

# Fast and Flexible Finance Solutions

In the current economic climate, financial firms are challenged to make their operations more cost-effective, to do more with less as Jack Calhoun says in the Q&A at the back of the book. In securities and international banking, firms are seeking straight-through processing. The three firms that follow show how firms can meet their business objectives efficiently with Microsoft tools and platforms. GAIN Capital took Visual Studio .NET and Microsoft's Mobile Internet Toolkit to deploy its foreign exchange trading on cell phones and PDAs in just hours of programming time. Straight-Through, which is being deployed at Deutsche Asset Management, was developed before .NET was launched but uses an entirely Microsoft platform and a Web-based architecture that can be used in London, New York and Tokyo, with each site providing backup for the other two. Finally, Capco, the international financial consulting firm, has built its STP Bridge on Microsoft's .NET platform.

## Going Wireless—in Weeks

If you're a CTO, you may recognize the squeeze play Michael Thwaite faced at GAIN Capital. The foreign exchange trading firm's CEO wanted to go wireless – fast – but without spending a lot of money. Meanwhile, the core development team was swamped with other projects.

So Thwaite, GAIN's vice president of technology infrastructure, called in consulting firms large and small looking for a solution. The best proposals he received projected three to six months of development time at \$100,000, plus ongoing support costs; he was told to find something cheaper.

Thwaite picked up a copy of Visual Studio .NET, and a couple of days later a copy of Microsoft's Mobile Internet Toolkit 1.0 landed on his desk. Although he isn't a professional developer or a programmer, Thwaite has been in financial technology long enough to know his way around a software package.

"I couldn't believe what I was getting," he recalled. "Literally a few hours later I had joined the dots and was displaying Rates, News and Commentary from GAIN's servers on my phone."

From his time spent interviewing consultants for the wireless assignment, Thwaite had learned a bit about how wireless applications work, but he wasn't prepared to accomplish it himself.

"Pretty soon I had linked mobile phones to our infrastructure, and content was being dynamically constructed to fit the particular device. Once I was accessing our data from my phone and then from my iPAQ, I realized I would have to take this further."

He did a proof of concept and asked the firm's traders to try it from their mobiles. It worked.

"Fast forward a month and here we are with our production-ready application," said Thwaite from GAIN Capital's offices in New Jersey. Gazing at a monitor, he could see clients connecting over phones and PDAs to check their positions. In addition to wireless handhelds, the occasional user is connecting from a Macintosh operating system.

"The target was mobile phones," added Thwaite. "Once I learned the capability of the phones I could target higher end devices, such as iPAQs, and capitalize on features like their graphic capabilities. At the same time I can still reach the handheld devices and RIM Blackberries from the same server, carrying out the same tasks with the same code base – that is the thing most powerful for me."

Write-once, run-anywhere – that old slogan was an idea just waiting for the proper technology.

"This has taken only about five man-days of real coding time in actual development," said Thwaite, who is still amazed at the ease of development. "We have fewer than 100 lines of code. In the past, I have been responsible for technology development with Visual Basic and Java, and the difference here is quite monumental."

Perhaps he shouldn't have told the boss, though.

"Our CEO Mark Galant is looking forward to decimating the development group's list of deliverables." Thwaite professes to be unconcerned, now that he has the latest generation of Microsoft development tools. "We have contracted our development time quite significantly, in some cases to hours."



Now that the wireless connection is up and running, developers are watching usage and planning enhancements, such as alerts, and alerts tied to analysis. Guest users can see delayed market prices on up to 10 currency pairs, in addition to news and commentary from GAIN's trading desk, while users with live accounts can see real-time rates, analysis of their margin positions, plus order status and trade history.

"The next step is to allow clients to use that information and input orders through the wireless devices," said Thwaite.

GAIN plans to use .NET to develop new components, starting with ASP.NET to provide a richer interface and expand its reporting capabilities. In the past, as each new requirement for functionality came along, developers were driven by time-to-market pressure to write code and bolt on the extra functionality, which creates a more complex transaction path. With .NET, GAIN can re-engineer specific components of the system so it can group similar functionalities and link them to transactions through the .NET framework. That will allow the firm to create a shortened, simplified transaction path while allowing future development to still reach the transaction core directly.

"We like the performance, the speed to deploy features and functionality and the 'cross-everything' protocols. We have a number of clients who have white-branded our trading platform, and they need access to the data in the platform so they can integrate it with their own systems," added Thwaite. "Web services is right on the mark for that."

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