

Washington Department of Licensing Case Study

Feasibility studies gives future IT projects the best opportunities for success.

Overview

The Washington State Department of Licensing (DOL) licenses millions of drivers, vehicles, vessels and professionals, collecting more than \$3 billion in transportation and other revenues each biennium. The Drivers Field System (DFS) supports statewide issuance activity of drivers licenses. In 65 service offices around the state, DFS processes an average of 12,000 transactions per day and collects approximately \$105 million each biennium.

A separate Vehicle Field System (VFS) handles vehicle/vessel title and registration. VFS is utilized in over 185 county auditor and subagent offices and is accessed by over 500 workstations. The system supports an average daily transaction volume of approximately 50,000 and collects over \$1.2 billion in revenue each biennium.

Challenge

As with most legacy applications, DFS and VFS present many challenges. DFS was developed in the early 1980s as a Turbo Pascal (DOS) based program and was later converted to a Windows based program utilizing Visual Basic with few functionality changes. Over the years several key interfaces to other office systems were added, including photo verification, automated driver testing systems, lobby management, driver license digital capture workstation, and the federal commercial drivers and problem driver systems administered through AAMVA. VFS was developed in 1987 on the HP3000 computer platform with a projected ten-year life cycle. In the 2005-2007 biennium, DOL re-platformed the application because the hardware vendor was eliminating all support. At that time VFS was reprogrammed in Visual Basic.NET, but its functionality remained the same.

Maintaining the systems, adding functionality (especially self-service functions) and training new users are difficult. What's more, because they are disparate systems, DOL doesn't have centralized data or a customer-centric view of information. As a result, generating combined reporting – critical to the legislature – is an arduous process. DOL selected Quest to evaluate various alternatives to replace the current drivers license system with one that would meet its requirements. The feasibility study would be used to determine a replacement approach and serve as a foundation for DOL's future legislative funding request.

Solution

Quest conducted feasibility studies of different approaches for the replacement of DFS and VFS. The following alternatives were evaluated for each system:

- **Commercial Off the Shelf Systems (COTS)** – Use a COTS application framework that can be modified to meet the unique requirements of DOL. An application framework is a set of software modules that meet specific licensing requirements and can be combined to form an enterprise level application.
- **Custom System** – Write a new replacement system from the ground up.
- **Modifications** – Modify the existing field system to meet new identified requirements.

Before analyzing the alternatives, Quest worked with key DOL stakeholders to develop methodology, evaluation and data collection plans that outlined how the analysis would be conducted and how information would be collected and used. In a five-month timeframe, Quest performed the activities below.

- Conducted market research to determine what commercial vendor frameworks were available and what actions other state agencies are taking to address similar needs.
- Met with key DFS and VFS stakeholders to identify key capabilities of a new system, including statutory issues specific to the state of Washington.
- Identified key metrics of the existing DFS regarding the size and number of components to enable the creation of a parametric estimate for a total system replacement.
- Sent standardized questionnaires to system vendors with commercial frameworks. Gathered information on base costs and high level estimates for framework modifications to meet DOL's unique requirements.

Evaluated transaction based funding as an alternative to financing the system replacement project. All selected vendors provided information on how to structure such an arrangement.

Results

DOL has completed its due diligence to determine best, cost effective system replacement approach and is armed with the following:

- For each alternative, one-time and ongoing costs, project timelines, risks, recommended technology architecture and potential business efficiencies.
- Information to develop an investment plan and seek budgetary approval from legislative committees.
- Perspective on funding approaches utilized by other states.
- A foundation for the future development of an RFP to replace DFS and VFS.

Large-scale, mission-critical IT projects are often saddled with prolonged timelines, budget overruns, functionality problems and more. By completing this initiative, DOL believes it has the information necessary to ensure success and avoid prolonged timelines, budget surprises and functionality problems experienced by so many agencies.