InApp

Revamping a Helpdesk application based on ITIL best practices

About the Client

Our client from Atlanta, Georgia is a leading global provider of outsourced solutions to over 300 firms in the legal and accounting markets with more than 21 years of industry experience. They specialize in providing IT managed services such as helpdesk support, financial management services, and eLearning softwares with a focus on law firms. With targeted innovative services our client is recognised as a top choice in outsourced Accounts Receivable management.

Business Challenge

The client's signature product is a helpdesk software that specifically addresses the IT needs of law firms.

- The scope of work included rewriting the application as a web-based infrastructure that can be available on demand.

- The current software necessitated installation in the user's system, and this was not extremely effective and required an upgrade.

- The helpdesk application required integration with a Professional Services Automation (PSA) software, which streamlines ticketing and certain helpdesk operations.

- The current infrastructure was dependent on a single server. The variation in incoming loads posed a significant risk of the model suffering downtime in the case of potential issues.

- The client also desired enhancements in particular modules within the application such as service catalog, incident and change management, and several UI changes.

InApp's Solution

The existing helpdesk tool is widely used by more than 300 law firms to manage their IT requirements. We decided to rewrite the front facing part of the architecture into a single-page application. The idea involved avoiding interruption between successive pages and to be available as a web-based application. We used C# to develop the front end via ASP .Net framework and utilized SQL server 2008 R2, which corresponded to the DB that was used by the client. We hosted an email server with a dedicated script which resolved the email requirements of the helpdesk. For example, users replying back to a ticket were recorded into the tool with attachments (screenshots and documents) if any.

The primary challenge for our developers involved integrating the client's helpdesk tool with a third party Professional Services Automation (PSA) software. The product integration allowed the client's tool to exchange data with PSA software. The helpdesk dealt with ticket allocation and maintaining work records, and the PSA software parallelly functioned to streamline incoming and existing tickets. The application was redesigned in the following three tiers:

- A JavaScript client built using the Ext JS framework.
- An ASP.NET API layer written in C#.
- A set of T-SQL stored procedures that backs the API layer and handles data exchange.

We possess a proven set of expertise in IT Service Management, and thus we developed the product by considering ITIL best practices to improve process workflow and to enable better collaboration between technicians and customers.

Highlights

In addition to rewriting the core application & enabling cross platform integration, InApp is also responsible for re-engineering the following modules of the Helpdesk software,

■ Problem Management

Redesigned the Problem Management module with a provision to perform Root Cause Analysis (RCA) on high priority issues. The RCA aids in tracking and resolving recurrent issues. This led to improved data analytics and file attachment features that tracked all issues and solutions provided.

■ Service Catalog

We enhanced the service catalog module of the application that contained release notes, training documents and diagnostic reports. In addition to product owners and technicians, customers can directly access the service catalog and use documents for self-servicing.

■ Change Management

We improved the entire workflow of change management necessary to track important changes in the organization. The change management module underwent a major facelift with tabs to review, edit, approve, and close the change tickets.

■ Maintenance & Support

InApp was also responsible for providing technical support and maintenance to the client's helpdesk software. Each product enhancements and releases were followed by a maintenance period during when the application was monitored for any potential issues.

Technologies Used

Business Benefit

- The load balancer deployed by InApp aids in sharing incoming user traffic to the different application servers and enables 24x7 application availability to the end customer.

- Improved problem management module to perform root cause analysis with options to attach evidence as a file/document.

- Enriched different application modules corresponding to the ITIL lifecycle, thereby aligning IT services with business requirements.

- Achieved stable integration with a third party PSA software enabling data collaboration & automation to manage the tickets logged.