LIQUIDX®

A Global Digital Network for Illiquid Financial Assets

Impello Global



LiquidX 360 - Trade Up!

LiquidX 360 is the most advanced solution in Working Capital, Trade Finance, and Insurance

- Execute transactions in 35+ jurisdictions and 7 different currencies
- Leverage **embedded business intelligence** to better manage your portfolio
- Use blockchain technology to simplify and automate treasury management processes
- Work directly with your customers and business partners in a private, branded environment
- Trade Up!





The Pillars of LiquidX's Unique Network

LiquidX solves for the legacy trade finance issues through its leading technology platform, proprietary legal framework and robust operational servicing capabilities

Leading Technology Platform



- Global technology platform offering Trade Finance, Working Capital and Insurance Solutions
- Connectivity to inhouse bank systems, ERP, TMS platforms via an API connector to automate information flow
- Users can elect trading partners on a transaction level
- Web-based application hosted on the Azure and AWS clouds

Single, Standardized Legal Framework



- Market-leading documentation structure that is quick to on-board and easy to scale globally
- A single agreement allows each party to transact with all players in the network
- Documentation annexes split by product enabling users to pick bespoke solutions for their requirements

Secure Cash Management Structure





- Secure funds flow structure on Citibank and JPM's Agency and Trust Platforms
- LQX has the ability to act as payment agent for all transactions settled via the platform
- Leverage Broadridge's global operations footprint for fast and efficient processing of funds
- Direct Funding: Flexible settlement structure allowing banks to fund directly if preferred

Reporting and Back-office Support





- Real-time reporting
- Machine readable and customizable to users specifications
- All trade screens and historic information exportable into various file formats
- Set-up and operation of lockbox collection accounts, including reconciliation of all payments flows and related reporting
- Broadridge acts as operational services provider, handling all payments processing

Workflow Efficiency Using Blockchain



- Platform is integrated with InBlock, LiquidX's blockchain engine
- Strategic partnership with Broadridge to leverage blockchain infrastructure
- LiquidX launched its first Blockchain transaction in Q2 2019
- Designed to streamline treasury workflows
- Captures all transaction details on the DLT



LiquidX has Processed over \$100B of Funds

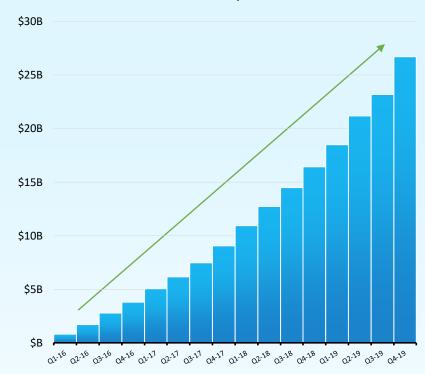
LiquidX's Technology is the Industry-Standard

- Since its inception in 2016, LiquidX has effectively managed and processed \$100+ billion in cash management activity on behalf of our customers with no losses, delays or defaults
- We have a 50+ person technology team dedicated to building and enhancing the LiquidX and InBlock platforms
- The LiquidX 360 platform is the most advanced solution in trade finance, featuring seamless access to multiple products including the only electronic marketplace for trade credit insurance

We had Record Results in 2019

- Volumes of \$9.7B in 2019 and revenues up 90% compared to 2018
- Transactions in 5 currencies and 28 jurisdictions across North America, Latin America, Europe, Asia, and the Middle East
- Over 220 credits traded across the platform to date, an increase of 64% year over year
- Strengthened our strategic partnership with Broadridge, the operational service provider for all cash management on the platform
- Added numerous new participants to the network, including 3 new insurance carriers – AIG, Great American, and Tokio Marine HCC

TOTAL TRADED VOLUME OF \$26B+ AND ACCELERATING



- √ \$26B+ traded volume
- ✓ \$1.5B of monthly traded volume
- ✓ \$100B+ of funds flow
- √ 6,000+ transactions

