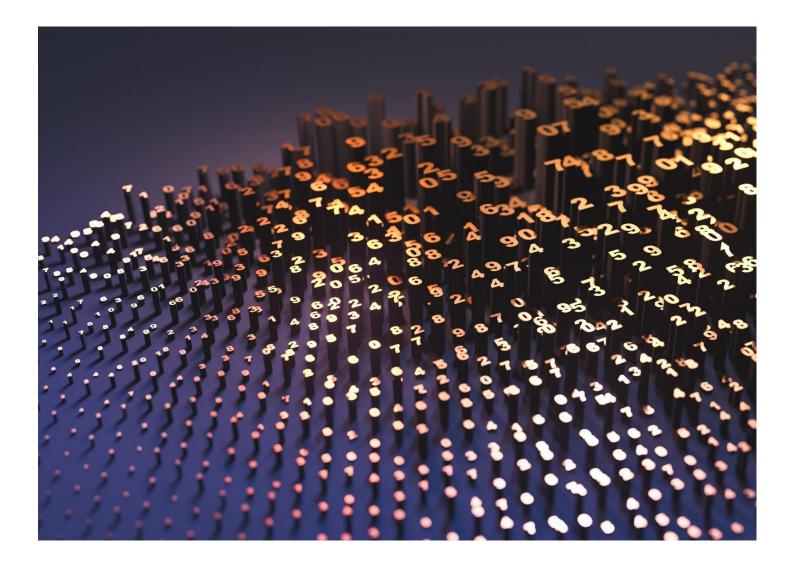


Unlocking value in data and analytics

Sell-side firms need a targeted strategy for monetization

Point of view

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Analytical contacts

Abhik Pal Global Head of Research Practice CRISIL GR&RS abhik.pal@crisil.com

Sabrina Rey Global Head of Sell-side Practice CRISIL GR&RS sabrina.rey@crisil.com

Deepak Krishna Associate Director, Sell-side Practice CRISIL GR&RS deepak.krishna@crisil.com

Executive summary

Sell-side firms need a targeted strategy to harness the power of data analytics and tailor their offerings to clients.

As things stand, adoption of data analytics by sell-side firms for research and advisory is yet to take wing. Products, investments and execution are disparate generally, and monetization remains a challenge. Besides, most firms are cautious about investing in data analytics due to tepid returns from earlier investments, uncertainty over revenue streams, and fear of attenuating traditional research revenues.

A successful data analytics strategy is one that enables monetization by triangulating target clientele, research integration aims, and data offerings.

Firms can monetize by establishing, or ramping up, dedicated data units that offer clients subscription-based enriched products and actionable advisory services. Integration of data analytics into research can bolster mindshare and protect current positioning.

Partnering with third-party data vendors and technology providers, and bridging skill gaps are crucial in this milieu.

Expanding budgets and taking small but focused steps are equally important. To truly transform their data analytics practice, sell-side firms will need to increase their data analytics budget from 2-3% currently to 5% of their overall research budget, and channel it according to their data strategy.

Our estimates indicate bulge-bracket firms and data-focused boutiques would require a cumulative three-year outlay of \$30-60 million across data, talent and infrastructure. For regional firms and independent research providers (IRPs), that could be \$6-15 million. The scale of outlays would vary based on current data analytics maturity level and overall research strategy, too.

For data-driven research and insights, enriched data products and client advisory services, sell-side firms should start small and expand gradually. Firms need to identify specific research products, sectors and themes, and channel budgets towards analytics-ready data, visualization to enhance client engagement, and incubation of unique data sets.



Data analytics has taken center stage in research...

The search for new sources of alpha by buy-side firms has necessitated rapid adoption of data analytics.

In response, sell-side firms have started integrating data analytics into research to stay relevant and provide differentiated offerings.

Declining research budget driven by MiFID II is also pushing sell-side firms to explore analytics-led solutions to drive down costs.

...but adoption by sell-side firms is only beginning

Today, sell-side firms typically lack big, dedicated data analytics teams (>25 members) and infrastructure, and manage with small, single-digit teams that tend to be centralized and follow varied strategies.

A few firms focus on curating data sets and providing alternative data-enabled research and advisory services, while others focus on artificial intelligence or machine learning (AI/ML) analysis and primary surveys, and collaborate with external data consultants.

That said, several firms are looking to collaborate with vendors to scale up their data analytics capabilities quickly. A few players, however, are wary of committing resources to data analytics as they remain unconvinced of its potential to add value to their positioning.

Data analytics practice among sell-side firms



Dedicated data units are outliers



Small centralized teams are the norm



Vendor data augmented with in-house data



Research integration in early stages



Path to monetization is unclear

Source: CRISIL GR&RS

From our interactions with research heads, it appears that a common concern has been inadequate clarity on incremental revenue generation that can be directly attributed to data analytics efforts. Even when there is a strategic drive, firms are concerned about cannibalization of traditional research revenues. That, in turn, has hindered investments in data analytics practices, partly reflected in the adoption of a wide range of strategies as firms try to optimize returns.

