LIQUID HOLDINGS

Purpose-Built Technology: Modern Tools for Hunting Alpha

Original research by Liquid Holdings - 2013

ATTRACTING AUM: PROCESS & TRANSPARENCY

Historically, two primary criteria have factored into hedge fund managers' ability to attract new assets: performance and pedigree. Today, those criteria have expanded as hedge funds face new industry challenges such as changing fee models, crowded markets, and new regulations, as well as investor mandates for transparency and operational credibility.

As detailed in Ernst & Young's 2012 investor survey, "hedge funds still believe recent investment performance is important more often than investors do, and although investors clearly look at past performance, confidence in the people and in the processes that will generate future returns and manage risk-taking, respectively, are at least as equally important." For small businesses and especially hedge funds, competing for new clients and fresh capital requires the longest operating runway possible. Aside from a track record of performance, longer operating runways build client confidence in the team and the processes in place to manage operations.

It is a veritable new hedge fund reality, one in which hedge fund managers are significantly rethinking their approach to, and investment in, their own operations to compete for new allocations.² *Today* more than 10,000 hedge funds compete in the \$2.51 trillion dollar hedge fund industry. It's an industry that over the past twelve months has continued to break records in terms of size, driven by new hedge fund managers as well as fresh investor allocations, which in the third quarter of 2013 alone netted out to \$23 billion dollars. It's also an industry made up of 6,000+ emerging hedge funds (\$500 million in assets or less), who in the same quarter, received less than 16% of the \$23 billion in net new allocations from investors.³ With a smaller pool of new allocations available compared to other segments of the industry, competition among emerging managers for new allocations is fierce.



Nearly 65% of all global hedge fund assets can be attributed to institutional investors such as pension funds as well as university and non-profit endowments⁴, making institutional investors a powerful bloc of influencers. Deputized as agents of transparency, institutional investors have in many ways become more demanding than regulators. These investors expect more engagement, involvement, and clarity when it comes to their investments. Explicitly, investors have a "heightened interest in the stability and reliability of a hedge fund's operations."⁵

In seeking to address new investor expectations, hedge funds could spend the equivalent of their 2% annual management fee on operations and technology to demonstrate that institutional quality infrastructures and services are being used to support the investment process.⁶

As with other industries such as healthcare and hospitality, hedge funds are now looking to the cloud for low-cost solutions to manage parts of their operations. Managers should look to implement a cloud solution to mitigate cost as well as to tackle key challenges, namely:

- Knowing what is owned in their portfolio, its worth, and its risk(s) at all times
- Ensuring operations can scale to address future growth
- Forecasting total cost of ownership today and in the future

In the hunt for alpha, fund managers can no longer afford to view the lifecycle of a trade as a series of modular components that live separately. Each stage of a trade impacts the bottom line through operational costs and risk-taking.

In today's new fund reality, assessing risk is as important as order management and liquidity sourcing. But finding the tools to assess risk at the onset of a trade will separate fund managers from their competition by allowing them to actively utilize portfolio and risk analytics as part of the investment management process, stay within mandates, and ultimately raise fresh capital. However, the key to harnessing such tools depends on a variety of factors that address the need to de-modularize and give full-scale insight into trading activity and the management of positions, portfolios, and risks to the fund manager and ultimately the end-investor.

IDENTIFYING PURPOSE-BUILT

As investors become more knowledgeable about the transaction lifecycle, maintaining key relationships with clients will become more complex, involved, and fast-paced for hedge funds. With the need for transparency, investors will seek analysis, updates, and custom anytime reporting, which can only be supported through a solution that integrates multi-asset and multi-currency investment management and reporting into a single platform built for speed, performance and scalability.

And, like in any small business, better business operations and processes need to be implemented and backed by the integrity and caliber of the management team. The critical tool that will ultimately accomplish this end goal lies in one of the primary benefits of the cloud – access to real-time information, at any time, and on any device. The alternatives community is beginning to embrace the benefits of real-time data as a pivot point to enhance strategies and a method of engagement with clients.



FRANKENSTEIN TECHNOLOGY

Within the last twenty years, on both the buy- and sell-sides alike, vendors have produced wave after wave of advancements that have not successfully evolved processes.⁷ These same vendors view the cloud as a way to mask their strategy of bolting third party systems together, or acquiring legacy systems with singular functions and Frankenstein-ing disparate systems onto a new infrastructure.

But, when it comes to answering to investors and creating value for the business, disparate systems created for siloed functions slow down the business. As investors start to weigh proof of sound infrastructure

on the same scale as a hedge fund's track record and pedigree, hedge funds must prove the capability as well as quality of their overall operations to investors.

Antiquated platforms, higher latency, middleware, and provisional work-arounds are just a few of the hurdles of Frankenstein technology. ven if disparate systems are brought together in the cloud, it doesn't necessarily mean they are integrated; different code, versions, content, and a different database can and will slow down key processes such as risk management, and can result in inaccurate valuations.

PURPOSE-BUILT TECHNOLOGY

Despite many market and regulatory pressures, the traditional trade lifecycle still includes the same core front to-back-office activities. From front-office order management and execution flow to back-office processing and reconciliation, trades move in a similar sequence as they did five years ago. More recently, though, many fund managers have started placing more emphasis on portfolio and risk analytics at the beginning of trades.

