

IMPACT BRIEF

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Trade Ideas: Leveraging AI to Maximize the First Impression

Driven by fee compression, growth of passive funds, increasing market complexity, and rapidly changing competitive landscape, identifying and capturing alpha for active traders has become more difficult than ever. This Impact Brief profiles Trade Ideas, a trader-focused equity strategy development and stock analysis platform that has been leveraging artificial intelligence (AI) in recent years to help clients make real-time trading decisions.

BACKGROUND

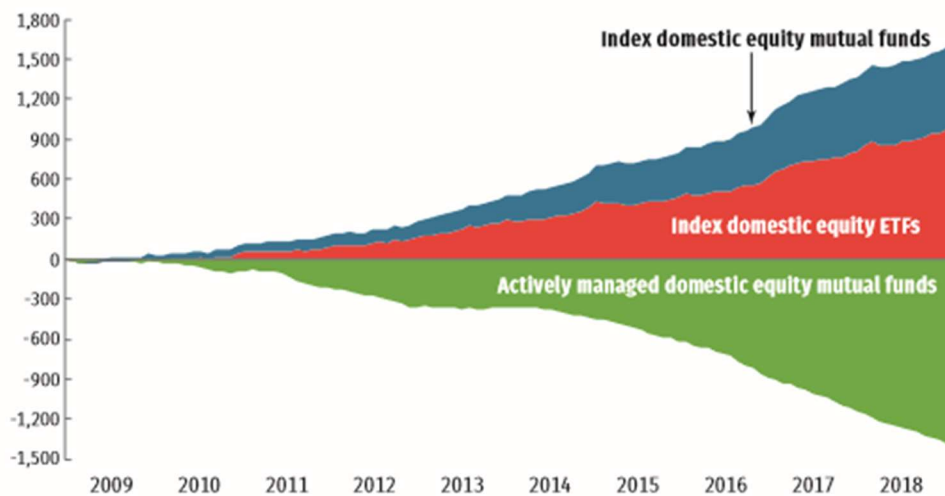
Founded in 2003, Trade Ideas is by no means a true startup. Launched by industry veterans with the battle scars to prove the difficulty of succeeding in capital markets, Trade Ideas epitomizes growth through constant transformation. Spurred by evolving market trends, technology advancements, competitive forces, and changing customer needs, Trade Ideas has transformed itself from an institutionally focused securities scanning tool into a sophisticated AI-driven decision-making platform targeting active traders.

CHALLENGES AND OPPORTUNITIES

Trade Ideas' latest transformation is taking place under the following market challenges:

- Continued growth of passive assets under management (AUM):** While actively managed mutual funds continue to dominate the universe of open-end funds in terms of AUM, the last decade has seen exponential growth of passively managed mutual funds in the U.S. Total market size of passive mutual funds in the U.S. grew from US\$844 billion in 2007 to about US\$3.3 trillion as of May 2017, quadrupling their AUM over the past 10 years, while active mutual funds only grew 66% over the same period.

Figure 1: Cumulative Flows Between Actively Managed and Equity Index Funds and Net Issuance of Domestic Equity Index ETFs (in US\$ Billions)

