NCCSD Systems/Data Workgroup Vendor Webinars – October 18, 25 and November 1

COVER PAGE for Answers by Vendors

Attached please find the answers provided by Conduent, who was invited by the Systems Workgroup of the National Council of Child Support Directors (NCCSD) to present educational webinars on two of the newest approaches to modernizing state child support systems.     These two topics are “replatforming/refactoring” and “low code/COTS”.   Note that some vendors are responding to both topics, and some are responding to only one.

IMPORTANT: Even though these are educational sessions, the vendors may be providing some proprietary information in their answers.   *Therefore by opening these documents you are agreeing to treat the information as confidential.*

Vendor Name: \_\_\_\_**Conduent** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Please enter your responses into this document, but feel free to send any other attachments as well.

Questions:

1. **Since there is not yet a consistent term or definition for this approach, please give your company's description, including your terminology and definitions. How is this approach different from a "custom" build of a child support system? If you choose to do a quick demo or screen shots that would be welcome.**

Our definition of “Low Code/COTS” is a software product that allows business processes and user interactions with the system to be built largely through configuration of the product. These COTS (Commercial Off the Shelf) products offer a wide range of functions and features that can be configured and customized with minimal code changes to deploy the system in an expedited manner. Commercial products that Conduent has used include Microsoft Dynamics, Salesforce, and Pega for case management, CRM, and sales systems. Open source products like Cardinality are also available and being used for low code case management systems.

COTS products typically offer the following built-in features:

* A secure platform with security functions to manage system users, authorizations, and data access management
* Case management functionality for entry of member information, demographics, address and social media information that can be edited, managed and maintained
* Tools to define user screens, workflows, and business rules
* Forms and notice design, generation and management
* Reporting, dashboards and analytics capabilities
* Integration points with external systems and software products
* Internal portals for workers, and frequently the ability to deploy external portals for clients and partners

On the other hand, a “custom” build of a child support system is usually accomplished through a set of products and custom programming to develop the system and integrate all of the components into a unified system. Separate products that provide the system’s security, screen development, business rules, workflow management, data storage, communication, document management, and reporting may be used, or they may be developed by programmers. In a Low Code/COTS system most of these components are already integrated into the system platform.

A custom build does allow an agency to take advantage of existing licenses for products that the agency owns. It also means that expertise to implement and support the products may be available from across the agency. It can allow the agency to select the “best of breed” technology to be built into the system offering the most feature rich products, or products with the most important features to be incorporated into the system.

Evaluating the state’s primary goals and objectives combined with technical and cost factors is an important first step in the decision making process. The following are critical factors to be evaluated by an agency for a Low Code/COTS system.

Technical Considerations:

* Evaluate the technology platform(s) the IT department currently uses or has plans to migrate to in the near future
* Does the technology align with the long term plan, skills and ability to support systems?
* Will the platform be able to handle the existing transaction volume within the platform, or will some of that processing need to be accomplished outside of the platform to meeting processing timeframes?
* What functionality will need to be developed by the agency on the platform? Can the existing platform tools accomplish the development or will custom programming be needed?
* What integration points are built into the tool to interact with other systems and data repositories?
* Does the platform have a strong user base or third party vendors that support it and provide additional features that can be easily incorporated into the platform?

Cost Implications:

* The feasibility and total cost (time and financial) to transition from legacy systems
* Ongoing operations and maintenance costs
* Costs related to being locked into a single vendor for product support, license costs and technical support could potentially become a risk
* Costs related to data migration can be significant due to technical skills required to handle the source data and complete the conversion to the target platformomplete the conversion to the s required to handle the source and target platforms in terms of ffer similar capabilities with m
* Costs associated with maintaining custom features, and who owns those modifications and the data associated with them

1. **With reference to the "core" functionality required by the OCSE Systems Certification Guide (Case Initiation, Locate, Establishment, Case Management, Enforcement, and Financial Management), how does this approach handle each area? In particular, since Child Support requires complicated financial processing, e.g. distribution rules and arrears calculations, please address how these are handled with this approach.**

COTS products typically offer case management functions, report generation tools and integration capabilities for document management, business process management (BPM), rules engine and data warehouse. The built-in widgets, tools and configurable screens allow development of many child support functions in a short amount of time. Building these components does require integration, definition of workflow, navigation and security.

