Information Officer (Vice President for UW-IT and CIO) has delegated authority in <u>Executive Order No. 63</u> to provide leadership, guidance, and oversight, and leads standards work for all aspects of IT investments. In addition, the University's IT governance boards have oversight responsibilities for IT investments."

Change:

"Note: The office of the State CIO may from time to time make changes to the policies, standards and requirements for IT project approvals. Any subsequent changes will be reflected as updates in the UW-IT Investment Procedures, and those updates will prevail over the requirements defined in this policy."

Change:

Accordingly, every University information technology (IT) acquisition and project must comply with:

- All federal and state legal requirements;
- The rules and policies of the state of Washington including the state's Chief Information Officer (State CIO), the University's Board of Regents, and any relevant funding agencies;
- The provisions of this policy;
- The University of Washington Information Technology (UW-IT) Investment Procedures; and
- Standard IT Solutions.



APS 2.3

7. Exemptions from University Approval and Oversight

An acquisition and/or project may be exempt from University approval and oversight (small project exemption) when that acquisition and/or project is under a certain cost (initially \$1 million in total project cost, and under \$2.5 million in system life cost), is a Level 1 project, and the impact is within a single department. These projects should still align with and leverage the Standard IT Solutions where feasible.

A project or acquisition does not qualify for this small project exemption if any of the following is true:

- Requires use of central administrative systems or resources, including, but not limited to, new data interfaces or integrations
- Is in conflict with a Standard IT Solution (i.e., would replace or replicate the Standard IT Solution)



QUESTIONS

UWFT Combined Quarterly Report

Erik Lundberg Assistant Vice President, Research Computing & Strategy, UW-IT

UW FT Combined Program

Executive Summary - December 31, 2020

Project	Sponsor	Organization	Overall Risk & Project Health *	Budget Rating	Schedule Rating	Scope Rating	Resource Rating	Issues Rating	Actual Cost	Budget
Finance Transformation Combined Effort		UW	(A) New						\$60,499,000	\$269,246,000
UW Finance Transformation Implementation	Mark Richards	Core Project	(B)	•	•			•	\$56,019,000	\$219,874,000
Collab Partner: IT Finance	Aaron Powell	UW-IT	First						\$2,733,000	\$20,619,000
Collab Partner: ORIS	Mary Lidstrom	Office of Research	First	•					\$659,000	\$13,511,000
Collab Partner: UW Medicine	Jacque Cabe Eric Neil	UW Medicine	First	•					\$848,000	\$4,088,000
Collab Partner: Finance Readiness Program	Ann Anderson	UW Enterprise Services	First						\$240,000	\$4,020,000
Unit Readiness	Overall readines medicine and adm		(C) New		nit readiness o				\$0	\$0
Side System Remediation	Overall status ou Implementation Collaboratio	Program and							\$0	\$7,134,000
		n Partners	New			rk and effort	required for re	emediation	\$0	\$7,

5 separate projects under one Combined Effort, plus 2 areas of work across the campus

\$60.5M \$269.2M

Notes:

- (A) The UW FT Integrated Program is a composite of the core UW FT Program, and the four Collaboration Partner Projects; with ratings computed as the average of all five constituent projects; except that Schedule is 'maximum' of others.
- (B) The core UW FT Implementation Project status will be shown in this <u>Combined Program Summary</u>, along with the four Collaboration Partner projects. The status of the 'FT Combined' effort will be shown on the main Quarterly Summary Report. Cost figures for the core UW FT Implementation Project shown here are exclusive of cost and budget for the four Collaboration Partners and other remediation efforts, but <u>do include</u> the initial Readiness Phase. All cost and budget figures are as of Oct 30, 2020.
- (C) Engagement with departments and units outside the core program and Collaboration Partners is beginning. Budget is a placeholder value.
- Improvement over previous quarter
- Setback from previous quarter

* Project Health Key

Project is on time, on budget, and within defined scope, with minimal issues.

Overall Risk Rating of 5-10 is Green

Changes to scope, budget, or resources have placed project at some risk. Project has the potential for delays, cost or scope changes.

Overall Risk Rating of 11-17 is Yellow

Major changes to scope, budget or resources have placed project at critical risk. One or more of the following must change in order to proceed: project schedule, resources, budget, scope.