- √ 23,000+ remittances processed
- √ 35+ legal jurisdictions
- ✓ 1 standard legal agreement (multi-jurisdictional)
- √ 7 approved currencies



LiquidX: A Broadridge-Backed Company





Global leader in technology and operations solutions for the financial services industry; regulated by FINRA, the SEC and other international, state, and local regulators

40+ FI clients

\$6T

Daily Traded

Volume

\$4.4B
Annual
Revenue

\$14.4BMarket Cap

Broadridge acts as a strategic partner to LiquidX, providing funding, technology services and operational support to LiquidX

- 1. Broadridge is the **lead investor** in LiquidX with 15% ownership; they recently doubled their ownership interest during a \$25M funding round in Q2 2019
- 2. Broadridge's multi-jurisdictional regulated Broker-Dealer is the strategic **operational services provider** for LiquidX:
 - a) Payment processing for all LiquidX platform transactions + subsequent settlements from
 - b) Reconciliation of all bank accounts
 - Back-up services provider in the event of LiquidX default (i.e. bankruptcy)
 - d) Global operations scalability with a follow-the-sun operating model
- 3. Broadridge is the **blockchain technology provider** for InBlock InBlock uses Broadridge's Recs and Finmap solutions to link the InBlocked invoice to the payments.
- As a Broadridge-back company, we observe the same information security policies and procedures as Broadridge, a global leader in information security standards



We're Not Building This Alone



\$4.4B Revenue, \$15B Market Cap, Lead Shareholder, Operational Services Provider, Back Up Servicer, Administrative Agent and Blockchain Technology Provider.



\$25.5B revenue, \$5B market cap, partnering on Blockchain.



A global leader in insurance broking and risk management. Partner for insurance marketplace.



Multi-billion dollar special situations fund. Targeted deployment on LiquidX of up to \$500M.



Key banking partners managing account structure on their agency & trust platforms.



LiquidX's 5-year Strategic Vision

Disruptive Technologies Create Opportunity

- Working Capital, Trade Finance, Insurance and Loan assets will be blockchained in the next 5+ years
 - As these underlying assets become "digitized" they will be more easily underwritten and monetized
- Electronification of the credit insurance market will accelerate use of insurance
 - An efficient electronic marketplace for credit insurance could be viewed as an alternative to CDS (\$6.8T gross notional outstanding for single name CDS in 2016)

Non-CUSIP Networks Emerge

- Working capital/trade finance, insurance and loans and will migrate to networks and marketplaces, consistent with how other asset classes have evolved
 - LiquidX's scalable customer legal framework will become a competitive advantage
- The "Network Effect" of a global platform for non-CUSIP assets will be highly synergistic

Commercial Banking Moves Towards Capital Markets

- Non Banks will become major investors of non-CUSIP assets
 - Banks need to become more efficient to compete \$1B+ outsourcing opportunity
- Banks will gravitate towards our white label solution ("LPP") to leverage our marketplace technology, legal framework, settlement structure and reporting capabilities embedded in our network



LiquidX's Strategic Framework

Digitizing The Asset









Electronifying The Front Office



- ✓ Blockchain expertise digitizing underlying assets (first InBlock trade Q3 2019) and digitization of underlying policies / documentation
- ✓ Broadridge technology partnership, leveraging their operational excellence to build industry utilities





- ✓ **Corporates** marketplace to sell trade finance assets
- ✓ Insurance electronic marketplace for the purchase of trade credit insurance
- ✓ Banks origination and distribution network and marketplace
- ✓ Non-Bank Fl's framework to deploy institutional capital at scale



A bank's full-service Trade Finance solution:

- ✓ Blockchain platform
- ✓ Origination/distribution platform
- ✓ Back office, reporting and settlement function



Maximizing Optionality for Your Franchise

LiquidX offers **Front Office, Risk Management, and Back Office efficiency tools,** all of which will be available to IG Customer

