Technology Advisory Board (TAB) Committee
Friday, September 17, 2021

Zoom & In Person

MEETING MINUTES

Attendees: Joel Reeves, Larry Jennings, Mohamed Al Sager, Igor Bernardi, Jessi Grieser, Michele Wilson, David Ratledge (online on behalf of Emily Gore), Devendra Potnis (online), Jolyon (Jo) Gray (online), Jennifer Gramling (online), Suzie Allard (online).

Absent: Emily Gore, Claire Donelan, Chandler Lampe, Ben Pham, Nick Corbin, Evan Pindrock, Mikala Leath

1. **Welcome**
   - Joel Reeves welcomed everyone to the September 2022 TAB committee. Meeting began at 3:32 pm.
   - A request for agenda items will be sent prior to each TAB meeting.

2. **Introductions**
   - Joel Reeves, AVC and CIO of OIT, Ex Officio and Chair
   - Larry Jennings, Associate Chief Information Officer, Ex Officio
   - Jessi Grieser, Professor in the English Department, Representing Faculty Senate
   - Mohamed Al Sager, Graduate Student, Representing Graduate Student Senate (GSS)
   - Igor Bernardi, Graduate Student, Representing Graduate Student Senate (GSS)
   - Michele Wilson, assistant to Joel Reeves
   - David Ratledge, attending on behalf of Emily Gore, Representing UT Libraries
   - Devendra Potnis, Professor in the School of Information Sciences, Representing Faculty Senate
   - Jolyon (Jo) Gray, IT Manager in Student Life Technology Services, Representing Vice Chancellor Student Life
   - Jennifer Gramling, Director of Online & Digital Programs, Representing Provost's Office
   - Suzanne (Suzie) Allard, Professor of Information Sciences, Dean's Council Representative Appointed by the Provost
   - Not in attendance:
     - Emily Gore, Assistant Dean of Libraries & Associate Professor of Practice, Ex Officio Representative from UT Libraries
     - Claire Donelan, SGA President, Student Representative
     - Chandler Lampe, Student Representative
     - Ben Pham, Student Representative
     - Nick Corbin, Student Representative
     - Evan Pindrock, TAB Co-Chair, Student Representative
     - Mikala Leath, Student Representative

3. Budget Overview

- Joel reviewed the FY22 budget

Description	Amount
College Awards	$ 1,000,000.00
Grants	$ 20,000.00
Recoveries	$ (650,000.00)
Training	$ 132,500.00
Software, Hardware Procurement	$ 368,282.00
Salaries / Benefits	$ 2,614,000.00
Research Support	$ 638,589.00
Teaching Tools	$ 1,048,521.00
Desktop Support	$ 24,015.58
Computer Lab	$ 214,110.00
HelpDesk	$ 180,285.00
Telecommunications	$ 149,000.00
Classroom Technology	$ 1,500,000.00
GRAND TOTAL	$7,239,302.58

- These line-item highlights were shared:
  - Grants – We set aside money to award faculty grants.
  - Recoveries are where we license software that we let other campuses 'buy in' on (UTC, UT Martin, UT Southern). This number helps balance the bottom line.
  - Training is the Linked In Learning software.
  - Software, Hardware Procurement – most of this is the Microsoft buy-in.
  - Salaries / Benefits are for folks on the HelpDesk and Canvas.
  - Research Support includes most of the software you would see in Apps@utk.edu, SAS, SPSS and Qualtrics.
  - Teaching Tools include Canvas, Proctorio, classroom clickers (Turning Technology), etc.
  - Desktop Support includes Bomgar.
  - Computer Labs – we run several Computer Labs on campus that keeps the equipment refreshed.
  - HelpDesk moved to a new ticketing system (TeamDynamix) no longer using Footprints.
  - Telecommunications includes telephone services and Ring Central is a new application.
  - Classroom Technology includes the annual upgrades to rooms at a budgeted rate of $30K per room on a 5-year cycle. We have about 300 centrally managed classrooms on

campus that have current technology, but the bad news is that we have about 500 classrooms in use. Igor asked, 'Why so much?'. Joel responded that this cost includes projectors, document cameras, stacks of equipment/hardware, upgrades to software, and other plug-in options. $30K is the average – could be $50K for larger rooms, $20K for smaller. We target a classroom to last 5 years and then get a refresh. AMX is an older platform and they haven't kept up their product (similar to Blackboard), so we are moving to EXTRON technology. It isn't a cheap endeavor. The first and only time we've raised the tech fee was about five years ago specifically for classroom tech, so we're just now getting through a whole refresh cycle. We went from $100 a semester to $120 a semester and that whole $20 increase per semester per student goes into the classroom.

