



The TCDRS Story: Digital Transformation

TCDRS has been focused on delivering services in a more digital, efficient and secure environment. Over the past few years, we've worked to modernize our systems and processes — not just to keep up with technology, but to better meet the evolving needs of our members and employers.

One of our most significant shifts has been implementing automated workflows and straight-through processing when coded validations pass to improve security, efficiency, flexibility and empowerment. Today, members can make account changes and apply for benefits through our secure website or by calling our contact center.

Currently, about 70% of member transactions are completed online using best-in-class authentication techniques to ensure transactions remain secure, with another 30% handled through the contact center. Members can log into the secure website to complete benefit applications and manage account changes using best-practice authentication technology. A technical application process has also been built for the contact center to complete the same processes. Technology has created consistent design patterns to leverage website and Pega integrations, user experiences and standard design patterns.

When a signature is required, we send members a Docusign via email. If further verification is needed to complete a request, members are prompted to upload documentation via a secure URL provided during their interaction. Automated work prioritization associates the documentation with the application case, which then proceeds to the next step in the process.

The member digital transformation initiative will finalize this year with an overall project duration of approximately three years. Advanced capabilities implemented include:

- **Enhanced Digital Access:** Expanded member tools, including an ability to apply for retirement and survivor benefits, initiate account balance withdrawals, manage representatives, and complete account and contact information updates to improve convenience and reduce processing time.
- **Enhanced Security & Authentication:** Updated our risk-based authentication to use best-in-class authentication tools that promote risk-based friction policies, MFA and passkey technology for stronger, user-friendly protection.
- **Digital Communications:** Automatically generate communications to members based on workflow steps that provide relevant status about an application or account update.
- **Automated Document Processing:** Transitioned annual communications (e.g., 1099s and annual statements) to a digital-first model for greater access and responsiveness.

- **Future-Ready Technology:** Launched a new mobile app that provides passkey authentication and an additional digital channel for our members to manage their accounts.
- **Advanced Security Infrastructure:** Implemented zero-trust network segmentation, real-time penetration scanning, privileged access management and encrypted file transfer services. The infrastructure security team completes a Gartner security assessment every three years and applies results with internal expertise to build our security roadmap.

By transitioning to digital transactions through technology innovation, we have been able to significantly automate processing and communications.

- Nearly 80% of our transactions are automatically processed with no human touch. Automated validations and business rules will trigger exceptions that require business review through our implemented Get Next Work technology that applies best next action to determine routing and workflow requirements.
- Over 5,000 digital communications are sent weekly including confirmations, updates and notifications. Automated mass communications are also sent to members leveraging established customer journeys and educational emails.
- Our average lump-sum payment turnaround is about four days from request to completion, even when external input or exceptions are needed. Payments with exceptions or security alerts are automatically sent to analyst work queues for review.

Technology Stack

TCDRS has modern architecture designed to be scalable, maintainable and flexible. TCDRS uses the following platforms:

- Pegasystems is our pension administration platform, which orchestrates business processes, workflows, system integrations and business rules. The case management framework provides a holistic, responsive approach to automating work.
 - Pega programmed cases use business rules to generate exceptions, promote auto processing when validations pass, automate work routing and apply programmed service levels to drive follow-up and performance.
- IBM's FileNet is used for electronic document storage.
- Business data is stored in a SQL enterprise database that is encrypted at rest and in transit with personal identifiable information masked or scrambled based on environment.

- Our custom website uses Optimizely, an on-prem solution for content management with custom code leveraging a .Net and .Net Core framework.
- Multi-channel personalized communications are managed through a software solution, SmartComm. Mass communications are managed through Salesforce Marketing Cloud.
- Authentication services are handled via LexisNexis tools and multi-factor authentication through Okta.
- Reporting is performed through SQL Server Reporting Services.
- An enterprise BI solution has recently been implemented using the Microsoft Power BI stack.

New Major Initiative: Employer Services Optimization

Our technology team is launching a large initiative to modernize service delivery and user experience for our employer customer segment. The initiative includes building a new website portal for employers leveraging .Net Core, SQL database, new integration technologies and an upgraded version of Optimizely content management system. The website technical effort includes building a modernized look and feel, personalized dashboards, guided workflows and onboarding, editable submissions and validation handling, and improved security and contact management.

The employer modernization effort also includes implementing a new Customer Relationship Management system using our Pega platform for improved interaction and process tracking, integrations and orchestrations, workflow management, and processing efficiency.