NORTHERN TRUST

FAMILY OFFICE TECHNOLOGY

SOLUTIONS GUIDE

TECHNOLOGY & REPORTING SPECIFICALLY FOR FAMILY OFFICES

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NORTHERN TRUST AS YOUR FAMILY OFFICE ADVISOR AND PARTNER

On behalf of Northern Trust, I would like to thank you for your interest in our Global Family & Private Investment Offices (GFO) group. We know that families and Family Offices come in different shapes and sizes, and have unique attributes that require a distinct service model. Our clients' complexity, investment horizon and need for advanced technology architecture set them apart from the broader universe of wealth management. The Northern Trust GFO group is a recognized leader in the ultra high net worth tier due to our investment in technology, processes and people.

COMMITMENT TO TECHNOLOGY FOR FAMILIES AND FAMILY OFFICES

As a technology leader in financial services, Northern Trust has committed over $3 billion to enhancing our capabilities over the next three years. We have one, integrated technology platform that enables us to expedite new system enhancements to the marketplace and a employ a quick, iterative approach based on client and partner feedback. Over the past 2½ years, within our Global Family Office practice, we engaged in a comprehensive review of our reporting solutions to help us determine how we can be even more relevant to our global family office client base. Our primary objective and goal is to partner with our clients to 1) Create Operational Alpha and 2) Enable Operational Efficiencies for our clients. Operational Alpha allows our clients to have decision-ready tools and services on demand that enable them to make thoughtful business and portfolio decisions. In the process, we help our clients achieve Operational Efficiencies, reducing friction, risk and, potentially, cost in their day-to-day operations.

TECHNOLOGY BACKED BY A GLOBAL INSTITUTION

Our technology platform was created to support Northern Trust's wealthiest of private clients and is backed by the resources and expertise of a longstanding, global financial institution. As a firm, Northern Trust has nearly $11 trillion in assets under custody and administration and over $1 trillion in assets under management. From our experience supporting this level of assets for sophisticated clients, we understand not only what technology and reporting is needed but we also understand how it is best utilized.

CLIENT-CENTRIC CULTURE

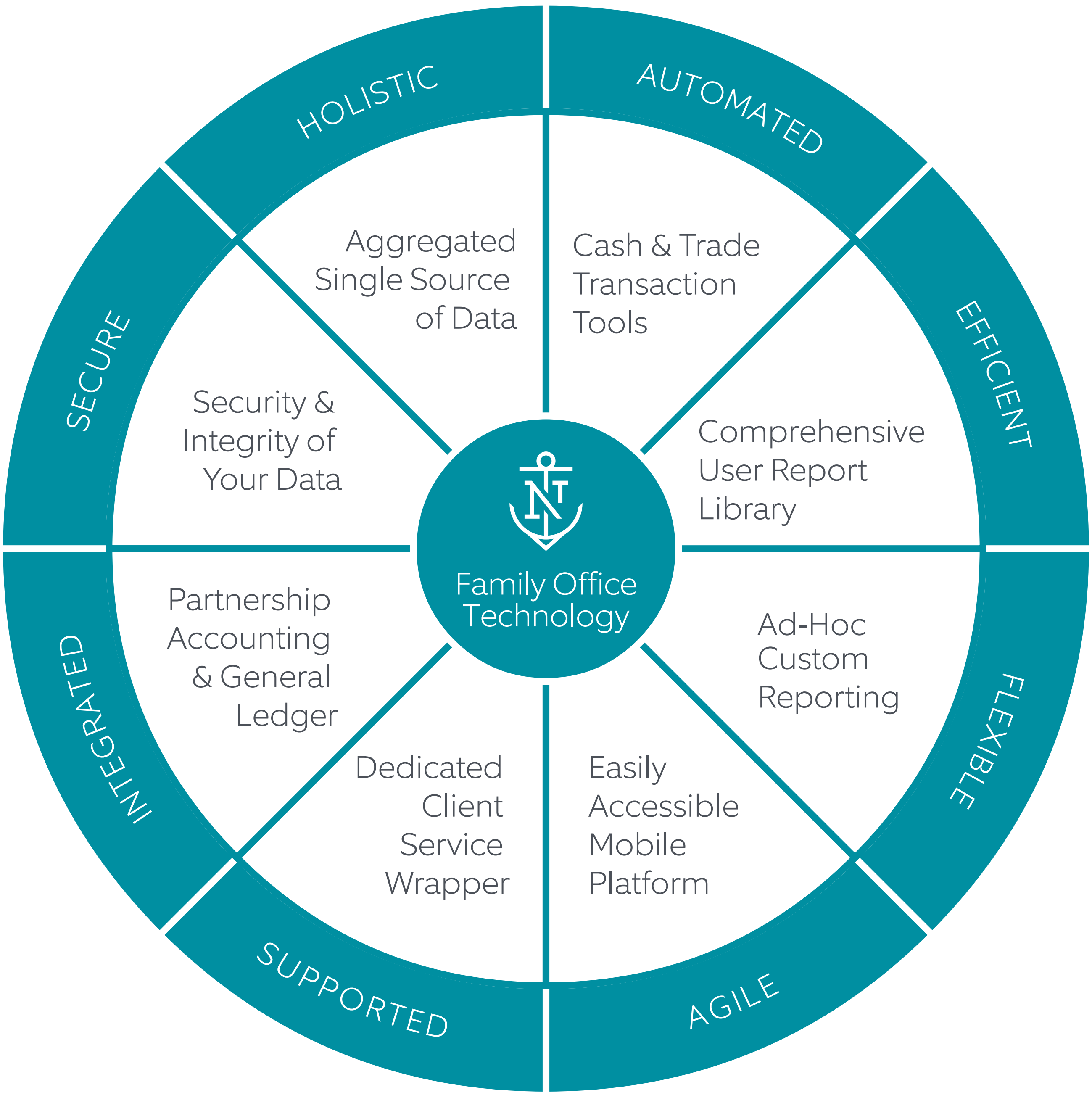
Service, Expertise and Integrity are the core principles driving our service model and all of our business decisions. In working with GFO, you will have a partner that prioritizes your needs first. We firmly believe that doing what is right for our clients is the best way to grow our business. We feel very strongly that developing and nurturing personal relationships are the cornerstone for long- term business relationships.

