

Data Management Committee

Annual Report for FY24

Background

The Data Management Committee (DMC) was reactivated after a number of years of inactivity and began meeting on February 14, 2022. This report summarizes activity since that date. In general, the committee meets virtually on the 2nd monday of each month from 12:30 to 1:45 pm

Co-Chairs:

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Committee Roster:

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Organizing Principles

As the committee was reestablished, our first effort was highlighting our charge and role in the institution.

Committee Charge:

The Data Management Committee (DMC) is responsible for the following two activities:

1. Define policies, procedures, and processes that will ensure that UMBC effectively uses our data as a critical asset in achieving our institutional goals. As part of this effort, the DMC will oversee the data lifecycle from definition, creation, usage, management, retention, and deletion. The DMC represents the expertise of units that are responsible for data and works within our existing governance structure to bring forward recommendations for improvements.
2. To achieve #1, the DMC will develop programs for data definition, data literacy, training, reporting, visualization, and security.

In addition to these functions and areas of responsibility, the committee reaffirmed and documented our philosophy for the use and stewardship of data.

Philosophy for the Use and Stewardship of Data:

UMBC aspires to be a leading innovator in the use of data and information to transform higher education. We believe we have a duty to learn what can be known from our data and then to act upon it. We believe data is an institutional asset, and that transparency and access to it are required to meet our mission as a public institution. Our responsible stewardship will support the delivery of useful, meaningful, and actionable intelligence needed to deliver and assess our efforts to:

- provide a high quality education to our students and to promote their success;
- support path-breaking research to the benefit of society;
- conduct our operations efficiently and effectively and to maintain access and affordability; and,
- support our institutional equity goals.

Structure and Organization of the DMC:

The DMC established seven subcommittees that will take responsibility for many on-going activities to implement the plans identified by the DMC. These subcommittees are shown on the [Google Slides presentation](#). These include:

- a. Data Architecture and System Integration,

- b. Data Catalog,
- c. Security & Privacy of Systems & Data,
- d. Data Warehouse & Reporting Support,
- e. Data Quality Assurance,
- f. Training & Community Engagement, and
- g. Strategic Communications & Reporting.

FY24 Initiatives and Activities

The committee reviewed, commented on, and participated in the following activities and initiatives during the past fiscal year.

A. Completing the HelioCampus Implementation in 2024.

While we made substantial progress, we did not fully replace the original REX reporting environment, which we refer to as Classic REX, with REX 2.0. That said, DoIT and IRADS made significant progress towards this with HelioCampus. The following was accomplished:

- The process for extending the data model in HelioCampus is working and a large amount of Classic REX data is now in the REX 2.0 environment;
- The process for extending the Tableau environment is working and we have made significant progress on 190 reports; and
- The process for loading our Census data tables used for most reporting is underway and is presently 75% complete.
- To reduce the cost of maintaining Classic REX, in FY24 we moved this back to run on UMBC's local VM infrastructure instead of AWS. This saved about \$100k in AWS charges per year.

On a positive note, the new REX 2.0 Finance Reporting system launched for the campus on October 1, 2023 and has approximately 280 users accessing the new system.

HelioCampus and the UMBC Analytics team created new data science models for accessing individual student risk models for retention and graduation in six years. These models have been put into production by the Academic Success group in UAA.

B. Monitor and review the training and data management requirements associated with the privacy legislation.

This project, based on Maryland legislation passed in the spring 2020, has progressed much slower than anticipated when this activity was identified in June 2023. That said, a small team of staff within DoIT has been working with the campus towards development of the required privacy web site, privacy.umbc.edu. The legislation requires this to be online by October 1, 2024 and we expect to meet the minimum requirements while we implement a more robust Privacy Program to meet current and future privacy requirements.

C. Develop a multi-year plan to implement a robust data catalog.

The Data Catalog subcommittee completed its review in the fall 2023 and suggested UMBC upgrade to the new SaaS version of Data Cookbook. This was delayed by the vendor and finally completed in May 2024. We have signed a consulting contract to get training and support on the new version. The Data Catalog subcommittee will develop the implementation plan and present this to DMC in the fall. This goal will be carried over into FY25.

D. Improve outreach & communication around the data products.

This was delayed partially by the fact that the conversion from Classic REX to REX 2.0 has taken longer than hoped for census reporting to be available. Once that is in place we can then leverage the Tableau environment to update the reports to be more visual. This goal will be carried over into FY25.

