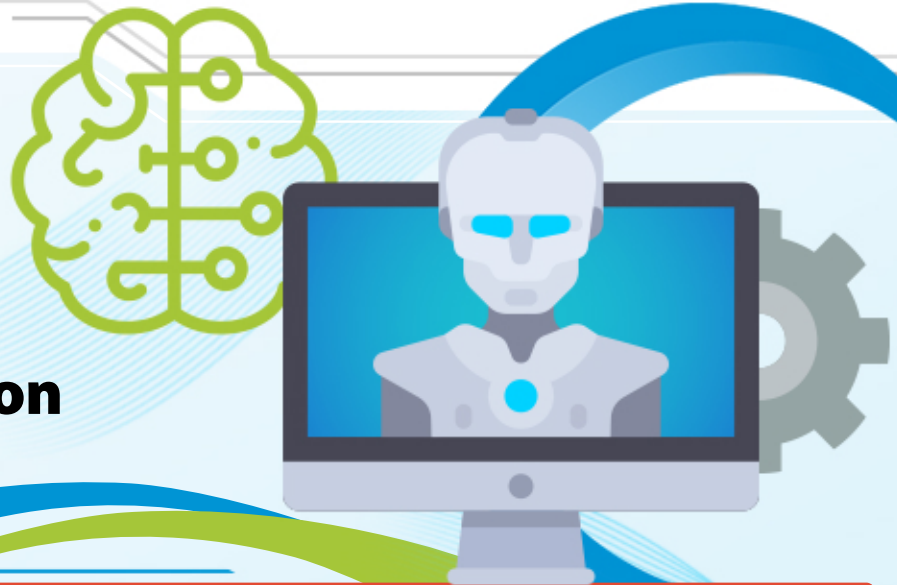


# How an AI driven machine learning solution helped a research organization



## Introduction

Artificial Intelligence (AI) has shown potential to improve outcomes in several industry verticals. Some of the key benefits it brings to industries and organizations within these industries include enhancing efficiencies, improving cost structure, and optimizing work environment. For data driven organizations, AI coupled with automation paves a way to save time needed for complex and repetitive tasks, to reduce information processing errors and to minimize human intervention.

### Customer background

- ▶ Our client is a well-known data driven political research organization in Asia specializing in politics related to conflicts, mediation and peace processes.
- ▶ Through research and data analytics, the client provides customized background briefs and analytical reports as well as conducts advisory meetings, presentations and workshops.

### Requirement

- ▶ The client was seeking an information platform to help organization's research and consulting work with data from various web sources.
- ▶ The platform needed to help identify trends and reveal insights that will influence important research and operational decisions.
- ▶ The client wanted the solution to be scalable and one that could handle complex research issues.

### Scope

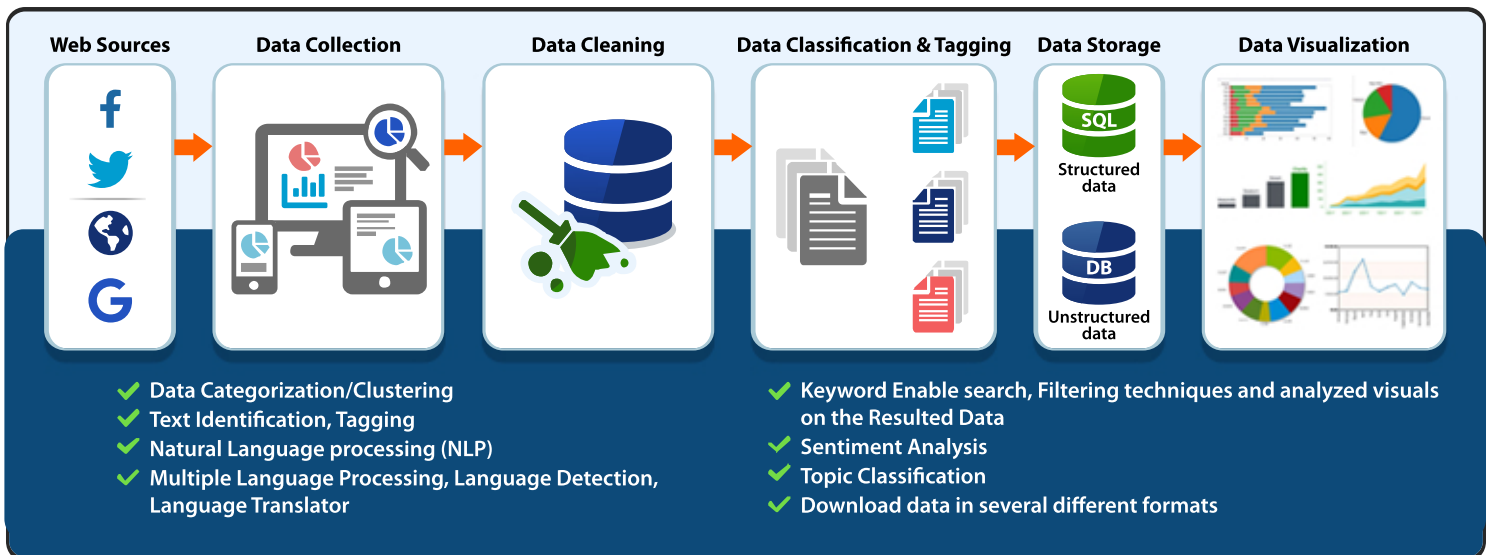
- ▶ The scope of the work included designing and deploying of an AI driven automated solution/ platform to obtain data from close to 45 web sources which comprised of news websites, social media sites like Facebook and Twitter and other online channels.
- ▶ The solution needed to scrape data from these sources in English as well as a selected national language.
- ▶ It was also expected that topic modelling should be applied for discovering popular topics, key words and trends.
- ▶ Based on the data that is collected, Aress had to build visualizations to help comprehend the information.

## Solution


- ▶ Aress assigned a team of developers to work on designing and deploying a scalable architecture to leverage automated AI models.
- ▶ The developers used latest data scraping tools to scrape data from the websites, social media sites and other online sources.
- ▶ Appropriate tagging and topic modelling techniques were used to help categorization of information which was then pushed to databases such as MySQL DB and MongoDB which is a NoSQL database.
- ▶ The processed data was picked from these databases for visualization purposes to identify hidden trends.

## Business Benefits

- ▶ The solution was designed in such a manner that it helped extract data from multiple sources in an automated manner, thereby eliminating any human intervention and resulting errors.
- ▶ It made it easy for the client to automatically segregate specific articles, images, topics and events that were of interest.
- ▶ Ready-to-use, clean structured & unstructured repositories of data helped in deeper research enabling appropriate consulting and operational decisions for the client.



## Contact Us

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