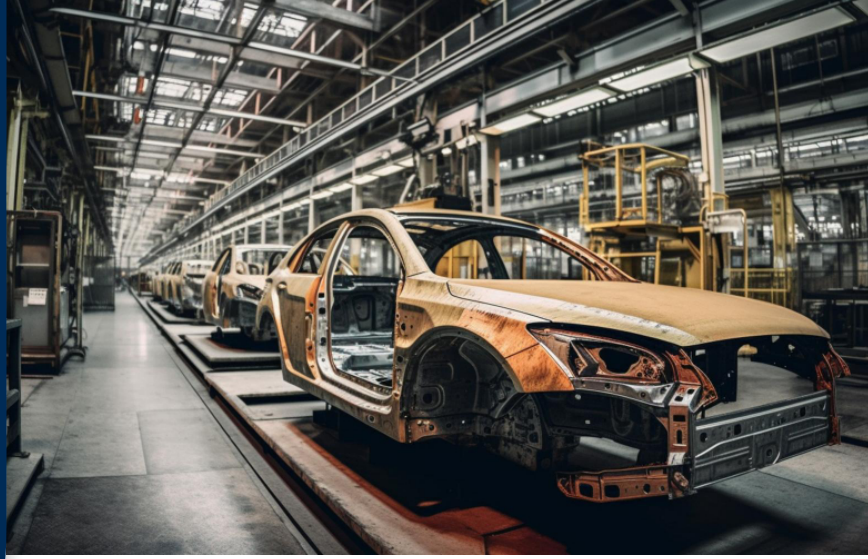**Case Study** | AI, NLP, RPA, DATA ENGINEERING

A very prestigious Car and Engine Manufacturer in UK

Problem

A prestigious UK car and engine manufacturer lacked a centralized system to consolidate and compare market data for IoT parts.

Sourcing and evaluating IoT components across multiple vendors was time-consuming and inefficient.

Difficulty in making informed procurement decisions based on the latest market trends and pricing.

Solution

Developed a tailored solution for their intranet COE (Center of Excellence) portal, featuring:

- **Market Data Extraction:** Automated collection of relevant IoT part data (e.g., specifications, pricing, availability) from diverse sources.
- **Data Consolidation:** Centralized storage and organization of market data into a structured format.
- **Intelligent Comparative Search:** A search engine facilitating side-by-side comparison of IoT parts based on key criteria defined by the manufacturer.

Results

- Streamlined the process of sourcing and evaluating IoT parts.
- Enabled data-driven decision-making for optimal procurement choices.
- Enhanced visibility into market trends, potentially leading to cost savings and competitive advantages.

Technology Stack

- **Web Scraping Tools:** Beautiful Soup (Python), commercial solutions, or similar.
- **Database:** SQL or NoSQL, depending on the complexity and volume of market data.
- **Search Engine:** Elasticsearch, Solr, or similar, potentially integrated with custom ranking algorithms.
- **Intranet Portal Integration:** Embedding the solution within the company's COE portal.

Software Development

- **Methodology:** Agile approach for flexibility and continuous improvement.
- **Focus:** User-friendly search interface with relevant filtering and sorting options.
- **Data Integrity:** Robust error-handling and data validation mechanisms.

Before Metrics

Time-consuming manual research to collect and compare market data.

Potential for suboptimal procurement decisions due to limited market visibility.

After Metrics

Reduction in time spent on sourcing IoT parts.

Improved procurement decisions based on comprehensive market intelligence.

Potential cost savings through competitive sourcing.