In general, Conduent has found the COTS products will address core child support functions as follows:

* Case Initiation – prebuilt or customized screens allow and enable capturing person relation information, addresses, demographics and other information with minimum changes. Navigation and workflow integration can be done with the framework that offers several widgets and connectors.
* Locate - Screens and decision tables with embedded rules can be built quickly with the available platform tools. The locate interfaces can be assigned priorities that determine which data element can be updated first and storing multiple instances of the same. Creating a batch schematic to process the incoming and outgoing data is done by integrating the batch functions available within the product framework. Should the need to integrate other third part products arise, there are standards and protocols defined within the COTS product. Some custom code may be needed to support the full range of locate files processing and locate processes.
* Enforcement – Defining enforcement actions depending on the financial data of the case is achieved by building a set of screens and background processes that trigger the applicable enforcement actions. Some custom code may be needed to support the full range of processing.
* Establishment and Case Management functional areas require a series of screens supported by workflows and processes. The COTS products have built-in validation and error checking mechanisms that are configured.
* Financials – Most products offer a number of basic financial processes that can be incorporated into the child support financial processing to accept payments and make disbursements. However, a significant portion of child support Financial processes will need to be custom developed using the product’s custom coding language or external custom modules.
* Interfaces –COTS products offer a wide range of data files that support different layouts and data transmission protocols. External systems can be connected through configuration to allow data sharing across multiple agencies under stringent security controls and authentication methods.
* Security – Several features within the COTS framework provide various level of security for each category of data, access controls, administrative and protection against malware, data theft and data hacking. The ability to add layers of security with third party products and tightly integrate them with the COTS solution is an added advantage. With cloud based solutions, the security is continuously monitored and data backed up to prevent loss of information.

The need for customization efforts depends on the complexity of the business rules and requires a significant effort both in terms of design, development and testing which affect the project schedule and overall cost of implementation. Several COTS platforms offer the ability to integrate other commercial replacement products for platform components that provide workflow management, rules engine, analytics, content management and reporting.

1. **What COTS or other products are used in conjunction with this approach to give a State a fully functional system?**

The ability to seamlessly integrate BPM (Business Process Modeling), rules engine, document management solutions with a COTS product is a distinct feature and attractive option to implement functionality.

The following are a list of products that may be used with a COTS platform:

* Data warehouse tools and ad hoc reporting products
* Enterprise Content Management (imaging and document generation)
* System Interfaces that support common data sharing
* Cloud based services platform (Amazon Web Services or Microsoft Azure)
* Batch Schedulers
* Address Validation software or plug-ins

1. **Under what circumstances does it make the best sense for a State child support agency to consider this new approach versus other possible means of modernizing its child support system? Are there any characteristics of either a State’s IT system or its business processes that lend themselves more to this approach?**

States that decide to use a COTS product as the basis for their new system should conduct a value mapping exercise with the stakeholders, program and the State IT department. The short term and long term benefits combined with cost implications and product dependency must be evaluated to determine the value. In addition, key points for consideration include:

* Program level goals related to cost, maintenance and operations have been analyzed and estimated for use in evaluating a COTS platform approach
* Staff with relevant skills to support the platform are available in the agency or can be obtained from the market
* The agency has already selected the COTS platform for new systems. This can help ensure adequate resources are available to enhancement and manage the product. It can also help the agency achieve volume pricing on licensing
* The platform is well established with a history of support, a roadmap for improvements, a large pool of vendors that support and augment the platform
* Is there clear data ownership and access to it when working within an enterprise platform situation?
* The platform doesn’t conflict with the vision and strategy of the agency. For example, if the vision is to put everything into the State’s private cloud, don’t select a PaaS (Platform as a Service) product
* Existing systems are able to easily integrate with the new platform through APIs (Application Programming Interfaces)
* The ability to replace or augment core tools such as the BPM, rules engine, and other functions. This may be needed to handle the complexity of the CSE program, as well as performance requirements
* Some of the tools embedded in the platforms are better suited to straight forward processes. A large set of complex tasks or needs may be difficult to implement in them. This may require the processes to be implemented outside of the platform.
* A custom coding language supported by the platform that is flexible and easy to use.

