State of Vermont

Department of Vermont Health Access
Integrated Eligibility & Enrollment Program

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Mini Charter

Business Intelligence – Phase 1

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Date of Publication: 06/11/2018

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Mini Charter

Business Intelligence Charter

Background

Problem

Background

The Department of Vermont Health Access (DVHA), Health Access Eligibility and Enrollment Unit (HAEEU) must replace its current system for reporting. The current system utilizes an Oracle software known as Oracle Business Intelligence Enterprise (OBIEE) and Oracle Data Integrator (ODI).

OBIEE is used by HAEEU for its data reporting needs including ad-hoc query generation and analysis, dashboard and scorecard generation and Online Analytical Processing (OLAP). The OBIEE data warehouse was originally established for HAEEU by the original build of Vermont Health Connect (VHC).

The Oracle Data Integrator (ODI) is an extract, load and transform tool produced by Oracle that offers a graphical environment to build, manage and maintain data integration processes in business intelligence systems.

The State of Vermont has chosen to replace OBIEE and ODI with Microsoft SQL Server. Microsoft SQL Server is already used broadly throughout the Agency of Human Services. This option is more affordable and enables in-house State of Vermont expertise to sustain support and maintenance of the solution.

Problem statement

The replacement of these systems is required for the following reasons:

Cost avoidance
- The State believes that leveraging existing SQL Servers will be more cost effective than continuing to leverage Oracle tools for data analytics.
- DVHA has committed to replace contracted reporting resources with state staff in order to reduce budgetary impact.

Resource Shortcomings
- The State does not have in house expertise to build and maintain OBIEE and acquiring those resources has proven to be challenging.
- Maintaining the current OBIEE warehouse is manually intensive and time consuming for State staff.

Constrained System Performance
- Consolidating all IE&E Program data into one solution will help meet IE&E's goal of improving data integrity and robust access to data for analysis, reporting and modeling to staff.
- The State continues to struggle with data warehouse performance. Specifically, the State records a high error rate in data transmission and loading.

Business Intelligence Charter

Core Project Team
Executive Sponsor: Cassandra Madison
Product Owner: Kathy Purdy
Project Manager: Kenan Nurkanovic
HAEEU Reporting and Data Quality Lead: Roseanne Colasurdo
Procurement Representative: N/A
OCM Representative: Devon Downing
Technical Lead: Joshua Harless
Security Lead: Emily Wivell

Critical Project Partners
HAEEU Reporting and Data Quality Representative: Kara Williams
HAEEU Deputy Director of Operations: Sean Sheehan
ADS Director of Digital Services: Darin Prail
ADS CTO: Mark Combs
ESD IT: TBD
Archetype Engagement Manager: Michelle Prior

Vision

The desired outcome of this project is to migrate the data from the OBIEE data warehouse to Microsoft SQL Server. The new system will be easier for staff to use, enable self-service, and allow for real-time reporting and analytics.

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Goals Use SMART measures: Specific, Measurable, Attainable, Realistic, and Time-bound.

Goal	Measure(s)
Achieve operational reporting independence	Archetype Ad Hoc reporting cost reduced by 100% by 7/1/19
Reduce ongoing operating expense	Reduce SoV financial outlay by $1M per year starting 2020
Increase VT's reporting capabilities	• Reduce cycle time (lag) between data request to delivery • Reduce daily data load time • Availability of previous day's data
Increase staff customer satisfaction	Increase timely, accuracy and reduce backlog and duplication of delivered reports.
Ensure that the State can maintain and successfully transmit 1095 and enrollment data to federal partners	• 10% increase of 1095 reports delivered timely • 10% decrease of Error rates
Automat nightly data loads into data warehouse	• Increase success rate by 30% • Reduce data load run time by 30%

Scope

The State is moving to a SQL data warehouse and structure in order to be compatible with the State's other systems as we move to an Integrated Eligibility and Enrollment solution. Specific activities included in scope for this project are as follows:

Requirements Gathering Activities:
- Report Definitions
- List of required Siebel Objects
- Report list to data warehouse fields comparison
- 1095A/B Requirements
- CMS Reporting Requirements
- Interface/Integration Requirements (SFTP endpoints, file layouts, delivery schedules)
- Comprehensive Calendar of Reports

- Notification Protocols
- Data Models
- List of Data Warehouse Objects
- Map of Incorrect fields that need to be corrected in new system

Pre-Requisite Activities:
- Update CMS with Migration Plan and submit for approval
- Security access to source data systems for SOV Database Administrators
- Firewall Rules Setup for SoV SSIS servers to Seibel
- DBA/Data Services SQL Training
- Test Connectivity and Throughput

VHC Activities:
- Develop VHC work plan
- Develop MOU
- Conduct gap analysis
- Report requirements
- Review and verify warehouse design

Database Design Activities:
- Develop Objects for staging data in Siebel format
- Develop Data Warehouse

ETL Load Activities:
- Create ETL process to move data from Siebel to SoV SQL Server (staging)
- Create ETL process to move data from staging to data warehouse
- Create ETL process to generate data marts
- Create ETL process for RPD

ETL Interface Activities:
- Create ETL process for 1095a notices (include correction runs)
- Create ETL process for 1095b notices (include correction runs)
- Create ETL process for 1095A/1095B verification to/from IRS (full and corrections)
- Create ETL process to verify errors received from IRS
- Create Medicaid job to process passive renewals (full and updates)
- Create QHP job to process passive renewals (full and updates)

SSRS Design Activities:
- Create Reports

- User-generated reports (self-service)
- Automated notices

Testing Activities:
- Unit Testing
- User Acceptance Testing

Cutover Activities:
- Promote reports to production
- Promote ETL Packages to production
- Run production in parallel to OBIEE/ODI
- Triage discrepancies between BI production and OBIEE/ODI
- User Validation

Budget*

Initial Estimate 6/7/18:

Professional Services Consultant:	$ 529,975
State of Vermont Staff	$ 884,888
Software License	$ 2,500
Vendor System Configuration	TBD

Note: all IT projects, regardless of dollar amount, require completion of an ABC form.

Timeline

Initiate project by 03/05/18
Complete development requirements by 06/30/18
Complete and get approval for project charter by 06/30/18
Complete warehouse design/development by 07/06/18
Complete ETL DataLoad activities by 09/21/18
Complete report requirements by 9/30/18
Complete ETL Interfaces by 11/30/18
Complete SSRS Design by 12/28/18
Complete User Acceptance testing by 5/4/19
Production Cutover by 5/6/19
Complete Cutover by 6/30/19

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Mini-Charter Version History

Date	Description	Version
03/26/2018	Initial Draft	1.0
03/30/2018	Revisions based on initial feedback	2.0
05/11/2018	Revisions based on feedback from 18F & VHC Core Team	3.0
05/15/2018	Add cost for Power BI s/w	4.0
05/17/2018	Updated timeline	5.0
05/30/2018	Revisions based on feedback	6.0
06/07/2018	Revisions based on feedback	7.0
06/10/2018	Revisions based on feedback from Marie Hayward	8.0
6/11/2018	Updated project name to include "Phase 1" and added ESD IT to critical partners.	9.0
6/11/2018	Updated signature page	10.0

Version 10.0 Signatures

Name	Role	Title	Signature
Cassandra Madison	Program Sponsor	DVHA Deputy Commissioner	
Amy Marshall-Carney	Program Manager	IE&E Program Manager	
Kathy Purdy	Product Owner	VHC Eligibility & Enrollment Data Director	