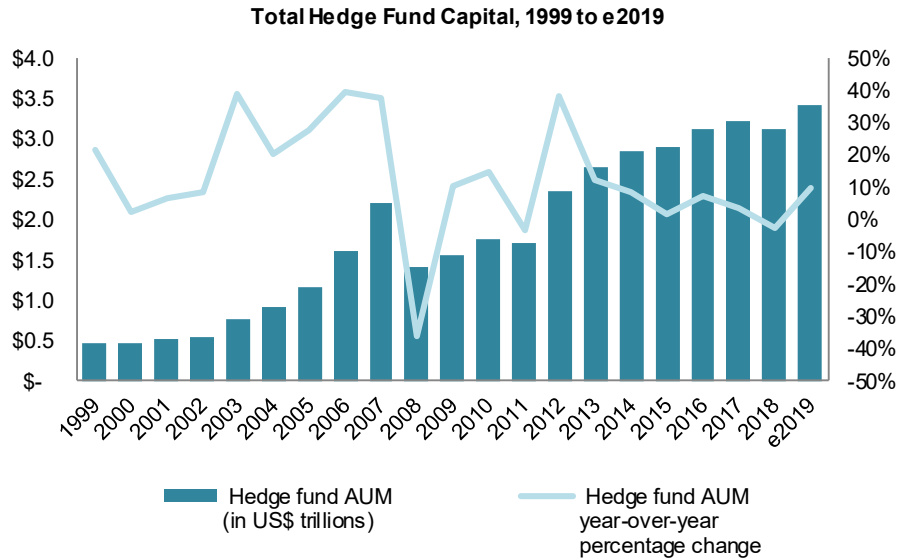


Source: ICI

- The hedge fund market continues to decline:** Tough market conditions and the growth of passive AUM have been detrimental to the growth of the once high-flying hedge fund market. Annual performance has dipped significantly since 2012 (Figure 2), and liquidations have outpaced newly launched funds over the last few years.

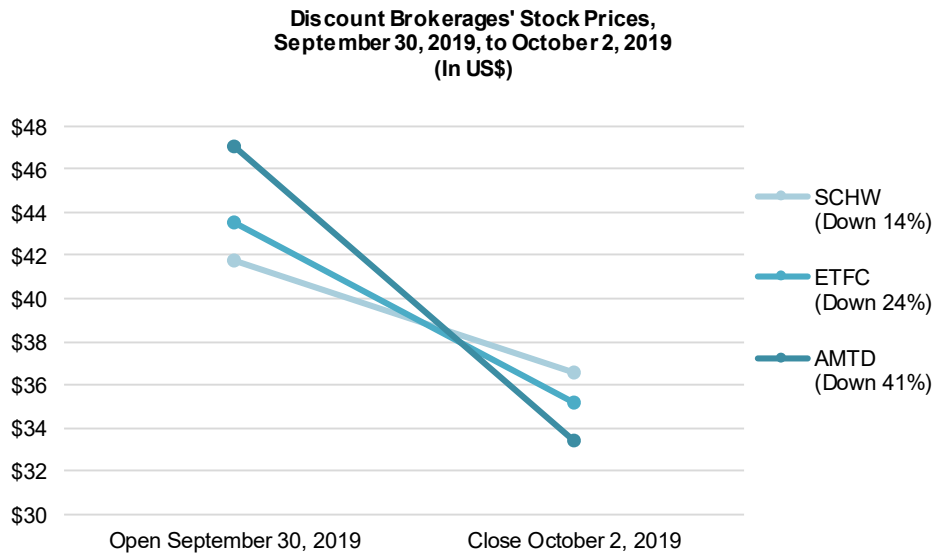
Now, as in the past, hedge fund participation relies on the demonstration of outsized alpha performance, a portion of which may be secured through active strategies.

Figure 2: Declining Hedge Fund Performance



Source: Aite Group, Hedge Fund Research, MSCI

- Retail brokerage commissions drop to zero:** In early October 2019, three of the four largest discount brokerages cut their commission charges on trades to zero, leading to a steep drop in their share prices (Figure 3). Combined, Charles Schwab (which commenced the expedition to zero), TD Ameritrade, and E-Trade have US\$2.35 trillion retail client assets and over 28 million brokerage accounts. Overnight nearly US\$1 billion in revenue from these three brokerages was eliminated, prompting an immediate cost/benefit analysis of their legacy systems and the further investment in customer-facing platforms:
 - Commission rates had been falling for years with certain niche firms that have already introduced free commission on market orders.