L I Q U I D X Platform Supply Chain Finance, AR Onboarding Portal Finance, Inventory Finance Reporting/BI **Automated Ingestion** · Post-Trade Integration Invoice Filtering + Validation • Maintenance and Support InBlock™ • Insurance Capabilities **Transaction Migration** Asset digitization platform with full order-to-cash lifecycle **ORIGINATION AND DISTRIBUTION TOOLS** · Automated filtering and validation of assets Originate assets from the LiquidX · Post-trade integration to marketplace LQX and other platforms **IG** Customer • Sell assets from your existing portfolios · Full integration to TMS and Bank to bank participations ERP systems, and financing platforms INSURANCE MARKETPLACE **POSITION MONITOR SERVICE** Access to Insurance marketplace · Manage all payments, limits, and **BACK OFFICE SERVICES** Import policies and link to assets insurance in one place Automated validation of asset eligibility **Post Trade Settlement Software** Keep all internal stakeholders in Track insured assets and utilization Remittance Logic sync with respect to outstanding Search limits and insurance by obligor and utilization **SWIFT Integration** · Full Entitlements

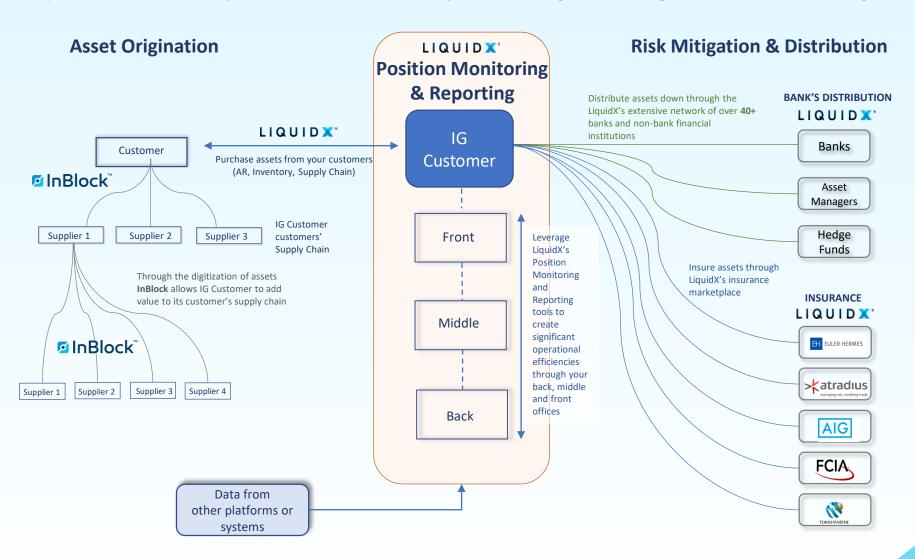
Broadridge BPO

Market leader in FI BPO



Leverage the LiquidX Ecosystem

LiquidX's front-to-back ecosystem allows IG Customer to tap into Asset Origination through Distribution and Risk Mitigation





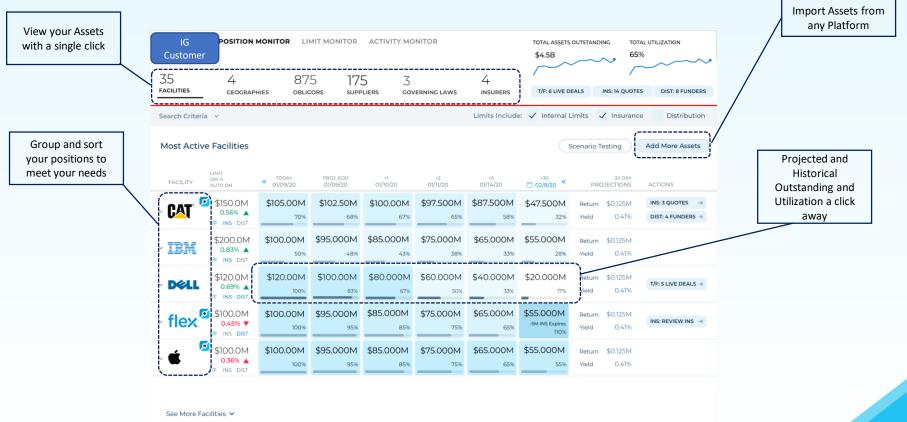
A Comprehensive View of Your Trade Finance Portfolio

