planning the key activities to develop the solution. This includes scoping, data preparation and modeling/insight or dashboard creation. provide a short (under two minute) presentation of the team’s work.

1. Semantic/NLP Document Search/RIXML Analysis

Build a text search engine library system using Scala, replacing the current Lucine with features like: go beyond basic string matches to associated words, or possibly even sentiment-based associations

2. Readership Benchmarking normalize client activities

Organize research reports. Since It is difficult to accurately aggregate information since the ticker for one company may be used differently.

Then build a ranking system on readership by sector, company, region, country and sell to customers.

3. Predictive behavior based on history

Analyze the historical data on volume especially during earning seasons to help better prepare for higher volumes prior to certain companies reporting or notes of certain nature being released.

4. design and development of a prototype to formalize their Machine Learning capabilities through the selection of modern tools ranging from TensorFlow to Watson

SQL, Python, JSON and XML formats, and ability to call web server APIs are sufficient for most of the work. Core applications are built in Java/JavaScript.

Both JSON and XML can be used to receive data from a web server.

BlueMatrix will provide access to multiple terabytes of data including

* RIXML data
* Research report textual content
* Obfuscated readership data (relational) primitively mapped to attributes
* Access to Sellside and buyside customers where appropriate

2. planning the key activities to deploy the solution

BlueMatrix is a SaaS company which provides software for the authoring, distribution, and analysis of the consumption of financial research. Our goal is to help build a mature well thought out platform which is essential to guarantee the authenticity of the content and the fair and appropriate dissemination of the content.

Using HTML5 or PDF documents rendered online using more sophisticated viewers, BlueMatrix can capture time spent on a page, mouse locations on a page, the read of a document from disparate IP addresses. These provide a more accurate indication of interest.

**Blue Matrix**

**Takeaways**:

BlueMatrix is a SAAS company who is providing platforms for equity analysts to author and distribute research reports. More data analysis could guide equity analysts understand better of their readers and the competence between peers by utilizing AI, ML and NLP tools.

Our goal is to:

* Help BlueMatrix build a search system using Scala.
* Establish a ranking system of the clients on readership by sector, company, region, country.
* Make a prediction based on the historical data especially during the spike in the earning seasons.
* Accelerate their ML Capabilities.

**Technologies**:

SQL, Python, R, Excel, Java/JavaScript, JSON and XML

AI, ML and NLP tools.

By the end of the class students should be able to define the major steps of a structured analytics project and use the learnings to identify the key activities needed for the practicum to build an initial project plan.