**Data Engineering**

**Evolve Program**

# Context

Optimizing Operations for Lenskart

# Background

Lenskart, a leading eyewear retailer, aims to streamline its operations by centralizing product information, pricing details, and customer reviews, and enhancing customer and employee databases.

# Procedure Implementation

## Gather Product Data

* The team accesses the Lenskart website to extract detailed information on eyeglasses, sunglasses, and contact lenses.
* Product pricing details, including discounts and promotions, are compiled for a comprehensive overview.
* Customer, order-related information with employee details needs to be obtained from the client side.

## Platform build

* Build an architecture for this data platform.
* Apply data transformation techniques to cleanse and structure the extracted data.
* Need to ingest them all into the platform and ensure data integrity and consistency during the loading process for accurate analytics and reporting.

## Document and Metadata Creation

* Create documentation outlining the structure, relationships, and metadata of the loaded data within the data warehouse.
* This documentation serves as a reference guide for team members interacting with the data.

**Dataset information**

**Scraped Dataset: (**Need to scrape from the site)

* Product
* Store

**Client Dataset: (**Will be shared through the Azure Blob storage)

* Customer
* Transaction

**Expecting KPI**

* LTM bridge
* Top store, customer and product sliced and diced in different dimension.
* Heat maps (e.g., sales distribution with geo spatial data)
* Customer LTV (Optional if we have time towards end of project)

# Outcome

The streamlined procedure facilitates better coordination between different teams, leading to optimized warehousing operations. The shared document serves as a central reference point, enabling Lenskart to respond proactively to market trends and customer preferences. Sales and customer service teams use the customer details to tailor their interactions, enhancing the overall customer experience. Also, this platform needs to provide a solution for operational-related areas. Overall, Lenskart achieves operational efficiency and improved customer satisfaction through the implementation of this comprehensive procedure.