About Eze Castle Integration
Eze Castle Integration is the leading provider of IT solutions and private cloud services to more than 650 alternative investment firms worldwide, including more than 100 firms with $1 billion or more in assets under management. The company’s products and services include Private Cloud Services, Technology Consulting, Outsourced IT Support, Project & Technology Management, Professional Services, Telecommunications, Business Continuity Planning and Disaster Recovery, Archiving, Storage, Colocation and Internet Service. Eze Castle Integration is headquartered in Boston and has offices in Chicago, Dallas, Hong Kong, London, Los Angeles, Minneapolis, New York, San Francisco, Singapore and Stamford. Visit us at www.eci.com.
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INTRODUCTION

The industry is changing for hedge funds and investment management firms – even more rapidly in 2014, it seems, than in previous years. The crop of emerging managers seems to be at a peak, and allocators are vetting those startups just as frequently and diligently as established investment firms. The regulatory environment remains active for investment managers, with notable cases like AIFMD and the SEC’s cybersecurity sweep prompting firms to take compliance more seriously. And the investor due diligence process is more intense than ever – especially when it comes to understanding what technology and systems firms are utilizing to support operations. Due diligence questionnaires (DDQs) are no longer ‘check the box’ forms; they are now detailed examinations of business processes, infrastructure and application sets that require firms to spend time completing and explaining how they function on a day-to-day basis.

What exactly does all this mean? It means that funds of all shapes and sizes must work prudently to shore up investment, operational and technical best practices to attract allocators in today’s environment. It also means firms must do their own due diligence to ensure they are working with reputable and reliable service providers and leveraging premiere technology and applications to achieve positive results. Alas, this evolution brings us to our 2014 Global Hedge Fund Technology Benchmark Study.

For the fourth consecutive year, Eze Castle Integration has surveyed a section of the investment management community to understand the systems and service providers funds are working with to achieve these best practices and attract investors. Our survey questions focus on front, middle and back office operations and will provide insight into how funds are relying on outsourced solutions and service providers – and in some cases managing operations in-house – to satisfy investor requirements. As always, our hope with this report is to provide both new and existing hedge funds and investment firms with a sample of what the financial services industry has to offer and insight into how their peers are using technology to satisfy their needs.
SURVEY METHODOLOGY & RESPONDENT PROFILE

For the fourth consecutive year, Eze Castle Integration surveyed members of the hedge fund and investment management industry to understand the various technology systems and applications firms are using to support their daily operations. The data for the study was collected in 2014.

**Firm Type**

Eze Castle Integration surveyed 279 firms worldwide – across the United States, United Kingdom and Asia. The majority of respondents classified themselves as hedge funds (58%). Other firm types surveyed included investment/asset manager (13%), private equity firm (3%), fund of fund (3%), and family office (3%). Additionally, 13 percent fell into an “Other” category which included financial firm types such as venture capital, advisory, fund management, quant and wealth management [Figure 1].

NOTE: Responses to survey questions were not required; therefore, not every question was answered by every respondent. Information provided in this report is based only on the number of responses (n) given.

![Firms by Type](image)

**Assets Under Management**

From an asset management perspective, the breakdown of firms was relatively even. About a third of firms (33%) responded that they are managing less than $100 million in assets [Figure 2]. Twenty-eight percent (28%) manage between $101 and $500 million in assets. The largest group of firms noted they were managing greater than $500 million AUM (39%). A more detailed breakdown of assets under management is as follows:

- Less than $50 million: 16%
- $51-$100 million: 17%
- $101-$250 million: 13%
- $251-$500 million: 15%
- $501m-$1 billion: 13%
- $1-$5 billion: 16%
- Greater than $5 billion: 10%
Locations

As in previous years, we surveyed investment management firms across the United States, United Kingdom and Asia. Nearly three-quarters (74%) of firms indicated they were based in the U.S., followed by 18 percent in the U.K. and eight percent (8%) in Asia [Figure 3].

