

Increase Efficiency and Accuracy by Digitizing Permit Application

■ Client Overview

The client is an organization that handles tobacco permit applications through a rigorous process, following strict compliance and considering state requirements.

■ The Challenge

The client wanted to convert a paper-based tobacco permit application to a digital Web site application. In doing so, requirements and necessary steps have to be taken in consideration.

There are three prerequisites for an application to be considered:

- 1 The address should go through validation
- 2 The address should not be in a school zone
- 3 The permits approved in a district should be within the specified cap

These prerequisites should be checked by integrating with the arc GIS software, which is provided by the city of Philadelphia. Further, the application is split into three steps:

- 1 Check the prerequisite
- 2 Collect all the required establishment information
- 3 Proceed with the payment

The payment module has to be implemented using the city of Philadelphia payment gateway.

Apart from the Tobacco permit Web site application, the client wanted to develop a back-office application where the administrator can:

- Review the digital application(s) submitted by the users—and either approve or reject them.
- Utilize a search feature based on the establishment name, establishment ID, and other fields to search the permit applications for the current and the past years.
- Employ a ticketing module for creating, editing, and deleting tickets against the establishment users.

■ The Solution

Smart IMS started the Tobacco permit Web application project by assessing and analyzing the existing paper-based application and gathering the requirements, followed by creating design mockups.

A detailed R&D process had been performed on the prerequisites of address validation, school zone check, and district cap check using the arc GIS software provided by the client. A rigorous testing had to be done on the prerequisite checks, especially on the school zone check. The second and third steps of the application—information collection and payment module, respectively—were implemented successfully and demonstrated to the client. An additional feature that enables the renewal of an existing permit was also implemented. The digital Web application was released to production in the first phase, where end users have successfully submitted the permit applications online. In phase 2, the back-office web application was implemented with search feature, approval or rejection permit application feature, and ticketing system.

Tools and technologies used in this project include:



It was developed using the Agile development methodology. Client was involved in UAT for every sprint move to production.

■ **Benefits
Delivered**



Digitalization of the tobacco permit application process



Automatic address validation, school zone check, and the district cap check



More seamless account management through online payment



Greater efficiency through an easy search, approval, and rejection of permit applications



Greater accuracy as administrators can verify payments