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Final Copy of Case Study

Year:
2013

Status:
Laureate

Organization Name:
Pennsylvania Justice Network

Organization URL:
www.pajnet.state.pa.us

Project Name:
JNET Federated Background Check

Please select the category in which you are submitting your entry.
Collaboration

Please provide an overview of the nominated project. Describe the problem it was intended to solve, the technology or approach used, how it was innovative and any technical or other challenges that had to be overcome for successful implementation and adoption. (In 300 words or less.)

The Pennsylvania Justice Network (JNET) is an integrated portal that provides authorized users with access to public safety and criminal justice information from federal, state and local sources. Over 39,000 municipal, county, state and federal justice professionals use JNET to conduct secure investigations and background checks in a web-based environment. The JNET Federated Background Check allows users to quickly and securely conduct comprehensive investigations using numerous data sources owned by various commonwealth agencies through a single unified search. By reducing redundant search efforts, this new approach saves time, reduces errors and alleviates frustration caused by making multiple inquiries and sorting through disparate search results. The

JNET Background Check application uses web service technology to combine information from PSP CLEAN, NCIC, court and domestic warrants, and out-of-state driving records. JNET users can get information on job candidates, new hires, CLEAN certification and criminal offenders without having to make multiple inquiries into each application. The application automatically searches PSP CLEAN Master Name Index, Rap Sheet, Protection Order, NCIC out-of-state History Index, out-of-state Rap Sheets, Gang Membership, Driving Records, AOPC Warrants and Domestic Relations Warrants. One inquiry yields results from up to eleven databases across three state agencies, nine state departments of motor vehicles, and criminal records and warrants from all 50 states. This type of information sharing is an example of what can be accomplished when agencies collaborate to share resources, while affording agencies the ability to maintain control of their data.

When was this project implemented or last updated? (Please specify month and year.) Has it incorporated new technologies and/or other innovations since its initial deployment? (In 300 words or less.)

JNET deployed the Federated Background Check to production in July 2012. This application was developed utilizing JNET web services technology on the back end of the application. This technology allows for reuse of existing services and provides efficiencies between JNET and contributing systems.

Is implementation of the project complete? If no, please describe the project's phases and which phase the project is now in. (In 300 words or less.)

This is a new project that was completed and deployed to production in July 2012.

Please provide at least one example of how the technology project has benefited a specific individual or organization. Feel free to include personal quotes from individuals who have directly benefited from the work. (In 300 words or less.)

Using the Federated Background Check application, criminal justice practitioners have dramatically decreased the investigative time required for checking both the backgrounds of perspective employees as well as subjects during criminal investigations. Within days of deploying the JNET Federated Background Check, JNET received the following feedback from criminal justice practitioners: Dan Hazelett, Director of the Pennsylvania Board of Probation and Parole 24/7 Unit: "The JNET Federated Background Check is a great tool for our agents. Instead of running 10 or more transactions, we can run one query to get a full picture of an offender's criminal history and warrant status. Not only are our agents more

efficient, they are safer." Kayleen Longstreet of the Montgomery County District Attorney's Office is responsible for authorizing JNET criminal history access in her county. Kayleen uses the JNET Federated Background Check to expedite staff clearances prior to providing access to sensitive resources both within and outside of JNET. "The JNET Federated Background Check allows me to quickly and easily vet employees' backgrounds that will have access to critical criminal databases. Before the JNET Federated Background Check, it was tedious and time-consuming to accurately administer access for users in the county." Alan Pelton, Allegheny County Adult Probation: "As the agency security officer I certainly appreciate the one-time search capabilities of the Background Check service. With 200-plus users this makes granting role requests a much quicker process. I also know that our pre-sentence investigators and field officers appreciate being able to gather multiple sources of information from just one search." The JNET Federated Background Check is easily accessible for use by any law enforcement, court, or correctional agencies within the commonwealth. The application is designed to provide pertinent information relevant to every function within the criminal justice paradigm.

Would this project be considered an innovation, a best practice or other notable advancement that could be adopted by or tailored for other organizations and uses? If yes, please describe that here. (In 300 words or less.)

The JNET Federated Background Check builds upon earlier JNET successes, such as the federated address, warrant, and photo searches. This effort relied heavily on the use of JNET's service-oriented architecture (SOA). This type of architecture allows for the reuse of business and support services. By removing data silos and enabling multiple queries to be completed through a single input, information is now accessible with increased user efficiency. With increased application services and a single search screen, the JNET user experience is now similar to that of a commercial search engine. All affected users and contributing agencies were involved from the very beginning of the project. Buy-in and ongoing support from an active governance structure helped JNET avoid delays with approvals, support and funding. Strong governance and thorough planning helped to assure the various agencies that contribute data that they would maintain the integrity of their systems and minimized systems impacts. JNET focused on building upon existing infrastructure to provide increased data availability. Because existing hardware and software were already in place, funding and procurement did not prove to be a barrier to implementation. This was truly a case where new services were deployed by capitalizing on existing investments. JNET recognizes the importance of national standards such as Extensible Markup Language (XML) and the National Information Exchange Model (NIEM) for development, as well as using SOA technologies based upon the Global Reference Architecture (GRA). Use of GRA services guarantees that

any XML and service development from this project can be leveraged for reuse in other business exchanges. The result is a product that addresses the business needs of JNET customers in a manner that allows for reuse, cost savings and interoperability through the use of nationally recognized justice standards.

If there are any other details that the judges should know about this project, please note them here. (In 300 words or less.)

The application is innovative in several categories. Each of the eleven underlying data sources used by the Federated Background Check application has its own legacy user interface and connection to a data source. However, the new service-based interface had to account for user inputs and the ability to transform those inputs into a format acceptable to the agency data owners' legacy standards. Additionally, JNET connected to a web service provided by a private integration partner to access information maintained in the Pennsylvania State Police criminal history repository. This is the first time JNET has interacted with a non-commonwealth, vendor-owned web service. This shows the importance of strong public-private partnerships in improving public safety. Furthermore, query results from a variety of different data sources had to be displayed in a common format for the user. Since some of the accessible data sources returned duplicate results, the JNET data aggregation service (a common component in previous federated searches) had to be modified to accept the increased number of services in order to logically aggregate and remove duplicate results. This project utilized a number of existing interface security, business rules, applications, and web services previously built by JNET. This reuse and ability to leverage existing investments provided tangible savings in the development of this application. In addition, users have realized a significant savings in time and resources as a result of using this application. The new service will produce an estimated $71,960 (in salary savings) annually. This savings will continue to grow as criminal justice practitioners become more familiar with the application and find additional business and use cases for the service.