

IT Investment Priorities

As part of the charter of IT Gov, the committee is charged with setting IT priorities for URI. This document, based loosely on the [2021 EDUCAUSE Top 10 IT Issues in higher education](#) describes at a high level where the committee feels IT investments have the highest probability of having a positive impact at URI.

1. Research – Supporting and growing scholarly work across disciplines that need computational resources.
2. Student success – Advancing student support services to help students attain academic, social, and career goals.
3. Diversity, Equity, and Inclusion – Providing technologies, access, support, staffing practices, and policies that enable the success of diverse users across the enterprise.
4. IT security – Enhancing our cybersecurity operations strategy and support.

Allocating resources to these initiatives will require URI to become far more efficient and effective in utilizing our current resources. Underlying all these areas is therefore the core priority of improving our resource utilization through **efficient delivery of IT services**, allowing URI to increase agility, improve service delivery and reduce redundancy through **digital transformation**.

Efficient Services and Digital Transformation

As the key enabler of the other investments, efficiency and digital transformation at URI are both attempting to improve the availability of faculty and staff time. Our most valuable and costly resource at URI is our people, but in many areas, they are stretched so thinly that engagement with new initiatives, finding new approaches or spending the time needed to “think big” becomes impossible.

The most obvious examples of digital transformation initiatives currently underway at URI involve the transformation of paper-based processes to digital processes. Examples currently underway include:

- The Quali curriculum management system, potentially saving faculty and staff significant time in proposing, reviewing, approving and publishing curricular changes.
- InfoEd – Grant Administration Software. Currently in the process of implementing suite of InfoEd modules that cover the life cycle of sponsored research.
- InfoReady – a software as a service (SaaS) system, for managing internal grants and competitions and their review and approval processes, currently used by a variety of units across URI to manage proposal reviews.
- The URI-wide RFP for digital forms processing, finally eliminating once and for all the need for any office to produce, track, and chase down a paper form.
- The renewed post-pandemic progress towards a truly digital procurement system for URI, allowing faculty and staff to reduce the time and effort needed to purchase everything from pencils to new gene sequencers.

IT Gov would like to encourage every division, area, and department to look for continued opportunities to transform paper-based processes to digitally transformed processes and share those with the committee.

It is also vital that we reclaim time through efficient delivery of IT services. One prominent example of recent success in this area is the availability of single sign-on services. By reducing the number of commonly needed username and password combinations from 15 to 1, URI has not only made life easier for our entire community but has also saved significant time for all IT staff by eliminating the need to manage users and passwords on individual systems.

Another new system currently in deployment is Fishtail, which manages the integration between PeopleSoft and Brightspace. This will save time for students, with more timely access to courses, save time for faculty by allowing them to merge and separate courses instantly and save time for staff who were previously both performing the course merges manually and manually checking and updating enrollments.

IT Gov feels that further enhancements in these areas are likely by working together across divisional and department boundaries to centralize commodity services (such as general desktop/laptop support) as well as avoid duplicative software purchases (such as the four different student employee management systems in use at URI).

Research

Strong sustained growth in scholarly work is a high priority for the university. Prominent scholarly work programs serve the regional community, the state and beyond, and are expected to lift the university's profile nationally and internationally, help recruit and retain top faculty and student talent, and grow extramural funding. Technology has permeated all disciplines, including the Arts, Humanities and Social Sciences. Computational research efforts are also an important part of the university's research footprint -- there are over 85 faculty-led groups / labs that are involved in research computing at the university. These numbers are expected to grow as more labs focus their efforts on simulation and data analysis since those are not impacted by COVID-related restrictions. Moreover, computational skills are extremely useful for students to have, given that computing has become essential in all fields.

Recent examples of such efforts include:

- Building a growth and sustainability strategy for research computing at the university that includes all stakeholders (federal agencies, faculty researchers, university administration and ITS)
- Searching for a new *Computational Scientist* to facilitate and support the use of advanced computational resources by faculty and students. This search was launched this year, shortly after hiring a founding *Director for Research Computing*.
- Leveraging regional and national resources (NSF CyberTeams, MGHPCC, XSEDE) that support research computing.
- Investing in digital tools, such as the Adobe Creative Cloud, multiple statistical packages, scientific writing tools and others to support individual scholars.