Only 30 percent of firms indicated they had international offices outside of their primary location [Figure 4]. And the majority of firms maintain only a single office (63%). Twenty-two percent (22%) of respondents operate two offices, followed by six percent (6%) with three offices, two percent (2%) with 4 offices and seven percent (7%) with five or more office locations [Figure 5].

Staffs

The majority of firms – more than half – reported they employ staffs of 10 employees or less (52%). Another third of respondents (34%) reported between 11 and 50 employees. Six percent (6%) of firms have between 51 and 100 employees, and eight percent (8%) employ over 100 people [Figure 6].
Strategy

As in previous years, long-short equity remains the top investment strategy utilized by our survey respondents. In 2014, 50 percent of respondents indicated they were trading long-short equity [Figure 7]. Other popular primary strategies include credit (8%), fixed income (6%), emerging markets (5%), event driven (4%), and distressed debt (3%). Twenty-four percent (24%) of firms fell into an “Other” category that included a wide variety of investment strategies such as commodities, derivatives, merger arbitrage, relative value, securities, global macro, and long only.

Primary Prime Broker

The top five prime brokers have stayed consistent over the past four years, according to our survey. Once again, Goldman Sachs remains the top choice for hedge funds and investment firms and is the primary prime broker for 27 percent of our respondents [Figure 8]. Morgan Stanley follows at 17 percent, as well as JP Morgan (8%), Credit Suisse (6%) and UBS (5%). Additional prime brokers noted in our “Other” category include: Bank of America, Bank of America Merrill Lynch, BTIG, Citi, Deutsche Bank, Merlin, Pershing, TD Ameritrade, and Wells Fargo.
Order/Execution Management

While grappling with regulatory changes and increasing investor expectations, hedge funds are, of course, still facing the everyday challenge of managing investments and executing trades. As such, firms need robust and powerful systems to support operations and create efficient and effective workflows from the front to the back office.

To effectively manage the complexity of global trading, a hedge fund requires a full-bodied order management system with all the features and functionality necessary to conduct business. Throughout the industry, two key players have emerged as the leaders in order management solutions and have remained such for the last several years, according to recent surveys.

The 2014 iteration of our Global Hedge Fund Benchmark Study found that, once again, Eze Software Group’s Eze OMS is the most popular application used by investment firms, with 40 percent of firms responding as such [Figure 9]. Closely behind was Bloomberg’s Asset and Investment Manager (AIM) with 32 percent of the responses. Additional order and execution management solutions referenced by our survey respondents include RediPlus EMS (5%), Advent’s Moxy (4%), in-house and proprietary applications (4%) and a variety of others such as Tradar, Charles River, Factset, Jefferies’ Jet, Autotrader, Linedata, Orchestrade and Sophis.

Market Data & Analytics

To be successful, hedge funds and investment management firms require access to the latest market data and analytics to properly align their strategies and execute trades. When merely a millisecond can make all the difference in whether a trade is successful or not, it’s imperative for firms to rely on robust, experienced systems to power trading operations.
As such, we continue to see Bloomberg remain the top choice for investment management firms when it comes to market data. Nearly all of the survey respondents – 96 percent – indicated they were using Bloomberg either exclusively or alongside a second solution [Figure 10]. The next most popular market data system was a very distant second at 6 percent (Thomson Reuters), followed by S&P Capital IQ (2%), SunGard Market Map (2%), Factset (1%) and a wide range of “Others” (17%) including Barra One, Russel, Starmine, Intex, Equifax, Creditsights, Realpoint, RealTick, Novus, Interactive Brokers, Derivatix and more.

On the Market Analytics front, Bloomberg also remains the top player for the fourth consecutive year. Ninety percent (90%) of firms surveyed said they are using Bloomberg for market analytics either exclusively or in accordance with other systems [Figure 11]. Six percent (6%) of firms are using Factset, followed by S&P Capital IQ (5%), Thomson Reuters (4%), In-House/Proprietary solutions (3%), and Other (11%). Other solutions include Matlabs, Morningstar, StreetAccount, Edgar Online, Mathworks and 1010 Data.