Overall Risk Rating of 18-25 is Red

(over for FT Workstream status breakdown)

	UW FT Workstream Status - December 31, 2020									
FT Workstream	Director	Overall Status †	Dependencies ‡	Statis - as of early December, 2020						
Program Operations	Leslie Jones	•	•	The core program team has worked with the collaboration partners to build a preliminary version of an integrated plan. However, the planning process has highlighted additional areas where increased levels of detail are needed to inform continued integrated planning efforts.						
осм	Jeff Bishop	•	•	Currently on track with all deliverables.						
Design	Christina Mercer	•	•	On track with business process development, FDM maturity, and has an active configuration tenant. Confirmation sessions were completed on time. Collaboration partner organizations are concerned that further business process/FDM maturity is needed in order for integrated planning work to continue.						
Operating Model	Libby Hartman	•	•	Over the last quarter, UW leadership asked to review additional models for post go-live operations, resulting in new work around the design of the operating model and associated end-to-end business processes. Given the new model development, the team is on track. However, this has pushed out the overall design completion by a quarter.						
Technical	Manoj Joshi	•	•	While there has been significant progress made in the Integrations space, there are concerns regarding Data Conversion, scope of system remediation work, and overall data management within the full UW enterprise. The technical complexity within the systems landscape at the UW is high, with correlated high levels of dependency from units and partners. The coming quarter will focus on driving higher levels of clarity in the technical space.						
Alignment	Paula Ross	•	•	Work on HRP Remediation is well underway and on track. There have been delays in progress around reporting inventory and reporting strategy development. Additionally, there is new concern regarding the program's ability to achieve appropriate levels of testing given the complex interactions of systems within the UW. Test strategy development is underway.						

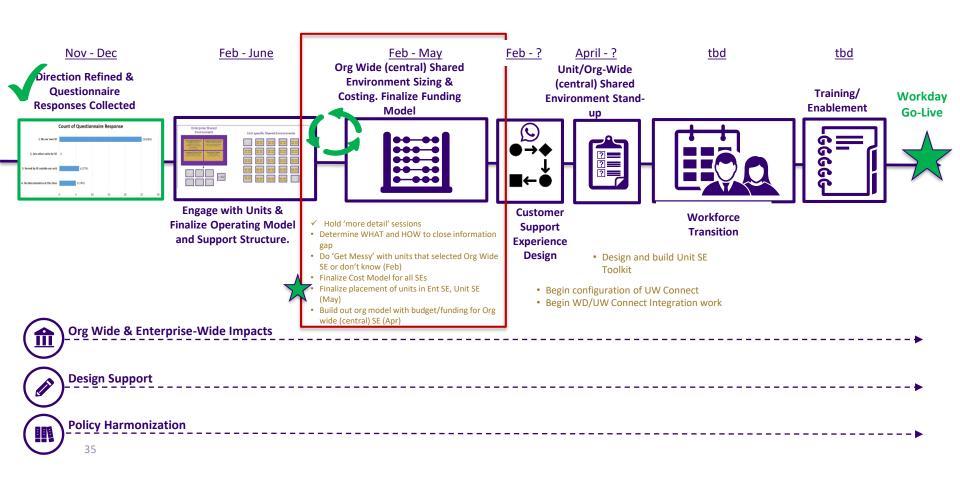
	† Workstream Overall Status Key								
•	Workstream is on track to complete current Phase, with minimal issues or impacts on budget, scope, schedule or resources. Or there may be some risk, but it is being addressed and mitigated.								
•	Workstream for current Phase is at substantial risk to fully complete scope on schedule with current budget and resources.								
•	Workstream is at criticla risk of not completing current Phase scope or deliverables on schedule.								

	‡ Workstream Dependencies Key								
•	Workstream is on track to provide information to other dependent partner projects to design their solution and deliver on schedule.								
•	Workstream is at substantial risk of providing information to other dependent partner projects in time to design their solution and deliver on schedule.								
•	Workstream is at critical risk for providing information to other dependent partner projects in time to design their solution and deliver on schedule.								

UW Finance Transformation Discussion

Aaron Powell
Vice President for UW-IT and CIO

Operating Model Timeline



Operating Model Activity During AVS

Held "Shared Environment Deep Dives" to walk unit administrators through the four end-to-end business processes (Customer Requisition to Payment, Grant Award to Close, Procurement and Supply Chain, and Record to Report) aligning to Shared Environments. **UWFT created questionnaires outlining key criteria** (e.g., capacity, competency, compliance, operational sustainability) and 3-digit org units completed initial self-assessments about their desire and ability to manage the specific responsibilities that would potentially make up their own Shared Environment. Unit administrators provided feedback that in order to make decisions about their unit's Shared Environment alignment (either serving as their own or joining an org-wide Shared Environment), "more detail" was needed about structure and exactly how each process and hand-off would work. ☐ **UWFT hosted two interactive "Need More Detail" sessions** asking administrators to provide their specific questions. The first session was attended by ~130 administrators from all 37 units and the second session gathered questions from administrators considering the potential org-wide shared environment. General topic areas included: 1) cost model, 2) customer service model, 3) process / transaction flows, 4) governance, and 5) security roles.

