



CSI at a Glance Fact Sheet

Challenges:

DMV is currently using disparate automated systems that are 20 or more years old. These outdated systems run independently on multiple, diverse platforms. This situation creates the following issues:

- Duplicative data entry into multiple systems
- A limited ability to identify missed or uncollected revenue and initiate requisite enforcement actions
- Inability to track customers and their related records across all business-related functions and platforms
- Insufficient processes for ensuring the integrity of customer records and data
- Duplication of records which facilitates identity fraud
- Lack of a service-oriented, customer-centered technology architecture to support integration
- Inefficient and ineffective point-of-sale services across multiple transactions and/or across various business-related functions
- No method to secure sensitive information internally or externally because users cannot be prevented from accessing data that is unrelated to job duties or business needs
- Lack of a single data repository that can put critical summary level data in the hands of decision makers without generating ad-hoc reports as needed
- Absence of documentation from the CSS vendor (Ernst & Young)
- The silo-based CSS system makes it difficult to adapt to change
- The current system is expensive to maintain and make legislative changes (for example, it took 9 business days to change the Commissioners signature from D.B. Smit to Rick Holcomb)

In addition, today's systems inhibit the agency's ability to provide consistent service, consistent responses to customers' questions, and facilitate employee and customer fraud due to a lack of internal controls. Furthermore, the current systems do not have "netting" functionality, forcing employees to manually total the fees associated with multiple transactions and creating errors that result in lost revenues.

Phased Approach:

1. **CSI Phase 1 - Business Requirements and High-Level Business Process Re-engineering (Completed February 2007)**

- In October, 2006, DMV hired a re-engineering Contractor (CACI) to provide support to the DMV CSI Systems Redesign project.
- During Phase 1, the re-engineering Contractor led DMV focus groups through a methodical process to validate our vision and strategic objectives, establish guiding principles, and document high level business requirements for all components identified within the scope of the DMV CSI Systems Redesign project.

- To create executive support, focus groups consisting of Assistant Commissioners and Directors of cross-functional core business areas were led by the re-engineering Contractor through a process to define the future system needs and requirements using a holistic approach.
- This approach created a high level customer-centric future state model to effectively support the business needs of CSI including customer relationship management, internal controls, auditing, and fraud prevention and detection.

Accomplishments:

- Foundation of CSI vision was formed
- Established project related relationships with 52 business partners
- High level business process model was created

**2. CSI Phase 2 - Detailed Business Process Re-engineering
(Completed February, 2009)**

- During Phase 2, DMV performed a detailed business process analysis and re-engineering effort based on a use-case driven, UML object modeling approach utilizing results of the high level re-engineering activities performed during Phase 1.
- The results of Phase 2 were captured and documented using an enterprise repository that supports the Commonwealth's strategic plan.
- In addition, DMV extracted embedded business rules from the existing mainframe (Natural) source code.
- DMV conducted a procurement based on a unique design/build approach and selected a vendor that was to provide a previously implemented DMV solution as a framework for CSI.

Accomplishments:

- Implemented new tool to visually capture all business processes in a consistent and uniform fashion
- Captures business operations knowledge in a tangible and industry standard format
- Public CSI internet site launched in August 2007 to ensure project transparency
- Business model published on CSI public internet site
- Business logic extracted from computer source code of the existing system which allows business operations to understand the capabilities of their current system and to ensure the same capabilities exist in the new system.
- Approximately 900 Process Improvement Opportunities (PIOs) captured and used as a basis for business process re-engineering activities as well as some being implemented.
- Data quality assessment and strategic data cleanup plan completed
- Numerous business partner automation and interface opportunities identified as part of business process re-engineering

**3. CSI Phase 3 - Conceptual Design Activities
(Completed February, 2010)**

- Explored the use of the previously implemented DMV solution and found that it would not meet the needs and requirements of the Commonwealth and CSI. Due to the innovative nature of the contract and the design/build approach, the Commonwealth

was able to terminate the contract which prevented force-fitting a solution and paying untold costs to fix the solution in order to conform to requirements.

- DMV leveraged existing design artifacts based on the results of Phase 1 and 2 re-engineering efforts to develop a conceptual design which were validated by Gartner, an independent advisor, and used to create an RFP for procuring a CSI Solution and a Contractor to support the CSI Development and Implementation efforts in Phase 4.
- Began procurement process for deployment and implementation activities targeted to begin Fall, 2010.

Accomplishments:

- Business and technical needs have been documented utilizing industry standards and best practices ensuring technical correctness of business processes that will result in the CSI solution
- Business and technical needs were validated by Gartner to ensure that the resulting solution can be implemented with reduced risk premium and increased assurance of success
- Integrated project management, collaboration, platform, and development environment is in place
- Ongoing collaboration occurred between DMV, VEAD, VITA, and Northrop Grumman to ensure Commonwealth standards and guidelines were incorporated into the RFP.
- Ongoing communications with business partners.
- Executive summaries documented – allows agency to prioritize and implement the most beneficial components which the agency can afford
- Implemented 38 PIOs resulting in \$107,305 savings, \$486,501 revenue, and numerous improvements and efficiencies in service.
- RFP created using validated business artifacts and conceptual architecture.

What we expect to achieve:

DMV envisions that multiple strategic objectives will be met through the CSI effort and the implementation of the proposed vendor solution. These objectives will address various business problems that exist within the agency by:

- a. Utilizing a simple, highly efficient design based on open standards (ODBC, XML, etc.) that support a service-oriented architecture with built-in redundancy.
- b. Providing improved access to information through single sign-on and limiting access to data, fields and values, screens, system processes to only authorized users, improving user authentication, segmenting and tracking access based on user roles and responsibilities (role-based security model capabilities), and creating a new ability for users to generate ad hoc reports.
- c. Enhancing security, customer ID verification, and fraud prevention by eliminating duplicate customer records, creating single customer accounts, tracking patterns of suspicious activity (customer and employee), producing automated exception reports and creating systems alerts to potential safety, security, and risk management issues, and restricting access based on user roles and responsibilities and accommodating multiple authentications based on segregation of duties.
- d. Automating audit requirements and oversight by tracking user activity in a standard manner and creating a single data store.
- e. Consolidating disparate applications by replacing multiple systems with a single integrated data store, integrating multiple applications through core modules (such as user interfaces, core business services, infrastructure related services, interfaces, etc.), and providing a financial services component, as well as a tax processing component, with enhanced tracking and netting capabilities.

- f. Improving efficiencies by implementing re-engineered business processes.
- g. Implementing a customer-centric model that effectively supports customer relationship management.
- h. Increasing alternative service channel usage by allowing most transactions to be offered through multiple channels.
- i. Migrating toward electronic credentials to provide the type of controlled access needed for authorized entities to verify the existence of electronic credentials, including photographic or other images as may be required.
- j. Accommodating interoperability and integration with business partners by providing a consistent method to interface with business partners and a consistent message format for exchanging data as well as creating the ability to effectively manage business partner contracts and billing electronically.
- k. Providing an integrated financial component, including integration of the agency's ERP (Oracle Financials e-Business Suite R12), to facilitate a complete financial view of the customer (refunds due, additional fees due, etc.) as well as an enhanced ability to allocate revenues to appropriate accounts.