To succeed, sell-side firms need to define a clear data analytics strategy and channel budget accordingly

Sell-side firms should start by clearly defining the purpose of their data analytics practices, based on an assessment of client needs and their own positioning. Three factors will determine operating models and budgets: target clientele, research integration aims, and data offerings.



Based on our understanding of various data strategies and conversations with industry leaders, we believe a targeted approach will go a long way in achieving data analytics objectives and rationalizing investments.

Firms must critically analyze various elements of their data analytics strategies — core elements and enhancements — and assess investments in each area. It must be noted here that while enhancements add more value to clients, they increase associated costs.

Elements of data analytics strategy

- 1 Target clientele
 - · Largely existing research clients
 - · Typically long-only investors
 - · Expand reach beyond traditional clients
 - Target niches hedge funds, quantamental funds with data and advisory offerings

3 Data partnerships

- Source specific data sets from vendors, alongside proprietary data
- Incubate and develop data sets in collaboration
 with vendors

5 Talent

- Relatively small data team that works with sector and strategy teams for research and advisory services
- Relatively large data analytics team with some sectors having specialist teams; more focused on advisory services

Source: CRISIL GR&RS

We recommend the following approach:

• Offer focused, data-driven differentiated research and advisory services to protect positioning

Despite monetization challenges, integration of data analytics into research by sell-side firms is essential to differentiate their offerings from those of competitors, and protect their positioning. At the same time, considering such integration rarely adds meaningful revenue, it is imperative to minimize additional costs. Integration with focus on sectors and themes that are the core strengths of firms will drive differentiation while being cost-effective.

· Establish dedicated data units to monetize enriched data products and advisory services

While differentiated research will help garner mindshare, it will not be sufficient to drive monetization, in our view. One of the roadblocks is the need to widely disseminate any information that could provide actionable insights to clients. We believe the way forward is to establish or ramp up dedicated data units that can provide customized, curated and insight-ready data sets, analysis and advisory services to select clients, and thereby ensure a sticky subscription-revenue base.

· Build partnerships with key data vendors and technology providers

The alternative data marketplace is proliferating with data sets ranging from established ones (consumer transactions, web-crawled data, etc.) to fast-rising ones (ESG, geo-location, etc.). To make sense of these



Data products and offerings

- Curated data sets and data-driven research for specific sectors and themes
- Enriched data sets combining third-party and proprietary data
- · Advisory offerings on data, tools and techniques

Data infrastructure

- 'Sufficient' infrastructure to handle requirements; limited integration
- Highly integrated infrastructure; data engineering pipelines
- · Distribution through API feeds

Core elements

Enhancements

varied data sets and offer actionable insights to clients, we recommend partnering with data vendors as a means to gain access and manage costs. Sell-side firms with expertise in specific sectors should aim to expand such partnerships to incubating and developing unique sector-specific data sets. Firms should look at the possibility of exclusive arrangements and continually use the data to establish their ongoing value in the chosen areas.

In a similar vein, sell-side firms should leverage partnerships with technology providers to set up their data and analytics infrastructure. While repurposing existing infrastructure might suffice to start with, eventually firms should scale up infrastructure to handle data storage, processing and distribution requirements, in line with their chosen strategy.

Assess talent skills and gaps

Firms can start small with a central hub consisting of data scientists and data analysts, catering to multiple sectors. In addition, firms can leverage in-house talent and augment selectively to fill the skills gap. As the data analytics practices start to build up, firms should invest in data advisory talent that can drive monetization efforts.

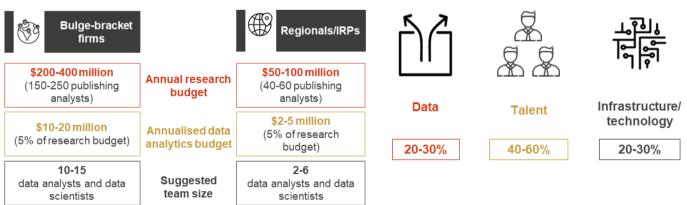
• Increase data analytics spending to 5% of research budget

Our market interactions suggest that sell-side firms typically spend 2-3% of their annual research budget on data analytics. Most firms adopt a conservative approach due to uncertainty over investment returns and the inherent challenges in fully integrating data analytics.

To adopt a targeted approach towards research integration and data offerings, we recommend increasing the spend on data analytics to about 5% of research budget, which translates into a cumulative three-year budget of \$30-60 million for bulge-bracket firms and data-focused boutiques, and \$6-15 million for regional firms and IRPs. Nearly half of the investment would be in talent, with the rest split almost evenly between data and infrastructure.

