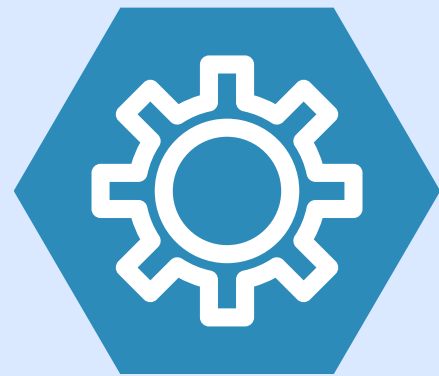


# HOW BRANDS USE DATA SCIENCE

PRESENTED BY:

- FATIMA RIZWAN AND LAIBA JABBAR

# CUSTOMER INSIGHTS & PERSONALIZATION



## USE

Analyze customer behavior, preferences, and buying patterns.



## EXAMPLE

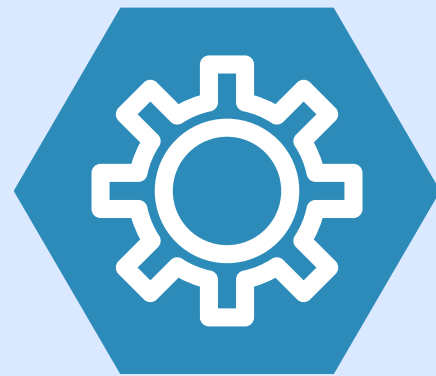
Netflix uses viewing history and ratings to recommend personalized content.



## TOOLS

Machine learning, clustering, predictive analytics.

# MARKETING & ADVERTISING



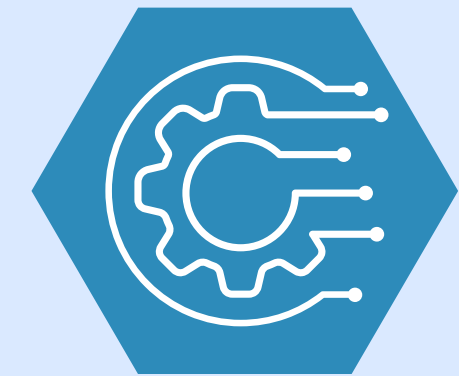
## USE

Run targeted campaigns, measure effectiveness, and optimize ad spending



## EXAMPLE

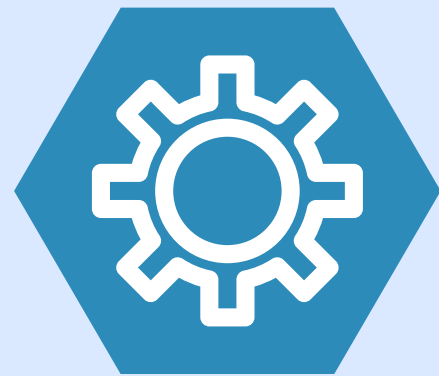
Amazon uses data science to show personalized product ads.



## TECHNIQUES

A/B testing, attribution models, sentiment analysis on social media.

# PRODUCT DEVELOPMENT



## Use

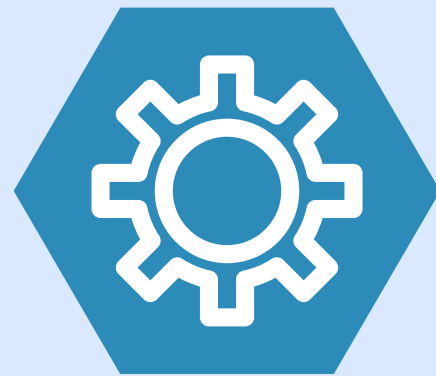
Analyze customer feedback and usage data to design or improve products.



## Example

Coca-Cola uses customer taste data to decide on new flavor launches.

# SUPPLY CHAIN OPTIMIZATION



## Use

Predict demand, optimize inventory, reduce delivery time.



