



A Replatforming Trio:

Stories from Kansas, Utah & Montana





KAECSES

- Kansas Automated Eligibility and Child Support Enforcement System, also known as KAECSES
- COBOL based system
- Came online in 1999
- Payment processing has not been interrupted in 20+ years



GOOD AFTERNOON, WELCOME TO KAECSSES !!!
KAECSSES STATE OF KANSAS 091523 14:45

KANSAS AUTOMATED ELIGIBILITY AND CHILD SUPPORT ENFORCEMENT SYSTEM

KKK	KKK	AAAAAAA	NNNNNNNNN	SSSSSSS	AAAAAAA	SSSSSSS	!!!		
KKK	KK	WARNING: THIS SYSTEM MAY CONTAIN GOVERNMENT INFORMATION WHICH IS RESTRICTED TO AUTHORIZED USERS ONLY. USE OF THE KAECSSES SYSTEM IS MONITORED. MISUSE OR UNAUTHORIZED USE OF INFORMATION CONTAINED WITHIN KAECSSES MAY BE SUBJECT TO FEDERAL/STATE CRIMINAL AND/OR CIVIL PENALTIES. ANYONE USING THIS SYSTEM CONSENTS TO MONITORING.					!!!		
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PLEASE ENTER SECURITY KEY:
PASSWORD:
SYSTEM: KES

S O C I A L A N D R E H A B I L I T A T I O N S E R V I C E S





Moving Toward Modernization

- Our journey started in 2014
 - The first step would be a feasibility study
- Feasibility study completed in 2016
- Concluded that KAECSSES is:
 - Inefficient to use
 - Difficult to become proficient with
 - Challenging to update and keep current
 - Provides less functionality than is needed for optimal program operations



Specific Limitations

- Lack of Basic Case Management Functionality compared to other states
- Expensive Mainframe Technology
- Outdated Design of the System
- Scarce and Expensive Development Resources
- Declining Support for CA: Gen
 - Significant risk that it will soon be unsupported by its vendor
- Limited availability for automation
- Limits to innovation in Caseload Management
- Difficult for Workers to Use
 - Challenge in Recruiting and Retaining New Employees
- Inability for Leadership to Make Data-Driven Decisions



The Options

- Several options for modernization considered
 - Evaluated options by several criteria
 - Total Cost
 - Total Benefit
 - Time to Implement
 - Expected Risk Value
1. Build from scratch (new coding)
 2. Enhance the existing system
 3. Transfer systems from other states
 4. Hybrid Model
 5. Commercial Off-the-Shelf (COTS) product
 6. Integration with the Kansas Eligibility Enrollment System (KEES)



A New Direction

- In 2018, leadership decided to examine alternatives to the transfer
- Options from the original feasibility study were reviewed again
 - Reevaluated Priorities
 - Reduce the high probability of catastrophic system failure
 - Mitigate the impact of primary system support resources nearing retirement
 - Address the rising cost of system support resources due to declining demand and increasing rarity of the skill set required for system maintenance
 - Reduce overall acquisition costs and long-term operating costs

Decided to convert the existing system to a modern platform

- COBAL -> SQL Server/.NET



Replatforming

- The goal of the project is to convert the existing mainframe application to a server-based system.
 - **No Design Changes**
- Several projects will be needed to achieve the desired business functionality.
- Replatforming is the first project and once completed, will enable future projects to be completed.





Modernization Phases

Benefits to this approach:

- Lower work effort and lower risk involved for system interfaces
- Reduced system training needs
- Allows for a strategic and budget-conscious delivery of enhancements

The Projects:

1. Replatforming
2. Non-IV-D Distribution
3. Workflow Management*
4. Obligor and Obligee Automation*
5. Enforcement Action Automation*
6. Suspended Monies Reconciliation



Current Status

Planning for our replatform project began in January 2021

- Kick-off in May 2021

The goal was to go-live in December 2022

Delays –

- COVID
- Turnover of resources caused a loss of agency knowledge
- Migrating our test data to the new environment
 - Currently Impacting our plan for migrating production data

At this time, we are in the early testing phase

Our targeted go-live date is May 2024





Montana

Who:

- Montana Child Support Services Division(CSSD)
 - Division of the Montana Department of Public Health and Human Services tasked with the IV-D functions in Montana.
- Northrup Grumman, now Peraton
 - Contractor tasked to maintain and enhance the System for the Enforcement and Recovery of Child Support (SEARCHS)
 - Also tasked with replatforming the SEARCHS system
- Modern Systems, Inc.
 - Sub-contractor chosen by Northrup Grumman to perform the code conversion
- State Information Technology Services Division (SITSD)
 - Division of the Montana Department of administration tasked with supporting the technology needs of Montana state government.