Typical data analytics spend split

Annual research and data analytics budget



Source: Coalition Greenwich, CRISIL GR&RS, Element22 (The State of Advanced Analytics and Alternative Data Use in the Asset Management Industry, 2019)

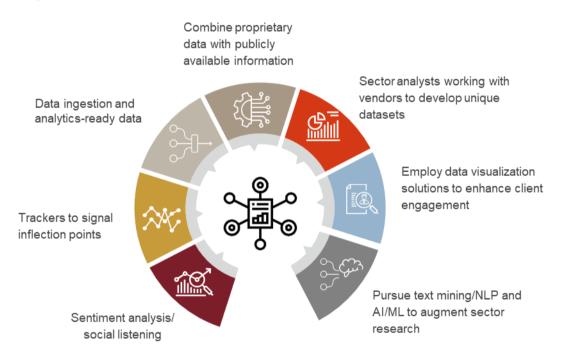


Sharper focus needed on data-driven research and insights, enriched data products, and client advisory services

Firms seeking data analytics leadership will need to incorporate enhancements

Bulge-bracket firms with a robust traditional research ecosystem, and boutiques with a sharp focus and deeper understanding of data are well placed to standout in the data analytics space. Incorporating enhancements across data strategy elements will help them target niche clients such as hedge funds and quantamental funds. Here, too, the approach should be to start small, and pick and choose enhancements in line with the firm's core strengths and objectives. Firms should focus on owning specific products and themes, and creating a niche for themselves.

Sample use cases



Source: CRISIL GR&RS

- **Combine proprietary data with publicly available information** to generate differentiated insights and reduce the risk of signal decay (for instance, combining survey data with technical indicators)
- **Data ingestion and analytics-ready data**: Focus on making integrated alternative data available for analytics through data ingestion, transformation, validation and enrichment, for instance, by:
 - integrating mobile apps data with web-based data to understand market dynamics on e-commerce companies
 - integrating transaction data with survey data to understand customer life cycle
- Trackers to signal inflection points and changes in the market/ market momentum using analytics techniques on enriched data sets. For example, a mix of banking, credit, consumer confidence and transaction data to generate signals for housing markets
- Sentiment analysis/social listening to analyze customer feedback on services/products by evaluating importance of various features, and changes in search and follower activity over time

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- Pursue text mining/natural language processing and AI/ML to augment sector research as these techniques offer the most scope for substantial differentiated content generation (for instance, data dictionaries augmented by insights from specialists across sectors, credit and economics to analyze specific themes such as bullishness/bearishness and medium-term performance, and predict default or credit transitions)
- Employ data visualization solutions to enhance client engagement (for instance, Tableau dashboards showcasing store locations, competitive intensity and demographics to provide a holistic yet granular perspective). Relatively easy to adopt on data already available, with minimal investments in talent and infrastructure
- Sector analysts should work closely with vendors in a couple of sectors to help incubate and develop unique data sets, and offer advisory services on data, tools and techniques. This could be ramped up to additional sectors over time

Regional firms and IRPs need to focus on core elements of the data analytics strategy

As most regional firms and IRPs are in the early stages of their data analytics journey, they should leverage their existing sector expertise and start with core elements of the data strategy that entail relatively less investments. Firms should focus on certain sectors in line with their positioning and objectives.

- Offer clients enriched and insight-ready data sets in the chosen sectors
- Emphasize on sector-analyst overlay that can generate deeper understanding, rather than advanced analytics
- Use a mix of proprietary data and sector-specific vendor data sets to analyze and add value

Separately, some sell-side firms are exploring analytics-led solutions to drive down costs, ranging from simple ones such as automation of databases to advanced ones such as leveraging natural language generation to write analyst notes. Such solutions are in their infancy, in our view, and need careful implementation. Further, they may not be cost-effective at present, but would become more efficient over time.

Executing on the data analytics vision will require a well-thought-out, stage-wise plan

We outline a high-level implementation framework across three phases, including the various steps involved. While most steps are common for all firms, the scale of implementation would vary. Further, some of the steps — highlighted in bold font — are solely for bulge-bracket firms and data-focused boutiques.

Illustrative data strategy execution plan

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Initiation

- Integrate data-driven insights into research
- Start with relatively inexpensive vendor data, such as ESG, social media and transcripts
- Build data sets through web scraping
- Build a small central hub with a mix of data scientists and data analysts
- Partner with vendors for operational flexibility
- Repurpose existing infrastructure

7 Ramp-up

- Own specific themes/sectors
 - Build data products
 - Offer advisory services
- Identify data sets that can be combined with proprietary data; explore combining data sets
- Add complex data sets, such as transactional and location web/app tracking
- Ramp-up team mix of data scientists, analysts and data engineers as required
- Partner with vendors for operational flexibility
- Dedicated team for select sectors and data products
- Data distribution through API; scale up infrastructure to handle data storage and processing requirements
- Gradual integration of Hadoop/Spark infrastructure



Steady-state

- Offer data products to clients
- Advisory services a strong contributor to revenue
- Enrich vendor data sets by combining with proprietary data
- Collaborate with vendors to develop data sets that would be of interest to clients
- Collaborate with third parties for niche skillsets
- Add experienced data advisory talent
- Data distribution through API or direct data access partnerships
- Build data engineering pipelines and integrate across disparate internal systems

Source: CRISIL GR&RS

To sum up, all firms — bulge-bracket, regional and IRP — looking to leverage data and analytics should establish dedicated data units, assign focused budgets and offer advisory services.

They should also adopt a targeted approach through investments in various elements of the data analytics strategy based on their objectives and risk appetite.

In our view, this approach will help firms enhance research with data-driven insights, and enable them to provide differentiated data products and advisory services to clients, thereby effectively unlocking value in data and analytics.

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