



## Overview

**Country or Region:** United States

**Industry:** Professional services

### Customer Profile

Founded in 1978, Aderant specializes in process-management software solutions for law firms and other professional-service organizations. It employs 250 people.

### Business Situation

Facing growing competitive pressures, Aderant wanted to enhance its flagship product, Aderant Expert, to better enable its customers to define workflow-driven processes.

### Solution

Using Microsoft .NET Framework 4 and Visual Studio 2010, Aderant rebuilt the core foundation of Aderant Expert to strengthen its customization capabilities.

### Benefits

- Improvements in productivity, time-to-market, and manageability
- Easier workflow customization for customers
- Reduced IT costs for customers

## Solution Provider Upgrades Development Tools to Improve Customization, Productivity

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Stefan Sewell, Software Architect, Aderant

Based in Atlanta, Georgia, Aderant is a leading provider of process-management software to many of the world’s most prominent law firms and other professional-service organizations. To maintain its leadership position, Aderant needed to enhance the customization capabilities of its flagship product, Aderant Expert, and it did so by upgrading to Microsoft Visual Studio 2010 and .NET Framework 4, including enhanced workflow technologies. With the upgrade, the company is increasing developer productivity and reducing time-to-market and the cost of development and support. The company also is providing similar benefits to its customers, helping solidify its position as an industry leader and potentially increase revenue.

"Our clients were asking for greater customization options, so we had to make Aderant Expert even more powerful, flexible, and usable in that regard."

Mike Barry, Senior Vice President of Research and Development, Aderant

## Situation

Headquartered in Atlanta, Georgia, and with offices worldwide, Aderant is a privately held provider of integrated software solutions designed to help law firms and other professional-service organizations maximize their operational efficiencies. Its customers include 8 of the top 20 U.S. law firms, 45 of the top 100 global law firms, and 5 of the world's top 10 accounting firms.

With nearly half of its 250 employees working in software engineering, the firm is dedicated to the continual improvement of its flagship product, Aderant Expert. A customizable suite of applications and services, Aderant Expert enables firms to define their own workflow-driven processes. For Aderant executives, therefore, a primary objective in improving the product has always been to increase its customization capabilities.

Meeting that objective, says Mike Barry, Senior Vice President of Research and Development at Aderant, became especially urgent in recent years. "From its inception, Aderant Expert was a leader in supporting customization, but, increasingly, competitors began offering such capabilities," Barry explains. "Meanwhile, our clients were asking for greater customization options, so we had to make Aderant Expert even more powerful, flexible, and usable in that regard. This meant supporting customization not only of the user interface but also of workflow, the domain, the data model, and other processes in a single, consistent fashion with a single, consistent tool."

## Solution

A Microsoft Gold Certified Partner since 2004, Aderant has long used Microsoft development technologies, including the Microsoft Visual Studio development

system and the Microsoft .NET Framework, most recently with its Windows Workflow Foundation, Windows Communication Foundation, and Windows Presentation Foundation technologies. When Aderant executives looked at early releases of Visual Studio 2010 and .NET Framework 4, they saw what seemed an ideal environment for helping them enhance the customization capabilities of Aderant Expert.

In particular, the executives saw a way to give customers more control by enabling them to work more closely with the workflow tools in the .NET Framework. "When we saw the new, fully declarative Windows Workflow Foundation and Workflow Services, we saw a compelling way to simplify and extend our workflow product," says Stefan Sewell, Software Architect, Aderant. "We decided, then, to move our existing code base to the new environment."

Barry, Sewell, and their colleagues launched their development efforts by implementing an early release of Visual Studio 2010 and of .NET Framework 4. Over the better part of a year, these individuals were part of a team that upgraded the Aderant server infra-structure to .NET Framework 4 and development tool set to Microsoft Visual Studio 2010 Ultimate, rebuilding the core foundation of Aderant Expert using these technologies.

A significant change to come out of the endeavor is the greater flexibility that Aderant can offer its customers. Instead of providing only a stand-alone workflow designer for creating a business process, Aderant now offers a choice: an add-in to the Visual Studio workflow designer or use of the Visual Studio workflow designer directly, for customers with existing licenses for Visual Studio 2010 and sophisticated IT capabilities.

"In the past, to perform advanced customization of business processes or workflows, clients had to use staff or independent consultants with training in our stand-alone proprietary tool. Now, they can use any of the many developers or engineers available with Visual Studio expertise."