Sample - Key Questions, "Need More **Detail** Sessions

GOVERNANCE

- What will be the values and **principles** for governance?
- What will be the governance structure?
- How will governance issues and concerns be addressed?
- How will the governance structure be communicated?
- How will **stakeholders** inform the governance structure?
- How do we **define success** for governance (KPIs)?
- Where do responsibilities reside (training)?

FUNDING MODEL / UNIT COSTS

- How does UWFT plan to charge departments differently based off of usage of shared services?
- Has the final funding model been defined and decided and how does this incorporate the complexities of "colors of money"?
- Are units expected to fund shared services through a "recharge" or "pay by use" model?
- Or will units be expected to **shift funds** to "central"?
- If so, would shifting funds to "central" result in a reduction of budget authority for the units? (We care about this because loss of budget authority at the unit level increases our risk, especially as we enter into phased budget reductions.)

CUSTOMER SUPPORT MODEL

- We currently use centrally available user guides. Will we have those for new model? Who will create and manage these?
- Would like a **tie to policy**. We don't have that today but...if I look up a policy and want to apply it, tell me how I go about executing it.
- How are workflows changing with unit-based shared environments?
- Who is deciding things? Will unit hubs decide restrictions? Will there be central oversight of things like security roles, internal controls, etc.?
- Who trains new faculty and staff when they come on?

Sample - Key Questions, "Need More **Detail** Sessions

SECURITY ROLES

- What is **definition of the** security roles (who sees what and how, what can the role initiate, what they can do and not do)?
- What is **functionality** of each security role?
- What is **determination of** role delegation (who's deciding, how many are allowed per unit and unit SE, how are they constrained)?
- What is **training** for security roles?
- What is **management** of security roles?

PROCESS / TRANSACTION FLOWS

- Are there other process flows that would see Shared Environment involvement (specific to grants)?
- What is the beginning and end of the transaction if it occurs outside of Workday?
- What are the savings in staff work in our school as we will still have to use a system (ServiceNow) to submit everything? Can you explain what savings we will have in my unit?
- We understand the guidance is to have our Shared Environment individuals in Workday 75% of the time; what is the reason for this requirement? Is Workday more complex than the systems we use today (where our staff spend smaller fractions of their time)?
- If we form our own Shared Environment, will we be given ALL of the Workday roles necessary to execute the Shared Environment tasks noted in the process flows? (For example, in Workday HRP we have a lot of simple processes that we can't execute without the ISC.)

Operating Model Next Steps

A fo	cus on <mark>closing the gap on knowledge and understanding</mark> :
	Analyze learnings of "Need More Detail" sessions.
	Determine what we currently have that addresses questions and identify what new content needs
	to be created to address questions.
	'Pilot' detailed new content / visuals with small groups to ensure efficacy.
	Identify how best to communicate content to close the gap on knowledge and understanding.
Coll	aboratively determining the cost of the org-wide shared environment:
	Identify options for charging for shared environment services (by FTE, by transaction, etc.).
	Hold "Get Messy" session for units who selected this choice or are still undetermined (outcome is
	to have current data on FTEs doing work today that will be in shared environment tomorrow).
	Model out costs for units based on their current transaction level.
	Determine funding and charge model.
Rea	ch final decisions:
	The beginning of May is targeted for final decisions about the operating model – specifically,
	which units will elect to be served by what type of shared environment.
	These decisions will be the result of collaborative discussions among unit administrators, Deans,
	the Executive Office, and UWFT.
	Coll Coll Rea

QUESTIONS

IT Project Portfolio Executive Summary

Erik Lundberg Assistant Vice President, Research Computing & Strategy, UW-IT

UW Enterprise IT Projects

Project Portfolio Executive Summary - December 31, 2020

Project	Sponsor	Oversight Level *	Overall Risk & Project Health *	Budget Rating	Schedule Rating	Scope Rating	Resource Rating	Issues Rating	Actual Cost	Budget
Finance Transformation Combined Effort	_	3 - UW	(A)						\$60,499,000	\$269,246,000
Destination: One	Tim Dellit	3 - UW	(B)	·		•			\$128,149,000	\$159,500,000
Advancement CRM Replacement	Julie Brown Dan Peterson	3 - OCIO							\$2,358,000	\$4,000,000
Clinical Trials Management System	John Slattery	2 - UW	(B)						\$10,364,000	\$15,704,000
UWM Data Analytics Warehouse	Adam Wilcox	2 - UW	(B)	1		·	•		\$2,004,000	\$5,172,000
Continuum Online Apps	Marlon Buchanan	2-UW	pause	•		•		•	\$213,000	\$600,000
Campus Space Management Modernization	Tim Rhoads	2- UW	U.		₽				\$220,000	\$330,000
MSIM Online Program Management	Anind Dey	2 - UW						•	\$59,000	\$216,000
Transportation System Improvement Project	John Chapman	1 - UW	Final						\$3,301,000	\$3,401,000
Finance E- Commerce/Touchnet	Brian McCartan	1 - UW	Final		₽		0		\$243,000	\$1,000,000
Public Records	Ann Anderson	1 - UW	(B)		1		•	0	\$379,000	\$887,000
EvanTEL	Alison Cullen	1 - UW	New						\$15,000	\$100,000
Gradescope	Aaron Timss	1 - UW							\$58,000	\$85,000
Audit/Compliance of Unstructured Network Data	Xiao-Ping Chen	1 - UW							\$59,000	\$60,000