Research/Document Management

In today’s ‘big data’ world, the task of managing inordinate amounts of research materials and documentation can be a daunting one. Many hedge funds and investment management firms find it challenging to do this in-house and outsourced the responsibilities, while others opt to maintain control over the management process and design and implement proprietary solutions to suit their needs. According to this year’s Benchmark Study results, most firms are relying on the former solution to satisfy their requirements.

Forty-three percent (43%) of firms are using in-house or proprietary solutions for research and document management purposes [Figure 12]. MS SharePoint is a close second at 14 percent, followed by Advent Tamale (11%), Code Red RMS (7%) and Others (25%) including Factset, Evernote, Investor Dynamo, Linux Blackbox, and Sophis.
MIDDLE & BACK OFFICE

Portfolio Accounting

When managing assets and investments for investors around the globe, it can become quite challenging to keep track of allocations and perform calculations at a moment’s notice. A critical component of a hedge fund or investment firm’s operations, then, is a portfolio accounting system, through which a fund manager can automate workflows and reconcile transactions in an organized and efficient manner.

Our 2014 Benchmark Study found that Advent remains the leader in the portfolio accounting space and their two dominant products – Geneva and Axys – are the top choices for investment firms worldwide [Figure 13]. Nearly half of firms who responded are using one of the two Advent solutions. Other solutions noted by our survey respondents include Quickbooks and Tradar, as well as Linedata’s FundManager or Beauchamp, Paladyne, Sophis, SS&C TotalReturn, Tora, Tradar and Peachtree.

Risk Management

The term “risk management” encompasses a wide variety of thoughts: everything from portfolio and systemic risk to cybersecurity and infrastructure risk. While the latter are certainly becoming critically important to satisfying both regulator and investor expectations, the former are equally as important. That said, not all firms are committed to employing off-the-shelf risk management tools.

According to our survey results, most firms are not using risk management solutions to mitigate portfolio risk (or chose not to reveal so) [Figure 14]. Additionally, many firms now outsourced risk management responsibility to fund administrators, prime brokers or other third parties. Of firms who revealed their risk management vendors of choice, the results showed Advent (14%), proprietary/in-house solutions (10%), Bloomberg (5), FT Options (3%) and Other (12%). The “Other” category included Indus Valley, iVolitility, Orchestrade and The Insight.

Fund Administration

We just mentioned that many firms may rely on third parties to handle some of these functions, and that particularly includes fund administrators. Administrators are often responsible for day-to-day operational tasks including P&L and trade processing, financial statement production and (noted previously) risk management.
Our survey shows that Citco is the top administrator choice for hedge funds and investment firms, with 20 percent of the responses [Figure 15]. SS&C GlobeOp came in second with 15 percent of the responses, followed by Northern Trust (7%), State Street (4%), JP Morgan (3%) and Other (22%). Thirty-one percent (31%) of firms also indicated they were not currently outsourcing their fund administration.

**Customer Relationship Management**

Today’s hedge funds and investment management firms have a unique advantage – marketing tools and communication outlets by which they’ve never been able to interact with investors before. After the so-called ban on hedge fund advertising was lifted last year, firms are now able to use traditional and contemporary outlets to solicit new investors and communicate with current ones. With that marketing ability, though, comes the responsibility of maintaining organized and accurate investor information. Most firms in 2014 rely on some type of customer relationship management portal – or CRM system – to do just that.
In 2014, our survey shows Backstop is the preferred customer relationship management tool for investment firms, nudging out Salesforce, at 12 percent and 10 percent, respectively [Figure 16]. Other CRM tools funds are using include Pertrac (8%) and Imagineer Clienteer (7%). Firms are also using a wide variety of “Other” systems such as eFront, Netage Solutions, Ledgex, Oracle Siebel, SalesLogix, Satuit Technologies, ACT, Digiterre and proprietary/in-house methods.

