CUSTOMER STORY

# **Ensuring strong ROI** in education

Gray Associates teams with Qlik to deliver powerful insights



# **GRAYASSOCIATES**

### **CUSTOMER STORY**

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# Need to make the right financial decisions

Traditional undergraduate education in the US is declining and competition is increasing, especially since Covid-19 has become the catalyst for many institutions to move online. Budgets are tight, particularly for on-the-ground organizations that face the additional cost of maintaining buildings.

It is vital that colleges and universities maximize returns when they are making large investments like opening a new campus or satellite. They must be sure that the site is right and must know the demographics of the students they aim to recruit. They must also pinpoint the best focus for their marketing spend.

Obtaining this information requires the analysis of millions of lines of data, billions of highly complex calculations and input from the latest machine learning technologies. These are highly specialized skills and they are all delivered by PES+ GeoTargeting with Location Optimization, a location assessment and predictive modeling service from Gray Associates.

Founded in 2002, Gray Associates is headquartered in Boston with representatives across the US. Initially a management consultancy, in 2010 it began to work with education institutions and has now transformed into a Software-as-a-Service (SaaS) business. Over ten years, it has amassed a huge bank of data assets and methodologies that it has combined into a proven method of identifying and predicting where institutions can reach the most students.

### **Solution Overview**

### **Customer Name**

**Gray Associates** 

### Industry

High Tech

### Geography

Boston, USA

### Function

IT, Marketing, Sales

### **Business Value Driver**

Balanced Risk/Reward, Customer Intelligence, New Business Opportunities, Reimagined Processes

### Challenges

- Provide education market with location assessment and predictive modeling
- Conduct billions of calculations
- Visualize results in an intuitive format

### Solution

Qlik Sense collates and analyzes data, carries out complex calculations and visualizes the results. Qlik AutoML delivers vital predictions.

### Results

- Help educational establishments make the right decisions on major investments
- Streamline capabilities to reduce cost, expand customer base and plan for the future

# Powerful combination of data analysis and AI

"In 2013, we identified Qlik Sense as the best analytics platform to run a lot of calculations in RAM very quickly and manage our large datasets," says Gray Associates Partner, Zach Paz.

The consultancy uses Qlik to collect data from its educational clients and combine this with its own data and methodologies. Insights are derived from big data sources including US Census data, as well as competitive indicators such as regional job postings and matching programs from existing universities or trade schools. Qlik data is then brought into the automated machine learning program, Qlik AutoML, designed to simplify machine learning and artificial intelligence (AI). Not only are Qlik AutoML's predictions operationalized into Qlik Sense for visualization, but the predicted dataset is enhanced with prediction influencers which explain how each attribute in the dataset influences the prediction.

# Intuitive heat maps tell the story

The results show how many students the client can reach by locating a campus near a particular region or spending more marketing dollars there. Colored heat maps make it easy to identify opportunities or drawbacks and clients have ongoing access to the results through Qlik Sense dashboards that are built, housed and managed by Gray Associates.

"The visualization capabilities of Qlik Sense give us a lot of flexibility," says Paz. "Qlik has always been the best for doing on-demand calculations and its biggest benefit is the ability to visualize millions of rows of data on one dashboard. Our main dashboard gives over 50 different metrics: from what students are interested in, to who you're competing with and what employers are looking for, all in one place."

"Qlik AutoML has streamlined our capabilities and expanded the availability of machine learning to our analysts who do not have a coding background. They get the results from Qlik AutoML then visualize them in eye-candy maps rather than charts and PowerPoints."

PES+ GeoTargeting with Location Optimization has been used by dozens of Gray's education clients with impressive results. StrataTech Education Group reports revenue of \$1.5 million from a new school it opened in Houston following advice from Gray Associates.

Projects require billions of calculations that would be impossible without Qlik and Gray Associates' main Qlik dashboard covering more than 50 metrics. Using Qlik AutoML eliminates the need for data scientists to code in R, while increased efficiency enables Gray Associates to achieve a lower price point and extend its services to more institutions including secondary education charter schools.

Versatile Qlik APIs are an important enabler and Gray Associates analysts are attending master classes on how to use Qlik APIs to create streamlined workflows and automated solutions. The company has also expanded its services to a lot more areas such as predicting enrollment trends and margins.

"We have just scratched the surface of what we can achieve with Qlik," concludes Paz.

## The keys to success



**72K** 

census tracks in an average calculation



50

metrics covered on one Qlik dashboard

"We identified that Qlik Sense was the best analytics platform for our needs, which are to run a lot of calculations in RAM very quickly and be able to manage the large datasets that we have been gathering over the last decade."

Zach Paz, Partner, Gray Associates



# **About Qlik**

Qlik's vision is a data-literate world, where everyone can use data and analytics to improve decision-making and solve their most challenging problems. Our cloud-based Qlik Active Intelligence Platform delivers end-to-end, real-time data integration and analytics cloud solutions to close the gaps between data, insights and action. By transforming data into Active Intelligence, businesses can drive better decisions, improve revenue and profitability, and optimize customer relationships. Qlik does business in more than 100 countries and serves over 38,000 active customers around the world. qlik.com