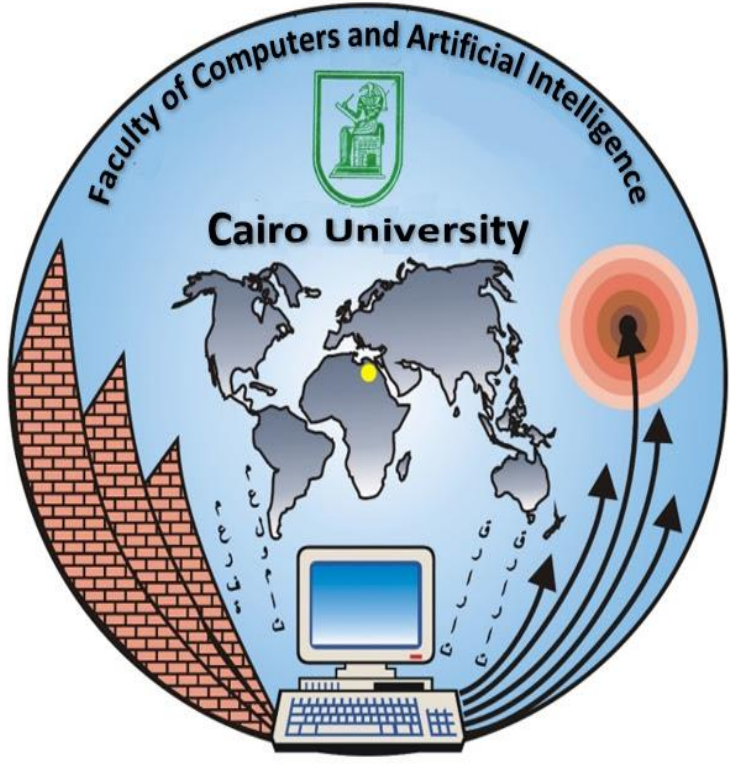




AVAILA



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VISION / OBJECTIVES

The E-commerce Optimization Tool aims to significantly improve the efficiency and effectiveness of e-commerce operations, leading to increased profitability for businesses and a superior shopping experience for consumers.

BENEFICIARIES

This tool is designed to benefit a wide range of stakeholders, including e-commerce businesses, consumers, e-commerce platforms, supply chain partners, and market analysts and researchers.

USED TECHNOLOGIES

- Developed a market Basket analysis using Apriori Algorithm.
- Dynamic pricing strategies using ML models.
 - Linear Regression
 - Bayesian Ridge
 - Decision Tree
 - Random Forest
 - XG Boost
 - CatBoost



METHODOLOGY

The methodology centered around Market Basket Analysis and Dynamic Pricing. **Market Basket Analysis** utilizes algorithms like Apriori to uncover purchasing patterns, optimizing product placement and cross-selling opportunities.

Dynamic Pricing involves real-time data collection on market trends and consumer behavior, using tailored algorithms to adjust prices based on demand elasticity and competitive dynamics.



DELIVERABLES / OUTPUT

- Identification of frequent item sets and association rules through Apriori Algorithm
- Insights into customer purchasing patterns, leading to optimized product placement and cross-selling opportunities.