




J P Morgan COIN: Revolutionizing for legal documents

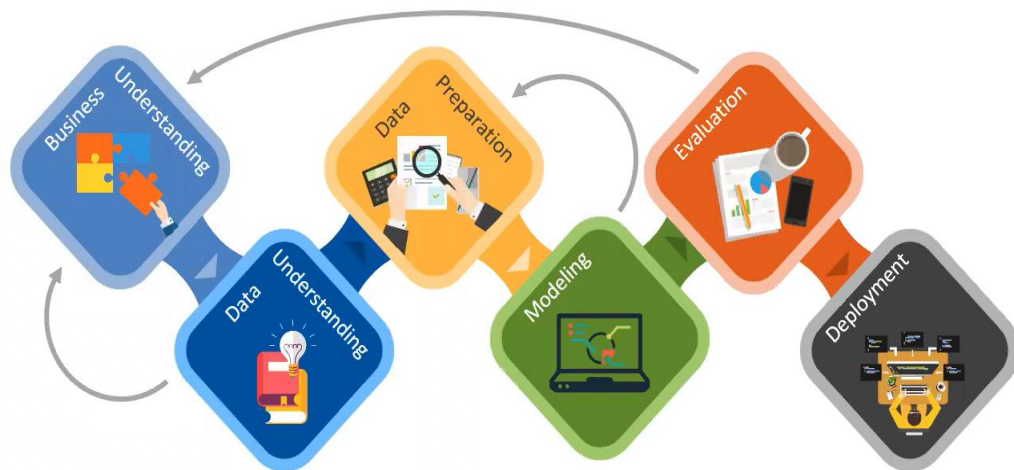


J P Morgan's COIN:

- COIN is a Contract Intelligence developed by JP Morgan that automates the certain class of contracts for the documentation review.
- It leverages the Natural Language Processing for documentation review without errors and reducing efforts and time compared to traditional methods.

CRISP DM Methodology:

- CRISP DM (Cross Industry Standard Process for Data Mining)
- It consists of 6 phases.



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According to CRISP DM methodology:

1. Business Understanding: Defining objectives and project requirements.
2. Data Understanding : Collecting and cleaning the data.
3. Data Preparation : Integrating and formatting the data for modelling.
4. Modeling : Applying and evaluating various modeling techniques.
5. Evaluation : Verifying the model reaches the business requirements.
6. Deployment : Deploying the project for practical use and reviewing the project.

Diving into CRISP DM Methodology

1. Business Understanding

Objective- Classification of legal documents and loan agreement services.

Business Goals- To effective output and reduce time consumption for loan agreement services. Also extending the COIN functionality.

Data mining goals- Prepare a data model to automate all the services like loan, agreements contracts etc. accurately and maintain scalability.

2. Data Understanding

Data collection- Collect all the required data that reaches the business goals and agreements up to date.

Exploring data- Using those datasets perform the initial stage of analytical process to differentiate textual data exploration and formatting patterns.

Data Quality- Verify the data quality issues without errors, incomplete files and inconsistent labeling.

3. Data Preparation

Data Cleaning- Remove any non-text content, unnecessary data involves transforming raw data into standard format.

Data Integration- Integrate all the data into a single dataset which can be further used into modelling techniques.

Data Formatting- Format the data in a that can be easily analyzed (rows, columns, date, loan status and DD/MM/YYYY).

4. Modeling

Model Selection- Select specific model machine learning algorithm and deep learning for text clarification.

Model Training- After selecting the models split them into validation and test sets.

Model Tests- Test the Natural Language Processing and Convolutional Neural Networks to analyze the text content also extracting the relevant information and patterns.

5. Evaluation

Evaluate Results- Evaluate whether it reaches business goals evaluate the model's performance. Also check models with actual classification to know its performance.

Reviewing the Process- Present results those investors and stake holders whether it reaches their requirements. Check those models are actionable and if not make necessary adjustment based on feedback.

6. Deployment

Deployment Planning- Implement those legal documents in JP Morgans COIN system for real time application. Choose a deployment environment (AWS, Google, Azure).

Monitoring and Maintenance- To interact with the classification system, acquiring results and managing the documents develop a dashboard for stakeholders so that it will continuously monitor the system.

Reviewing The Project- To identify the areas for improvement in order to meet the business objective keeping a review will be beneficial. It will keep track of successful implementation of the model.

Finalizing the Project- Ensure the entire process from initializing data to deployment is processed, find if any challenges occurred and successful implementation of the entire project in a correct manner.

Conclusion

JP Morgans COIN software ensures a significant advancement in the legal document review, potential in the AI. As increase in the AI tools can automate all the upcoming issues in a simpler manner. The adoption of AI solutions like COIN can enhance problems for financial institutions and legal services.