# VEC VIRTUAL ENGINEERING CENTRE

# Lean into industries using AI today



Artificial Intelligence (AI) has transformed multiple industries and sectors all around the globe, improving efficiencies, saving on costs, improving accuracy, removing dull tasks and rocketing customer satisfaction levels in addition to brand loyalty.

Revolutionising how industries access and use their data, AI is an innovative technology that has already demonstrated several benefits for even basic business functionality. Here are the top 5 Industries taking advantage of these tools…

## HEALTHCARE

The healthcare industry employs AI to improve patient outcomes and streamline healthcare operations. Chatbots assist patients in scheduling appointments, answering common questions and even supporting healthcare professionals in using machine learning and algorithms for earlier and more accurate diagnoses, leading to the execution of earlier treatment plans.

The UK government (Health and Social Care Secretary) is now offering the NHS Trusts £21m worth of support to deploy AI technologies for earlier identification and diagnosis of cancer, strokes and heart conditions, accelerating access to treatment for their patients.

## FINANCE

Like the healthcare industry, the Finance and Accounting industries harness AI technologies to automate processes and directly assist customers with their finances. AI also assesses algorithms for quickly and autonomously identifying fraudulent activity and predicting any illegal activity, ensuring effective preventative action.

IBM Security provides transformative, AI-powered solutions that accelerate threat detection, expedite responses, and protect user identity and data flow as stock trading app Robinhood uses AI for quickly recommending investment opportunities based on customer risk tolerance and investing style.

## RETAIL AND E-COMMERCE

AI can personalise the customer shopping experience. Retailers analyse customer data such as previous purchases and preferences for providing bespoke and tailored recommendations, enriching customer loyalty to the brand whilst improving sales and company turnover.

Beauty giants Sephora also use AI to make quick colour match recommendations for their customers, without the need for testing on physical products, reducing waste of trial products and providing a valuable service to customers.

AI also optimises inventory management as retailers can analyse sales data and forecast future demand for stock, ensuring the products facing higher demands are readily available to meet customer expectations and remain efficient in their delivery.

American pharmacy store Walgreens records the number of anti-viral prescriptions they supply across their 8,000 stores, using AI to create an interactive map that highlights areas of flu outbursts, ensuring their customers are well prepared and stay healthy, whilst using the real-time data to ensure stock levels can match customer demand.

## REAL ESTATES

This industry is already popular among users of VR technologies, creating an immersive experience for potential clients as they virtually and remotely tour homes and for-sale spaces, allowing agents to highlight specific elements for improved sales rates.

AI can support the development of property listings in addition to using keywords for improved search optimisation, reaching a wider audience whilst data can also be used for predictive analysis, identifying future trends to allow for sales groups to remain one step ahead of competitors and even inform their clients of future investment opportunities, expanding on the quality of service provided.

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Other available data includes statistics regarding the neighbourhood and surrounding areas of desired homes. Potential buyers can quickly access readily available information such as local school evaluations, crime rates, pollution levels and average utility bills to that area - all of which can support their informed decision-making.

Based in New York, the Compass app supports the relationship between sellers and potential buyers. The app tracks interest levels and activity of those searching to buy property, notifying sellers and agents to prompt communication that could lead to a sales transaction during a convenient time for the buyer. The app helps agents maintain positive client relationships, improves customer service and experience, and even autonomously drafts emails to streamline the process.

## FOOD AND DRINK

AI technologies are becoming more popular amongst Agricultural workers who can use real-time data such as weather forecasts, insect behaviour, pH levels of soil and crop health to make informed decisions about their produce. This data can help to avoid mistakes, become better prepared for growing healthier crops and even grow profits for farmers.

The VEC has supported research at the University of Liverpool to explore how data can reinforce the fight against food insecurity in Liverpool, ensuring healthy foods are available to even more communities. Click here for the full case study.

Drink giants Pepsi use AI technologies to optimise their production processes, accurately assessing demand figures and aiming to use this data to optimise their operations, only producing similar quantities of produce to reduce waste and even improve product quality.

Delivery service Just Eat uses AI to gain greater insight into customer behaviour and identify trends for popular ingredients, favoured dishes and even popular order times to ensure their teams are best prepared.

For examples of AI projects the VEC has supported, click here. There is more information on the Digital Research Theme of the University of Liverpool here.