E. Continue to expand our campus community of practice in using analytics.

In terms of developing a community of practice in using analytics we had four webinars showcasing both innovative practices at UMBC as well as innovative practices at other universities. These webinars will continue.

One area that the Training and Outreach group identified as a critical need was Tableau training for end-users and managers. The subcommittee launched a campus-wide survey that identified the need for training. Due to changes in training options with the purchase of Tableau by Salesforce, we have been on hold while Salesforce deploys new Tableau training programs. The subcommittee has ideas for The DMC discussed the plan and we agreed to launch a training program in the fall that will be a mix of asynchronous online with weekly community gatherings to share information and get support.

DMC Plans for FY25

FY25 is primarily a continuation of the work that was started in FY24. Many of these activities identified are multi-year efforts; however, there is always new or additional work that must be done each year and FY25 is no different.

A. Completing the HelioCampus Implementation in 2025.

While Classic REX continues to run in our current enterprise environment, FY25 will see the start of a multi-year effort to modernize our enterprise systems running HR, Finance, and SIS. In the case of HR and Finance, UMBC expects to follow the state lead and move to Workday. With no vendor support for Classic REX, this won't be able to continue once we go to new enterprise systems. HelioCampus does support Workday and I have verified that we could move to WorkDay and keep HelioCampus. As such, completing the cutover from Classic REX to REX 2.0 in calendar year 2025 is very important for our administrative modernization efforts.

The key tasks being focused on are the following:

- a. Complete the loading of Classic REX Data collected outside of the enterprise systems into REX 2.0 and extend the data model and Tableau tables.
- b. Complete the development of the remaining foundational reports once data is loaded. The DMC subcommittee on Data Warehouse & Reporting Support will oversee the prioritization of new Tableau reports.
- c. Launch additional training for Tableau for both end-users and non-IT developers working outside of DoIT and IRADS. The DMC Training & Community Engagement subcommittee will develop a plan for Tableau training and highlight successful uses of data to advance UMBC.
- d. Complete the loading of data from Quali to provide additional pre-award data for reporting on grants.
- e. Expand the financial reporting tool to add grant-based reports.

B. Monitor and review the training and data management requirements associated with the privacy legislation and new Cybersecurity requirements for administrative data..

- a. The privacy web site will launch by October 1, 2024 as required by the law. However, as we modernize our systems and implement the requirements of the legislation into our procurement processes we will need to have a plan for a multi-year implementation of a privacy program that continues to evolve data management practices. This effort will be assigned to the Security & Privacy of Systems & Data subcommittee.
- b. Likewise, the new FAFSA that utilizes IRS data to simplify the FAFSA for families requires that UMBC ultimately meet the Controlled Unclassified Information (CUI) security requirements. CISO Stacy Cahill is working on security controls and plans to map our controls across a variety of regulations. The Security & Privacy of Systems & Data subcommittee will work through these requirements and present updated controls to the DMC for data protection.

C. Develop a multi-year plan to implement a robust data catalog.

- a. With the upgraded SaaS offering from Data Cookbook, the Data Catalog Subcommittee will lead the review and planning for the use of the consulting dollars for implementing the product.
- b. This is a long-term effort and the new version of Data Cookbook provides a number of new capabilities that the subcommittee will review as part of the implementation.

D. Improve outreach & communication around the data products.

- a. The key opportunities to advance this will likely come in FY26 as we have census data loaded into the system and can launch Tableau-based visualizations for Middle States, Academic Program Review, and strategic planning.
- b. In FY25, DoIT will work with HelioCampus to launch their Learning Insights tool for learning analytics. Instructional Technology will take the lead on this product and work closely with the Training and Community Outreach subcommittee.

Doing this will lessen the reliance on classic REX as we continue to support faculty pedagogical innovation.

- c. As we complete the searches for a number of senior leadership positions the DMC will work more closely with these senior leaders to develop data products they can use to support management and strategic initiatives.
- E. Continue to expand our campus community of practice in using analytics.**
- a. As noted above, developing training materials that faculty and staff can use to learn our data will be part of the goal. This will be much easier to do once Census data is loaded into both the data model and Tableau environment. Since Census data doesn't change for prior years we can demonstrate reports that users can replicate as part of their training
 - b. The Provost Office and DoIT will continue offering the Learning Analytics mini-grants to faculty and staff interested in using data to evaluate teaching practices.

Finally, we expect that as the subcommittees get underway, there will be additional items identified as high priority for implementation in FY25.