14 projects

\$207.9M \$460.3M

Notes:

- (A) Details of the UWFT Core Project and Collaboration Partners are shown on a separate "Combined FT" Summary.
- (B) COVID-19 has impacted four projects: D:1, DAWG, CTMS (all three due to resourced needed during peak of current surge), and Public Records (due to impact on vendor technical resources).

(1)

Improvement over previous quarter

Setback from previous quarter

Program Operations	Executive Leadership		Major Proje	ects Interdependencies Assessment	Note: ISC and UW-IT resources are tracked within the major projects' budgets
Integrated Service Center	Ann Anderson	UW Enterprise		COVID-19 – ISC team members continue with support eligibility, payroll data corrections, over-payment monit attestations, etc.) with some of the workarounds requir available resources. On standby for FFCRA-related color uww. WWNC/CUMG Project - Successful 1/1/21 go-live. Cupayroll activities. Many thanks to the broad team. Financial Transformation - Key open questions arout to the ISC to be determined. Reporting Adoption Project - A customer-focused, of functionality, efficiency and ease of using Workday HC developed, 53 existing reports being modified. This proposed includes customer testing and peer demos. Expect Calendar Year End - An annual project to prepare an employees and benefit recipients in accordance with sedit integrations were run, reviewed, and edited by ISC reconciled for mid-January publishing. Open Enrollment for 2021 - Total submissions increa ~3,000 eligible employees for a total of 14,634 submis submitted events). Introduced a new AWS phone systemetrics tracking, decreased dropped calls, reduced ov call back later). 93% success rate with proactive outres — historically a pain point for employees.	toring, unemployment benefit verification, ring manual actions which impacts our infiguration rollback. Intently preparing for, and monitoring, first and scope, schedule and budget with impacts sustomer-driven project to improve the Reporting. Twenty two new reports oject has focused on the customer experience atted completion end of March. In deliver tax accounting to university state and federal tax requirements. Year-end and downstream partners. W-2 data In ased ~300 from last year, with additional sisions out of 36,597 eligible employees (40% em — customer callback functionality, improved the reall call volume (less need to hang up and
UW-IT	Aaron Powell	UW Enterprise		UWNC integration project went live as planned on 1/1/i UWFT - For a third quarter, FT consuming significant of sustainable for the staff. Integrated schedule produced significant amount of work likely to extend beyond curred the work that needs to be done to refine estimates, soft around scope and requirements remaining with FT. ADV CRM - UW-IT development work completed by 1 scoped and scheduled.	/21. capacity across all UW-IT that is not divith FT and partners this quarter reveals rent go-live timeline. UW-IT now focused on hedules and budgets. Key open questions

Completed Projects - Mar 31, 2020								
Project	Sponsor	Oversight Level*	Go Live Date	Project Completion Date	Total Project Cost (\$K)			
LQI	Susan Camber	2-UW		Aug, 2020	\$459,424			

UW Enterprise IT Projects

* Oversight Level Key

- Overseen by UW management and staff. Requires OCIO approval and reporting if over delegated authority.
- OCIO approval required and regular project reporting.
 Quality Assurance (QA) reporting required, maybe internal or external.
 OCIO may recommend project to be full Technology Services Board (TSB) oversight.
- High severity and/or high risk, subject to full TSB oversight, which includes TSB approval, written reports to the TSB, periodic status reports to the TSB by the agency director and staff, and submission of other reports as directed by the TSB. External QA reporting required.

* Project Health Key



Project is on time, on budget, and within defined scope, with minimal issues.





Changes to scope, budget, or resources have placed project at some risk. Project has the potential for delays, cost or scope changes.

Overall Risk Rating of 11-17 is Yellow



Major changes to scope, budget or resources have placed project at critical risk. One or more of the following must change in order to proceed: project schedule, resources, budget, scope.

Overall Risk Rating of 18-25 is Red

QUESTIONS AND DISCUSSION



UNIVERSITY of WASHINGTON

