The importance of using data to inform location decisions cannot be overstated. Whether it’s for setting up a new retail outlet, choosing a focus area for an on-site service business, or selecting a location for a logistics hub, the stakes are enormous.

The general approach to location analytics often follows a funneled approach. Companies can start by identifying all the players in the industry and key regions to target before shortlisting specific sites that are poised to outperform.

A tech-enabled approach brings greater precision to this process. It starts with the same questions but uses machine learning and other advanced analytics to get more robust answers efficiently. Some examples of this approach include:

- **Market Mapping** – Using diverse data sources to build a list of incumbent businesses and all their locations in an industry creates a “virtual twin” of the market. A market map can serve as the top-of-funnel deal identification for M&A activities while also providing insight into local market dynamics and supplementing location decision-making. With our marina business, we mapped out over 11,000 marinas, with additional insights such as the number of locations per brand, amenities in each marina, number of slips, boat club presence, and more. The market map identified potential acquisition opportunities that met our target profile, while also helping us identify markets with a strong potential for deploying our high-velocity M&A tools.

- **Market Prioritization** – Leveraging machine learning to identify internal performance patterns that are driven by external factors is essential to location selection.

This can predict future market performance and identify top target markets. With our funeral home business, we built a market prioritization model using a time-series dataset of the performance of every funeral home in our network. We stack-ranked each of our markets based on internal metrics, overlayed this dataset with numerous external variables, and leveraged machine learning algorithms to identify crucial external indicators of market performance. These variables were then used to predict future market performance and identify the top markets for capital investment.

- **Site Selection** – Identifying localized market gaps with high potential for de novo and infill transactions mirrors market prioritization, but with more granular variables to predict the performance of each business location rather than the broader market. Key external variables that strongly predict individual location performance can then be used to predict new site performance potential. While this approach improves the robustness of the site selection model, the true value is unleashed by the model’s ability to score thousands of sites simultaneously. With our pet wellness business, we utilized performance data from our current locations and stack-ranked each location on metrics such as revenue per square feet. We overlayed this with data on multifamily density and various other metrics in a set radius. We then leveraged machine learning to predict future location-level performance. Within minutes, we were able to prioritize nearly a thousand different land parcels, identifying top target sites for further expansion.
Constant Model Improvement

Continuous iteration and new information improve these models. To realize even greater precision, companies should test these models with actual performance data.

As these capabilities are developed into tools that can help to lift and shift across various use cases, primary and secondary data that can be accessed at scale, efficiently, and cost-effectively should be utilized. Key tools may include:

- **Mobile Data** – GPS signal-based mobile data illuminates customer demographics, visit patterns, and purchase behavior. Insights are not limited to customer behavior in current locations but also in competitors and potential M&A targets. Mobile data can help identify underserved customer segments, understand customer demographics of the incumbent businesses in a market, and reveal where customers come from and visit, all of which help identify target areas for new site openings. This data can also help create a bottoms-up view of the competitors' volume. Mobile data can further be analyzed to project the expected demand for the service in that trade area and identify cross-collaboration marketing opportunities with other retail locations.

- **Machine Learning Driven Web Scraper** – Web scraping can help quickly build market maps and understand the competitive dynamics at a national, regional, and local level. Web scraping tools aggregate a list of competitors and overlay this information with other financial and operational estimates from different data sources. The machine learning-driven nature of these tools means they can generate a more targeted competitor list, identify keywords on competitors’ websites to create a differentiated service mix, provide an edge for cross-selling, and identify potential M&A targets within a similar customer segment.

- **Large Library of Time Series-Based Geographic Intelligence Data** – A database built over time with market-level geographic intelligence data that can be leveraged for location analytics. This can include weather data at an MSA level, demographic data at a zip code level, construction trends, and industry-specific data points on market volume, to name a few. Ideally, this library should consist of generic and industry-specific data points for the national market and a drill down into more granular geographies. This library’s primary purpose is to access a large set of time series data on key external metrics, boosting the efficiency of data collection for any location analytics projects.

- **Customer Survey Capabilities** – Developing a survey capability can be critical to gaining primary data rapidly. This exercise should create targeted panels for customer and business surveys. This can provide insights into satisfaction, competition, and other stakeholders, such as employees, to build conviction on the location analyses.

What are the benefits of this approach?

Advanced data analytics and machine learning are transforming how companies approach location decision-making.

These technologies can process vast amounts of data quickly, providing more accurate and timely insights than traditional methods of research and analysis. This may result in enhanced reliability, efficiency, and scalability, all of which lead to more informed location decisions.

The dynamic nature of machine learning models means they are constantly adapting to changing market conditions. For firms, this means they are delivering real-time insights into the current market ecosystem, which translates to an ability to pinpoint potential challenges or threats in specific markets or sites. This leads to greater adaptability and improved decision-making. At the personal level, analytics can facilitate better collaboration between teams by providing a common data-driven framework for decision-making to ensure that all stakeholders are working towards the same objectives.

By harnessing these technologies, firms may gain a competitive edge in identifying and capitalizing on investment opportunities, ultimately leading to better outcomes.
Integrating the quantitative approach with the qualitative approach:

The synergy between qualitative and quantitative analysis is crucial for effective location analytics and decision-making. These tools do not exist in a vacuum. While quantitative data provides the statistical foundation for decision-making, qualitative insights add depth and context, ensuring a holistic understanding of market dynamics and consumer behavior. For the most effective adoption and implementation, firms must ensure that team members are aligned with a data-driven approach. Best practices for buy-in include:

- Incorporate qualitative data, such as local market knowledge and industry expert opinions, into the analytical framework to ground quantitative models in real-world contexts and provide more nuanced and actionable insights.
- Involve executives and other key stakeholders early in the decision-making process to ensure that their insights and concerns are accounted for, leading to a more aligned and effective location strategy.
- Provide training and education for team members on the importance and benefits of a data-driven approach.
- Maintain transparency in the data analysis and decision-making process so stakeholders can trust and rely on the insights provided.
- Establish a feedback loop where stakeholders can provide input on the effectiveness of the location decisions made to refine and improve the analytical models, ensuring they remain relevant and accurate over time.
- Recognize that different companies may have unique needs and market dynamics, warranting a more personalized location analytics toolset.

Conclusion

Firms can and should capitalize on digital capabilities to identify new site locations with greater speed, insight, and predictability of outcomes. Within our portfolio, we have seen how a data-driven approach supported by our partners' expertise and knowledge can lead to more informed and effective location decisions, greater long-term stability and profitability.