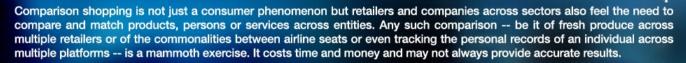TCS's artificial intelligence-powered solution for three-tier matching has found applications across industries and pushed up the company's revenues by $35 million.

THE CONTEXT

Comparison shopping is not just a consumer phenomenon but retailers and companies across sectors also feel the need to compare and match products, persons or services across entities. Any such comparison -- be it of fresh produce across multiple retailers or of the commonalities between airline seats or even tracking the personal records of an individual across multiple platforms -- is a mammoth exercise. It costs time and money and may not always provide accurate results.

For instance, many retailers rely on erroneous, time-consuming and laborious processes to gather information on their competitor' products. Third-party mystery shoppers, for example, can gather information on the prices of less than 2% of the key products sold by a competitor. The potential for a retailer to increase its margins by as much as 100% by matching its competitor's products and determining a dynamic pricing strategy is very high. Similarly, when it comes to government records, matching can help eliminate duplicate records and check frauds. Realising that there are several such use cases across industries, TCS decided to look for an innovative comparison solution.

THE IMPACT

The AI-powered matching system has found application across various industries and pushed up TCS's revenues by

$35 MN

THE INNOVATION

The company developed an artificial intelligence (AI)-powered programme that enables three-tier matching. This is powered by a sophisticated algorithm comprising advanced neuro-linguistic programming (NLP) techniques and TCS's best-in-class computer vision algorithms. These are architected through an intelligent three-layered sieve to streamline the matching process so as to provide the best possible match.

KEY CHALLENGES

TO HANDLE HETEROGENEOUS PRODUCT DESCRIPTIONS AND INCONSISTENCIES IN PRODUCT IDENTIFICATION CODES
The TCS team encountered these challenges while working with a European specialty retailer to solve its product matching problems.