

Case Study

Ground up development using Cello

DuoSubscribe, an On-Demand Subscriber Management and Billing framework

DuoSoftware, Sri Lanka

Introduction

Duo Software is an established Subscriber Management and Billing solution provider for Pay-TV, ISP and Triple play industry providers and has secured a significant market share in the industry managing millions of subscribers. They provide tools needed to launch and scale any subscription service quickly and affordably.

The Current Solution

DuoSubscribe is a complete end-to-end on-premise subscription management solution which can be integrated with other packages and platforms to enhance workflow and productivity of an organization. The Product makes it easy for a business to manage all subscriber relationships from one place by responding to customer requests for channel activations, changing subscription packages and handling promotions efficiently while ensuring that all processes are well streamlined. Handling any task involved in a subscription-based operation, from lead management to sales and initial invoicing to prorated invoicing and monthly invoicing, it provides more value to customers and helps operators to stay competitive in a business where customer service is the key that separates an organization from the competition.

The Problem

- The current system is an on premise windows based application which requires complete IT Setup including Special Hardware and Software at required configurations and resources to manage them for each customer.
- Their Customers, the DTH , Triple Play and IPTV Providers were high end technology users wants to have accessibility to the Billing/Subscription and customer Management solutions at the reach of their hands, rather than accessing application installed at one place.
- In order to change the subscribed package, upgrade a package and change the channels, a subscriber has to request the contact centres of the respective provider.
- The applications were not easily distributable over the multiple locations of the customers who have offices in multiple regions.
- Customers were not able to actively engage the subscribers with their offerings, experience, cost and social benefits etc. Because to this, customers were unable to maintain a loyalty with their subscribers about the company and the product they offer.
- Setup and configuration takes huge time for each and every customer, so overall cost of ownership to the customer increases. Similarly, the customers always have to be dependent with the software vendor whenever they set up a new location.
- Given the dynamic nature of the industry, introducing new feature, fixing a patch, version Upgradation was a nightmare.
- The base cost of an On-Premise Solution costs 100 K to 200 K USD on an average for a Medium sized customer, so entry level customers was unable to afford.

- Takes around 6 to 12 months on an average to do a custom implementation for a customer.

The Need

Customer wanted to migrate from On-premise model to a Cloud based Multi Tenant SaaS Solution to give their customer and their subscribers a whole new experience and gain more market share and reach globally. In order to win the losing market share in the tough economic conditions, they wanted to bring the SaaS version within a targeted period of 6 months. In order to focus all segments of Customers such as Large, Small and medium businesses as well as entry players, duo Software wanted to make the product self service based, module/feature wise Licensable and price as minimal as possible. The customer's IT and development team was well versed with their domain and business aspects but their core expertise were developing and maintaining on-premise single tenant application rather than building distributed web based applications.

Having set an aggressive goal of striking the market with an Upgraded product on SaaS required Expert knowledge in Architecting Web based Distributed Application with an internet scale. Given the Resource and time constraints, DuoSoft team wanted to cut short the development time to the maximum possibility without compromising on the quality attributes and the functionality. The expectation of the end solution is to be highly configurable and customizable for each and every customer as per the requirements, and the ability to manage the application without much technical Skills.

The Expected solutions has to be Customer & Subscriber engage-able, so Instead of relying on call centre executives, subscribers should be able to self serve their need by themselves, thereby decrease the operational cost and increase the customer satisfaction.

The Solution

CelloSaaS, a .Net based application development Framework, helped the customer to realize their vision of building an upgraded version their current offerings within the given stringent time line and hit the market. With CelloSaaS, their developers were able to concentrate more on Business aspects and less of cross cutting concerns such as Security, Data Access, Auditing, Exception management etc. CelloSaaS weaves multi-Tenancy throughout the entire applications and all its components. Especially for Start-ups and small companies, where the developers were not given with enough architectural guidance or assistance in developing complex multi tenant architecture, application design etc, CelloSaaS steered the developers to build Reliable, Scalable, configurable and Manageable Subscription, Billing and Customer Management Application which can be hosted on any cloud.

The SaaS Operational components such as Tenant Management, License Management, Metering etc similarly the engineering and plumbing components helped the developers to develop the application quicker. The Workflow and Business rules capability helped them to provide end user configurable workflow to the managers and administrators of the respective Customers who don't have much technical Skills. The Module based Licensing component gave the ability to the customer to serve the start- ups in the IPTV and Pay channel industry who was not able initially fund for a huge on premise services.

Case Study: DuoSubscribe, a SaaS based Subscriber & Billing mgmt

DuoSoft was able to give the ability to the Customers to configure the look and feel of the product and localize the application as per their preference by their own.



DuoSubscribe Deployment and Accessibility

The Challenge

DuoSoft's Developers base were developing Windows based application and maintaining the legacy application. In General, the developers who were new to Distributed SaaS based Multi Tenant applications has to follow certain Design norms and Guidelines in order to build an high quality configurable business application, notably for Retail applications where one cannot anticipate the user burst, the applications should be able to withstand and serve the customer needs. Techcello provided On- Site training to their developers and architects as to how to use Cello Framework to build the applications faster as well as the best practices and techniques.