Many managers are harnessing pre- and posttrade risk analytics in the front office, not only for mitigating that risk but to identify opportunities to capture alpha. Thus, front-office needs have evolved beyond just order and execution management systems (OEMS) to an order, execution, and risk management system (OERMS). A purpose-built solution that provides OERMS capabilities is a single platform that lives in the cloud. It is a service that provides and empowers market-tested capabilities and unique workflows for all points in the transaction lifecycle. It can be accessed on any device through a browserbased, secure portal. Through a single database built to scale, it acts as a single book of records for precise pricing and valuation from front-office trading and risk through investor and shadow NAV reporting to broker reconciliations.

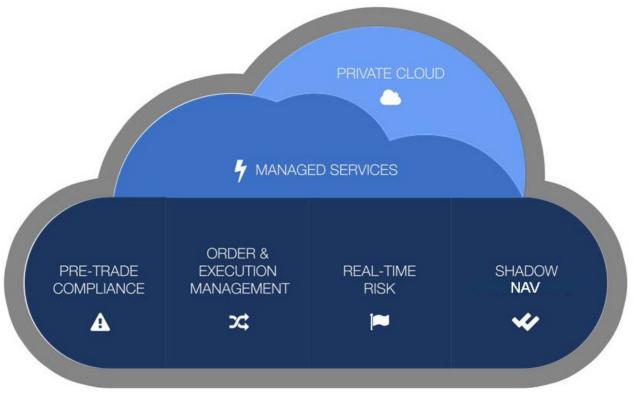
It is essentially everything that a hedge fund would need to operate a growing business. Above all, it is the modern alternative to Frankenstein solutions, offering:

- Sub-millisecond pre-trade controls for strategy adjustment
- Real-time position and portfolio level analysis and monitoring
- Real-time risk analysis and anytime reporting, which account for the latest transactions

It is instantaneous, proactive technology that keeps hedge funds agile and competitive. Just as low-latency and complex logarithms have transformed the financial industry through speed and complexity, real-time capabilities that sync front office trading, portfolio and risk management, anytime reporting, and broker reconciliations are the next step in trading evolution. In the hunt for alpha, a real-time OERMS with integrated pre-and post-trade risk offers:

- Unique views into opportunities for capturing profit and preventing undue loss at the early stages of execution and liquidity sourcing
- Instant insight to adjust strategies through P&L, performance, risk, and NAV tracking





Purpose-Built: end-to-end platform that combines mission critical capabilities and managed services in the cloud.

Purpose-built technology enables real-time, deskspecific workflows, cross-office communication, and the ability to address institutional investors' growing expectations for accurate anytime reporting, all while capturing alpha and building capital. Just as fund managers must prove sound infrastructure and quality operations, vendors must also prove efficient automation and increased functionality. Next generation vendors have the advantage of showing

value through enhancements that keep pace with advances in the financial markets, while other vendors rely on tenure and a collection of outdated systems.

When selecting a vendor and its solution(s), fund managers should look for key components that support their hunt for alpha, including Entire Transaction Lifecylce Support, Managed Services, A Unified Database, and A Single Source Code.

ENTIRE TRANSACTION LIFECYCLE SUPPORT

Today, providers offer access to liquidity and prime services. An OERMS should complement those services with end-to-end capabilities tailored to support specific

requirements and workflows across front-office trading, portfolio and risk management, and investor reporting.



MANAGED SERVICES

While the front office is critical to growing the business, managed middle- and back-office services ensure precise pricing and valuations across holdings as well as business continuity in case of displacement. Outsourcing labor intensive, error-prone processes such as broker

reconciliations, market data management, corporate actions, and disaster recovery minimize or eliminate the need for operations staff, allowing fund managers to service their portfolio(s) and investors more effectively.

A UNIFIED DATABASE

Future requirements such as increases in the number of holdings in a portfolio, analytic measures in the portfolio management process, or users can impact performance. A unified database scales to handle much bigger data volumes, new strategies, and users with relative ease without sacrificing performance across mission critical functions such as trading, risk management,

and reporting. A unified database also allows for agile development. While hedge funds might prioritize agile development as a 'nice-to-have' at the beginning of their lifespan, a 'nice-to-have' such as a new instrument type, asset class, algorithm, or analytic measure might become an immediate requirement tomorrow to generate alpha.

A SINGLE SOURCE CODE

As cloud solutions evolve with the industry, it will be critical that managers select a cloud solution that relies on a single source code to provide access to innovations across the board. Ultimately, this is about multi-tenant

architecture that streamlines operating processes and allows managers to take advantage of future innovations through risk-free upgrades across all users.

CONCLUSION: BEYOND THE SUM TOTAL

When it comes to building a business, a hedge fund needs every modern tool to stay competitive. Investors' priorities have shifted to a new emphasis on the structure and credibility of the fund's processes and systems, rather than focusing solely on past performance.

The investor is now the regulator, seeking more transparency with delivery at a moment's notice. It is up to fund managers to have the right infrastructure to support this new fund reality, while accurately forecasting operating costs and scaling for tomorrow as well as future growth. Cloud technology offers the ability to engage institutional investors with what they expect, today.

A cloud-based OERMS, complete with managed services, affords the simultaneous abilities to compete for alpha and allocations faster and more effectively, while positioning the business for smarter growth.

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Liquid offers a real-time front-office platform built for the cloud to provide the seamless control and superior speed required to manage alternative investments more effectively. Liquid is an elegant operating system that lets you concentrate on what you do best—generate alpha. And it has been designed to scale up effortlessly right alongside your business.