William Davis, Senior Director for Product Engineering, Aderant

## Benefits

For Aderant engineering professionals, higher productivity is the primary benefit of having upgraded to the latest development technologies for enhancing Aderant Expert. Higher productivity is a benefit that Aderant anticipates also for customers that will be taking advantage of the enhancements, along with reduced IT costs and increased flexibility.

### **Faster Time-to-Market, Greater Manageability**

Productivity gains were significant for the Aderant team using Visual Studio 2010 Ultimate, according to Sewell. "We can use the new support for UML [Unified Modeling Language] in Visual Studio 2010 Ultimate to capture design in models, map implementation tasks to Visual Studio Team Foundation Server 2010, and generate model implementation from templates," he says. "With the modeling capabilities of Visual Studio 2010, we can streamline application lifecycle management because we no longer need a third-party modeling tool."

Aderant developers also reduced development time dramatically with the help of the service hosting capability in .NET Framework 4. In the past, Sewell's team would spend more than four months developing the service hosting infrastructure for the Aderant workflows and services. But with Windows Communication Foundation in .NET Framework 4, the developers are able to declare their service hosting in a simple XML configuration file and deploy it to Internet Information Services or the Windows Process Activation Service, both features of the Windows Server operating system.

As William Davis, Senior Director for Product Engineering at Aderant, explains, .NET Framework 4 Workflow Services takes

hosting a step further to provide long-running, durable services. Plus, with the Windows Server AppFabric technologies for building, scaling, and managing Web and composite applications, his team is enjoying horizontal scale-out and fault tolerance, too.

"Administering the services is made easier with the AppFabric support built into Internet Information Services Manager and available through Windows PowerShell scripts," Davis says. "All of which not only shortens time-to-market and cost of development and support, but also gives our clients an easier way to manage the application and lower their own IT costs."

### **Streamlined Workflow Customization**

For Aderant customers, the enhancements to Aderant Expert made with the help of Visual Studio 2010 Ultimate and .NET Framework 4 will help streamline workflow customization. As Davis explains, this starts with more efficient management of data and a clearer structure of the workflow representations.

"Before, with the stand-alone workflow designer, our clients generated C# code to represent workflow activities," Davis says. "But now, using the Visual Studio 2010 add-in or Visual Studio 2010 directly, our clients are generating a much smaller, XAML-based [Extensible Application Markup Language] declarative representation of the workflow and its activities. This enables them to shrink their workflow persistence size for faster reloading of workflows and reduced storage requirements. In turn, they will enjoy even easier deployment, higher productivity, and lower IT costs."

### **Reduced IT Costs**

Because customers can now use an add-in to Visual Studio 2010 or the Visual Studio

## For More Information

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For more information about Aderant products and services, call (888) 604-2366, e-mail [info@aderant.com](mailto:info@aderant.com), or visit the Web site at:

[www.aderant.com](http://www.aderant.com)

workflow designer itself for workflow customization, they will enjoy access to a wider and potentially less costly source of IT talent. "In the past, to perform advanced customization of business processes or workflows, clients had to use staff or independent consultants with training in our stand-alone proprietary tool," Davis says. "Now, they can use any of the many developers or engineers available with Visual Studio expertise. They also can train their internal staff in that technology, which is something many of our clients are doing or want to do anyway. Either way, they can reduce their IT costs."

Similarly, by using the Visual Studio workflow designer or the add-in for their workflow customization, customers will be able to take advantage of third-party activity libraries created with Visual Studio. "Our clients will enjoy greater flexibility in integrating with Microsoft Office SharePoint Server 2007 and other Microsoft workflow-friendly systems," Davis says. "This makes Aderant Expert an even more attractive proposition, potentially helping us increase sales and revenue."

## Microsoft Visual Studio 2010

Microsoft Visual Studio 2010 is an integrated development system that helps simplify the entire development process from design to deployment. Unleash your creativity with powerful prototyping, modeling, and design tools that help you bring your vision to life. Work within a personalized environment that helps accelerate the coding process and supports the use of your existing skills, and target a growing number of platforms, including Microsoft SharePoint Server 2010 and cloud services. Also, work more efficiently thanks to integrated testing and debugging tools that you can use to find and fix bugs quickly and easily to help ensure high-quality solutions.

For more information about Visual Studio 2010, go to

[www.msdn.microsoft.com/vstudio](http://www.msdn.microsoft.com/vstudio)

### Software and Services

- Microsoft Visual Studio
  - Microsoft Visual Studio 2010 Ultimate
  - Microsoft Visual Studio Team Foundation Server 2010
- Technologies
  - Microsoft .NET Framework 4
  - Windows Communication Foundation
  - Windows Presentation Foundation
  - Windows Workflow Foundation