I would like to give you my personal affirmation of our commitment to your family and its needs, over both the short- and long-term. We hope that the information that follows helps to underscore that promise, and we look forward to meeting with you in the near future to discuss more specifically how we can support you.

We thank you for considering us as a technology solution. Should you wish to start the conversation about our technology offerings, please reach out to your dedicated Relationship Manager or myself directly.

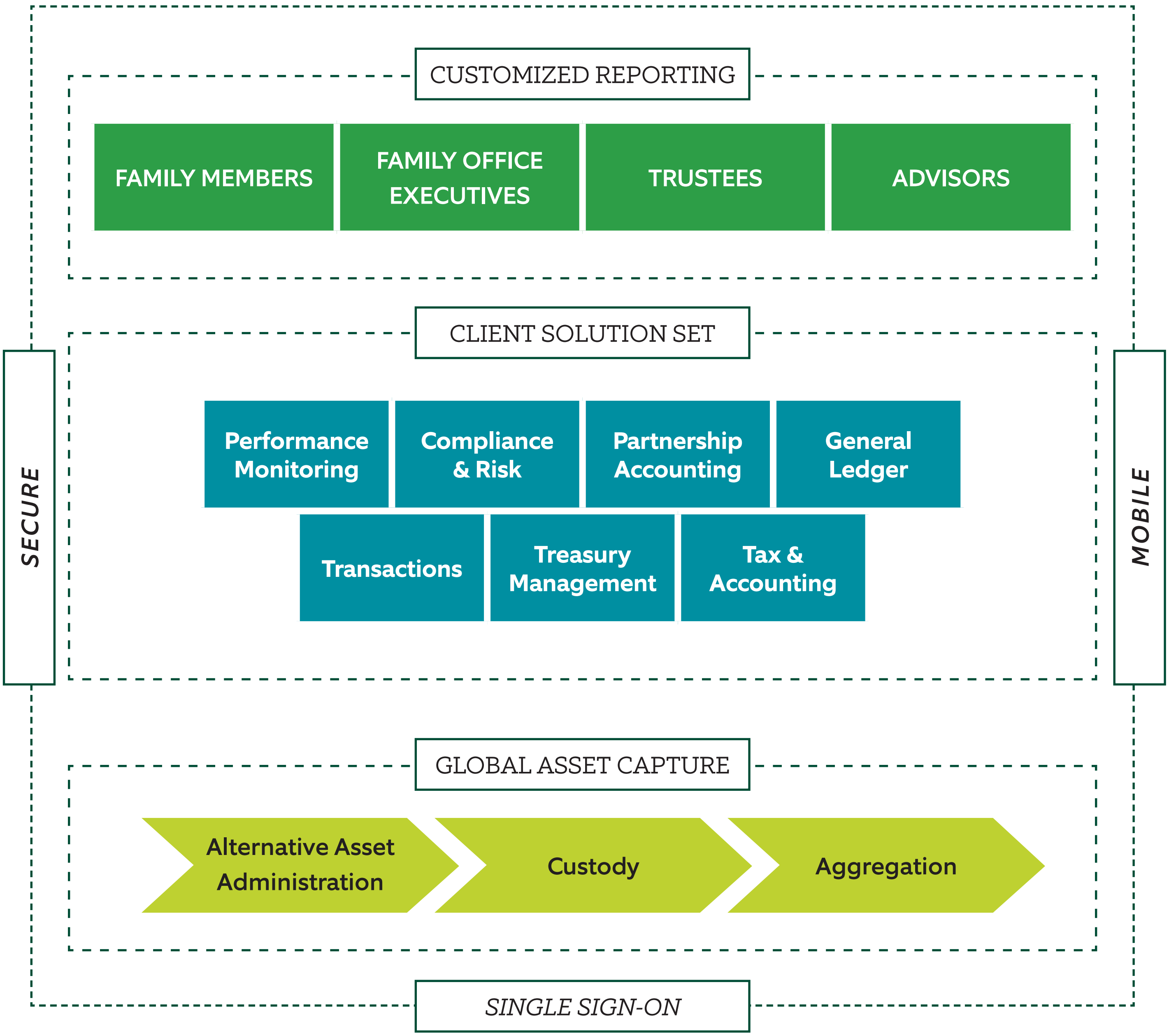
SOLUTIONS OVERVIEW

Northern Trust's Global Family Office technology and reporting solutions leverage our institutional and private client technology capabilities alongside direct feedback from over 450 of our Global Family Office clients.



TRANSFORMING DATA INTO COMPREHENSIVE SOLUTIONS

We build technology & reporting solutions that create Operational Alpha and Operational Efficiency.



AGGREGATION SOLUTIONS FOR A SINGLE SOURCE OF DATA