The Solution

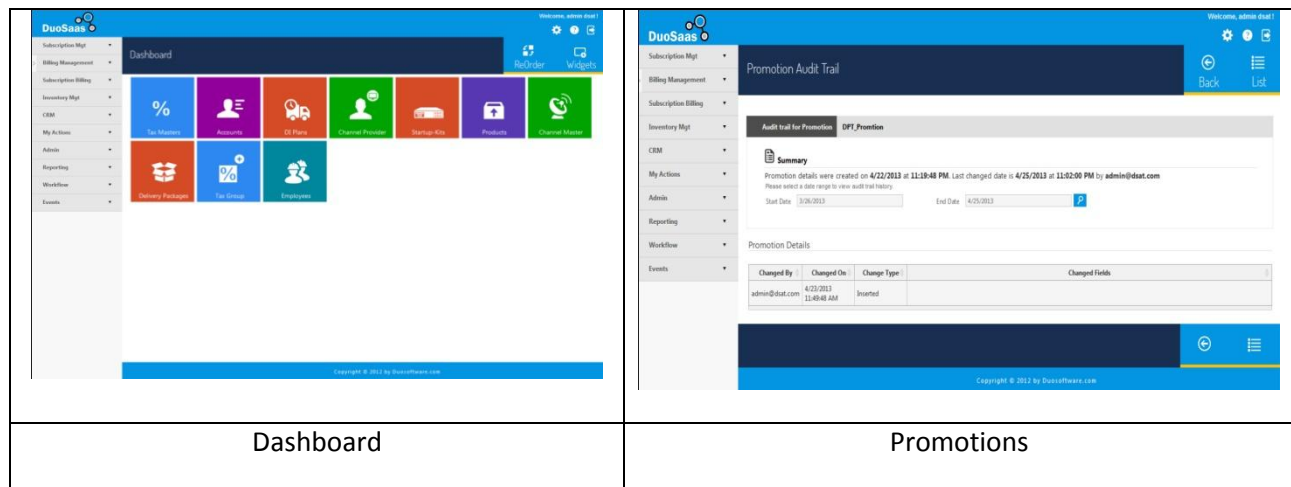
With Cello, DuoSoft's development team was able to complete the given specifications on time as per the project plan without any slippage in time duration. The Robustness and the flexibility of the framework helped them to just mind the functional aspects of the business solution and left the rest to the framework. The Customer was able to realize the 30- 40 % of Savings on both development time, cost and Time to Market. The management estimated the completion of the product with the given resource and their skill set by 10 to 12 months, but using Cello they were able to successfully complete a business solution within 6 months.

Case Study: DuoSubscribe, a SaaS based Subscriber & Billing mgmt

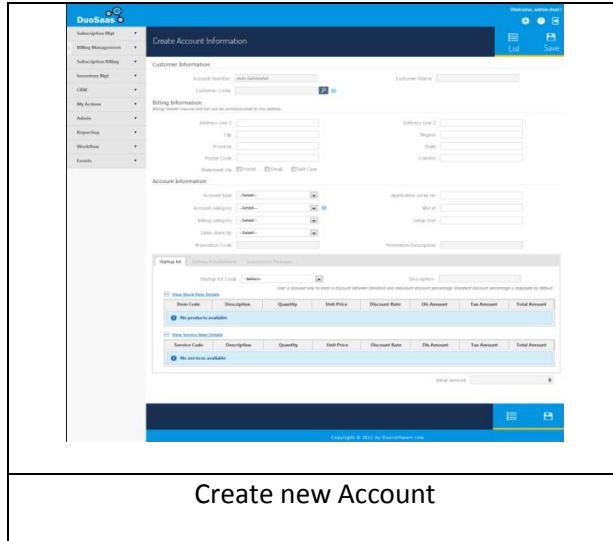
The Self Serviceable model aided the Customers to engage their subscribers as well as reduce the operational cost in a day today basis which helped DuoSoft to pitch the customers with a unique selling proposition. The SaaS Security Architecture that defines a more comprehensive and mature SaaS implementation has given the customer the confident to trust the application and the vendor. With Cello Security, the operator has the ability to set fine grained data scoping mechanism as to what the sub dealer can access and cannot in the system. SOA and componentized architecture of Cello given the flexibility and control for the customer to mutate the solution as per their business requirement.

With a ready to Cloud deploy mechanism, DuoSubscribe is equipped to scale through extensive load balancing and failover mechanisms to provide high availability and ensures that there are no outages or service. Through which the organizations will be able to enjoy uninterrupted application availability and provide service to their subscribers.

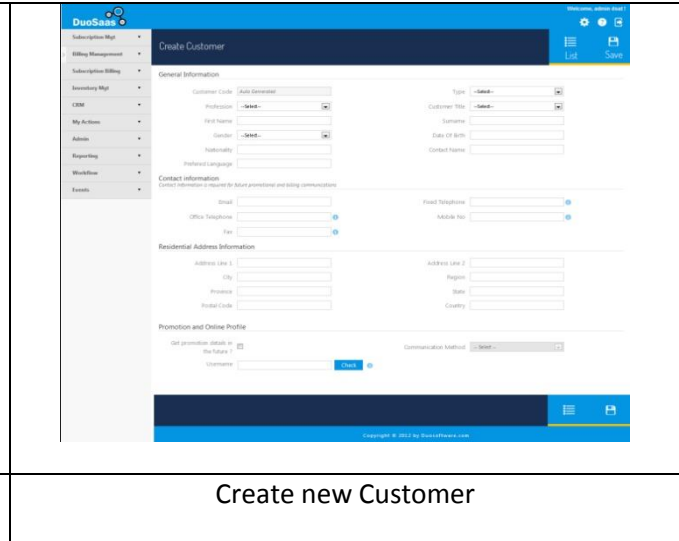
The Tenant Hierarchy feature of Cello effectively leveraged to build the Operator and Sub Operator network Management. The facility is provided for one operator to manage many operators under it through the multi-tenancy capability provided through DuoSubscribe. The main operator has complete insight into the operations of its sub operators and can control all required processes centrally while allowing decentralized management as well. This gives operators the license to expand their operation without being burdened by concerns over management overheads and lack of centralized control.



Case Study: DuoSubscribe, a SaaS based Subscriber & Billing mgmt



Create new Account



Create new Customer

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