IT Gov feels that further enhancements would be made in this space if various university entities (Colleges, Departments, Library, Research, ITS) would work together and potentially share resources and collectively leverage the opportunities that result from such collaborative efforts.

Student Success

Student success is basic to the goals of URI and is vital for its continued success. Not only does this raise our national and international stature, but continuing students are also a key economic contributor to our financial health. Technology plays an increasing role in both supporting our students and evaluating our progress.

These approaches need to be holistic and support students in all aspects of their experiences with URI. From admissions, orientation, and welcome days, through four years of academic, social, and residential experiences and culminating with the alumni experience, technology can and should be applied wherever it can facilitate and improve the student experience.

Recent examples of these technologies include:

- Signal Vine, used by enrollment services to remind our students of key deadlines and opportunities through text messaging.
- Rhody Connect, providing students with a one-stop shop on their mobile devices for academics, social events, and other activities at URI.
- Brightspace, the new learning management system at URI.

One key to identifying and acting on these opportunities is the completion of the data repository currently in development in instructional research, supporting a data-informed approach. Once the base is complete, expanding the repository to include all aspects of student life at URI should be considered.

Supporting Diversity, Equity and Inclusion

Embracing DEI has become a core value of URI. Diversity within IT staffing, equitable access to computing, and inclusive systems technology must all be addressed within IT at URI. Over the past year, some progress has been made on all these issues with more aggressive recruitment, the formation of the IT JEDI committee, providing loaner machines to students who have limited access to technology, and establishing remote access to lab environments.

There is much more to be done to support DEI within IT spaces.

Advancing IT enterprise DEI practices, staffing and recruitment

IT staffing across URI is not reflective of the diverse populations served by these staff. To address this, IT Gov is recommending:

- Specifically recruit for underrepresented groups, such as LatinX, Black, and Indigenous/Native American staff, as well as non-majority gender groups, through aggressive outreach to non-traditional recruitment avenues.
- The creation of norms for ensuring advancement opportunities for staff from underrepresented groups.
- Enhancing staff competencies in the soft skills of DEI through a regular professional development program.

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- Consider new ways of dismantling possible causes of inequities within IT staff across the university.

Ensuring equitable computing access for faculty, staff and students

With all aspects of URI growing increasingly digitally reliant, all members of our community need to have equitable access to computing resources. To address this, IT Gov recommends:

- Strongly encourage the use of URI-subscribed software and free and open-source alternatives instead of expensive proprietary packages to provide economic relief to both students and academic units.
- Retain and if possible, expand programs originated during the pandemic to provide low-cost or no-cost computing equipment to economically disadvantaged students.
- As we move away from fully equipped computer labs, we encourage and support continued development of cloud-based lab software access, remote access to disciplinary software located on high-density machine groupings and continued development of virtual desktop technology.
- Use the upcoming Faculty Senate Committee on Technology & Infrastructure report on faculty computing needs to prioritize investments in this area.

Improving inclusive technology

Inclusive technology has also made significant strides over the past few years, however accessibility as broadly defined under ADA as well as emerging technology risks require attention:

- Investigate and deploy emerging auto-transcription services as well as text-to-speech technology at URI.
- Deploy technology to automate scanning of digital course materials to ensure they remain accessible to all members of the community.
- Consider the risks of bias in contemporary IT such as AI and analytics.

IT Security

The security of our information resources remains critical. Our IT security posture has improved rapidly over the past years, but much work remains to be done. While faculty have traditionally worked on an anywhere, anytime model, the expansion of this activity to many staff has presented challenges and further opportunities for improvement.

Security should no longer be considered in isolation, but rather as an integral part of every IT activity. Every system at URI should share common user identities, be fully patched and updated, and be supported by professional IT staff who can monitor data access and rights for the package. In many instances, this may require URI to re-invest and make difficult choices between adding staff or hiring outside vendors to perform these critical activities.

IT Gov recommends that all units at URI fully implement our new security policies, including the endpoint protection policy and work with IT Security to enhance security awareness and mitigate security risk.