

To: SACUA

From: Quentin Stout, Chair, Information Technology Committee

Subject: Report on Activities of Information Technology Committee for 2024-2025

- **Advisory to:** Ravi Pendse, VP for Information Technology and Chief Information Officer
- **Members:** Quentin Stout (Chair), Yasser Aboelkassem, Mashon Allen (VP's Chief of Staff), Natasha Allen, Michael Bohanon, Susan Borda, James Cranford, Ivo Dinov, Amir Mortazawi, Deirdre Spencer, Jeffrey Yackley
- **SACUA Liaison:** Deirdre Spencer
- **VPIT-CIO Chief of Staff:** Mashon Allen
- **Faculty Governance Coordinator:** Ann Marshall

Guests:

- Bob Jones, Assistant VP of Support Services and Emerging Technologies for ITS (11/12)
- Stephanie Rosen, IT Accessibility Assistant Director (11/12)
- VP Ravi Pendse with guest Asmat Noori, Interim Chief Information Security Officer & Executive Director of Information Assurance (2/19)
- Colleen McClorey, Associate General Counsel (4/23)

Meeting Dates: September 25, November 12, December 11, February 19th, March 19, April 23

Committee Charge

1. AI/ML: UM has a strong start in some aspects of this, but given the explosive growth in this area can we continue to be near the front of the best universities? How will this be funded? Almost all aspects are complicated, evolving, and need tremendous research and computational resources, so we might want to hold a joint meeting with the Senate's Research Advisory Committee (RAC) (this has been mentioned to them).
2. IT at UM: It might be useful for our committee to get an overview of what IT does in terms of resources including advising, software, hardware, connectivity, negotiating pricing for software used mainly by individuals (such as Microsoft 365), etc. Does this vary among our colleges and campuses, do members of the Faculty Senate believe there are needs that have been identified but not met, etc.? How does the faculty give input concerning centralized IT functions?
3. Security and Reliability: There are still questions about what happened last year and whether everything has been restored. There are also worries that the CrowdStrike problems that plagued Delta and others might arise here due to similar software changes. What are the mechanisms that prevent such problems, or rapidly mitigate



them? How does the office of the VP IT /CIO help smaller entities (colleges, departments, individuals) prevent such problems?

4. Accessibility: How is the university addressing accessibility? This is being addressed for web pages at the university level, but what about all of the material that faculty put on the web? How will the university help us meet the strict ADA requirements that are going to be enforced on all material on the web (with a few exceptions) at all public universities?
5. IT Collaboration outside UM: are there any such collaborations, are any planned or requested? With companies, national labs, other major research universities, etc.? Should UM be a leader in the state in terms of collaboration with other colleges and community colleges? Is cloud computing available to everyone, with suitable support from IT staff in educating people about how to use it?
6. Committee will also consider emerging issues as raised by ITC members.

Information Obtained, Discussion Areas, & Committee Actions

I. General: U-M ITS pursues [five areas of focus](#)

II. Accessibility (11/12)

- A new [ADA federal rule on digital accessibility](#) (WCAG 2.1 AA) for public entities of 50,000 or more persons applies to U-M, with a compliance deadline of April 2026. U-M strives to apply best practices that may extend beyond regulatory requirements.
- Efforts include working with procurement to ensure vendors meet the new standards, working strategically with units to provide training and guidance, and creating new tools, such as a Canvas-based application that can automatically check-for and/or implement accessible content. IT is in phase 2 (FY25) of a 3-year project.
- The project is a collaboration between ITS, [ECRT](#), the Office of General Counsel, the Strategic Initiative Team, [Digital Accessibility Liaisons](#), and IT Leads.
- There will be updates to the [U-M Digital Accessibility website](#). The work applies to all three campuses and Michigan Medicine (all umich.edu); examples of digital accessibility are correct use of headings, color contrast, screen reader compatibility; [GrackleDocs](#) is an example of an accessibility tool; [Panorama](#) is an accessibility tool in Canvas.
- A challenge is that U-M has over 1 million websites; this is a data-led initiative; AI-powered tools may be helpful, e.g. in creating ALT text data and making LaTeX accessible; U-M IT-created digital accessibility tools will be open source; IT works in collaboration with disability communities on campus; digital accessibility has many positive impacts including for sight, ESL, aging, low-bandwidth, older hardware, literacy and language, and temporary injuries; another app to check out is [be my eyes](#).



