## Securities Industry News

## Northern Trust Adapts Technology to Changing Times

## Bank expands products, portfolio transparency, says Magrini

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By Chris Kentouris

The client is king, says Peter Magrini, technology applications and client solutions practice executive for Northern Trust in Chicago.

While such a stance has become commonplace among asset servicing providers, it is far from easy to fulfill. Like many of its peers, the ever-expanding global marketplace is forcing Northern Trust to ensure 24-by-7 support for its customers while their increased diversification of trading strategies requires it to incorporate new financial instruments into its IT strategy. Market volatility has generated higher trading volumes--hence revenues from clearance and settlement activities--but also prompted customers to seek greater transparency into their portfolios, more efficient risk management controls and timelier information.

Responsible for all software development and custom client solutions, Magrini has implemented a number of enhancements to the Chicago bank's data management and delivery capabilities. A 22-year veteran of Northern, Magrini took on his latest task as the result of the bank's splitting the CTO functions last year into two roles--software management, overseen by Magrini, and infrastructure management, which comes under the direction of Jim Scholefield, technology infrastructure and operations practice executive. Both executives report to Jana Schreuder, president of Northern's operations and technology unit.

Magrini was previously client accounting practice director in charge of accounting operations for customer investment portfolios from April 2007 to August 2008. From November 2005 to March 2006 he served as chief operating officer for worldwide operations and technology. Prior to joining Northern Trust, Magrini held technology roles as a development manager at Citicorp and project leader at the former Continental Illinois National Bank.

Last week, Magrini spoke with *Securities Industry News* about his past and future initiatives.

**How has the credit crunch affected your IT strategy and budget?**

In the current economic downturn, market values are declining but trading volumes continue to rise and we continue to invest heavily in IT. Market conditions have simply given us the opportunity to expand into new products and offer clients greater transparency into their portfolios.

**What are your IT priorities?**

After making substantial investments to ensure our content is solid, we will be putting most of our energy into creating what we call client-differentiated solutions. That means we will present more updated ways clients can package and use information. Northern Trust is unique in having created a truly global infrastructure so that clients in North America, Europe and Asia have access to the same information on their portfolios. Over the past five months we have implemented a third-party data virtualization tool that allows our institutional clients and relationship staff to have a single view of the data but not depend on access to static databases for access. The data is housed in a virtual layer which does not require inquiries to be made to multiple relational databases such as DB2, Oracle and Sybase. Development of reporting and delivery applications will therefore be faster and less expensive. Our business lines will be able to introduce new products to market faster. In our first three deployments of the data virtualization tool we have saved over $500,000 and reduced the development time of the technology solution by 20 percent

**What are the next steps in your data virtualization project?**

The introduction of data virtualization, coupled with our use of existing ETL (extract, transform and load) technology, is the first step in our evolution toward an integration competency center. The asset servicing business relies heavily on data. It is critical that data housed in our single operating platform is understood and utilized appropriately for each particular demand. The integration competency center will provide a centralized data service that all application developers can tap into to retrieve the right data for the right job. This eliminates the need for multiple teams and projects to reinvent the data extraction wheel time-and-time again.

**What's your greatest IT challenges?**

There are two central challenges: addressing the continuing need to accommodate new financial instruments and operating on a global basis. Last year we decided to switch from using internal applications, which were adapted for syndicated loans and OTC derivatives, to dedicated third-party platforms.

Markit WSO Services from Markit Group, which is used to process global syndicated bank loans, allows posting of principal, interest, or any fees associated with incoming payment wires at the loan level, even if held by multiple accounts having uneven denominations of a loan. Investment funds and asset managers receive automated reconciliation, documentation and loan maintenance for instruments such as term loans, revolvers, letters of credit, delayed draws and bridge loans.

For OTC derivatives, we implemented Misys' Summit for daily processing and lifecycle management.