Figure 3: Devastating Impact on Share Prices

Source: Google Finance

- The downward trend in commission rates has elicited change among the discount brokers as they have focused on diversifying their revenue stream, including adding fee-based investment advisory services, such as robo-advice platforms, and establishing brick-and-mortar offices scattered across the United States. Other potential areas of revenue include selling order flow, capturing deposits, and offering other banking products.
- The industry's shift to zero commission will force retail brokers to pursue a client acquisition strategy through the "freemium" model, by which clients onboard for free and are upsold subscription-based, value-added services.
- More consolidation could be expected in light of the recent deal between Charles Schwab and TD Ameritrade, and Morgan Stanley's announced its acquisition of E-Trade.
- The firms may "specialize" in terms of offerings, with each becoming differentiated among product or client types.
- The zero-commission environment may create pressure on wirehouses' private banking services to also move to zero. This may replicate the need to recoup revenue through subscription-based, value-added services.
- **Burden of legacy technology:** Technology innovation could potentially help firms remain competitive in today's tough market conditions. Unfortunately, legacy technology and systems have hindered implementation of new innovative initiatives, including forming partnerships with new technology providers. On top of this, less revenue exists to support previous IT and technology development, creating an unfavorable condition for future growth.

While challenges certainly exist, new market opportunities set the potential foundation for transformation for Trade Ideas:

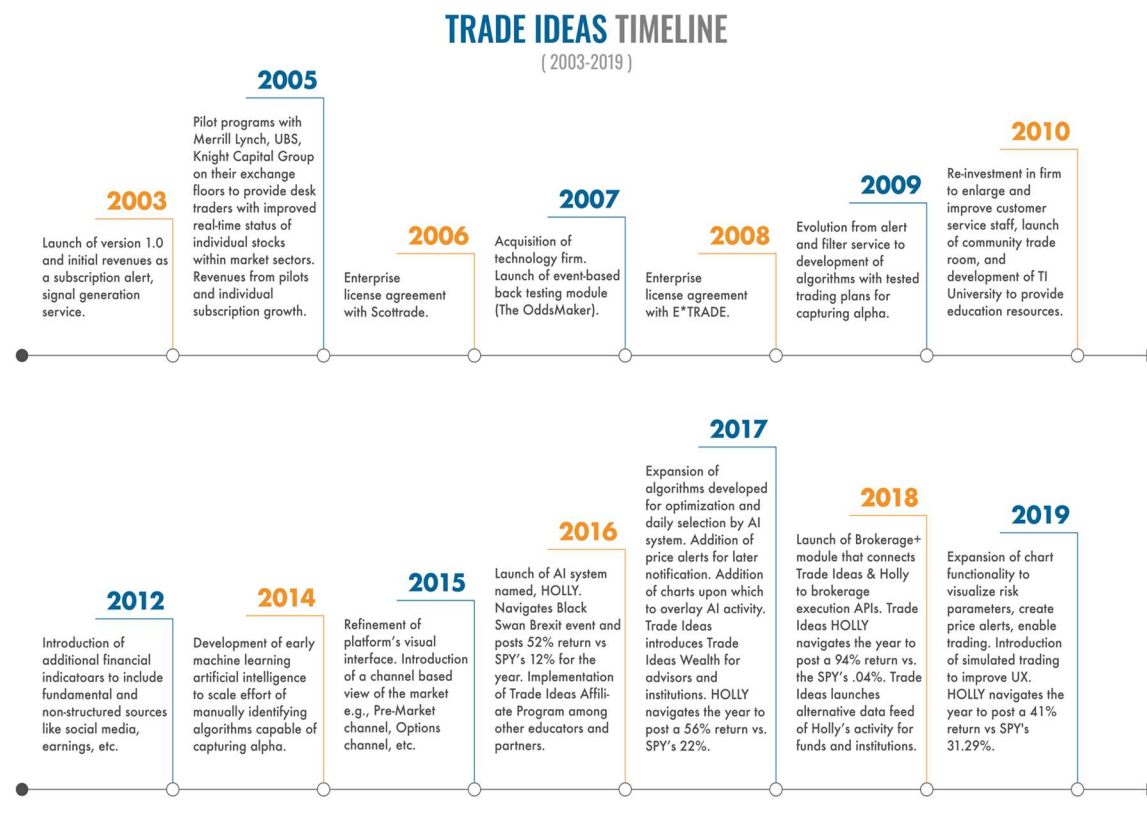
- **Know Your Customer in the digital age:** In the past, a financial institution offering various financial products had a near monopoly over customer information, including wealth level, purchasing behaviors, and affinity for specific financial products. In today's digital economy, however, we have seen increasing numbers of nontraditional players, such as Google and Amazon, aggressively capturing retail customer information. We have also seen the emergence of neobanks, open banking, and "banking-as-a-service," which are increasingly eating into the market share of incumbent financial institutions, largely by leveraging their technology innovation.
- **Open platform approach gaining momentum:** Even for global players, the pace of technology innovations is demonstrating that reigniting growth will require a much broader and more flexible technology strategy, especially given the burden of outdated legacy systems unsuitable for supporting new innovation. By developing a more open technology platform capable of supporting both internal development and third-party technology innovations—for example, a robust API—firms can reposition themselves for future competition. And as a result, competencies related to assembling partner technologies for better customer experiences and innovation will play a key role in revenue generation.
- **Growing acceptance of AI as a growth engine:** AI adoption is increasing across all areas of financial services. Innovation in AI requires a core competency in big data and analytics. Further, this technology can be applied to idea generation and risk management capabilities in the service of decision support and alpha capture.

