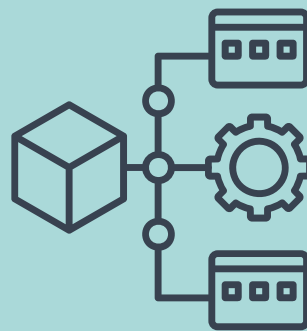


# 5 Ways Retailers are Using Data Science for a Competitive Edge

Discover how retailers are growing revenue, optimising inventory and more by leveraging data

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1

# £100M Saved in Annual Supply Chain Costs

Tesco



Tesco applied supply chain analytics across different projects to optimise inventory.

Their analytics team fed 4 years of sales data into a predictive model to simulate the performance of its distribution depots. The company used this model to optimise inventory, **saving £50m** through reduced stock levels.

Another project **saved the company £30m** in food waste by analysing stock and transmitting product discounts to in-store staff near the end of products' shelf-life<sup>1</sup>.

# 2 | 50% Increase in Repeat Customers

## Burberry



Burberry has seen a **50% lift in repeat customers** through personalised customer management programmes.

For example, they analysed product images for the same products that sold better in-store than online. They saw a 100% increase in sales for a particular bag by creating new images for the online listing.

The company is also using image recognition technology to spot counterfeit goods posing as genuine Burberry products. They can reportedly **spot a counterfeit with 98% accuracy<sup>2</sup>**.

# 3 | 30% Reduction in Shelf Gaps

## Morrisons



Morrisons uses artificial intelligence to automatically analyse store sales, weather forecasts, public holidays and other data to replenish inventory.

When first launched in 2016, the system had automated over 13 million ordering decisions per day and **reduced out-of-stock products by as much as 30%<sup>3</sup>**.



## 4

# 12% Reduction in Inventory

Macy's



Macy's rebuilt their inventory disciplines following the Covid-19 pandemic by using data science to forecast demand.

In Q2 of 2022, they **limited inventories to a 7% increase year-over-year**, compared to inventory increases of 36% and 48% for competitors Target and Kohl's, respectively<sup>4</sup>. By Q3, Macy's successfully **reduced inventories by 12%** compared to 2019.

The company has also used data science to determine where to place products for optimal full-price selling and to better inform markdowns<sup>5</sup>.

5

# 35% Growth in Sales

Amazon



Amazon uses recommender systems to personalise consumers' shopping experience on their platform.

The company collects data on each user based on their previous purchases, interactions and ratings of other displayed items. An algorithm then chooses recommended products for that user based on similar items viewed by users with similar preferences and purchasing behaviours.

The latest estimates attribute **35% of sales on Amazon to product recommendations** based on such algorithms<sup>6</sup>.

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# About Cambridge Spark

Cambridge Spark are an education technology company that enables organisations to drive business value through data by upskilling and re-skilling their workforce.

We specialise in offering publicly funded apprenticeships and development programmes to accelerate digital transformation, including programmes in:

- Data literacy
- Data analytics
- Business analytics
- Data engineering
- Data science & AI

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