DoIT Digital Strategy Summary Report FY 2022 - FY 2024

Digital Strategy FY2022-FY2024 Background

In the Spring of 2021, as we began to plan for a reopening for fall 2022, DoIT leadership developed our Digital Strategy and sought input from both governance groups and committees that resulted in the current [Digital Strategy FY22-24](). There were four key principles this was based on.

1. The effort is grounded in UMBC's mission, vision, and values, especially the recent Carnegie classification as Research - Very High.
2. The effort is grounded in UMBC 2016 Strategic Plan, but would build on the digital transformation that was necessary during the COVID pandemic.
3. The effort was grounded in the [foundations working group]() report but recognizes that the pandemic has changed how our community will manage, create, teach, learn, and work in the future.
4. While increasing our use of technology, we must at the same time improve our digital risk management and digital resilience.

The principles led to a set of actions across six initiatives. These initiatives are summarized below. For each initiative we have highlighted some of the key efforts that were completed. We have also identified work that is not completed. These items are identified so we can discuss their inclusion and prioritization in the next Digital Strategy.

One of the significant challenges of this digital strategy was that it was developed during a natural point of institutional transition, a presidential transition. While this document was discussed with prior leadership colleagues, as they retired, there was a lack of continuity communication and connection of this document with the current issues facing the campus. In the end, everything that was done above would most likely have been done whether we had a Digital Strategy or not. Nothing that was completed is unnecessary or not useful. These initiatives that were completed were both incremental, but necessary, initiatives to enhance important and critical digital capabilities.

Deliver exceptional service and support

- There was significant investment in upgrading our server infrastructure, network infrastructure, including both campus and residential WiFi, and telecommunications.
  - We upgraded our campus VMware infrastructure and expanded our presence in cloud services (AWS, Google, and Azure).
  - We completed the transition from the Rolm phone system to our new Cisco VoIP system that allows everyone to use their computer or cell phone in lieu of a desktop phone.
- We launched Webex Teams for collaboration that allows asynchronous and synchronous communication within and across groups on campus.
- Efforts to deliver a new service management platform were paused while we waited for the strategic plan to complete; however, we delivered a new way of accessing and finding help online through help.umbc.edu. This will be improved with generative AI interfaces in FY25

Yet To Be Done

- Selecting and implementing a new service management platform to replace our current RT system.

Use Data to Continuously innovate and improve

- We relaunched the Data Management Committee (DMC) in the spring 2022. The effort has brought governance and broadened planning in how we use data, please see the [FY24 DMC Annual Report](#).
- Through our Learning Analytics Mini-Grants we have funded eight grants in FY24 and had over thirty community events over the prior three years.
- In FY24, we launched our new Tableau Server with unlimited license and have expanded our Tableau capabilities. Also launched in FY24 was our new Financial Dashboards that were developed in Tableau.
- We continue to offer the bi-weekly REX User Group meetings to support our broader Community of Practice in Analytics and are excited to help them transition to HelioCampus and Tableau.
- During the Digital Strategy time period we launched the new [analytics web site](#) and have deployed four new HelioCampus playbooks that provide data science tools to support enrollment and retention.

Yet To Be Done

- Due to the volume of data we have in REX, we were delayed in converting all our data over from REX to our implementation of HelioCampus. That effort should

complete in calendar year 2024 and we will then focus on converting reports to Tableau.

Create and support digital innovation in the curriculum and pedagogy across all modalities

- During FY24, a major effort was completing the migration of the College of Arts, Humanities, and Social Sciences to Ultra. With that complete, we expect to have the other colleges converted to Ultra at the end of calendar year 2024. This will greatly enhance our accessibility efforts and allow us to focus on one learning platform for training and support.
- For active learning, we replaced the infrared clicker environment with Poll Everywhere, and internet-based tool that integrates with Blackboard and seen significant new adoption across a variety of courses.
- We continued to promote Instructional Technology training and offered 57 training events, comprising 48 unique sessions, with a total attendance of 606 participants (335 unique individuals).
- In addition, over the FY22-FY24 time period UMBC has trained 18 faculty in Quality Matters and in FY24 had 19 certified courses.
- In FY24, collaborated with Dr. Karen Chen (IS) on her successful NSF Career proposal that will use Learning Analytics and submitted one NSF IUSE Teaching and Learning Proposal utilizing spaced practice that was approved for funding, but unfortunately wasn't able to be funded due to budget cuts at the NSF. This proposal was reworked and resubmitted in early FY25.

