

## **Course 1: Introduction to Data Analytics**

### **Project Title: J P Morgan classification for legal documents**

#### **Introduction:**

J P Morgan announced it had developed and deployed new software called COIN—shorthand for Contract Intelligence—that automates document review for a certain class of contracts. COIN does the mind-numbing job of interpreting commercial loan agreements that consumed 360,000 hours of work each year by lawyers and loan officers within seconds.

#### **Learning Outcomes:**

Convert a business problem into an analytical problem and the ability to break the process down using CRISP-DM.

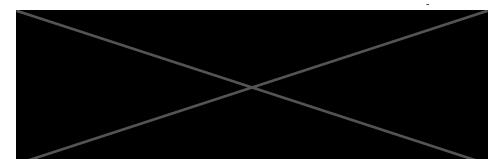
#### **Background Information:**

The software employs image recognition to identify patterns in these agreements. While JPMorgan has been tight-lipped about the details of the proprietary technology, the bank has stated that the algorithm digests data on the bank's numerous contracts and it can identify and categorize repeated clauses. The bank reports that the algorithm classifies clauses into one of about one hundred and fifty different "attributes" of credit contracts. For example, it may note certain patterns based on clause wording or location in the agreement.

#### **Scenario:**

The software reviews in seconds the number of contracts that previously took lawyers over 360,000 person-hours. Apart from shortening the time it takes to review documents, COIN has also managed to help JP Morgan decrease its number of loan-servicing mistakes. J P Morgan intends to deploy COIN for more complex filings, such as credit-default swaps and custody agreements. In the medium and long term, the bank also hopes to use machine learning to interpret altogether new regulations.

#### **Problem Statement/ Business objectives:**



How would you break the problem/scenario down with the help of CRISP-DM methodology: “Automate the classification of various legal documents”.

**Question:**

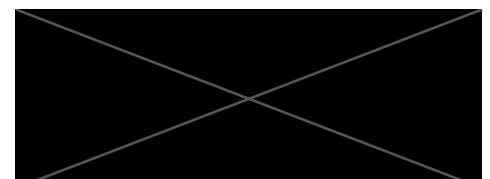
Distinct the process based on all the steps in CRISP-DM.(100 Marks)

**Submission Guidelines:**

- Save the word document as a PDF file and then convert it into a zipped (.zip) folder.(Please note, the link for the video created should also be added in the document itself).
- Upload the zipped folder on your respective dashboard.
- Failure to comply with submission guidelines will result in no grading/0 marks.

**How to ZIP a PDF file:**

- Put all of the PDF documents you want to compress (or just one) into a new folder.
- Right click on that folder.
- Select the “Compress to ZIP file” option and then click “Compressed (Zipped) folder.”
- A new .ZIP file will be created that contains your document(s).



**Note:**

- Plagiarism will result in a penalty, including possible project disqualification.
- The project will be evaluated based on the quality of analysis, depth of insights, and feasibility of recommendations.

