

## Consulting Project Examples: Business Analytics Programs at Drexel LeBow

Business Analytics students have completed the following projects for an energy company:

- Created real-time visualization of customer data using Kibana and Elastic Search
- Used big-data technologies to calculate real-time energy usage and customer data analytics using Hadoop, Apache Spark, and JavaScript
- Introduced interactive dashboards for customer data using R and Tableau
- Classified customers by their energy usage data using descriptive analytics
- Created a GUI to improved data visualization to predict the usage of electricity of a specific company

Students have completed the following projects across various companies:

- Predicted which customers would respond to direct mail offers from a consumer lending and credit insurance company
- Performed massive distributed computing for an e-commerce company, designing a Hadoop based cluster for analyzing millions of transactions every hour
- Used R to predict annual sales, created a time series model, and developed an optimization model to minimize employee costs and turnover for an international drug store chain
- Developed a method for creating and validating personae based on statistical data analysis;
  created an online budget allocation model for an academic institution's library network
- Projected sales for the shared bicycle using operations and logistics models to project seasonal sales for bike shares
- Optimized digital marketing ROI using Customer Lifetime Value calculations on paid Google Adwords and Facebook ad campaigns
- Used probability models and machine learning to classify locations that could maximize expected ROI for a new restaurant
- Quantified private companies using their corporate structure and open-source information to assign credit ratings for lending and borrowing