

Case Study

Ground up development using Cello

BPO Platform: Fare Audit Automation System



Introduction

Our Customer is a Business Process Outsourcing and Technology Enabled services pioneer providing measurable results across Banking & Financial Services, Insurance, Technology, Telecommunications, Retail, Healthcare, Travel, and Government markets. Established in 1986, this US-based company employs over 30,000 professionals in 31 Global Delivery Centers worldwide, serving some of the most successful brands in the world. They combine front office contact centre and back-office processes called integrated BPO, their innovative outsourcing services are currently being used to support financial services, Technological, Healthcare and Aviation companies worldwide.

The Need

The BPO giant currently uses in house built products and Solutions based on multiple technologies to serve the various needs of different customers for different domains and verticals. One of the prime vertical that it offers services and consultancies is for aviation Domain. The aviation domain is highly competitive, sophisticated, Service Conscious but also critical domain which is regulated by respective Operators, Local Governments and International organizations to maintain the standards and security. The airline operators outsource most of the business operations such as Fare/Tax/Refund/Reissue Auditing, Customer Loyalty Management, Cost Management, and Revenue Enhancement. Increasingly major Airline companies looking for outsourcing Non Strategic but crucial Activities of their business to vendors who provides quality services by following the required standards at a lower cost. One of the critical aspects of the Airline industry is the fare audit, increasingly the revenue loss due to various reasons such as Credit Card Fraud, Credit Card Cancellations, Fare Disputes, improper Cash Refund, and Usage of Theft Card to book tickets etc is increasing, so they wanted our customer to do Fare audit service for them. Our customer builds in-house tools and solutions to cater the above needs, but the margin that they obtain for both the services and tools & technologies is very marginal.

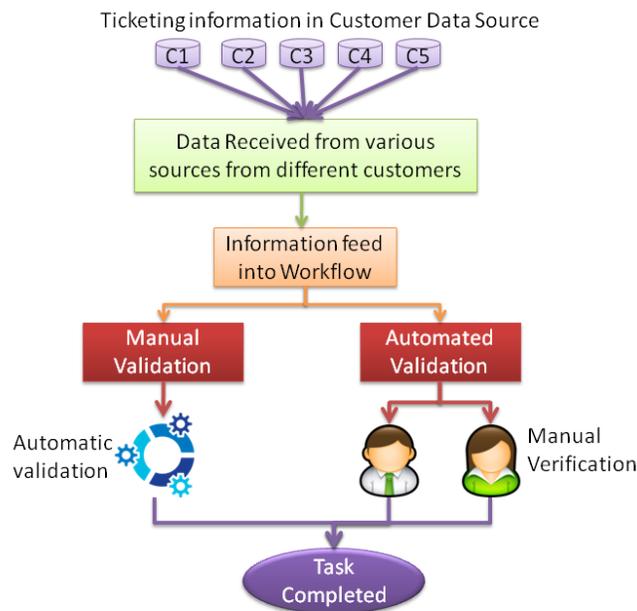
The Challenge

Building robust and quality solutions to cater high technology oriented business such as Airlines is fairly complex, cost and time Consuming for our customer. The solutions they build have to be web based, flexible, Scalable, resilient to change, Performant, Reliable, Highly Secured, Customizable, Extendible, Adhere to regulations and standards. Given the Non Functional requirements [NFR] for building the Fare Audit Automation System [FAAS], the service providers must have huge expertise in building Scalable Web based solutions especially the NFR portion which is the base for the entire product. Our customers have to spend considerable amount of cost, time and effort in order to build just the NFRs for the platform, as it requires tremendous technical skills, Application Architecture and Design thought Process, forward thinking etc. Other than NFRs mentioned above there are many other application specific components that are required such as Workflow, Business Rules, Customizability, Configurability, Extendibility, Ad hoc Query Builder, Dynamic Report Builder, Auditing, Logging, Notification, Effective distributed Caching etc. On top of this, the application delivery model also plays vital role in determining the costing of the product, therefore, the application must be offered in a multi Tenant model to reduce the overall TCO of the solution.

The Solution

Case Study: BPO Platform, Fare Audit Automation System

Our customer was looking for innovative ideas and tools which can lessen the overall TCO of their solutions by which they can reduce the pricing for their offering to the customers without reducing the quality of the Services. CelloSaaS, a ready to use .Net based Multi Tenant Application development framework helped our customer to build FAAS Application faster with improved quality. Techcello, a SOA based Multi Tenant Architecture brings in all the non functional components straight out of the box in plug and play based componentized model. Developers can easily start building the Application specific functionalities from the day 1 without worrying about the underlying Architecture and NFR components. In specific, the customer was able to utilize the Workflow and business rule to its full for validating the fraudulent usage of Credit Card in Booking Air tickets. As a result, the FAAS will receive all the Ticket Booking information along with the Credit Card details from different Airline Company/Tenants, this information will be automatically fed to the system using Services. Using Workflow System of Cello, the booking will be categorized [Based on proprietary algorithm] Automatic or Manual Credit Card Validation.



One other important NFR component was Theming -a mechanism to each airline company to select their skin to suit their organization. Ad-hoc query builder and report builder helped the customer to prepare their reports without much effort using the easy to use SQL like query builder. Advanced Notification system helped in customizing the content by respective administrators. it also supports Batch Email Notification, FTP and System Notification. Configuration Management, Granular Security mechanism, Auditing are also utilized heavily within the system.

About Techcello

Techcello's "Multi-tenant SaaS Framework" (product name: CelloSaaS) fills an important gap between .NET and the Cloud (Amazon, Azure, Private, Public). It helps you build multi-tenant applications 30-40% faster

and 50% cheaper. The framework has all the plumbing, engineering and operational components required for a robust and scalable SaaS product.

Why use a Framework?

Techcello's productized framework approach gives complete freedom, flexibility and control of custom development, without the complexities, risks, cost and time overheads of building and maintaining your own multi-tenant engineering stack. It provides a true multi-tenant architecture at the application level and database level.

Why Techcello?

Unlike other alternatives it does not lock you in to a proprietary development environment or a non-Microsoft run time container, application server or APaaS platform. It retains the .NET environment both during development and deployment, giving complete technical and strategic control over the entire application stack.

Benefits

Saves 40-50% on the cost of building a SaaS product or migrating an existing application to a multi-tenant architecture. You can get to the market faster. It provides a robust, scalable and strong engineering foundation to your product or application (tested, supported and easily extensible). You can deploy your application anywhere from on-premise Windows boxes, Private Clouds and Data centre

For more information: info@techcello.com, www.techcello.com