



Example of Project Team – New Telephony Software for OMEGA IP

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An Example of a Project Team - New Telephony Software for OMEGA IP

Introduction

In today's competitive world of software development, the time to market of a product can make the difference between the success and failure of the product and in some cases the business.

In-house development teams often find it difficult to meet necessary deadlines, either due to insufficient manpower, other competing projects or because they lack the specialist skills needed for a particular task. In these circumstances the recruitment and training of new staff would often take too long, and be wasteful because it may not be practical to continue to employ them after the end of a project. Equally, hiring contractors is often expensive and unsatisfactory unless it is certain that they will have the required expertise.

Frequently the best way of overcoming this type of problem is to outsource the whole project to a specialist company who has a proven record in the field. It goes without saying that Title Developments is such a company in the field of IT software development.

Another advantage of outsourcing is that it may be better for an organization to direct its management resources into business activities such as marketing. A well prepared market for a well developed product will give it the best possible chance of success.

Outlined below is an example of the work a Title Developments project team undertook for Omega IP.

Background

Omega IP is a big name in the UK IP Telephony world. It was founded in 2002 by voice and data specialists from one of the UK's most successful Cisco Gold partners to focus on IP Communication. The company came up with a very good idea to develop a new Telephony product, which had applications ranging from Voice Mail, Voice Recording and Voice Activated dialing systems. Their aim was to develop an open standard telephony product that had an enhanced value and a low cost as compared to other products in the market. Omega IP started work on this project called "**Omega IP Suite**". However, due to their engagement in other business activities it was an easy decision to outsource the development rather than continue the work in-house.

Omega IP chose Title Developments to undertake the project because of Titles experience with Telephony applications and reputation within the Cisco IP Telephony community. They relied on us to provide them with consistent services and produce a quality product. To Title this was an opportunity and a challenge, although it was a demanding task to understand the complex predefined requirements and the source code which had already been part written by Omega IP.

How we did it

A team of dedicated analysts visited Omega IP to get an overview of their incomplete product and understand their requirements in detail. This required full cooperation from our client and a high level of communication between both sides. It was essential, at this early stage, to take the time to do this work comprehensively and enabled us to work more effectively throughout the life of the project.

Next, Title's team of analysts had to document the details of what work had already been done on the project and what more was needed to complete it. Then the analysts, together with a team of dedicated developers produced a new requirement specification for the remaining work. Understanding semi-finished source code and creating new requirements from high level requirements was a demanding job, but it was made possible by our hard work and determination.

Below are some technical details of the project and how we developed it Phase by Phase:
The OMEGA IP suite was designed to be configured via Omega IP Web Client; a web based application, and was given different levels of access for different users. The project was basically divided into three major phases.

Phase I

Phase I of this project was made up of two parts, Voice Messaging and Voice Activated dialing. The Voice Messaging allows telephone callers to leave voice mail messages and can also be received. The voice messages and faxes are organized in the recipient's email inbox, giving the user a centralized communication control. Such messages could be accessed via the internet on a desktop PC or laptop, or through a touch type phone via an Interactive Voice Response (IVR) system. The other feature was Voice Activated dialing. This incorporated speech recognition to allow an inbound telephone caller to say the name of a person or a department and the system would then direct the call to the appropriate telephone extension.

Phase II

Phase II of the project consisted of the Record a Call feature. This would allow a user to record a telephone call from the outset or from any point during the call. Additional enhancements were added to the application, which would allow a recorded call to be emailed to the user, or heard via the user's IP Phone handset, or re-played through the application GUI.

Phase III

The next phase of this project was the Messenger Assistant (MA). This module required extensive research and its requirements were documented from scratch by our analysts. MA was developed as a text-to-speech module, which would allow users to call into the system, and their email messages would be read to them over the phone. In addition a 'Call Forwarding' feature was added. This allows a user to remotely set, via their web browser, the call forwarding number of their phone. Their calls would then be redirected to the new number i.e. their mobile/cell phone or home/ office phone, etc.

The project incorporated the following technologies:

- SAPI (Speech API)
- MAPI (Messaging API)
- Call Routing
- NET Framework
- Direct show (used for call recording and playback)

- Enhancement to work with exchange server 2000
- Server resilience

All the project's modules were tested rigorously by Title Developments' Quality Assurance department to ensure maximum quality and compliance with international standards. Our testing system not only reduced the development cost by identifying problem areas at an early stage but also ensured the reliability and usability of the product.

Conclusion

OMEGA IP was able to bring its project to a successful conclusion by outsourcing it to Title Developments. Our experienced personnel, effective response, proper communications and high-quality delivery reduced the overall project cost for Omega IP, and allowed them to concentrate their resources on building their business.

Title Developments brings real world knowledge and expertise to our clients. We stay current in the latest technologies and business issues in order to be able to offer innovative, well informed, and carefully considered recommendations and solutions.