

# Enterprise University Applications Recommendation

July 2020

Presented by: Jessie Minton, Vice Provost for Information  
Services and Chief Information Officer



# Agenda

- Project overview
- Current state and team findings
- Recommended approach



# Project Overview

Team

Goals

Phases

Definition



# Project Team

- 13 subject matter experts partnered with project management and business analysis staff to create a suite of recommendations
- Team members from:
  - Athletics
  - Business Affairs IT
  - College of Design IT
  - Finance and Administration IT
  - Information Services
  - Lundquist
  - Student Life IT
  - School of Journalism and Communications IT
  - University Health Center IT
  - VP Research and Innovation IT



# EUA Project Overview

---

## EUA project goals:

A categorized catalog of all purchased and custom-built software at the university;

---

A suite of recommendations on a category-by-category basis for possible changes to the purchase, hosting, management, and support of that software;

---

Recommendations for the delivery of custom application development as a service and associated organizational changes.

---

## Two Phases:

EUA recommendations (completed in June 2020)

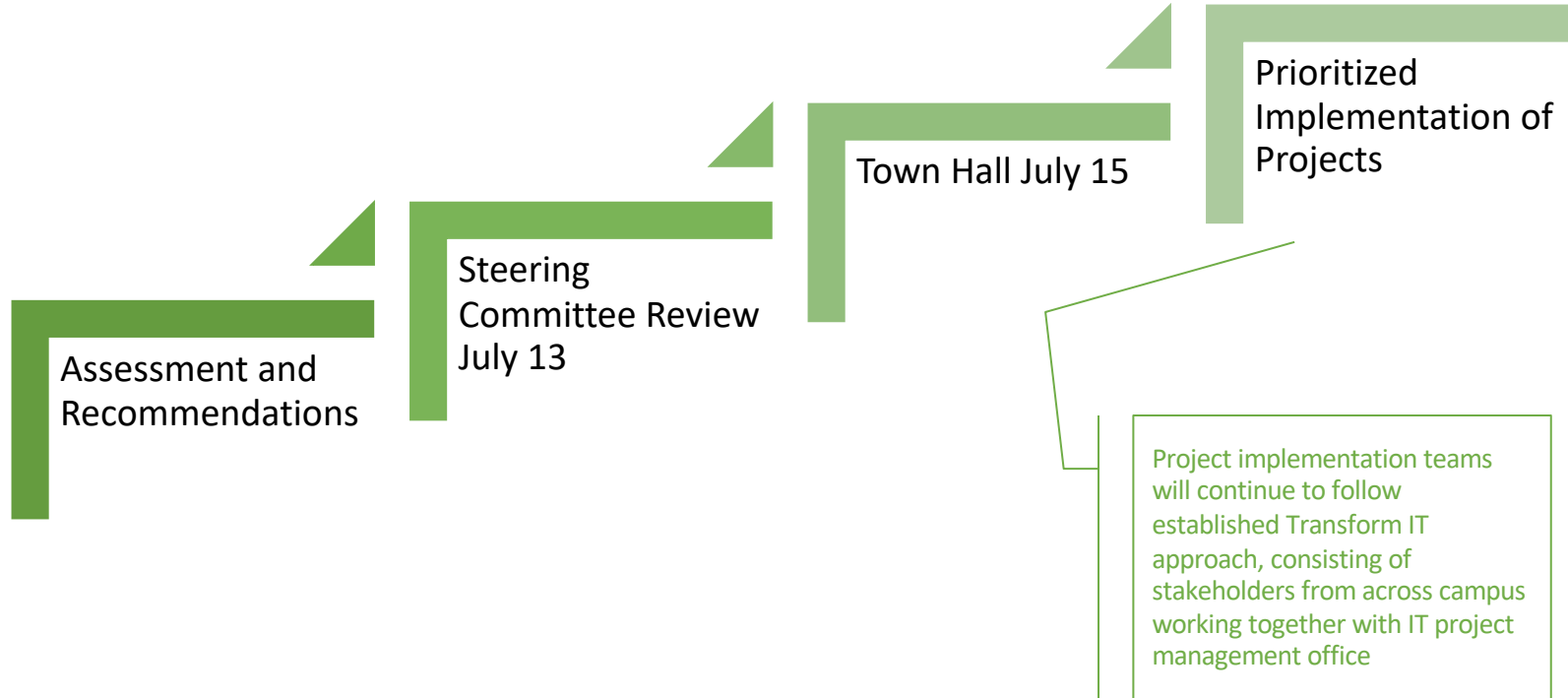
---

Implementation of approved recommendations (launching August 2020)


---



# Approach and Next Steps



# Enterprise Application Definition



## In scope:

Software, both custom and purchased, supporting administrative, academic, or research functions which require IT support to implement, integrate, or which uses UO identity management access (shibboleth)

## Generally out of scope:

Software which can be purchased via credit card and acquired, used, and retired without IT intervention and support.

