NAI PARTNERS
& Data Science

The history of human civilization is demarcated by major transformations arising from the agricultural revolution, the industrial revolution, and more recently the information age. Society is currently at the breaking point of a 'data' revolution. The future success of businesses belongs to those companies and people that can turn data into products and sound decision making.

The volume, velocity, and variety of data being generated today is unprecedented. In 2010, The Economist reported that the sector of data management and analytics was valued at more than $100 billion and was growing at 10% per year. Data are now one of the most crucial, yet underdeveloped assets of many enterprises. As a result, 'data science' has emerged. Data science is the process of using the scientific method and quantitative techniques to extract information and knowledge from data (Table 1, Figure 1). While companies such as Google, Amazon, Facebook, Linkedin, and others have employed data scientists for years now, such technically trained professionals in statistics, the scientific method, computer programming, and mathematics are just beginning to permeate other sectors.

At NAI Partners, we are embracing this data revolution by building a forward-thinking team on the data analytics of commercial real estate. We are working with brokers and clients to develop the key questions at the heart of issues, testing those questions with data using statistics, and importantly, interpreting the results to guide data-driven decisions for commercial real estate. Data analytics at NAI Partners span market research and reporting, quarterly market presentations, corporate projects, broker-initiated projects, and client-initiated consulting projects. Analytical research projects at NAI Partners result in important products and deliverables, including written reports, oral presentations to stakeholders, data visualizations, and guidance on data-driven decision making (Table 2).

Data analytics at NAI Partners benefits its stakeholders, including brokers, clients, tenants, landlords and others, by having statistically meaningful and accurate knowledge at their finger tips, as opposed to inadequate impressions. Such information can result in increased profits and reduced costs through better investment decisions, prospecting, market analyses, lease negotiations, and otherwise.

Table 1. Key steps in using research and data science to guide business decisions.

Step	Research and Data Science	Business Analytics
1	Develop the key questions at the core of a problem.	What does the broker, client, or business hope to achieve from data.
2	Design research to test question-driven hypotheses.	How to collect data to extract the most meaningful information.
3	Analyze data using statistical and mathematical techniques.	How to extract information from data.
4	Interpret data analyses and draw conclusions.	How does the data guide business decision making.
5	Communicate findings in written, visual and oral forms.	How to tell a story with data to advise stakeholders.

Table 2. Products and deliverables of analytical research projects.

Research Product	Description
Written Report	Summary report of research objectives, data collection, statistical analyses, results, data visualization, data interpretation, and conclusions.
Oral Presentation	Personal one-on-one presentation of entire research project with clients and stakeholders.
Data Visualization	Presentation of data and results in visual formats such as tables, figures, and graphics.
Data Interpretation/ Decision Making	Strategy and guidance on the implementation of data-driven decisions arising from the analytical research.

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