Case Study: Vision Consulting and ArtinSoft Join Forces to

Provide VB6 to .NET Migration Solution for Textile Company

The modernization of several critical information systems used by a leader in the lingerie industry was made possible in a fast, cost-effective manner through a strategic partnership. Thanks to ArtinSoft's Visual Basic Upgrade Companion tool and the professional services of Vision Consulting, a total of seven applications were upgraded and integrated into
the .NET platform, on a multi-tier, service-oriented architecture, while preserving their functionality and look-and-feel.

Situation

The client is a leader in the textile sector, with four production plants and 130 branches spread throughout the Mexican territory. Their need for technological upgrading was bound to seven systems developed in VB 6.0 whose life cycle gave clear signs of approaching its end: inherited source code, unsupported third party components, deployment problems, among others.

Since the client had a short timeframe, the option of a complete rewrite was quickly discarded, and Vision Consulting became committed to finding a strategic partner that could ensure a safe and cost-effective migration in record time. The search generated an alliance with ArtinSoft, whose products and services are used worldwide to accelerate the evolution towards more modern software platforms like Microsoft's .NET. Additionally, it was essential to rescue the business knowledge incorporated by the client into the application over time, which further reinforced the idea of an automated migration to retain this valuable investment.

Besides the tight timeframe, the project represented other challenges. It should reach functional equivalence in each of the seven systems, integrating them with each other, and keeping the look-and-feel unchanged. Furthermore, it was necessary to modernize the MS Access 2000 database, and all implementation should be performed on a distributed, object-oriented and multi-tier architecture.

Solution

Vision Consulting chose to migrate the systems to the .NET platform using a customized version of the Visual Basic Upgrade Companion, a tool developed by ArtinSoft. Over a period of less than two months, 100,000 lines of code were effectively converted to C# following rtinSoft's Ready-Set-Go methodology, which began with an on-site consultancy by an ArtinSoft expert to produce a detailed analysis of the original application, as well as the business plan that would shape the project.

FAST FACTS

Customer Profile
Mexican textile company, regional leader in production and distribution of lingerie.

Business situation
It was required to rapidly modernize seven systems developed in VB6.0 due to numerous constraints: unsupported third-party components, deployment problems, MS Access 2000 database, among others.

Solution
Using a customized version of ArtinSoft's Visual Basic Upgrade Companion, it was possible to migrate 100,000 effective lines of code, reaching 100% functional equivalence at the end of the project. Additionally, the database was converted to Oracle 10g XP database through third-party tools. All this in 46 days, half the time it would take to rewrite it, and at a fraction of the cost.

Benefits
The systems are integrated into a more modern language (C#), with a multi-tier, object-oriented and distributed architecture, and the code connected to Oracle Express. The Vision Consulting consultants now help the customer to take advantage of the benefits included in the new platform, improving and extending the functionality of the applications.

A proof of concept was later performed, which basically consists of migrating a small but representative portion of the source code to confirm how feasible the automatic conversion actually is.

After obtaining satisfactory results, Visual Consulting proceeded with the full migration of the systems, using the customized version of the Visual Basic Upgrade Companion. This process of tailored reengineering allowed adapting the tool to the client specific needs in order to increase the degree of automation, consequently reducing the amount of manual work required to reach 100% functional equivalence.

The MS Access 2000 database was migrated to Oracle 10g XP via third-party tools and under the supervision of an ArtinSoft consultant. Both the client and the Vision Consulting-ArtinSoft team became directly involved in the execution of the project, thus ensuring compliance with the requirements and estimates initially set out.

With a team comprised of five developers, two testers and one project manager, as well as the support of an ArtinSoft consultant, the entire project was completed in 46 days, 50% less time and effort for an application developed from scratch, and at a much lower cost.

Benefits
The conversion was successfully completed on time, an achievement attributable in large part to the intense and accurate analysis work performed by ArtinSoft at the start of the project. Rafael Miranda Moreno, General Manager of Vision Consulting, says: *"ArtinSoft's participation in the initial stages was critical,because it helped us establish a clear path towards the implementation."*

Likewise, the effectiveness of the migration tool as well as the combined efforts of the specialized groups created to execute the project, were key in accomplishing functional equivalence without affecting the look-and-feel of the migrated systems. *"The quality and professionalism shown by the ArtinSoft staff greatly surpassed our expectations. This made us confirm the initial vision towards them: establishing a long term relationship for migration projects"*, Miranda concluded.

"Their technology, methodology and highly talented professionals make ArtinSoft the most knowledgeable company in migration related issues", added Gregorio Nava, Director of Technology Vision Consulting.

Modernizing systems
The Visual Basic Upgrade Companion tool facilitated the automatic migration of the source code to C # in a fraction of the time and cost that would have required a manual rewrite, while maintaining the functionality and look-and-feel intact. Likewise, the client was able to take advantage of the new features offered by the. NET platform without losing any intellectual capital embedded in technological systems over the years, as well as improve the performance and maintenance of their systems through a rearchitecture towards a multi-tier and object-oriented model. Moreover, the new code is now connected to Oracle Express, as the MS Access 2000 database was migrated to Oracle 10g XP.

User Experience
The conversion to the .NET platform markedly improved system performance, which generated very positive reactions among end-users. The fact that migration did not affect the look-and-feel largely eliminated the resistance to change, so the transition could take place in a normal, efficient way.

About ArtinSoft

ArtinSoft has been in the software migration business since 1993, developing a proprietary artificial intelligence-based technology that has empowered them to carry out the main part of the work in the process of upgrading complex, business critical legacy applications to modern platforms like .NET and Java, all with an extremely high degree of automation. This, complemented with consulting services that cover every stage of a software migration project, delivered by the most knowledgeable experts available in the market, has allowed ArtinSoft to successfully migrate millions of lines of code for customers all over the world. www.artinsoft.com

About Vision Consulting

Vision Consulting was founded in 1997 as a company dedicated to providing specialized solutions for the IT industry, using cutting-edge tools to automate information processes in accordance with specific customer needs. In 10 years they have created several business units to ensure a complete offer of services and integrated solutions. www.visionconsulting.com.mx