Montana

What:

- System for the Enforcement and Recovery of Child Support (SEARCHS)
 - IBM Mainframe system in maintenance mode since implemented in the early 1990s. COBOL/IDMS

Why:

- Mainframe Decommissioned
 - State Information Technology Division (SITSD) upon order of the governor announces in May 2018 decommissioning of the IBM mainframe system.
 - CSSD is given 24 months, starting January 1st, 2019 to transition SEARCHS off of the mainframe.



Montana

Why:

- Mainframe Decommissioned
 - State Information Technology Division (SITSD) upon order of the governor announces in May 2018 decommissioning of the IBM mainframe system.
 - Long-term cost savings
 - Risk mitigation
 - Business continuity across state agencies
 - Only two state agencies were on the mainframe when decommission announced.

When:

- CSSD to start planning transition from the mainframe starting January 1, 2019. Planning stage over and kickoff of project 03/08/2020.
 - Project Planned: 03/08/2020-04/23/2021
 - Project Actual: 03/08/2020-11/26/2021



Montana

How:

- Migration to a C#/Oracle solution.
 - State Information Technology Division (SITSD) upon order of the governor announces in May 2018 decommissioning of the IBM mainframe system.
 - Long-term cost savings
 - Risk mitigation
 - Business continuity across state agencies
 - Only two state agencies were on the mainframe when decommission announced.
 - No change to functionality by the end user

When:

- CSSD given 24-months to transition off of the mainframe starting January 1, 2019.



Montana

Replatforming objectives:

- Convert SEARCHS to run in a MidTier environment
- Convert reporting system from mainframe to MidTier
- Convert batch jobs from mainframe to MidTier
- Set up MidTier environment (servers, etc.)
- Test all MidTier applications and components
- Go-live of new applications and components

Replatforming of the State's child welfare system to happen concurrently with the SEARCHS project.

- Both projects running concurrently stretched IT resources very thin as both projects were contracted to Northrup Grumman



Montana

Replatforming Project Plan:

- Initial Planning
 - Statement of Work, State provisioning, infrastructure & database setup, contractor & sub-contractor chosen
 - 45 Day Notice - IRS Office of Safeguards – contractor FTI disclosure
 - Project Change Request to OCSE
- Project Kickoff 03/09/2020:
 - Code assessment and code conversion phase
 - Planned: 03/18/2020-05/13/2020
 - Actual: 03/18/2020-03/11/2021
 - This phase took 10 months longer than expected
 - Contractor and sub-contractor performed all code conversion to the MidTier environment
 - Additional mainframe months requested

Note: Montana declared COVID-19 Emergency 03/03/2020



Montana

Replatforming Project Plan:

- Testing phase
 - Planned: 05/14/2020-03/11/2021
 - Actual: 07/29/2021-10/07/2021
 - This phase was delayed at the start
 - Contractor performed system testing prior to client testing by CSSD staff.
 - CSSD staff included system management staff and end users from all business units of CSSD
 - SharePoint used to collaborate CSSD testers. This was before Teams was used in Montana.
 - CSSD Project Managers organized client testing
 - Testing scripts were written and evaluated by CSSD and referred to contractor when issues found



Montana

Replatforming Project Plan:

- Testing phase Cont.:
 - Mission critical functionality tested and passed.
 - The testing phase was condensed and fixing of many non-mission critical issues were postponed until post go-live as the entire project was months behind schedule
- Go-Live 10/11/2021
 - SEARCHS off the Mainframe and running on MidTier system
- Post Go-live Support
 - Planned: 04/19/2021-04/23/2021
 - Actual: 10/12/2021-07/31/2022
 - Performance tuning, project documentation and trouble shooting.
 - This phase was many months fixing the backlog of code conversion issues found postponed until after go-live.



