Small Business Energy Efficiency Team

Project/Technology Overview
Small businesses represent a difficult but necessary sector to target as utility companies aim to meet energy-efficiency mandates. Our company, e²a, will help utility companies better target this sector through software that analyzes data from several sources and provides information about specific small businesses’ energy efficiency.

Problem/Need
Across the nation, states are mandating energy-efficiency targets for utility companies. Utilities currently meet these targets by improving the energy efficiency of large institutions and businesses; however, in the not-so-distant future, utilities will need to target hard-to-reach sectors, such as small businesses, in order to meet the targets. While the energy-efficiency potential of the small business sector is significant, utility companies know very little about their small-business end-users beyond an address and a meter reading, and therefore are unable to target energy-efficiency programs to these customers effectively.

Opportunity
Small businesses represent a broad category, and a utility company needs much more detailed data to gauge the efficiency of a specific business—e.g. industry/sector, unit square footage, year of building, etc. Databases maintained by business information companies and commercial multiple listing services provide such data. By matching the utility company’s data to data in these databases, our product will provide the utility with important information about a small business's energy behavior. For example, the utility may decide to target energy-efficiency incentives toward a restaurant which consumes more energy per square foot than other restaurants in the area.

Business Model
Our company, e²a, will license data analytics software to utility companies (electric, gas, water) at a price of $100,000 a year. Our initial costs are $600,000 for a 12-month startup period. Major costs include labor (programmers, economic analyst, interns) and database subscriptions (commercial multiple listing services, business information services). During the 12-month startup period, the software will be developed and tested, and research will be conducted to refine the analytics algorithms. At the end of the period, a final product will be ready for market. We will need to license the software to six utilities to break even. Of electric utilities alone, there are 36 companies with over 1 million customers. Critical success factors include accuracy and quality of analytics, usability of the software, and timely execution of development.