With the LiquidX Position Monitor, access 360 degrees of trading, insurance, and risk on one screen, all configurable to match the specifics of your programs

No more spreadsheets: Get a real-time view of Outstanding and Utilization for your entire portfolio

Import from anywhere: Pull in data from any platform for a full view of your historical and projected risk

Post-trade integration: Leverage InBlock to get straight-through payment remittance updates





LiquidX 360 is Built on Cutting-Edge Technology











Platform Architecture

Our solution leverages LiquidX's world-class and enterprise-grade design and architecture characteristics. This structure is based on proven technology in .NET/C# with Angular 7 which is in use on the LiquidX platform today

- An extensible platform designed for ease of integration & white labeling scenarios
- A multi-product web structure supporting configurable product additions
- A micro-services REST-ful architecture that is highly extensible & adaptable
- A multi-level entitlements 'DNA' that enables control at the 'atomic' level
- Global & Enterprise-grade Authentication, User Management & Admin Workflow
- Business Intelligence: Use of enterprise-grade Power BI cover ad-hoc & static analytics
- Latest architecture leveraging:
 - Business Logic via Serverless compute & PaaS scalable solutions
 - Database PaaS using cloud-relational & document database storage
 - Logging: Traceability of asset changes, user changes & behavior, etc.
 - Alerting: Real-time web-sockets with a platform that is event-driven
 - Azure Machine Learning: We've partnered with Microsoft for cloud-based machine learning since platform inception for our recommendation engine



Sophisticated Data Architecture: LiquidX is a multi-asset class data platform designed by architects and data modelers with decades of experience in Financial Markets. You will benefit from our expertise in data model design and access/interface design

Seasoned Experts: Members of our technology team have past experience building data models and systems across various industries



Broadridge-Backed brings Broadridge Infosec Excellence: Tech, Process, Data

Broadridge is recognized as the gold standard for information security, and LiquidX leverages their extensive resources to provide you the level of security and reliability a global bank requires

- Broadridge security framework applied for the AWS environment: Case study at AWS for best of class transformation
- Broadridge and its third-party partners have developed extensive procedures, templates, and workflows to pass SOC 1 and SOC 2 Audits, all of which is leveraged by LiquidX
- SDLC Guidance and Best Practices in place, along with frameworks for the secure deployment to AWS and Azure Clouds
- Data Encryption: All data encrypted in transit, at rest and can also be stored on-prem with customer-specific encryption
- Mitigate Tech Security Risks and Capabilities: Entitlement account structures and authorization, environment configuration, intrusion instrumentation, anomaly detection, recurring automated vulnerability scans, static code scans, MFA across employees and customers, cross-cloud federated authentication, SSO with customer platform, etc.

Benefits of the Security Stack Approach

- ✓ Governance: Data, architecture, application security proposal reviews, change management, etc.
- Governance, ERM: Reviewing third parties, BCM/DR, financial viability, employee vetting
- ✓ Legal: Plan for termination & return of assets
- Compliance: Identify potential data loss locations
- ✓ ILM: Persistence, Protection
- Portability & Interoperability: SOA "loose coupling" principles

- HA/DR: Gauge redundancy, high availability, and resiliency
- DC Ops: provisioning, patching, logging
 - Encryption: encrypt data wherever possible, validate key management processes
- AppSec: Adapt secure software development lifecycle
- ✓ Virtualization: Harden, rollback, port VM images

✓

IdM: Federation & standards e.g. SAML, OpenID

Governing the Cloud Cloud Architecture Governance and Enterprise Risk Legal and Electronic Discovery Compliance and Audit Information Lifecycle Management Portability and Interoperability Security, Bus. Cont., and Disaster Data Center Operations Incident Response, Notification Application Security Encryption and Key Management Identity and Access Management Virtualization