III. AI (12/11, 3/19 updates)

- Key topics were U-M AI initiatives, AI & sustainability, and AI & labor issues. The [Use AI: How the University of Michigan is Using Artificial Intelligence video](#) was shown.
- In 2023, Provost McCauley and VP Pendse sponsored a U-M faculty group to provide guidance on AI, resulting in a [June 2023 report](#). U-M is an AI leader and offers a custom suite of [U-M AI tools](#). Recent developments include better integration with Canvas; the release of findings of a U-M AI Research Committee Recommendations Report that outlined suggested AI key investments, internal innovation, and ethics and compliance; U-M's [AI partnership with Los Alamos](#); faculty use of AI for research, such as AI that [detects cancerous brain tumors](#).
- The [Go Blue AI](#) App, available to the U-M community, went live earlier this year. Students have provided feedback, such as adding where free food is served.
- There was discussion about the environmental impact of AI. High performance computing has a large appetite for water and cooling. U-M chose to use Microsoft as a vendor in part because of Microsoft's goal to be [carbon negative by 2030](#). U-M has a [Vice Provost for Sustainability and Climate Action](#) that is focused on U-M sustainability, and U-M also has a goal of achieving [carbon neutrality by 2040](#). Regents are in support of both AI and sustainability, that the two goals are interdependent. Other forms of power are being pursued, such as solar farms, geothermal energy, and nuclear energy.
- The U-M demand for computing power will soon surpass what is available. U-M data centers are at 80% of capacity and U-M can't wait until 2030 to address such needs. U-M faculty want the computing power to support large scale research projects. A [new U-M data center](#) is to be built on Textile road. Use of AI energy is larger than commercial airplanes but less than 2% of the carbon footprint, with automobiles at 18%.
- IT abides by [U-M's privacy policy](#) and offers a [sensitive data guide](#). IT does not access or track U-M students' AI use. If a legal subpoena from the FBI was received, a number of steps would be taken before U-M could hand over any information.
- ITC members also discussed the [labor behind AI](#). ITS shared information about [Karya](#), an organization working to responsibly pay and train tech workers residing in disadvantaged communities.

IV. Cyber Security (2/19)

- An update was provided about ITS actions following the [cyberattack](#) experienced by U-M in August of 2023. U-M's security systems had alerted U-M to an automated attack, and, by shutting down U-M Internet systems, U-M ITS was able to restore access to the Internet within two days. This cyberattack was precipitated by a cyber vulnerability at the U-M unit level. U-M is now deploying CrowdStrike falcon more comprehensively across U-M.
- Cyberattacks are ongoing and a regular part of ITS' work. Since the 2023 attack, U-M has stopped more than 600 incidents.



- There was discussion on whether CrowdStrike Falcon is intrusive, noting that many faculty use their U-M machines as their primary device, including for personal matters. Another potential challenge is that CrowdStrike Falcon is not installed on student machines and might not provide as strong of protection on machines that run older software. Given these challenges, ITS continues to strive to provide as much protection as possible. In addition, ITS will work with a PI and lab directors on specific situations and to create any needed documentation. ITS was very pleased with the quick and transparent nature of CrowdStrike's response and customer service.
- ITS does regular penetration testing and security audits. ITS does such tests on many systems, including monthly vulnerability tests, robust risk assessment, and risk treatment plans. ITS strategy includes 1) protection, 2) detection, and 3) remediation. ITS-recommended resources include the [ITS Safe Computing site](#), the [Endpoint Protection](#) page about CrowdStrike, and the [CrowdStrike Falcon FAQ](#).
- Appreciation was shared for the discussion and for these explanations, since much of this work is often taken for granted.

V. Bulk Sensitive Data regulations (4/23)

- There is a new federal regulation with requirements on access to [sensitive bulk data](#) (see [FAQ](#)) related to "countries of concern." The regulation had bipartisan support, began under the first Trump administration, continued under Biden, and was recently finalized.
- Enforcement is by the DOJ, with both civil and criminal (up to 20 years) penalties, with the DOJ expanding interpretation of the International Emergency Economic Powers Act (IEEPA). The regulation is nuanced, complicated, and, at times, contradictory. OGC has consulted with 20+ U-M entities, such as Procurement, MM, OVPR, the Provost's Office, HR, among others.
- The law covers individuals located in the U.S. or U.S. citizens abroad. It is difficult for universities to make determinations of scope. Access restrictions apply to all non-U.S. citizens that are outside of the U.S. There are [six categories](#) of data protected, for example, human genomic datasets of more than 100 U.S. persons. Access is defined very broadly and without regard to security requirements. Any "country of concern" could be covered, e.g. China, Russia, Iran, North Korea, Venezuela, Cuba. The regulation went into effect on April 8, and there is a current pause on civil (not criminal) enforcement for entities making efforts towards compliance.
- OGC is available for support and expertise, and the U-M community is encouraged to contact bulkdataregulation@umich.edu with questions.