From experience, we understand that families oftentimes own a wide array of valuable assets. For this, we offer a variety of data aggregation solutions so our clients can benefit from the ease of having a single source of data.

YODLEE

Captures screen-level data for retail assets into Wealth Passport.

For assets like: banking accounts, credit cards, rewards programs

MANUAL AGGREGATION

Client initiated tool that allows users to manually enter holdings and transactions directly into Wealth Passport.

For assets like: art, wine, boats, planes, property

SHADOW ACCOUNTING

A service that mirrors the account transactions and holdings across multiple custodians/prime brokers in our Custody Platform. Northern Trust monitors and normalizes the data to ensure alignment, regardless of source.

For assets at: Prime broker and custodian, relationships with electronic feeds

PRIVATE CLIENT RESOURCES (PCR)

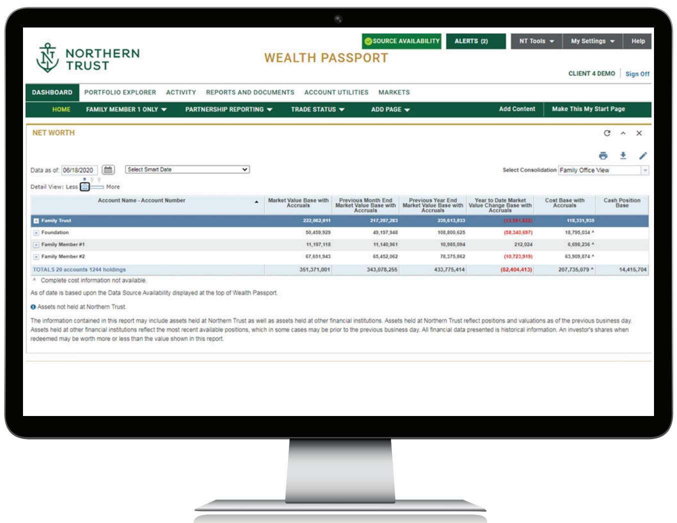
Partnered with a leading wealth aggregator to provide your family office with daily feed of transactions and holdings in Wealth Passport.