Yet To Be Done

- The work in learning outcomes was challenging due to the fact that the two versions of Blackboard in use during the period handle learning outcomes the same way. As such, we couldn't easily support a consistent infrastructure for the creation, collection, and reporting of learning outcomes as we had hoped. With the move of all courses to Ultra, some advances in what Anthology provides in Ultra, and some work done by Instructional Technology to use our analytics infrastructure for reporting we believe we are positioned to now move forward on this.
- Implementation of the new Accessibility regulations issued in April 2024. Our Accessibility team has done excellent work over the years in training faculty on best practices. In addition, with our Ally tool in Ultra we can assess how well each department and college is doing in terms of accessibility; however, the lack of defined requirements has hindered progress. Now with defined requirements

issued, we believe we have a plan to support our faculty as we work to bring all courses up to the required standard of WCAG 2.1.

Personalize and enhance the student experience

- In FY24, there was a special effort made to mobile enable the student experience. We have created a [web site](#) explaining all the mobile applications we recommend to students. In addition, we updated and enhanced many of the PeopleSoft Student Administration functions with responsive versions developed in myUMBC or through a 3rd-party vendor we use.
- Another effort in FY24 was the effort to improve student self-service. This resulted in a project to reimagine how students discovered our comprehensive list of FAQs by creating a new searchable interface for [help](#).
- We launched an external review of our [Micro-Credentialing practices](#) in spring 2023 and shared that report with leaders on campus in FY24. We expect that this will begin being implemented in FY25.

Yet To Be Done

- While much of the forward facing parts of myUMBC were updated, there are some additional components in our groups and posts that will be addressed in FY25.
- Another change coming is to better integrate how the myUMBC search and Help system search work. We envision a generative AI based solution that will be much better at answering more complex questions in a personalized way based on information we know about the student asking the question.
- Finally, while we hoped to begin launching a Comprehensive Learner Record (CLR) by the end of FY24. We expect that this project will begin to be discussed as we have discussions on the next campus strategic plan.

Expand access to digital innovation in research and creative achievement

- Working with the Vice President of Research, UMBC launched a Research Computing Task Force that produced its recommendations that were approved by the UMBC Research Council at their February meeting. This effort has led to significant new investments of almost two million dollars in research computing.
- As part of the Research Task Force, UMBC successfully wrote and received an NSF grant for additional storage space under the NSF CC*Storage program. This $500,000 grant is part of the two million in new investment.
- The Research Computing task force approved a new three year [cyber infrastructure plan](#) that will run from FY24 to FY26 and will drive our work.
- Recognizing that research security and compliance is increasing, DoIT is collaborating with the VPR Office on a grant proposal they wrote that will provide

a dedicated cyber security position dedicated to research data compliance and security.

- We have ordered the equipment and started our search for filling two vacancies but much of the work in FY25 is getting this operational.

Enhance digital skills and training

- As noted earlier, Instructional Technology has done an excellent job in working with faculty, reaching 335 unique people. Likewise the work that they have done with the Learning Analytics Community of Practice is an example we can learn from.
- During the three year period of the Digital Strategy, we had over 150 students earn the Digital Generalist micro-credential by taking a practicum through Career Services.
- During FY24, we identified some critical areas that need to be emphasized in a training program, this include:
    - Cybersecurity training for everyone that is aligned with their role and needs;
    - Training in accessing and interacting with data in our new Tableau environment.
    - Research computing tools and techniques needed at UMBC.
    - Accessibility training for instructors and those responsible for web sites that will explain accessibility requirements and show them how to create accessible digital content.

Yet To Be Done

- This is an area that is critically lacking that we need to address in our next iteration of the Digital Strategy. While technology continues to change quickly, the lack of comprehensive training for the campus undermines our efforts to fully utilize the technology we deploy.