The LiquidX Leadership Team



JIM TOFFEY, CEO

Jim Toffey has more than 30 years of experience in Fintech building and operating electronic marketplaces around the world. He founded Tradeweb Markets in 1997 and served as Chief Executive Officer through 2008, growing Tradeweb from a start-up to a global exchange platform spanning 18 different asset classes. Jim received an M.B.A. from the Amos Tuck School of Business Administration and a B.A. from Dartmouth College. After leaving Tradeweb Markets, he served as Entrepreneur-in-Residence at Warburg Pincus, LLC and went on to found Benchmark Solutions, where he served as CEO.

Mark Brazier is CFO and Treasurer, responsible for finance, strategy and investor related matters. Prior to joining LiquidX Mark was CFO, Americas and Global Head of Corporate and Strategic Development at GFI Group. Mark is a licensed insurance broker and a qualified Chartered Accountant with the Institute of Chartered Accountants of Scotland. He previously worked as an associate for PricewaterhouseCoopers in their Audit and Business Advisory Services practice in London. Mark holds a BA (honors) degree in Economics and Politics from Durham University, UK.





Andy Phillips is General Counsel, where he is responsible for managing all legal and compliance matters. Prior to LiquidX, Andy worked at Slaughter and May in London and Cravath, Swaine & Moore LLP in New York and latterly as in-house counsel at Barclays Bank in New York covering the US corporate banking business. Andy has extensive experience across a wide range of legal and regulatory areas, particularly trade finance, debt finance and general banking. Andy holds a BA in Jurisprudence from the University of Oxford (Lincoln College) and is admitted to practice in both New York and England and Wales.

ANDY PHILLIPS, General Counsel





Frank is LiquidX's Global Operations Officer and Head of InBlock.
Frank previously ran ITG's Fixed income Trading and Analytics
businesses. Prior to ITG, Frank was an Executive Vice President and
managed Fidelities Fixed income, Equity and Mutual Fund Operations
in support of Fidelity Brokerage, Family Office, Fidelity.com, National
Financial Services and their RIA business lines. Frank has an MBA
from Fordham University. He additionally received his BS in
Accounting along with an AS in Management Information Systems
from Merrimack College.

FRANK DIMARCO, Head of Operations



Albert is LiquidX's Chief Technology Officer. Previously, Albert served as CTO and MD at Genscape, a \$150M IoT information services energy company providing market data and intelligence to financial traders. Prior to Genscape, Albert was responsible for technology strategy as SVP at Thomson Reuters. Prior to Thomson, Albert spent nearly a decade in technology consulting between Accenture's Center for Strategic Technology, ZEFER consulting and Deloitte Consulting. Albert completed his Ph.D. in Aerospace Engineering at Oxford University where he was awarded an academic scholarship.

ALBERT HOFELDT, CTO



Andrew is responsible for product management and strategy. Prior to LiquidX, Andrew was the global product manager for Tradeweb's Dealerweb Actives platform where he led the successful launch of the firm's first low latency trading platform. Prior to leading the Actives team, Andrew was a Vice President in Tradeweb's U.S. Strategy and Business Development team. Andrew began his career as an M&A analyst in Morgan Stanley's investment banking division. Andrew holds a dual BA in Computer Science and Economics from Dartmouth College and an MBA in General Management from Columbia Business School.

ANDREW CHU, Head of Product

Alice (Ali) Hackett is the Chief Revenue Officer at LiquidX, where she is responsible for global strategy and execution of all revenue-generating activities including sales, marketing, and bank services. Hackett brings 30 years of experience in the financial services industry including a 20-year career at Citigroup where she rose to be the Co-Head of Global Prime Finance. More recently, she spent time at Fintech Thesys Technologies where she was Chief Revenue Officer, at the London Stock Exchange as the US Country Head, and at CME Group as the Global Head of Citibank Development and Sales.

Ali Hackett, Chief Revenue Officer