THE ORIGIN OF TRADE IDEAS AND ITS EVOLUTION

While the main focus of Trade Ideas may have evolved over the years, driven by a changing competitive landscape and market opportunities, its main mission—to enable its customers to make better trading decisions—has remained intact. It has evolved its model to meet this client-driven demand.

Trade Ideas started in the aftermath of 9/11, with the economy in a serious recession. Against this backdrop, Trade Ideas was initially an institutionally focused vendor, building out a stock scanning tool that can take multiple indicators and stack them so that customers can identify new opportunities and make smart trading decisions. Trade Ideas started marketing this tool to large sell-side firms with some success. Unfortunately, it was becoming apparent that the sales process was long and arduous, and the vendor struggled to sell enough seats under enterprise deals to build out a long-term profitable venture.

This is when Trade Ideas went through its first important transformation: moving away from the institutional market and focusing on the actively trading retail market. This would be one of many pivots that Trade Ideas would end up making, leading up to the more recent years, when this report picks up (Figure 4).

Figure 4: Timeline of Trade Ideas' Development

Source: Trade Ideas

Under this first pivot, Trade Ideas decided to modify its key customer profile and start targeting online brokers so that it could go after a much larger audience—the retail trading market. To do so, Trade Ideas identified gaps in online brokers' functionality for retail traders and institutions/individuals (retail traders that look more like small institutions). Initial retail broker clients under this new approach started with Scottrade as well as E-Trade.

Starting in 2008, while not abandoning the existing business relationship with retail broker clients, Trade Ideas decided to go directly to end retail traders, providing them with individual subscription options to Trade Ideas. This effort coincided with Trade Ideas reinvesting more heavily into the firm and creating an event-based back-testing tool to help simulate trading. Individual subscriptions now account for most of the revenue.

Despite the initial success of the retail and individual subscription, by 2015, it was becoming clear that in order to rejuvenate its growth, Trade Ideas had to look for another significant shift. The strategy platform and back-testing capability became a heavily manual process, delighting data scientists and quants but burdening users who were not data scientists with too many menus and options; essentially there were too many obstacles in the way of the reward.