VI. Additional Topics of Discussion

- There was discussion about the risk of budget cuts and that it is an unpredictable time. Expenses such as yearly subscriptions for Internet access can't be considered for cuts.
- There was discussion about the value of creative grant collaborations such as combining computer science and the social sciences.
- ITC expressed appreciation for having discussions at all levels, and that it is healthy to hear varying views and to model the kinds of conversations that would like to be seen

more broadly. It is also helpful to have humanities also involved in technical/engineering decisions. The analogy of a hand was shared, in that both the diversity and unity of five fingers is needed for a hand to work well.

Recommendations

I. ITC discussion topics that might help identify future action items:

Generative AI

- AI literacy as an important goal – to not use AI for everything, but to use AI responsibly, including when not to use AI.
- Offer support for U-M student efforts, such as [Students for Sustainable AI Development's](#) interest in a U-M dashboard that, for example, shows how much water is used each time AI's DALL-E makes a graph.
- There are potential opportunities to move from [GAIM](#) use to GAIM development and that a balanced approach of both centralized GAIM and local (lab-GAIM) shops be supported. U-M might pursue building a GAIM AI-assistant from scratch, assess and examine the barriers throughout the end-to-end protocol, i.e. from design, development, training, testing, validation, deployment, and sustainability.
- There are considerations about whether Maizey should be an opt-in or an opt-out tool in Canvas. ITS members offered varying perspectives, including that 1) opt-in may be considered a best practice so that tools are not predatory (as in some apps), while another suggested that 2) opt-out could be better given the tremendous demands on faculty members' time.
- There was discussion about the possibility of building an AI tool to assist research administrators in navigating grant guidelines. It was noted that such tools might have applications in unit/s within Michigan Medicine, and there was interest in discussing future possibilities.

Cyber Security, Training/Discussion Opportunities, & DUO Security Update

- ITC members expressed appreciation for how much they had learned about U-M ITS by serving on the committee. An ITC member suggested that ITS, ITC, and/or other entities might offer opportunities for the wider campus community to have similar discussions, and that it is helpful to lean into transparency. For example, a webinar could be offered to discuss cybersecurity issues. It was also noted that it is a challenging time for faculty and other demands may prevent faculty from attending.
- A faculty member identified interest in better support with UNIX and Linux, such that a small team of campus experts might offer training and/or other assistance. This could be a possible initiative to be considered for the fall term.
- VP Pendse has recommended that an update be provided in the fall about the DUO update that will offer biometric security options as a pilot in the fall. The problem with passwords is that people often fall for phishing attempts. Biometric options have been

requested by students. The decision of whether to use biometrics or passwords will remain with the user.

II. Initial Brainstorming of ITC Charge Topics 2025-2026 (4/23)

- Provide an update on summer developments, especially any IT-related federal policies.
- The new DUO security update and options
- Hold a joint meeting with the Research Advisory Committee (RAC) to discuss ways that IT might enhance support for U-M researchers.
- Brainstorm strategies to provide better support with students' hardware needs. A faculty member has experienced challenges with students whose laptops are not able to run the needed hardware and/or software for course assignments. This may be exacerbated by students taking classes outside of their major. For example, Ross offers Ross Anywhere, but non-Ross students may not have easy access to this. Some loaner laptops are available, but it seems there is a patchwork approach with every school doing something different.
- Consider opportunities for more comprehensive IT integration with U-M Flint and U-M Dearborn. It was noted that U-M Flint is working on having a new network, and also noted that duplication of IT services at U-M Flint and U-M Dearborn may not be ideal.
- A question raised about IT security, privacy, and data given current events and the detention and/or harassment of students and/or staff. Is it possible that some actors might use IT systems or data in nefarious ways, and are there steps that individuals and/or U-M IT can take to help protect against this?