For assets like: actively managed investment accounts, brokerage accounts, alternative assets, mutual funds

WEALTH PASSPORT

The comprehensive platform for your financial data needs.

Wealth Passport is an online platform designed to meet the specialized, highly complex needs of ultra-high-net-worth families, their family offices and their advisors.



AGGREGATE DATA

PERSONALIZE PORTALS

EXPLORE PORTFOLIOS

ACCESS VIA MOBILE

UNDERSTAND RISK

CUSTOMIZE REPORTS

TAILOR SYSTEM ACCESS

SUBMIT TRADES & FX

STORE DOCUMENTS

MOVE MONEY

RECEIVE ALERTS

SCHEDULE REPORTS

IMPROVE EFFICIENCY

INCREASE FLEXIBILITY

ENHANCE PRODUCTIVITY

TRANSACTIONS MADE EASY

Securely initiate and approve monetary transfers and trades from anywhere.

Northern Trust's cash movement, trade, and FX tools are designed to increase both operational efficiency and security for family offices.

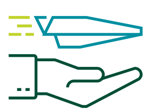
EFFICIENT

- Initiate and manage transactions
- Schedule and save information for future use with flexible options
- Import multiple transactions via a template
- Protect your information via secure ID token at login

SECURE

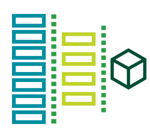
- Approve multiple transactions at once
- Attach supporting documentation to expedite the approval process
- Use the Wealth Passport App to complete mobile approvals, mobile check deposits and much more

Create transactions 24/7 & schedule transactions for certain dates



Eliminate email, faxing, and call backs

Easily access the status of transactions and receive notification when action is needed

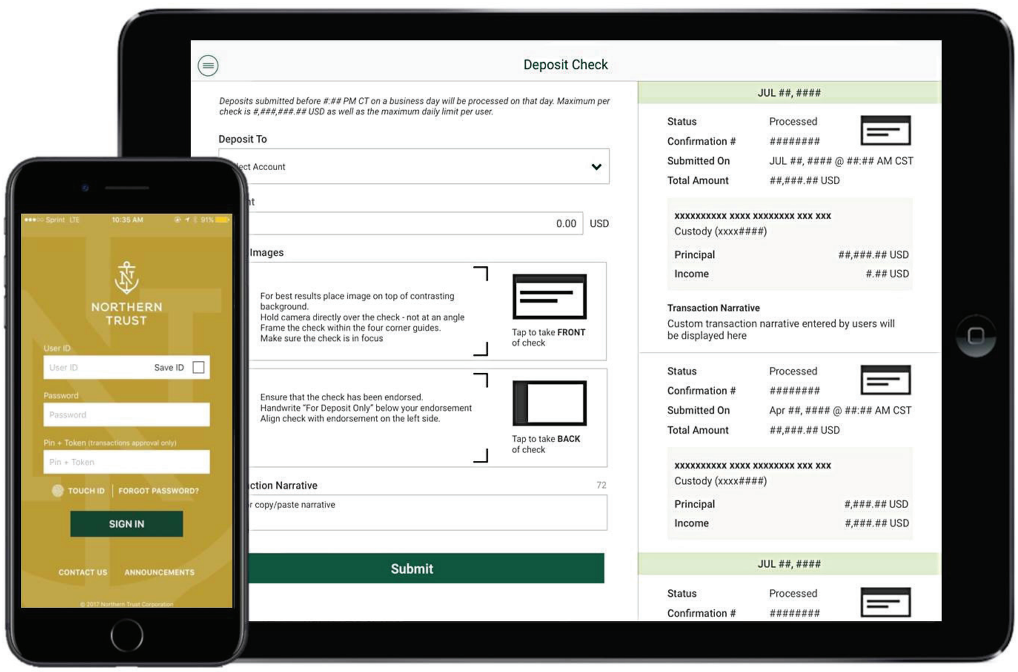


Customize security thresholds at the individual level

YOUR DATA: ANY TIME, ANY PLACE

Our fully-mobile platform allows to you to utilize Wealth Passport when you are on the go.