Inadvertently, in an effort to make the tool very flexible, Trade Ideas had made the platform way too complex to ensure a successful outcome consistently. Therefore, Trade Ideas changed its track again to design a new platform to support its new strategy of creating maximum value for

clients at first impression. This gave birth to the latest version of Trade Ideas driven by AI, big data computational skill, and simplicity. Paradoxically, because of this pivot, Trade Ideas is now appropriate not only for retail but also for the originally intended professional institutional and brokerage firms, with outsized performance on a consistent basis against all indexes.

KEY PRODUCTS AND SERVICES

In addition to licensing its platform to leading online brokers, Trade Ideas has thousands of retail clients consisting of active traders and market professionals across more than 65 countries. Trade Ideas also has fully automated trading capabilities available via partnership with Interactive Brokers.

At the highest level, Trade Ideas is focused on generating optimized trading strategies and empowering clients with easy-to-implement risk management parameters that try to land its clients into one of three scenarios: 1) large winning trades, 2) small winning trades, or 3) small losing trades. Ultimately, the platform is designed to help traders avoid initiating large losing trades from a risk management perspective. Key products and services include the following:

- **Holly:** Launched in January 2016, machine learning AI, dubbed “Holly,” consists of over 70 proprietary algorithms utilizing Trade Ideas’ uniquely derived data sets. Trade Ideas conducts a Quantitative Combine that performs overnight over a million simulated trades across the 70 algorithms. These simulations test values of key indicators as well as trading plan variables to identify trading probabilities. Holly then applies 15 criteria to yield five to eight of the algorithms that contain the greatest statistically tested probability of identifying successful opportunities in the market and displays them in the AI Strategies Window every day before open.
- **Brokerage Plus:** This is a risk management and trading module designed to partially automate otherwise complex risk management calculations within the process of executing trading decisions via API connectivity to a client’s designated brokerage account. This capability enables automatic, manual, and semi-automatic portfolio management and trading with a growing list of brokers in either live trading or simulated trading modes.
- **OddsMaker:** This back-testing and simulated trading platform requires no programming or scripting knowledge and provides the following key features:
 - Strategy visualization and analysis
 - Performance simulation
 - Equity curve for back-tested strategy
 - Summary view customization
 - Strategy comparisons

Trade Ideas also leverages the relationships with the following key partners:

- **E-Trade:** Seeks differentiation, retains its best customers, and attracts active customers with engaging experiences leveraging technology such as Trade Ideas

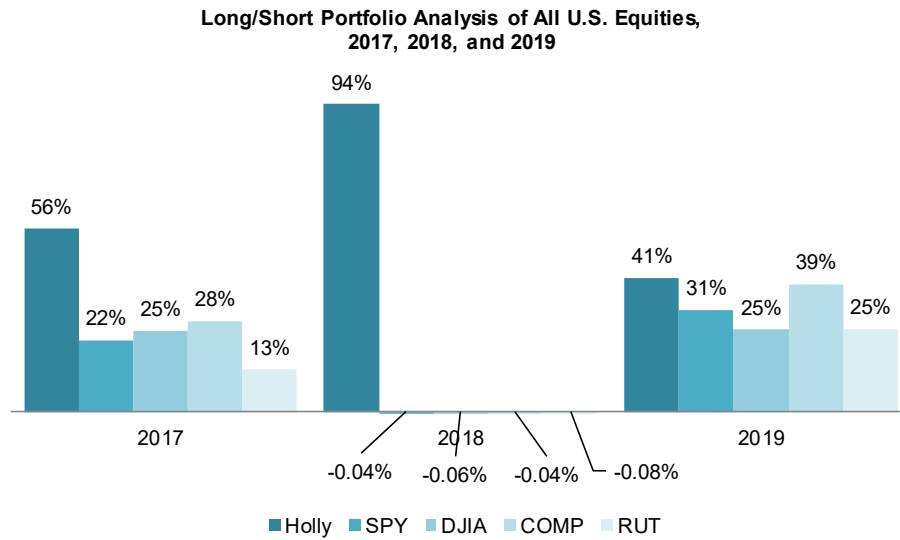
- **Alpaca:** Aims to be the Robinhood of institutional trading while partnering with Trade Ideas to provide a platform for decision-making
- **Just2Trade:** Focused on enhancing customer experiences, using Trade Ideas as a funnel for new customers

