Mott MacDonald Improves Organizational Access to Content, Saving Hundreds of Thousands of Dollars

Components Center Provides a Single Source of Truth

Driving Adoption of a Global Component Library

As a global engineering, management, and development consulting firm, Mott MacDonald works with its clients in over 150 countries to find sustainable solutions to the world’s most complex projects across the infrastructure industry. Recently, the organization decided to drive adoption of a global component library, which will serve 16,000 users across the globe. Mott MacDonald’s Andy Barnes, standard content service manager, led this adoption after being a BIM coordinator at Mott MacDonald in their Water division until late 2018.

One of the biggest challenges on this project was enabling each user to have access to a library of standardized and reusable content. Many projects at Mott MacDonald had been duplicating work by recreating the same components either because they could not find it or because they were unaware that it existed. There was no centralized library for all disciplines and projects that was readily accessible to all Mott MacDonald users.

Integrating with Bentley’s MicroStation® and Open Applications

Another benefit of Components Center was that both the browser portal, used to view and access content, and plug-ins within the design applications were lightweight but supported a flexible workflow. Its optional support for integrating with ProjectWise was also a determining factor, given Mott MacDonald’s reliance on ProjectWise across its organization for managing, sharing, and distributing project content.

Components Center also supported a tight integration with the Bentley design applications, such as MicroStation, OpenRoads™, OpenPlant™, OpenBuildings™, and other open applications. The application also supports Revit, Civil3D, and AutoCAD. Therefore, Barnes and his team chose to implement Components Center and institutionalize it across the organization.

“Just because you build a centralized digital component library doesn’t guarantee that your users will adopt it, so ease of use and reliable accessibility were key considerations in our choice of a digital component management system,” said Barnes. “We’ll be measuring adoption levels among our users and aspire, at least initially, for 30% adoption on a regular basis.”
Continuing to Gather Content Across the Organization

Now, Barnes and his team are institutionalizing Mott MacDonald’s adoption of Components Center service. Barnes estimates that if the organization could save the 1,300 Revit users 15 minutes each day at an average salary of GBP 50 per hour, Mott MacDonald would save hundreds of thousands of dollars a month by avoiding wasted time. This significant time savings would come from users easily finding the right content and preventing them from spending time recreating already-existing content.

When Components Center went live in July 2019, Mott MacDonald’s digital component library included 2D annotation families and assemblies, as well as 3D components. The initial library consisted of 1,500 digital components; however, Mott MacDonald is currently gathering content from other groups across the organization.

Once the digital components for Mott MacDonald’s BIM applications are added to the library, the organization will also use Components Center to manage its 2D AutoCAD blocks and MicroStation cells. The staged implementation plans will slowly grow the number of users across the organization, with all users anticipated to have adopted Components Center globally by end of 2020. In the future, Mott MacDonald is anticipating integrating the service into its other enterprise systems and platforms so that users have a single point of access for the critical resources and information that they need to continue delivering successful projects faster and more efficiently.