Claimant Portal

Internet Unemployment System | iUS

2016 NASCIO State IT Recognition Award Nomination

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IDAHO DEPARTMENT OF LABOR

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Executive Summary

Idaho Department of Labor (IDOL) is the state agency accountable for managing the unemployment insurance program for distribution of benefits to unemployed customers.

One of IDOL's fundamental requirements is to provide our customers with a way to file an unemployment benefits claim and a weekly certification for a benefit payment.

Since 2002, unemployment customers used a software application that was unstable, not secure and inefficient. Due to frequent application failures and inadequate security protocols, the system was closely monitored and required constant developer attention.

Thwarted by losing connection to the system at inopportune times, customers were often forced to restart the claim filing process. IDOL staff had to perform manual workarounds such as review and upload claims and file certifications on customers' behalf. These time-intensive workarounds delayed benefit payments for multiple weeks.

Moreover, the system provided only minimal account details to customers, which left staff to perform the vast majority of account transactions in place of customers and meant increased call volume from customers who required staff interaction.

Idaho's solution was to modernize its technology by replacing the obsolete system with a newly built unemployment benefits software application totally developed and maintained by IDOL. Use of agile software development methodology, domain-driven design, and new technologies facilitated an eight-month project lifecycle that culminated in the Claimant Portal deployment on Nov. 12, 2015. Claimant Portal is stable, secure and efficiently maintainable through use of new technologies such as a modern programming language, an industry-standard framework, and web services between dependencies.

As a self-service application, Claimant Portal was designed to provide each customer on-demand access to all aspects of his or her unemployment benefits account, such as the unemployment benefit monetary eligibility projection, claim status, and certification payment details. Each customer can set a tax-withholding status and payment preference, manage work history, file an unemployment claim, and file a certification for a benefit payment, all without support from staff.

Having successfully completed its first six months in production, Claimant Portal now boasts 47,000 registered users who have filed more than 46,000 unemployment benefit claims and more than 286,000 weekly certifications for benefit payments.

Claim filing once took 3.4 days on average, with repeated interruption from application failures followed by staff review. Claim filing in Claimant Portal is a smooth 12-minute process on a system that works successfully, as expected, without interruption.

Previously, 85% of claims required staff to complete the upload process. With Claimant Portal, less than 2% of claims require staff intervention.

Claimant Portal has transformed the way customers interact with IDOL online and simultaneously alleviated a hefty workload from staff across the Unemployment Division.

Concept

As the government agency who manages the unemployment insurance benefits program for the state, Idaho Department of Labor (IDOL) is responsible for providing a working system for customers to file unemployment benefit claims and weekly certifications for benefit payments. Yet, the system customers previously used was unreliable and inadequate. Due to the limitations of obsolete technology, customers, IDOL staff and developers were obstructed by the system on a daily basis.

The plethora of impediments due to old technology compounded each other. The system was programmed in a non-object-oriented language and was architecturally fragile. With poor performance and a myriad of redundant code, the outdated system was not only difficult to update but costly to maintain. The months-long bug-fix cycle often resulted in broken code in unrelated areas, a cause and effect that replicated relentlessly.

Reliance on security through obscurity left a number of vulnerabilities in the system. A homegrown user authentication method coupled with a single authorization level resulted in poor information security and no feature lockdown mechanism. All staff had access to all features, instead of limiting each user to the features required by one's job.

Use of non-standard session states meant that a customer's connection often timed out during the lengthy claim filing process. This, compounded with the system's inability to save a claim's progress midway through, left each customer exasperated as the connection failed, the data got lost, and the claim was restarted. A one-hour process ended up a two-hour process or more. Most claims filed were error prone and required staff to review and re-key them prior to completion. This delayed each claim's processing from an average 3.4 days up to 21 days. It also meant that a customer could not file for weekly benefit payments while the claim was being reviewed. Only upon a customer's request and manager's approval, did staff hand-key weeks that had been unpaid due to the delay. Both processes were time consuming for staff and frustrating for customers.

Moreover, it was not a self-service system. With only two features and minimal account details available to customers, agency staff were left to perform the lion's share of account transactions in place of the customer. This even included simple tasks such as changing a payment preference or electing to have taxes withheld from payments.

Idaho's solution was to modernize its technology by replacing an obsolete system with a new software application specifically designed to address the business requirements of the Benefits Unit along with the technological requirements of both product development and IT security. Built completely in-house, IDOL remains wholly responsible for all aspects of Claimant Portal, its development, deployment and continued maintenance.

The project's lifecycle began in March 2015. At project initiation, the scope was outlined. The team followed Scrum, an agile software development methodology that enabled five software developers, one product owner, one technical writer, and several testers to build and test small portions of the system in each two-week sprint. This iterative process fostered better understanding and quicker completion.

