Microsoft Power Platform and Fabric Digital Transformation

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Analytica, an SBA Certified 8a small business, is leading the design, development, and operations and maintenance of the Microsoft Digital Transformation suite of tools and applications—including Office 365, SharePoint Online, Microsoft Power Platform (Microsoft Power Automate, Microsoft Power Apps, Power BI, Power Query, Virtual Agents, Microsoft AI Builder, and Dataverse—for the Department of Education (ED), Office of Inspector General (OIG). We are developing an intuitive and high-functioning suite of Microsoft digital services following ED's MS Office 365 modernization strategy. Working with OIG, Analytica migrated legacy high-priority applications and data to the MS 365 cloud environment. We designed and architected the environment to support client objectives and timelines and improve the usability, accessibility, information discovery, and analytical value of the digital tools. We provide continuous monitoring and testing of tools, end-user training, and support, and maintain operator's manuals for government and end users after deploying new functionality. Leveraging the Digital Services Playbook, we iterated with the client product owner and stakeholders using a human-centered design (HCD) and Agile Scrum methods to build a set of high-quality digital products.

The Challenge

ED OIG moved to the Office 365 cloud in 2018 but had not effectively leveraged the environment for digital services collaboration, knowledge management, or for better reporting and analytics. Their digital tools were burdened by the legacy environment and not designed for the end user's needs. Email became the primary method of collaboration and analytics and reports were largely built and managed on users' local applications and desktops. Further, the design of the existing applications was not intuitive and did not enable users to find needed information, reducing use and increasing complaints and issues. This impacted an ED user base of more than 250 active users across all user personas, including Information Managers, Support Seekers, and Support Services Teams, and compromised the effectiveness of ED OIG's program and program initiatives.

Our Approach

Analytica designed and implemented a flat site structure using SharePoint Online Hub Sites infrastructure to associate each component site together as one intranet. Our solution avoided permission inheritance issues that previously required additional configuration management and security compliance concerns for the client. This approach takes full advantage of the capabilities of Microsoft 365 creating a scalable, robust, and easily managed intranet environment.

Analytica developed an application landing site and new workflows, created master page customizations, and developed new applications, integrating data flows with Power BI, and designing new sites based on ED requirements and needs. Along with these services, we developed and delivered training sessions and learning materials to the user community, improving capacity building,

knowledge management, and analytics capabilities. This project involved integrating Power BI, Power Query, and Office 365 tools to drive the "best in class" use of data and information across ED OIG. By providing a more usable application, we produced better data and analytics enabling our client to identify risks sooner and make more informed data-driven decisions. Our team has proven the ability to deliver a mission-critical modernization of Microsoft Products within ED's environment while maintaining legacy applications and providing O&M support.

Our project directly resolves business inefficiencies and end-user disengagement by building tools that assist ED users to find the right information to make better data-driven decisions and complete daily tasks. For example, an Analytica-developed financial application modernized a key Procurement and Budget system leveraging the Power Platform to integrate the functionality of multiple legacy systems. The solution provides a unified experience for users to manage their budget lines and expense requests and has introduced automated practices helping to increase the efficiency of ED OIG's daily business tasks. ED OIG can now host data and submit forms within one, streamlined application. Our work improved business productivity, collaboration, and data-driven decision-making for ED analysts and a user community of more than 250 active users.

The Solution

Analytica's solution includes:

- Applying Human Centered Design and the U.S. Digital Services Playbook for development of key business process automation and tracking tools. The platform User Interface (UI) and User experience (UX) are consistently applied improving overall experience decreasing new features development time by approximately 40%.

- Performing digital transformation of legacy SharePoint environment through migration to Microsoft 365 cloud environment and UI/UX redesign. The environment was successfully migrated with no loss of data or downtime experienced for end users. The updated UI for the critical communication and information management portal received high praise and increased usage by end users.

- Transforming OIG information collection forms into automated digital tools to reduce redundancies and data collection errors. The redeveloped forms as web applications have decreased the burden on end users through automated information completion and eliminated previous data collection errors.

- Creating document review and approval workflow and tracking tools to increase efficiency and provide visibility on the progress of critical policy communications. Analytica developed an automated application creating a collaborative and secure environment tracking these critical documents through approvals. Automated notifications, user dashboards, and business intelligence reports have increased the number of items completed by approximately 35%.

- Developing a digital service application to connect procurement requests with budget management processes. We transformed operations and increased the efficiency of a process that previously relied on emails and in-person meetings to balance budget lines with purchase activities in two separate systems. The time to completion of request processing significantly decreased.

- Establishing a standard process to solicit requests for, validate requirements of, and develop digital service tools needed to accomplish mission-critical tasks. Our team provided training and support in human-centered design practices along with request and requirement templates to gather all use cases and technical specifications for digital tools. These practices have accelerated ED OIG's adoption of new technology and allowed for the development of approximately four new applications to provide digital services each year.