4. Overview of Cycle
- Joel reviewed the award cycle:
    - January – Tech Fee request letters sent to the Colleges / Departments
    - March – Deadline for submission of all funding request documents
    - April – TAB make allocations at the April meeting
    - May – Colleges / Departments receive award verifications & purchasing guidelines
    - July – March – Colleges / Departments make purchases
    - July – March – Reimbursement for purchases are made

- In April, TAB will sort through the allocations together. We will be able to allocated $1M, but we'll receive $2M worth of requests. Some colleges / departments will want more with the "we serve all students" perspective.

5. Wireless Issues
- Joel reviewed the wireless issue timeline below:
  2020
  March 15 - Installed codebase with software bug
  2021
  August 18 – Dropping connections, OIT makes adjustments to NetReg, DHCP routing.
  August 20 – Dropping connections at 1030am, Vendor TAC engaged.
  August 23 – Dropping connections at 1030am.
  August 25 – Changes to mitigate dropped connections caused mostly day long outage.
  Vendor has 5 engineers on phone with OIT.
  Numerous changes made to logging and to minimize traffic to controllers.
  Upgrade to 8.6.0.11 recommended about 6 PM.
  Confirmed FSU having very similar issues.
  August 30 – 35,810 clients connected at 1120am. Started dropping connections at 1130am
  Vendor TAC recommends additional controllers despite documentation suggesting this is not necessary.
  Confirmed Texas A&M having similar issues.
  August 31 – Arkansas and Vanderbilt not having issues, but Va Tech is.
  September 1 – Dropping connections at 1030am; appeared to have peaked at 37,200 clients.
  Applied vendor recommended ACL and requested additional controllers.
  September 2 – Football game on campus, Labor Day weekend. OIT installed additional controllers over the holiday weekend.
  September 8 – No issues during major class changes, approximately 36,000 clients.
  September 13 – 38,000 clients on wireless. 100gb network flapping issues approximately 1 PM.

- Mohamed asked, 'What are controllers?' Joel explained that controllers are kind of like a router in that they talk to the internet. Jessi heard from Texas A&M and Virginia Tech colleagues and they've experienced the same issues. Joel stated that he has 100% confidence in our OIT team. Our confidence has been shaken in Aruba, but we will keep on top of them to ensure they make this right. Devendra suggested we use predictive analytics to compare and find out how to predict future issues and be better prepared. Joel stated he has no problem with the concept, but he does struggle with the idea of how analytics could have predicted this situation. He will be willing to talk about solutions. Mohamed asked if Aruba is the only vendor we use. Joel said they are for wireless, but we also Cisco Switches at the core and Juniper VPN. We don't have a single vendor stack. Jessi asked how it was communicated. Joel sent a DDDH to faculty/staff. Students weren't notified directly. Updates about the wireless issues were shared through IT Weekly.

6. September 2 Football Ticket Gate Issue
- Scanners operate on an un-advertised separate wireless network.
- Wifi around gates is disabled on game day.
- Stadium DAS for participating carriers should suffice for normal surfing.
- Ticket & ID both on phone took a few extra seconds each to show, contributing to line backup.
- Downloading ticket to wallet at gate added to congestion.
- ID card and ticket on the phone – that takes an extra 10-15 seconds.
- Igor asked if it would be possible for ticket to be integrated into the ID card? Jo & Joel replied that it really isn't possible because it is a different protocol. The student tickets are different than regular tickets. It would take a huge infrastructure change and a vendor that will be willing to make the change. Mohamed asked if there could be a way for the ID and ticket to be stored in an Apple wallet (or similar app) so that both items could be scanned at one time. Jo said that there is a limiting factor with this idea – student tickets are managed with a different piece of software than the athletic department uses for public ticketing. It is a question of implementation for the vendor – whether they want to make it available for us, or not. If they did, we would need to dig trenches and pour concrete and provide power and network for the little kiosks that would be used. So, it's technically possible, but it would take the vendor agreeing to it. Joel shared that the stadium will be going through a major renovation in the next 24 months.
- Jo shared that the Bowling Green was an outlier. Instead of 10K students, we had 14K students using the same 2 gates. It was a unique 'perfect storm'.
- Jessi notified the group that the University of Michigan has gone completely cashless.