FUTURE PLANS

- **Gamification of market decisions:** Trade Ideas believes that the desktop-based, isolated nature of trading will be an antiquated form of market participation for the next generation. Instead, as desktop use continues to decline, the population under the age of 50 will continue to run everything in their lives via mobile. Trading markets will follow a similar path to engagement. Trade Ideas is preparing offerings to meet this trend over the next 18 months.
- **Additional asset classes:** Futures, cryptocurrencies, and foreign exchange (FX) are some of the additional asset classes scheduled for the Quantitative Combine.
- **Development of new strategies with a longer investment horizon, including swing trading:** The increasing adoption of mobile trading in a zero-commission world necessitates market engagements in shorter bursts of activity and decisions made increasingly on the move. These circumstances are more suited to swing trading decisions. As a result, Trade Ideas is working on AI that optimizes and creates new strategies that are more long term.
- **Improvement to risk management logic:** These must be made to better capture alpha identified by the algorithms within the context of volatile and varied market trends. The goal of such improvement to the risk management capabilities specific to each algorithm will be superior returns, both long and short, that are less correlated to the overall market trend.

TANGIBLE RESULTS

Trade Ideas points to the trading environment in the aftermath of Britain's referendum to exit the European Union (commonly referred to as Brexit) to illustrate Holly's effectiveness. The Brexit announcement happened on a Thursday in June after the market closed. When the new trading day opened on Friday, Holly's recommendation was to not trade at all to avoid the frenzied bloodbath and thereby not harm the portfolio. Conversely, when the market opened on the following Monday and on subsequent Mondays, Holly recommended trades that were highly profitable at a time when others were too intimidated by the event shockwaves and ensuing volatility (Figure 5).

Figure 5: Performance of Holly vs. Benchmark Indices

Source: Trade Ideas

For the 2016 to 2018 time frame, Trade Ideas hired Extract Alpha Ltd., a consulting firm to the hedge fund community, to audit Holly's results. Evaluations occurred on trading across small, midsize, and large caps. The report revealed big performance improvement on small and midcap segments, and also across the entire spectrum. The report further identified the "return drift" in the original direction of the trade up to 20 days from the entry: Long trades yielded 100 basis points, and short trades yielded as much as 250 basis points.

AITE GROUP'S TAKE

One word to best describe Trade Ideas as a company is "alert." As market conditions have changed over the last 15 years with the evolving needs of different customer profiles, Trade Ideas has managed to pivot many times in order to stay competitive and continue on its overall growth and innovation trajectory. The latest shift could be the most challenging yet, as the AI-driven trade-decision market is quickly becoming a crowded marketplace with many different revenue models, across both retail and institutional markets. True to its DNA, Trade Ideas is not sitting still and, instead, is seeking new ways to grow, whether through continued focus on technology improvement or by launching longer-horizon trading strategies. Aite Group believes key elements to future growth will be Trade Ideas' ability to branch out beyond its traditional equity-focused market expertise on the desktop and into other asset classes (such as FX) that have seen rapid adoption of electronification and market microstructure changes as well as additive mobile experiences.

ABOUT AITE GROUP

Aite Group is a global research and advisory firm delivering comprehensive, actionable advice on business, technology, and regulatory issues and their impact on the financial services industry. With expertise in banking, payments, insurance, wealth management, and the capital markets, we guide financial institutions, technology providers, and consulting firms worldwide. We partner with our clients, revealing their blind spots and delivering insights to make their businesses smarter and stronger. Visit us on the and connect with us on [Twitter](#) and [LinkedIn](#).

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