NCCSD Systems Modernization Committee

Systems Modernization States Lessons Learned Webinars

Certification -10/22/2021

Massachusetts

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Massachusetts Child Support Enforcement

- Department of Revenue Child Support Enforcement Division (DOR/CSE)
 - State administered/state operated program
 - IV-D Caseload of 203,000
 - IT support at the Secretary of Administration & Finance (ANF IT) as well as the Commonwealth's Executive Office of Technology Services and Security (EOTSS); Business system management and analysis support at the agency
- COMETS HD Program
 - Full system replacement including customer relationship management, IVR, data warehouse, imaging, document management and customer website
 - The program was business driven and primarily managed by DOR/CSE with the following vendor support:
 - Primary Vendor: Accenture
 - Program Management Office: Deloitte, staff augmentation and state staff
 - QA: staff augmentationIV&V: KPMG
 - The program was overseen by the Department of Revenue, Executive Office of Administration & Finance, EOTSS and OCSE

Massachusetts Child Support Enforcement

COMETS HD Program

- Program Timeline
 - Program Initiation September 2012
 - Implementation January 2018
 - System Acceptance May 2020
 - Certification Phase 1 May 2021
 - Certification Phase 2 December 2021
- At the onset, multiple technology standards had to be met and mandatory software was determined. This changed throughout the program, increasing the challenge.
 - Enterprise Architecture DOR's Tax Division undergoing full system replacement
 - Use of Business Process Management
 - Use of Service Oriented Architecture
 - Pre-defined software for security, etc.

Timing and Process of Certification: Focusing on Certification Guide Appendix A Guidance and discussions with OCSE. Was it early enough?

COMETS HD Process

- An initial certification discussion with OCSE approximately 1 year prior to COMETS HD implementation (January 2018).
- Certification approach discussions between DOR and OCSE leadership started in the spring of 2020.
- Draft Certification Responses were submitted to OCSE and OCSE provided comments which were incorporated in the responses.
- Practice demonstration session to ensure we were providing sufficient detail.
- DOR submitted final Certification Guide Response in March 2021.

Lessons Learned

- Plan to submit drafts and receive feedback as early as possible. Discussion of process did not elicit sufficient detail.
 - OCSE required screen prints showing every step in the process, not just screen prints showing requirement being met. For example, we initially provided screen prints where locate activities were initiated and initiation of a postal verification. OCSE asked that documentation for each requirement include every screen accessed to get to the locate initiation screen.
- Obtain confirmation of requirements. OCSE introduced requirements outside the scope of the Certification Guide. For example, OCSE would not conduct Certification unless we had less than 50 Severity II defects in production. Technical requirements (upgrades/ penetration test). Make sure technical person confirms requirements.
- Confirm environment. OCSE initially insisted on "production" environment. OCSE agreed to Certification within a production-like environment, but it had to be a copy of production taken within 45 days of the start of Certification.
- Expand practice demonstration with OCSE to make it as close to the certification process as possible. We were not aware OCSE would read every requirement and that each requirement would be demonstrated individually, rather than joining requirements or subsets to be efficient. We were surprised by the literal reading of the requirement and level of detail. For example, several findings were issued on text in forms.

Implementation and Rollout Approach and Certification

Implementation Approach and Certification

- Certification activities were not integrated with the roll-out approach.
- COMETS HD was implemented over 2 releases. Certification activities did not start until system implementation was complete (January 2018).
- OCSE conducted a full Phase I review in April 2021 (remote demonstrations).
 - Demonstrations were held 3 days a week over 3 weeks. Government Zoom.
 - Benefits time to regroup and respond to questions and concerns, easier for staff to come in and out as needed, clearer screen display (no projection), ability to text directions during the presentation.
 - Challenges identification of system with security to allow for use of production data, demonstrations spread out over longer time period, inability to read body language or communicate via body language.
- Technical review: Cursory review.
- Findings were addressed over 2 releases (August/October 2021).

Phase 2

- CSE staff are working primarily remotely. The Certification process assumes staff are working in offices and OCSE can ask staff randomly to demonstrate work on the system.
- Plan is to have staff available to demonstrate working on the system remotely via Teams.
- Project staff will demonstrate the outstanding requirements on-site or remotely.
- Staff will be available at the data center, SDU, and disaster recovery site to answer questions.

Preparation Steps

- The relevant Certification requirements have been provided to the SDU and technical staff. A statement will be prepared documenting adherence to the technical requirements. Meetings are scheduled to review the requirements and prepare staff for the on-site visit.
- Project staff will practice demonstration of outstanding requirements.
- Field staff will be identified to participate in demonstrations remotely. They will have available a variety of work items that can be processed upon request.

Certification: Preparing Certification Documentation

Start Preparation

- Focus on certification requirements and how they trace to federal regulation and law starts at the beginning of the project.
- Certification requirements were taken into consideration at every stage starting with the Request for Response and ending with the Certification Guide Response documentation.
- Leads were required to verify Certification requirements were being met during requirements, design, development and test.
- Certification requirements were verified during the system acceptance process (prior to development of certification documentation).

Certification Requirements Contrary to State Law or Practice

- TANF Interface data elements
 - Our TANF agency did not want to receive the CP address. OCSE issued a finding.
 - The issue was escalated and OCSE has agreed to waive the requirement. Meeting the requirement would have involved changes to the interface and significant testing effort.
- Creating a process for supervisor approval on various requirements
 - OCSE agreed availability of staff worklist items pending and completed was sufficient since supervisors could review and reverse decisions, if needed.

Federal Test Deck

- The Test Deck was the first documentation submitted to OCSE.
- We had a dedicated environment for production of the test deck. It took a significant amount of time to run batches to mimic the changes in time. There was a challenge explaining them to OCSE since there were transaction dates that matched the scenario, but the system date did not change.
- Upon initial submission, we were asked to run one scenario we had not run because it tested conditionally assigned arrears which we do not maintain. However, since the answer included permanently assigned and unassigned arrears, OCSE required it be run.

Certification: Preparing Certification Documentation

Who (state or vendor) was responsible for writing the Certification response document and gathering any supporting documentation?

• The vendor was primarily responsible (via a contract deliverable) for drafting the Certification response document and gathering support documentation. However, the DOR team conducted many reviews and had final approval of the documentation. Work cannot be underestimated.

Was there anything for which OCSE asked that was a surprise?

- Difference in interpretation of the requirements (literal versus practical meaning).
- Documentation of each requirement starting with the first step in any process.

Were there any variations from the Certification Guide's Appendix A Guidance in Preparing for Certification Reviews? When should document preparation start?

- Federal Certification documentation preparations started in November 2019. DOR submitted our official request to OCSE in April 2021.
- Recommend the process start as early as possible.

What did you find were the best ways to trace the system functionality to the Certification Requirements?

- Matrix was created to track each Certification Requirement to the use case and relevant design documentation.
- Validation of functionality by Business Functional Team Leads.
- Requirements Traceability Matrix & Jazz Suite.

Overall Lessons Learned

- Start preparation for Certification on Day 1 of project planning.
- System documentation, including Federal Test Deck, is extremely time consuming. Obtain OCSE approval of level of detail.
- Demonstrations are very different from any other kind of presentations. Practice, practice, practice.
- Be prepared for literal reading of each requirement.
- Know your weaknesses and anticipate questions and responses.
- Pick your battles.