Montana

Replatforming Project Plan:

- Project Complete
 - 01/31/2022

Current Status:

- SEARCHS is currently back in a maintenance/operations mode.
- During the 2023 session of the Montana Legislature, CSSD was given funds for a new case management system
 - Initial data gathering is occurring to gain approvals from OCSS for system replacement planning.

Questions:

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Utah





Utah

Office of Recovery Services (ORS)

State of Utah Department of Health and Human Services



Departments within ORS

Child Support IV-D functions in Utah

Bureau of Medical Collections (Medicaid Recovery)

1.7 ★★☆☆☆ Star Rating on Google



Utah

What options do we have with our Child Support Application

- Why did we need to move to another environment?
 - Mainframe was becoming more expensive to maintain.
 - State wanted to no longer support having a Mainframe.
 - Unable to modernize our Child Support application.
 - Support staff was difficult to find.
 - The State will stop supporting the Mainframe.
- Criteria for moving from the Mainframe
 - Cost of project.
 - Expected benefits.
 - Risks associated with project.
 - Ability to modernize.



Utah

What options do we have with our Child Support Application

- Investigation into best approach of migrating our child support application from the State's Mainframe began in 2017.
 - 3 types of migration possibilities:
 - Complete rewrite of the entire application
 - Modernize one screen at the time in the Cloud
 - Migrate entire system as is to the cloud (Re-platform/Re-factor)



Utah

What Did We Discover

1. Complete re-write of our Child Support Application:
 - Cost would be \$200 million dollars or more to complete.
 - Take up to 10 years to complete.
 - Would require a recertification from OCSS.
2. Migration one screen at a time:
 - Significantly cheaper than a total re-write.
 - Would take several years to complete.
 - May require a recertification from OCSS.
3. Migrate ORSIS as-is from the Mainframe to the cloud:
 - Significantly cheaper.
 - Application looked and ran the same in the cloud.
 - No re-certification required due to an as-is migration.
 - Would need to modernize after the migration.



Utah

What Did We Choose

Migrate our Child Support Application as-is to the cloud

- Refactor the current ORSIS application written in COBOL to Java.
- Re-platform our ORSIS application to Amazon Web Services (AWS)





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Project Requirements

- Translate current Cobol language to Java.
- Migrate IBM DB2 database from the Mainframe to a LUW solution in the cloud.
- Migrate the current Office Of Recovery Information System (ORSIS) application from the state's Mainframe to a cloud infrastructure.
- Migrated application must function the same as it did on the Mainframe.
- Refactor project must be completed and implemented within 18 months.
- Project must stay within the budgeted amount allocated.
- Enhancements to the system must continue during the project.



Utah

Re-platforming Project Plan:

- Initial Work (10/2017)
 - Draft RFP.
 - RFP review (Internal, Attorneys, OCSS approval, State Purchasing process).
 - Contractor chosen through RFP (Deloitte).
 - Contract signed 6/10/2019
 - 45 Day Notices to the IRS (Vendor, State IT Group, Cloud Provider, +8 more)
- Project Kickoff Date: 07/01/2019
- Project Expected Production Date: 10/31/2020



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What happened during the 16 months of the project?

- Struggles:
 - IT staff struggles
 - Hidden and unexpected costs
 - OCSE and the IRS
 - Interfaces
 - Environments
- Successes
 - Dry Run Practices
 - Pilot
 - Project Management



Utah

Did we make our production date?

- Struggles:
 - IT staff struggles.
 - Hidden and unexpected costs.
 - OCSE and the IRS.
 - Interfaces.
 - Environments.
- Successes
 - Dry Run Practices.
 - Pilot.
 - Project Management.
 - Very little user training.



Utah

Did we finish within 16 months?



Yea we did!

Met the production date of 10/31/2020 and on budget and no major issues



Utah

Current Status

- In production since October 31st, 2020
- No major issues
- Currently working on the next phase of modernizing the system

Questions:

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