Built for your convenience and ease of use, Wealth Passport allows you to perform transaction approvals, deposit checks to custody and banking accounts and view an account summary on a mobile device. If you already have Wealth Passport online credentials, just download the app and log in.



Secure Access

Approve a multitude of transactions

Deposit checks

Access account information

View attachments

Our Clients Tell Us...

"Northern Trust's Mobile App allows me the freedom to be away from the office and approve transactions from my phone."

"I can view all the pertinent details of a transaction right on my phone including attachments, allowing me to keep my schedule the way I want to."

"Using biometrics, the Mobile App combines security with ease of use."

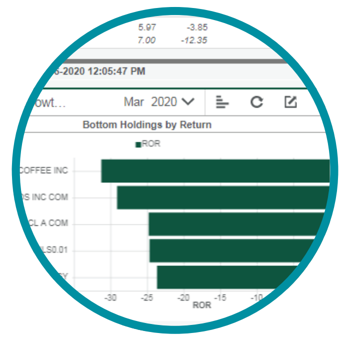
PERFORMANCE REPORTING

Better data, better tools, better decision making.

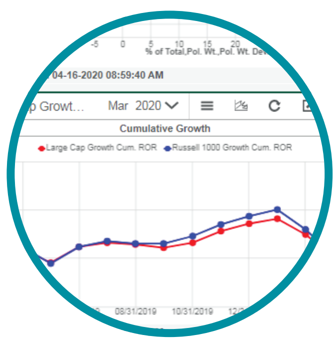
Northern Trust's performance module provides flexible dashboards to analyze the performance of your portfolios.

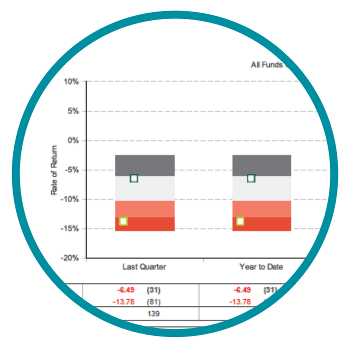
Powerful calculation engine providing global investment coverage and quality, independent data under-pinned by rigorous processes

Flexible, intelligent user experience supported by a dedicated team of expert consultants



On-demand access to information and a broad suite of reports





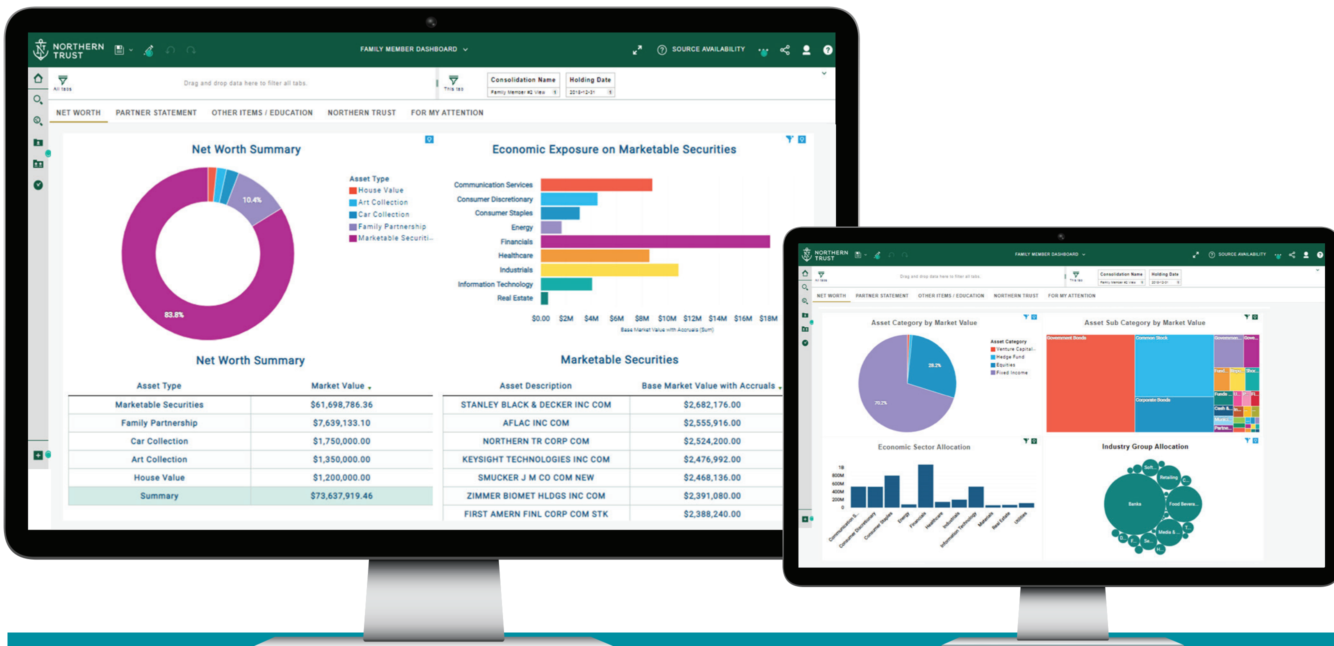
OUR CLIENTS USE PERFORMANCE DASHBOARDS & REPORTS TO ANSWER QUESTIONS LIKE...

