

OPERATIONAL AND COST EFFICIENCIES FOR A COMPETITIVE EDGE

Investment Operations Outsourcing





FOCUS ON YOUR CORE STRENGTHS

As an investment manager, you need to efficiently run back- and middle-office operations so you can concentrate on your core strengths — designing, modeling and implementing investment solutions.

Northern Trust understands this. To free you from your noncore activities, add value to your service delivery and help you achieve that all-important competitive edge, we offer you a reliable, flexible and innovative investment operations partnership.



INVESTMENT OPERATIONS OUTSOURCING

Northern Trust is one of the world's leading providers of asset servicing, asset management and private banking services. Founded in 1889, we have a history of strength and stability.

Today we are a global leader in delivering investment operations outsourcing solutions, supporting clients with a range of investment strategies from our operational centers in Chicago, London, Dublin, Singapore and Bangalore.



Today's investment environment is complex and fast-paced – where performance and speed to market are key drivers of success. Northern Trust understands the challenges you face – from profit pressure to managing technology costs, from facilitating business growth to managing new asset types, from keeping up with regulatory initiatives to retaining quality staff.

Northern Trust can help you focus on your core business of investment management. We offer a spectrum of investment operations outsourcing solutions that cover virtually every aspect of post-trade execution support, helping you take advantage of:

- **More time** to focus on your core responsibilities;
- **Increased** operational efficiency;
- **Lower** and more predictable operating costs;
- **Access** to the latest systems and technology without capital outlay;
- Back-office processing systems that support new asset classes;
- **Open architecture** to support your different distribution channels;
- Robust risk and compliance models to assist you in meeting changing regulatory requirements;
- **Dedicated** client servicing and a partnership approach to support speed-to-market for new products; and
- **Economies of scale** through technology, automation and collaboration.

A FLEXIBLE APPROACH

Outsourcing your investment operations is one of the most crucial decisions you will make. At Northern Trust, outsourcing is not a packaged product; successful relationships grow when the unique requirements of each client are met.

As your outsourcing partner, we will work with you to construct the solution best suited to your needs, using all or some of the components from our outsourcing continuum. Following are factors considered when proposing and building a solution for you.

- Your objectives
- People and culture
- Systems and connectivity
- Financial objectives
- Long-term goals
- Ongoing relationship plans

Through our continuous efforts to listen, collaborate, problem-solve, analyze, reengineer, advise, implement and measure our results, you can be confident we will deliver a solution that directly addresses your needs.

AN END-TO-END SOLUTION

Choose Northern Trust for a flexible, scalable and sustainable investment operations outsourcing structure, built on a single global operating platform. You can leverage a single, integrated solution for all your assets - custodied and noncustodied - with the flexibility of creating a full back- and middle-office or component outsourcing solution.

Our outsourcing model adheres to the following core principles.

- **Remove** process duplication
- **Assign** responsibility for each function
- **Maximize** automation
- **Deliver** flexibility
- **Reduce** reconciliation points
- Be vendor and partner neutral
- **Deliver** scale benefits
- **Adhere** to industry standards and best practices
- **Reduce** operational risk
- Support speed to market

A TRUSTED PARTNER

At Northern Trust, our culture is focused on control, risk management and conservatism, coupled with innovation and flexibility – critical qualities when taking on an investment operations outsourcing role.

We have partnered with a variety of investment manager clients worldwide with different goals and objectives, giving us solid experience creating, implementing and supporting tailored solutions.



Our outsourcing solutions support a wide spectrum of back- and middle-office functions, and are supported by a single, advanced technology platform.

ASSET PROCESSING	ASSET REPORTING	ASSET ADMINISTRATION	ASSET ENHANCEMENT
Trade confirmation and matching	Investment accounting	Fund consulting	Cash management
Message normalization	Financial accounting	Fund administration	Securities lending
Fail management and trade matching	Performance analytics	Fund accounting	Foreign exchange
Safekeeping and settlement	Risk analytics	Transfer agency	Passive currency overlay
Income collection	Post-trade compliance	Partnership accounting	Commission management
Tax reclamation	Headquarters reporting	Corporate secretarial	Transition management
Corporate actions	Data warehouse	Management company	Trade execution
Class actions	Trade execution analysis	Trustee	Investment program solutions
Proxy voting	Regulatory reporting	Cross-border pooling	
Vendor management	Management information	Fund of hedge fund execution support	
Derivatives processing	Benchmark reporting	Fund of hedge fund reporting	
Independent pricing	Client reporting		
Collateral management			
Data integrity checks			
Reconciliations			

The service you provide your clients will reflect the distinctiveness and expertise of Northern Trust's outsourcing capabilities. Take advantage of a broad range of services to create a tailored solution.

- Comprehensive, fully integrated back-office processing activities from trade validation and enrichment through settlement to event entitlements, proxy voting and fund accounting.
- Automated trade matching with client-specific tolerance checking and connectivity to industry-leading trade matching utilities that reduce operational risk and increase straight-through processing.
- **Collateral management solution** for over-the-counter (OTC) derivatives, using specialist technology.
- **Independent pricing** service for OTC derivatives covering a broad range of asset types.
- Online performance measurement data and daily attribution services including equity stock-level attribution, fixed income attribution and Global Investment Performance Standards composite management and reporting.
- Web-based post-trade compliance checking and regulatory reporting tool for efficient risk monitoring, measurement and management.
- Powerful, enterprise-wide single data warehouse providing flexible repository options, data aggregation from multiple sources and full data mirroring in real time, with copy maintained at Northern Trust's disaster recovery center.
- Web-based white-labeled client reporting so your clients and staff see your brand and logo, not ours.
- White-labeled client fee billing sent monthly, quarterly, semiannually, annually or on an ad-hoc basis.