Through domain-driven design, the team reached a better understanding of Claimant Portal's scope and its related pain points. The system was architected and coded more intuitively, which facilitated testing and resulted in more efficient coding practices. Use of onion architecture enabled dependency injection and loose coupling between application layers. A delayed database implementation increased the development velocity and unit tests prevented code regression and accelerated the bug-fix timetable.

The new application was written in C#, a modern programming language in which code can be easily reused. The result: a reliable code base that is simple to maintain. With C#, incorporating changes to federal and state law is a straightforward process. By leveraging ASP.Net MVC, the team attained a rapid and reliable development cycle. This industry-standard framework automatically handles the basic utilities of the application such as URL routing, view engine and session state. Web services implemented between dependencies allow enhancements to be deployed independently, without impact to interface applications.

To protect personally identifiable information and to ensure information security, Claimant Portal uses anti-forgery tokens, message-level encryption, integrated security testing, multiple user authentication, and identity verification through Idaho Transportation Department, Division of Motor Vehicles.

With all identified pain points resolved, the development team selected and coded an assortment of solutions that greatly enhanced Claimant Portal's user-friendliness. One such advancement automatically saves data after each step is completed in both the claim application and certification application. This prevents data loss while in an application and allows one to return to a partially completed application at a later time.

The eight-month project concluded with the Claimant Portal deployment on Nov. 12, 2015. With a projected cost of $750,000, IDOL completed the project on time and on budget. Claimant Portal is secure, stable and maintainable due in large part to the new technologies with which it was built. Its robust, clean architecture and simple implementation make it the ideal solution that accounted for all requirements delineated by the agency's Benefits Unit, product development, and IT security.

Communication with the Benefits Unit consisted of business requirements gathering, user acceptance testing, and training sessions to equip staff in Claimant Portal features.

Communication with unemployment benefits customers was imperative. A variety of customers attended a Claimant Portal demo at IDOL and provided valuable feedback. The agency used numerous media platforms to communicate: posts on the Idaho @ Work blog, direct-to-customer emails, and social media outreaches. For day one live, flyers and quick guides were placed at kiosk computer stations in local offices, while a series of user guides were published directly on the Claimant Portal website.

Since deployment, staff have continued to identify, triage, and prioritize work requests. The flexible development-test-release cycle has enabled frequent and seamless deployment of mission-critical improvements, even the same day a request is made. A single change can be released as easily as a group of changes. Releases occur with minimal customer interruption—only a few minutes of website downtime per release.

Significance

The project scope was to provide a self-service mechanism that unemployment customers could use to better interface with the Idaho Department of Labor (IDOL) online. The goal was to replace a technologically obsolete system with a secure, reliable unemployment benefits system that would do more than simply allow customers to file claims and file weekly certifications for benefit payments. The main objective was to place the burden of unemployment account management directly in the hands of the customers who need the temporary financial assistance.

While the main stakeholders and beneficiaries are customers who have earned wages in Idaho and become unemployed through no fault of their own, the entire Unemployment Division at IDOL also had a vested interest in the new software application due to the anticipated workload changes it would bring to multiple workgroups across Benefits and Tax. An ancillary objective was to provide a better medium by which agency staff could locate a more robust cross-section of customer data.

Claimant Portal is distinct: a prime example of a successful implementation through use of innovative technologies while maintaining a quick lifecycle for a project completed on time and on budget. IDOL conceptualized, built, tested and deployed it. A plan was created that contained measurable objectives. Business requirements were well-defined. An iterative agile approach to product development was used along with domain-driven design and onion architecture to facilitate an adaptable develop-test-release cycle. Adequate resources were kept available throughout the project. Communication was constant between the development team and agency stakeholders. Post-implementation, the team leaned on these factors to ensure quick turnaround of the most critical work.

Idaho was able to create an architecturally sound and completely functional self-service unemployment benefits system. Deployed with no significant problems, Idahoans easily adopted Claimant Portal seamlessly the first time they logged on.

The use of new technologies in Claimant Portal solved a litany of problems inherent in the old system for customers and staff, such as increased security, reduced impact to staff, and improved collection and display of unemployment benefits details.

The entire Unemployment Division across workgroups in Benefits and Tax have experienced increased efficiency and effectiveness in work performance. Copious slow processes have been eliminated: staff no longer review and process halted claim queues and no longer hand-key back-dated weekly certifications on delayed claims. Cross-referencing details from many screens has been simplified to one or two simple screens. A wide range of issues on claims are identified and investigated much earlier in the claim process, ensuring those who are eligible for benefits are paid more quickly.

Idaho is one of only a dozen or so states across the nation that has developed and successfully launched an online benefits system that is in use today. Many other states have spent millions of dollars over multiple years on similar projects that eventually were scrapped. By putting information in the hands of end-users, they can be responsible for their own unemployment accounts in a manner they have not had until now.