- Does internal and manager data check against an independent source?
- Why has my investment varied from the benchmark?
- Is my current asset allocation matching my target?
- How are investments contributing to the overall return?
- What does my portfolio risk look like?

INTELLIGENT, INTUITIVE DATA VISUALIZATION

Powerful reporting and data visualization tools, available wherever and whenever you need them.

Northern Trust's Anchor Analytics platform harnesses cutting-edge artificial intelligence technologies to help intuitively navigate, analyze and report on your data.



ARTIFICIAL INTELLIGENCE | **NATURAL LANGUAGE PROCESSING** | **MACHINE LEARNING**

Smart Visualizations

The system recommends the best chart based on data selected

Self-Service Dashboards

Quickly design compelling dashboards

Slice & Dice

Cut large segments of data into smaller parts, and find out the right level of detail for analysis

Single Interface

Personalized experience for all: build tailored, guided experience over any device

Aggregated Databases

Integrate uploaded files with your Northern Trust data

INTEGRATED ACCOUNTING SOLUTIONS

In working with families and family office clients, Northern Trust has observed firsthand the reasons for utilizing partnership structures and has developed solutions for the related challenges.

To address the unique accounting and reporting needs that partnership structures bring, Northern Trust has partnered with SS&C to provide an integrated, technology-enabled partnership accounting and general ledger solution to our clients which is designed to deliver:

Partnership Accounting

- Fully automated income allocation and reallocation to partners
- Special allocations for including/excluding specific P&L by partner by either investment or general ledger account
- Capital activity contributions, distributions, unitary reallocations, allocations, automated deferred capital processing
- Automated incentive fees and management fees, including loss makeup and hurdle(s) relative to indices
- Capital-based or shares-based fund valuation
- Subscriptions/redemptions processing
- Statement of changes, investor capital statement, entity performance, detailed gain/loss and NAV calculation detail
- Trade all types of securities, including equities, fixed income, partnerships, futures, forwards, options (financial and commodity), repurchase agreements, etc.
- Multiple methods to relieve tax lots

Tax Accounting

- Layering tax allocation methodology
- Entitlement/aggregate tax allocation methodology
- Fully automated tax allocation to partners
- Automated 704c tracking
- Production of tax worksheets for 1065 and K-1

General Ledger

- Integrated book/tax general ledger(s)
- Market discount/premium/OID amortization and accretion
- General ledger entries for book and tax
- Trial balance, account detail, financial statements module
- Portfolio reconciliation

Our Families Use Partnerships for...

- ✓ Cost Efficiency
- ✓ Access to Managers
- ✓ Individualized Investing
- ✓ Portfolio Enhancement
- ✓ Generational Wealth Transfer & Planning

BUSINESS PROCESS REVIEWS

Business Process Reviews (BPRs) help our clients create "Operational Alpha."