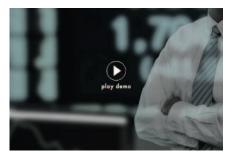


FLEXIBLE SOLUTIONS

To bring you end-to-end solutions - whether you require full or component outsourcing services we take a measured, ever-evolving approach and offer a flexible, nimble operating model.

COLLATERAL MANAGEMENT

Delivering accuracy and efficiency through an automated, integrated, end-to-end solution.



View a demo

WEB TRADE SERVICES

Simplifying your post-trade execution processing through automation, connectivity and real-time trade tracking, inquiry and reporting.



View a demo

COMPONENT SOLUTIONS

Pick and choose the functions you wish to outsource while having the flexibility to retain control of other activities in-house. To help you mitigate risk and achieve greater automation and more efficient workflows, our flexible outsourcing solutions can be bundled or used on a component basis.

Collateral Management

In-house collateral management for OTC derivatives can be complex, time consuming and open to significant risk, especially in a highly manual environment. Northern Trust can oversee the collateral process for you, including OTC derivatives pricing, to determine exposure and manage legal agreement documentation, reconciliation and settlement.

- **Covering** all OTC derivative products under the International Swaps and Derivatives Association agreements in a highly automated environment.
- Using specialist technology fully integrated with our global infrastructure.
- **Providing** a central repository for copies of your collateral agreements.
- **Delivering** flexible reporting.

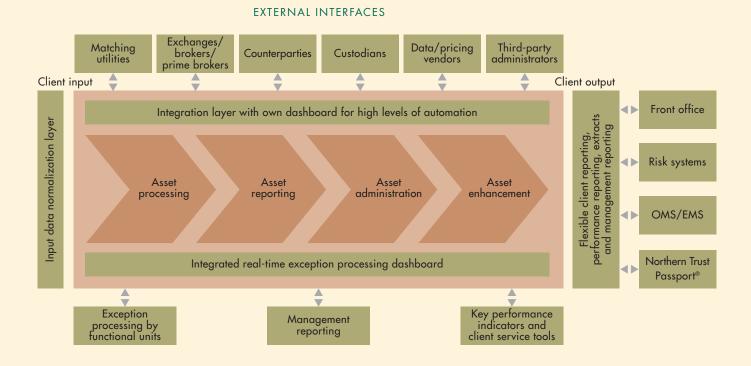
Web Trade Services

In-house post-trade execution can entail extensive manual processing, which drains organizational time and resources.

Web Trade Services, Northern Trust's market-leading trade processing innovation, offers you a highly automated alternative with real-time, Web-based inquiry and reporting capabilities. With Northern Trust, you can choose to fully outsource your post-trade execution, or using Web Trade Services you can elect to outsource only certain elements of the process, such as trade confirmation, matching, enrichment, custodian instruction and third-party messaging.

- **Supporting** a wide range of instruments.
- **Providing** electronic connectivity to more than 2,700 end points in the global brokerage community.
- **Automating** communications to major custodians globally.
- **Connecting** globally with Omgeo for trade matching.

Northern Trust utilizes some of the most sophisticated technology in the business. We have built our outsourcing services into our global operating platform, giving you a single asset servicing solution that is flexible, scalable and economical.



STANDARDIZED PROCESS AND FLEXIBLE ARCHITECTURE

Our single integrated platform offers:

- A powerful single data repository operational and economic efficiencies from an asset servicing platform that supports all your data needs;
- Real-time access to portfolio information 24/7 access for your front- and middle-office activities via Northern Trust's Web portal, Northern Trust Passport;
- White-labeled reporting through Passport for your staff as well as your clients, so you don't have to create and maintain your own reporting; and
- Message-based interfaces continuous interaction with your front-office systems.

OPTIMAL DELIVERY

Our extensive services are supported by a state-of-the-art operating platform, providing timely and accurate data delivery. Our technology infrastructure optimizes straight-through processing and data integrity, and is positioned to grow and change with your business.



hard to deliver the high-quality outsourcing service you expect. We adopt a consultative approach and partnership philosophy, tailoring our outsourcing solutions to suit your needs, now and as they evolve.

Northern Trust offers you a partnership in which you can trust. We would like to build a long-term relationship with you that will deliver efficiency, flexibility and understanding.

We focus on what is important to you. Ultimately, Northern Trust strives to deliver to you - and your clients - a differentiated service experience so you can enhance your investment returns and remain ahead of your competitors.

NORTHERN TRUST LOCATIONS

Abu Dhabi	
Amsterdam Control of the Control of	
Bangalore	
Beijing	
Chicago	
Dublin	
Guernsey	
Hong Kong	
Jersey	
Limerick	
London	
Luxembourg	
Melbourne	
New York	
Singapore	
Stockholm	
Tokyo	
Toronto	

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