**Message Archiving**

To satisfy both regulatory demands and investor expectations, investment firms must be diligent when it comes to compliance. Message archival – including email, instant messages and social media messages – is a critical piece of the compliance puzzle.

Global Relay is the predominant solution utilized by most investment management firms – more than half of our survey respondents [Figure 17]. Additionally, more than a third of firms are using our Eze Archive solution, powered by Global Relay. Smarsh and FrontBridge round out the top four, with lesser instances of solutions such as Postini, Rackspace, SherWeb, Silversky, Symantec Live Office and ArchiveManager.

**Mobile Technology Solutions**

On the mobile technology front, the BYOD revolution continues to change what devices investment management firms choose to support. In 2012, only 31 percent of our survey respondents were using Apple technology (iPhone and iPads). In 2013 – 43 percent. This year’s Benchmark Study reveals that number has significantly increased again, with 64 percent of respondents using Apple devices for enterprise purposes [Figure 18].

Not surprisingly, the number of pro-BlackBerry firms is decreasing, granted not quite as sharply. In 2014, our survey shows 83 percent of firms are supporting BlackBerry devices. That figure is down from 92 percent in 2013 and 95 percent in 2012. Windows and Android devices are also being used, but by significantly less firms (about 13% and 11%, respectively). Apple’s dominance of the smartphone market and penetration of the enterprise world will likely continue to show its face with even higher numbers in 2015.
CONCLUSION

As you can see from this report, financial services firms are relying on technology for business more than ever. Whether outsourcing solutions or managing them with in-house staffs, firms are meeting the daily challenges of creating efficient workflows and managing effective operations.

Technology was long considered a meaningless standard for firms and investors alike, but in today’s evolving landscape, technology can be a competitive differentiator. By using world-class solutions and service providers to meet your investment and infrastructure needs, you make it clear that operational excellence is a priority for your firm. In this day and age, that’s what institutional investors are looking to see. The DDQ process continues to evolve, and we expect to see investors asking more detailed questions about the systems and applications firms are using and how they work as part of the firm’s overall strategy.

Another significant trend that will affect the systems and applications firms utilize is the adoption of the cloud. In 2014, we’ve seen not only startup firms leverage cloud solutions, but large, established investment firms move their operations to private cloud environments and completely transform the way they do business. Cloud and virtualization technology, especially that on the premier level provided by the likes of VMware, for example, is providing investment firms of all shapes and sizes the opportunity to achieve institutional-grade technology and compete with the large players in the industry.

As a result of this evolution, firms will need to take notice of how these front, middle and back office applications work in the cloud and if there are considerations relative to the infrastructure they are hosted on. The obvious benefits to hosting applications in the cloud—cost-savings, flexibility and scalability—will fuel firms to continue moving in that direction and may change the results we see in a year’s time if any of these applications and vendors do not offer positive experiences in the cloud.

We hope our 2014 Global Hedge Fund Technology Benchmark Study has been informative and helpful to your firm in making and evaluating its technology and application decisions. If you’re looking for additional advice on what solutions and applications will work best for your firm, please feel free to contact us, and one of our technology experts can point you in the right direction.
ABOUT EZE CASTLE INTEGRATION

For the better part of two decades, Eze Castle Integration has been the premier provider of technology solutions to the investment industry. We support more than 650 clients around the world – a true testament to the global network of clients and partners we have connected with. Our IT and private cloud services are industry-leading, and we pride ourselves on providing the highest quality levels of service and support to our clients each and every day, 24x7x365.

But we consider ourselves more than just an IT or cloud service provider. Technology is not just what we do – it’s who we are.

We take innovation seriously and we’re the driving force behind the adoption of cloud services in the hedge fund industry. What started as an alternative infrastructure for one client in 2005 has evolved into a global platform supporting more than 350 firms and continuing to grow every day.

To learn more about Eze Castle Integration and our cloud services, contact us at 800-752-1382 or visit www.eci.com.