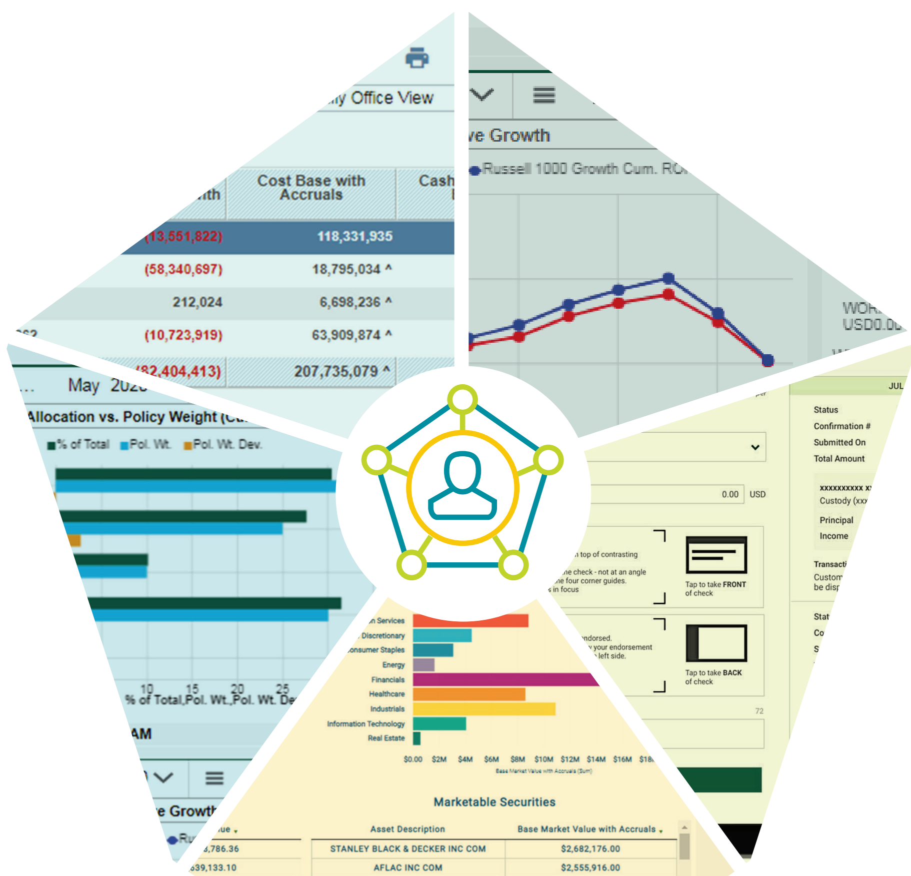
Goals & Objectives for BPRs Include:

- ✓ Identifying more efficient processes to work with clients and their vendors, including file feeds
- ✓ Reviewing our clients provider and advisor relationships, along with family office staff, to help maximize their resources and relationships
- ✓ Mitigating risk for both clients and their providers
- ✓ Determining where various tools and technologies can be used to create efficiencies
- ✓ Identifying product gaps where we have viable solutions
- ✓ Reviewing manual processes to determine more automated or controlled ways of operating
- ✓ Working with clients on strategic initiatives specific to their family office operations
- ✓ Analyzing how our clients interact with Northern Trust so that we can continually improve our tools, technology and processes

Business Process Review engagements can be short- to long-term; all-encompassing to narrow remit; over the phone, or up to several days in the client office.

DEDICATED CLIENT SERVICE WRAPPER

Every client relationship in our Global Family Office group has a dedicated Online Client Consultant, relationship team and subject matter experts who will help you leverage our technology solutions.



Bring it all together with personalized and reliable support for…

- ✓ Training
- ✓ Report generation
- ✓ Report customization
- ✓ Data aggregation
- ✓ Partnership Accounting
- ✓ General Ledger
- ✓ Performance Reporting
- ✓ And all other needs

NORTHERN TRUST ACCOLADES

Our success is your success.

NORTHERN TRUST

FOR YOU,
SUCCESS NEVER RESTS.
NEITHER DO WE.

FINANCIAL TIMES GROUP, 2018

BEST PRIVATE BANK for Use of Technology (North America)

BEST PRIVATE BANK for Family Offices (Global) 2nd Consecutive Year

BEST PRIVATE BANK for Customer Service (United States)

ACHIEVE GREATER

NORTHERN TRUST