7. Customer Satisfaction Survey
- The survey is sent out in March. The survey scale is 1 to a maximum score of 9. If we get an 8, that is outstanding. If we get 7.5 or above, that is very good. Joel reviewed the feedback from students in the 7.5 to 7.3 range. The fact that we can't get close to a 9 for the official university email is telling because those are the biggest collaboration on the planet. We're not sure if we'll ever get an 8, but we'll keep trying! Following is the survey review:
    - 7.5+
    - Official University Email - O365, Gmail
    - Customized help with developing course materials and lectures for online teaching

    - 7.3's
    - Getting timely resolution of technology problems that I am experiencing
    - Receiving communications regarding technology services that I can understand

    - A few comments:
    - I like talking to real people about my problems so I like that you can call them.

- o Make the website and online services must be easier to navigate.
- o Change webpage layouts to make them more organized.
- o Provide trainings to navigate how to use online services.
- o Purchase more wireless routers and place them around campus to strengthen signals.
- o Every time I have called OIT I have received excellent support!! I call OIT a lot. Keep doing what you are doing. I would say hire some nighttime and weekend employees please. Sometimes we need critical assistance after hours.

- Joel stated that OIT will continue to focus on communications to ensure more students know about the services available to them.
- UTC has been outsourcing their evening and weekend calls to a vendor. Basically, all they would do is complete a password reset and a few other things, but the major items just have a ticked created. Now they are willing to fund us another HelpDesk position. UTC will pay for an off-hour employee (evening, Saturday & Sunday). And we are saving UTC money with the funds that they were sending to the after-hours vendor and we should see better weekend service during peak hours.

8. Other Business
- **Faculty Gmail** – Jessi asked if Google Take-Out could be enabled. It is a service that exists on the back-end, which is a service that allows people to offload existing Gmail that they've been forwarding for years and move to a new account. Jessi would be happy to assist. Joel asked Larry & Michele to make a note to check in on this request.
- **Email Service Changes** - Joel provided an overview of the changes to email services.
  - This is a state-wide initiative.
  - Changes to the Email Forwarding Policy. Will no longer allow auto-forwarding to private email accounts.
  - Who will be affected? Faculty, staff, sponsored users, retirees/emeritus, departmental accounts, and shared mailboxes who are currently forwarding their email to an external email address.
  - When: December 14, 2021
  - Developing tools to:
    - o Look up approved/denied domains
    - o Request mail forwarding
    - o Request exemptions - Joel will be making approvals for some forwarding, but probably nothing that ends in .com.
- **Google Storage** – Joel provided an overview of news received from Google.
  - Google announced an end to their free service with unlimited storage programs starting in July 2022. Google storage is shared between email, drive & photos.
  - We are in too deep to get rid of Google.
  - New storage plans for Education:
    - o Basic Plan: 100 TB pooled storage … at no additional costs
    - o Paid storage plans are available
    - o We are considering quotas for Google
    - o ~400 accounts are using 250 GB+ of storage, totaling 921 TB
    - o ~800 accounts are using 100 GB+ of storage, totaling 1 PB
    - o UT's Current usage is ~1.2 PB
    - o We are looking at Tech Fee to cover costs.
    - o Target date of June 2022.
    - o What's next?
      - ▪ Google to release management tools by 2022

- Determine appropriate storage level and sign a new contract with Google
- Tell people what to expect (we are still figuring this out!)
- We'll talk to Athletics and VetMed about their usage.
- Moving to Google Enterprise and it should handle the storage issues.

- **SLACK** - Mohamed asked about the platform SLACK. Graduate students track timeline and checklists of who is doing what on a project. Google and Microsoft don't have anything comparable. There is a free version. Jessi added that she uses SLACK and is very pleased with the product. David said that the Library is also using SLACK. Joel asked, 'How many video collaborations do we need on one campus?' 'Google Teams, Zoom, Ring Central' are just a few. Ring Central will provide enterprise telephone services. It works and looks like Zoom. It would probably cost more money for less services if we UNBUNDLED everything. Joel will request an enterprise quote for SLACK, but where do we find the money? As a University, we have to keep Microsoft Office (Word, Excel, etc.). Zoom Pro for all was paid for TAB) and is very well received

9. **Adjournment**
   - Joel Reeves adjourned the meeting at 4:39 pm. The next meeting is scheduled for Friday, October 15, 2021 at 3:30 pm in person at Hodges Library Conference Room 605 or Via Zoom.

Minutes submitted by: Michele Wilson