Idaho's gubernatorial priority to promote responsible government is important to the way IDOL runs as a state agency. Claimant Portal has promoted fiscal responsibility by not only staying on budget and on time, but also providing a quantifiable benefit to constituents who would otherwise suffer financially during periods of unemployment. Claimant Portal has facilitated transparency in government by giving customers instant access to all of their unemployment account data.

As the unemployment fund fluctuates along with the national economy and as fast-paced technology-trends shift, it is imperative that state government agencies function as secure and lean as possible. Systematic modernization of outdated software applications is vital to this goal. With this perpetual improvement, IDOL continues to shape itself as an increasingly effective and secure government agency.

Impact

Claimant Portal represents another step taken on the road of technological modernization occurring at Idaho Department of Labor (IDOL). The agency has proven that with proper planning, use of new technologies and agile processes, state government can minimize the cost and complexity of modernization and attain a more secure and leaner state government. Gone are the days when an unemployment customer was stymied by the repeated failures of an obsolete system. With a secure, responsive software application at their fingertips 24-7, customers now step through the unemployment benefits process with ease.

After its first six months of use by satisfied Idahoans, Claimant Portal boasts more than 47,000 registered users. During that same time, customers filed more than 46,000 unemployment benefit claims and 286,000 weekly certifications for benefit payments.

Designed to supply real-time updates on unemployment benefits account screens, Claimant Portal has empowered customers to take action independently, without staff assistance. Some of the account features include an unemployment benefit monetary eligibility projection, Idaho wages and work history management, claim details and monetary status, weekly certification details and payment status, issues pended that could prevent payment, and overpayment balances. Furthermore, each customer can change a payment preference, set a tax withholding status, file an unemployment claim, file a weekly certification for a benefit payment, view annual 1099-Gs, view the current work search status, and see work search contacts by week, all without support from staff.

With such an abundance of online resources available on Claimant Portal, fewer unemployment customers are calling IDOL. There was a 4.7% decrease in benefits-related calls answered in the first quarter of 2016 compared with the same quarter of 2015.

Claimant Portal has streamlined workflows for increased efficiency throughout the Unemployment Division's Benefits and Tax groups, product development and IT security. It has assisted in the effort to centralize many front-line Benefits staff by providing a more manageable daily workload for 54% fewer staff.

Once, claim filing averaged 3.4 days from the customer's start to staff's upload. Yet in Claimant Portal, claim filing averages 12 minutes without interruption, and weekly certification filing averages 13 minutes from start to finish. This saves time and mitigates frustration of customers, while it reduces staff workload by 2,500 hours each month.

The abundance of details now gathered on claims and weekly certifications assists in earlier identification of many eligibility issues up front. Issues are then addressed promptly to ensure eligible unemployment customers receive benefits more quickly and those not eligible are better prevented from receiving improper payments.

As of quarter one in 2016, Idaho is ranked number one nationally for first payments. This means that of all 50 states, Idaho makes the quickest benefit payments associated with the first compensable week on new unemployment claims.

Claimant Portal was architected to ensure simple, swift implementation of federal and state unemployment program changes. The department is already compliant with new rules that were recently ratified by Idaho state legislature. These unemployment program changes were quickly and easily incorporated into Claimant Portal.

Data mining for quality control audits and benefit overpayment investigations is simplified with the abundance of unemployment-benefits-related data now available.

Before Claimant Portal went live, 85% of claims were staff-assisted claims. Now, less than 2% are staff-assisted claims, a majority of which are for limited English proficient customers who speak Spanish. To address this, the agency embarked on a project to translate Claimant Portal into Spanish, making online unemployment benefits services readily available to the limited English proficient, a growing population in Idaho. This translation effort means compliance with federal requirements in the Workforce Innovation and Opportunity Act (WIOA). WIOA requires state governments to provide services in other languages, with written notice given to those who require translation assistance.

Claimant Portal has provided the opportunity to create another new application: Reemployment Services and Eligibility Assessment (RESEA). RESEA automatically schedules in-person interviews for customers who have military wages in their work history, or who are more likely to exhaust benefits. The in-person interview provides each customer with personalized employment services from a reemployment specialist.

IDOL presented Claimant Portal to the Idaho governor's Legislative Services Office and Idaho Department of Finance, who collectively gave the new system glowing reviews.

The positive impact of Claimant Portal is far-reaching. It is not limited to IDOL nor to the 1.6 million Idahoans who could one day be unemployed. The positive impact extends nationwide to other states similarly hindered by old technology. Claimant Portal is an example of a simply constructed, easily managed system. Idaho is in a consortium with two states, both of whom intend to adopt Claimant Portal for their unemployment needs.

By reengineering how Idaho does unemployment benefits, Claimant Portal has revolutionized the way customers connect with the Idaho Department of Labor online.