

2019 CS@Mines Capstone Project Considerations

Title: Live Call/Text Message Handling in Web Applications

QED Analytics, Inc. – Big Data, Meet the Mortgage Vertical.

QED Analytics, Inc. (dba *PoweredbyQED.com*) is an integrated software, data and analytics solutions provider gathering, collecting and analyzing public property and mortgage data to realize specific and relevant insights for the mortgage vertical. Like Amazon, QED is using Big Data to deliver specificity and relevancy that empowers mortgage companies to create authentic relationships with only qualified borrowers.

Data Science is Going Direct.

Data science is providing intimate opportunities for businesses across industries to capture new customers by delivering unique value, specific to the individual. By knowing what a customer has recently purchased, Amazon can recommend what an online shopper may purchase next i.e. wall mount if purchasing a new TV. This form of data-driven marketing leverages data science as the foundation of recommending what a new customer may want by knowing what they have. *QED Analytics applies this concept to the mortgage industry.*

Integrated Intelligence Framework for Proactive Decision Making.

QED is a technology start-up based out of Denver, Colorado delivering an **Integrated Intelligence Framework** that combines a proprietary **Data Platform** with filtering algorithms and visualization technology to deliver proactive intelligence for the mortgage vertical. QED's Data Ocean links, augments, enriches and layers all data to create real-time analytics that drive mortgage decisions.

The Amazon Approach for Mortgage Professionals.

QED uses Big Data to provide critical elements of a borrower's mortgage identity without capturing any personally identifiable information. QED leverages a diverse set of public information sources to create a data pipeline which delivers specific and relevant information about a borrower's home loan at the point of sale for mortgage professionals. QED's unique mortgage identity provides context as the type of mortgage product a borrower has to determine what they may want, need or be qualified for.

How QED's Project Fits In With Your Capstone.

QED Analytics serves mortgage loan providers by giving them access to two important resources:

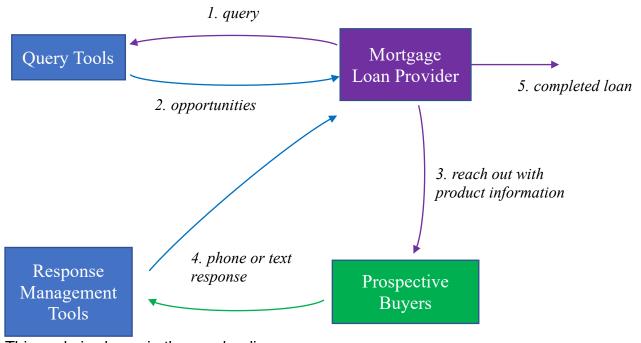
 Data about the market, from which mortgage loan providers can find their best business opportunities; and



 Tools for accessing this data, reaching out to prospective customers, and managing the response from interested buyers.

We maintain our database of market opportunities by gathering raw data from a range of publicly-available sources, then applying our experience and knowledge about the business in the form of proprietary analytical algorithms to create a database of mortgage business opportunities. We update this database daily.

Our customers – mortgage loan providers – query this database to build lists of prospective buyers who are most likely to be interested in their mortgage products. Bear in mind that mortgage loan providers' businesses vary widely based on type of mortgage product, geography, loan type, and other factors. The mortgage loan providers then reach out to the prospective buyers, and those who are interested in refinancing need a way to contact the mortgage loan provider with their interest.



This cycle is shown in the nearby diagram.

The purpose of our Capstone project is to build a way for mortgage loan providers to receive and manage voice calls and text messages from prospective buyers who are interested in refinancing their mortgages. The resulting software will connect with Twilio (https://www.twilio.com) to receive incoming calls and text messages, route those calls and text messages to the correct user, and provide a user interface that lets the user receive calls and text messages right in their web browser.



Ideal Team Size

3 - 6 working as a team.

We envision a project in which the team helps us understand and document our requirements, and ends with completed code. Because this includes both user interface and server elements, we believe a 4-person team would be optimal: two people working together on the user interface, and two people working together on the server.

Location

QED Analytics, HQ

201 Fillmore Street, Suite 200 Denver, CO, 80206 Cherry Creek Shopping District above Men's Wearhouse In-office work preferred, but not absolutely mandatory