## Example

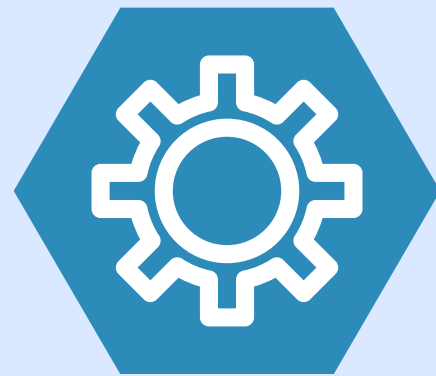
Walmart uses data analytics for real-time inventory tracking and forecasting.



## TECHNIQUES

Time series forecasting, simulation modeling.

# PRICING STRATEGY



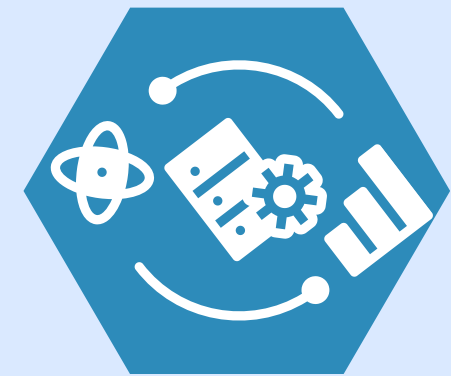
## Use

Dynamic pricing based on demand, competition, and consumer behavior.



## Example

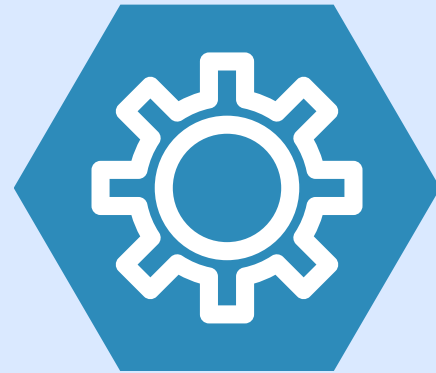
Airlines like Emirates or Delta adjust ticket prices based on demand patterns.



## MODEL

Regression models, price elasticity analysis.

# FRAUD DETECTION & RISK MANAGEMENT



## Use

Identify suspicious activities and manage financial risks.



## Example

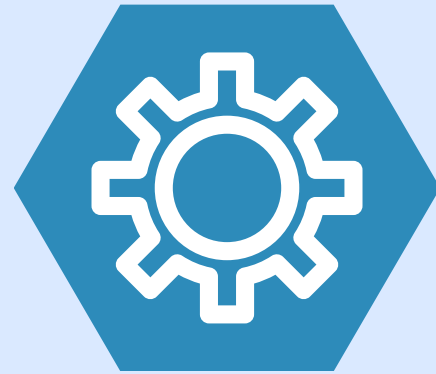
Banks use algorithms to detect unusual transaction patterns.



## TOOLS

Anomaly detection, classification models.

# CUSTOMER SERVICE AUTOMATION



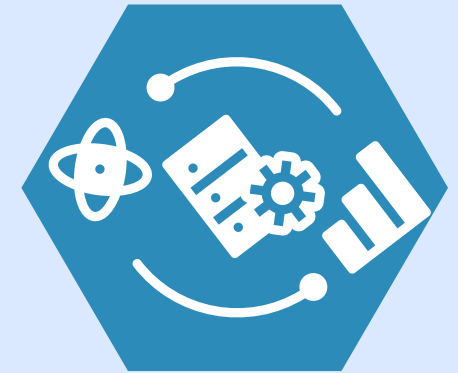
## Use

Power chatbots and virtual assistants to improve response time and reduce workload.



## Example

Brands like Sephora use AI-driven chatbots for beauty recommendations.



## MODEL

Regression models, price elasticity analysis.



# CONCLUSION/ FINDINGS

Data science helps brands make smarter, data-driven decisions. It improves customer understanding and personalizes their experience.

It boosts the effectiveness of marketing and advertising.

It supports better product development based on real feedback.

It optimizes inventory, supply chains, and delivery systems.

It allows for dynamic pricing and better financial strategies

It enhances fraud detection and risk management.