# Current State and Team Findings

Process, Tools, People – current state

Team findings by category





# Current State



## ***Policies & Process***

- Lack of security review in acquisition and implementation
- Lack of process to review potential purchases or development for compatibility with campus architecture
- Application development not done on common development platforms, with established security standards, or consistent data models



## ***Technology & Tools***

- No application catalog available or maintained
- Duplicative software common on campus
- Currently in excess of 1170 applications as defined by this project in use on campus for aggregate cost of \$8.9M, not including staffing



## ***People***

- Inexact number of staff doing custom development work in 31 departments on more than 100 applications
  - Many in teams of one – no support or collaboration
- Inconsistent professional development and approach, inconsistent customer experience

# Team Recommendation Summary

Where possible, applications be hosted, supported, managed and purchased in an enterprise manner – i.e. centrally



Complete work in process to develop centralized application purchasing process, including governing of application acquisition



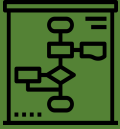
Develop UO application catalog to be dynamic and maintained on an ongoing basis



Initiate projects to assess viability and implement consolidation of applications by category where possible



# Highest Priorities



## ***Policies & Process***

- Identify, develop, or acquire tools and methods for creating a public application catalog
  - Seed that catalog with data from this project
- Integrate with four other sources of information:
  - Development staff
  - Network discovery tools
  - Purchasing systems
  - License servers/usage APIs
- Create a related model for consultation services about applications to avoid future duplication of purchases and security risks



## ***Purchased Applications***

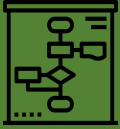
- Databases, data, analytics
  - 38 departments, 55 applications
  - \$565K
- Password Management
  - Low profile and cost - \$2500
  - High risk
- Project Management
  - 20 departments, 14 applications
  - \$65K



## ***Custom Software Development***

- Initiate project to deliver custom software development on campus including:
  - Supportability
  - Consistency of tools and tech used
  - University prioritization, agility, and availability of alternatives
  - Application security
  - Establish best practices – development, intake, business analysis, QA, testing
  - Understanding and scale to demand

# Clear Opportunities



## ***Low Hanging Fruit***

- Online forms, surveys
  - 14 departments, 12 applications
  - \$357K
- Events/calendar management
  - 15 departments, 18 applications
  - \$113K



## ***Complete Projects Underway***

- CRM
  - 14 departments, 17 applications
  - \$477K
- Collaboration and Communications Technologies
  - 4 departments, 6 applications
  - \$115K
  - Legacy tech end of life
- Time & Attendance
  - 11 departments, 1 application
  - \$150K
  - Current organizational risk



## ***Shift to Enterprise Solution***

The team recommends that where there is currently an enterprise solution available, departments shift

- Office productivity
  - 42 departments, 40 applications
  - \$588K
  - Team's opinion many could be focused into DropBox and O365
- Videoconferencing
  - 17 departments, 8 applications
  - \$30K not including enterprise
  - Team recommends shift to Teams and Zoom, retirement of others

# Other Opportunities – Require Analysis

Category	Number of depts.	Number of apps	Aggregate cost
Citation management	9	2	\$3,453
Web content management	16	19	\$180,978
Facilities/building maintenance & management	9	46	\$1,035,841
Building automation	3	2	\$750,000
Atlassian products	11	3	\$46,865
Marketing/sales management	11	12	\$15,778
Mathematics and statistics	9	8	\$188,387
Printing services	6	7	\$129,696
ID card creation	2	3	\$32,000
Stock photos/audio/video	7	6	\$13,310

Category	Number of depts.	Number of apps	Aggregate cost	Comments
Oracle database	1	1	~\$587,000	Although Oracle is purchased, managed, supported, and hosted centrally by Information Services, this project team recommends that an analysis be conducted to see if there are ways to reduce the significant annual cost for this application.
Work management – facilities	3	4	\$94,063	There are 3 groups that do essentially the same activities yet there are 3 independent systems being used. Aggregate spend is likely greater than reported.
Training/tutorials	10	16	\$27,936	Although this category has relatively few departments and applications, it is our opinion

# Recommended Approach



# Clear Opportunities – move forward now



## ***Policies & Process***

- Identify, develop, or acquire tools and methods for creating a public application catalog
  - Seed that catalog with data from this project
- Integrate with four other sources of information:
  - Development staff
  - Network discovery tools
  - Purchasing systems
  - License servers/usage APIs
- Create a related model for consultation services about applications to avoid future duplication of purchases and security risks



## ***Purchased Software***

- Continue CRM project, migrate all possible functions to Slate in phase 2 following admissions
- Work with campus partners to migrate all building scheduling and calendar management to EMS.
- Acquire and consolidate campus on password management approved by security office.
- Training & tutorials
- Continue Communications and Collaborations project including:
  - Telecom applications
  - Office productivity
  - Videoconferencing



## ***Custom Software Development***

- Initiate project to deliver custom software development on campus including:
  - Supportability
  - Consistency of tools and tech used
  - University prioritization, agility, and availability of alternatives
  - Application security
  - Establish best practices – development, intake, business analysis, QA, testing
  - Understanding and scale to demand

# Opportunities requiring more partnership

- Databases, data, analytics, including Oracle
- Project management
- Time & attendance
- Facilities, building automation, work management
- Web content management
- Printing management
- Enterprise applications (single source) not centrally managed



# Next Steps

July-Aug 2020

## Communication Work

- Transform IT Steering Committee

- Campus Town Hall

- Campus partners

## Begin work on clear opportunities

- Assemble teams

- Prioritize order

September/October\* 2020

## Begin Implementation on clear opportunities

- Consolidation

- Partner with departments as organizational changes become clear

- Continue communication

Fall 2020\* - ??

- Continue working through prioritized projects

- Completion of selected projects signals close of Transform IT as project

- Continue ongoing iteration of IT maturity and organization moving forward

\*COVID may impact timelines



**Questions?**