1. **Generally speaking, what should a State expect on the following: project timeframe, project cost, time to rollout Statewide?**

Most States expect a short implementation timeline to minimize costs and obtain federal certification quickly. Expectations for implementing a COTS product should include:

* Two to three years to install, configure and customize the product to meet the program requirements. An established set of technical and functional requirements predefined and readily available for the vendor would accelerate the overall timeline significantly.
* Overall timeframe to build and implement is in the range of 3 to 4 years depending on the number of offices, data conversion requirements, users and desired system rollout timeframe
* Project cost in the range of $40M to $100M – depending on the cost of the product and features. Factors that heavily influence the timeframes and cost:
* Business processes are clearly identified and mapped to Federal and State requirements
* Choice of COTS product, limiting customization to “must have” features for initial implementation
* State IT procurement process and procedures to buy and install the product
* Adequate set of State staff allocated full time to support the initiatives and be prepared to handle implementation activities and tasks

1. **The States don’t want to again face the major system build and cost challenges once they have modernized. If they choose this approach, what is the continuous improvement model for the platform? Will the States benefit from the vendor efforts without major costs?**

Many of the major Low Code/COTS products started out as customer relationship management (CRM) or case management products. They offer a very solid platform for case management with configurable tools to build business processes and interface with other systems. The products offer agencies the ability to offload most of the technology refresh of the child support system, and a continuous improvement in configurable tools to build and manage the system. The platforms will keep the agency current with security needs as well as technology products.

However, any custom coding or configurations developed by the agency will need to be managed and upgraded by the agency. For example, if the Financials functionality of the system have a significant amount of custom code, the agency will still have the requirement and associated cost to maintain that code.

There are third party products that are made to easily integrate with the COTS platforms that can reduce custom coding, complex configurations, and offer new functionality that can be incorporated into a child support system. Some of these vendors have expressed interested in building child support specific components, but haven’t deployed it yet. States should carefully look at these products to determine if they can reduce maintenance efforts or offer new features at a lower cost than if the State maintained the functionality.

1. **What are the most important things that a State should do to prepare for this approach?**

If the State has identified the platform(s) they would like to deploy their child support program on it would be important to obtain expertise from the platform vendor, or an experienced consulting company, to determine what the platform will provide and what will need to be built out for the child support program. If a specific platform has not been selected and the State is trying to procure a platform through an request for proposal (RFP), use the RFP and Orals process to learn exactly what the platform will provide and what the State will ultimately be taking responsibility for to maintain and upgrade.

States should work with their IT organization to make sure they are willing to support the chosen platform. A unique skill set and support group will be needed for most platforms. IT organizations should be prepared to support the new platform with internal resources or acquire vendor support.

The cost and support model for these types of systems are different than a traditional system transfer. The State needs to understand how the costs will be different (user licensing, type of programming resources, warranty, technical support) and how it will affect the program’s costs once deployed, as well as the initial cost of construction.

1. **How does this type of child support system fit with States who need to have an enterprise approach? Many of the platforms seem to be creating the same old silos on a new platform. Is it possible to have one casefile for each person/family across the systems (child support, SNAP, TANF, family services, etc.)?**

This type of child support system can support an enterprise approach, especially when the agency is using the same COTS platform across different programs. If the programs are on the same platform the technical challenges of aggregating data and services provided to individuals can be greatly reduced. If the agency programs are on different systems, the COTS platforms usually offer the ability to easily integrate with other systems to exchange data. More so than many of the custom systems developed because of the tools integrated into the platform and the design of the products.

It is possible to have one casefile for an individual that provides insight for the agency about services provided, or that may be available. In Human Services programs the way that each program views individuals and pulls them together into a case can be very different. In our opinion this is one of the key reasons that a universal case isn’t being used at this time to manage services across a wide range of services. Ownership and management of data from a program perspective, as well as the different types of data needed for a program to operate correctly can impact the creation of a universal case file. Complexity of each program also makes it difficult to integrate the programs and use a single casefile. In some situations, the rules can conflict between programs.

Conduent believes that the current modernization efforts by child support agencies won’t eliminate the silo effect, but that changes in programs, interagency cooperation, and technology will evolve toward a more unified insight to the full range of services received and available to individuals in the future.

1. **What haven’t we asked that we should have?**

Conduent doesn’t have a recommendation for additional questions that should have been asked.