To accommodate a global timeline, we are reengineering our workflow so that tasks can be broken down into their components. For example, an income payment has four or five steps which can be performed either in our Chicago operating center or our Bangalore, India, center depending on the time of day. We have already implemented an electronic document workflow management tool, IBM's Filenet, which allows us to hand off tasks from one operating center to another. We still receive plenty of faxes on confirmations for OTC derivatives and have to route the documentation to multiple areas for reconcilement and quality control.

**What percentage of your IT budget in 2009 will be allocated to software projects and what percentage to data infrastructure and how will that differ from previous years?**

Two-thirds of our budget will flow to software projects. We have consistently maintained the two-thirds/one-third ratio over the past several years.

**How will you balance your need to increase scale to ensure profitability with client customization requests?**

We ultimately want to spend as much of our investment dollars on technology that benefits our clients but have to do so in a way that leverages our standard infrastructure.

Last August, we launched an enhanced version of our Fundamentals Performance and Risk tool to offer a dashboard application for institutional clients to view key performance information. The Fundamentals Dashboard, available to asset managers and institutional investors, provides information such as returns, characteristics, risk statistics and market values. The version builds on the existing foundation of our performance, risk and attribution data. By allowing clients to define what is important to them and summarizing the information in a user-friendly way we provide mass customization on a flexible infrastructure that is crucial to investment decision makers.

**What are the next enhancements on client reporting and analytics to be delivered through the Passport front-end reporting portal?**

The next one scheduled is a risk governance reporting package for institutional investors, later this quarter. We'll also have a securities lending report on Passport and in the third quarter we will be releasing a new Real Time Query block on Passport. Sophisticated institutional or wealth managers and their customers can monitor and act on market risk in a volatile environment. The query can also be used to track potential settlement problems and take corrective action to ensure trades settle in a timely manner, reducing operational risk. The Real Time Query block complements other intraday information currently provided by Northern Trust, including cash positions, trade status and cash forecasting.

**How are you accommodating the technological spectrum of some of your clients?**

Introduced last March, PassportLink offers a plug-and-play technology solution that is designed to be used in conjunction with our Web Trade Services solution for automatic trade matching. It allows clients to transmit settlement instructions or pre-matched trades from any order management system to Northern Trust's Web Trade Services solution. Conversely, Northern Trust can transmit reporting information such as holdings, cash or income data to their client's underlying systems. PassportLink is designed to be compatible with a full range of front-office systems and has been successfully implemented with software from SimCorp Dimension and Wall Street Systems.

**How are you improving your corporate actions capabilities?**

**The biggest focus is gathering and scrubbing the notification information quickly so that we can send out information to customers faster. To that end, we implemented a new scrubbing engine**

**from Information Mosaic, a Dublin-headquartered corporate actions software vendor, in our Chicago headquarters while retaining exceptions processing work out of regional offices. Previously work would have been done manually or not at all. The introduction of the scrubber reduces manual work and improves quality since we can effectively use multiple sources to capture and confirm announcement details.**

**How are you using IT to address issues encountered with declines in cash collateral reinvestment pools?**

IT cannot solve the problem but it can help customers gain more transparency into the assets held by their collateral pools. We have been in beta testing since February for a new reporting service which allows clients to have a more comprehensive view of their collateral investments rather than the summarized version we provided previously. We expect to release the new service for use by institutional clients, including in investment managers and asset owners, in the second half of this year.

**How have you adapted your IT governance to account for your IT initiatives?**

Late last year, we created a centralized quality review team of six project management experts to review the ongoing process of each of our IT projects. Each executive on the team, which is run independent from our business units and IT department, is assigned a specific project and brings back his or her analysis to others in the group which then analyzes the results before they are presented to a separate project steering committee. The committee reports its findings to the business risk unit, which is overseen by our operations and technology group. We made the decision to develop this quality review team because we uncovered what we considered to be a lack of predictive assessment in some of our IT projects. Historically, detailed project reviews come after the fact in the form of a post-mortem. Our intent is to review the quality of the project's execution at multiple points in the project lifecycle. That way, corrective action can be taken to improve the project's outcome before deadlines and/or budgets are missed.