

twc

Harnessing data
Empowering wholesale
foodservice & convenience

Artificial Intelligence – A force for good in business



Whether you are keen to embrace it, or the thought fills you with fear, there is no escape from the topic of AI at the moment. In the press it's largely been presented as a threat - taking our jobs and risking our privacy - but in this whitepaper we intend to focus on how it can be a force for good in business.

What is AI?

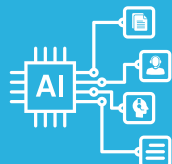
Put simply, artificial intelligence is “the theory and development of computer systems able to perform tasks normally requiring human intelligence”. This could include the ability to discover meaning; learn from past experience; apply reason; problem solve; perceive or use language.

There are two core types of AI: generative AI and AI driven insight. The former has had a lot of attention with the development of ChatGPT and the increasing use of chatbots to automate customer services. Essentially, generative AI takes strings of text and forms coherent sentence structures, to quickly make sense of blocks of information.

An area of increasing interest - and the focus of this paper - is AI driven insight. This involves taking huge datasets; running machine learning over it to identify patterns; and using those patterns to forecast future events.

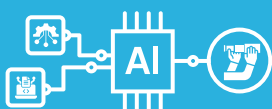
Generative AI

Creating content and automating customer service solutions.



AI Driven Insight

Using machine learning to identify trends and predict outcomes.



Case Studies

Throughout this document we share a selection of examples of applications of AI that show-case its potential within our industry.



Organisation: Gather AI

Industry: wholesale

Outline: Gather AI is a warehouse automation company offering a drone-powered inventory monitoring solution. Drones fly autonomously through warehouse racking, taking pictures of stock which are then analysed using machine learning algorithms. This information is compared to the data held in the company's warehouse management system and the results are presented in a dashboard, showing inventory matches, empty shelves, inventory exceptions and enabling search for missing items.

Results: The drones work at a speed of up to 900 pallets per hour (based on 3 operating simultaneously), significantly improving efficiency and accuracy vs. manual audits.

For further info
scan the code
and watch the video:



Ignore AI at your peril

There is no doubt that artificial intelligence **will** affect all of us and change our business processes, so we cannot afford to ignore it.

Indeed, AI offers solutions to some of our biggest challenges as an industry, so we need to reposition this technology as a potential force for good, rather than a cause for concern.

As a wholesale industry (including retail and foodservice wholesalers themselves, as well as their suppliers, plus the customers of the wholesalers), we face a number of significant challenges, including:

- Labour shortages
- Supply chain volatility
- Thin margins
- Competition from other routes to market

What if we were to tell you that AI can help with all of these challenges? Automation powered by artificial intelligence can help with some of the ongoing labour shortages we face as an industry. We can use predictive analytics to smooth out some of our supply challenges. AI can drive efficiency and reduce cost of sales. And ultimately this technology allows us to compete on a level playing field with other routes to market.

It feels counter-intuitive but embracing AI can enable a business to exponentially increase its inventory but reduce its cost of sales; reduce marketing spend and yet drive up loyalty. Just look at Amazon.



Organisation: Ocado Technology

Industry: grocery retail

Outline: Advanced AI and machine learning capabilities are embedded across Ocado software and systems. For example, AI powers a personalised experience in Ocado's webshop, learning what customers regularly order and tailoring their offers. Meanwhile, stock balancing is constantly taking place behind the scenes as customers place their orders to ensure accurate availability. AI also powers Ocado's forecasting across 50,000 products to better predict demand and keep groceries as fresh as possible. AI manages the real time control of Ocado's robot swarms and helps to fulfill orders with speed and accuracy. Machine learning computer vision and planning systems drive Ocado's robotic pickers and AI optimises delivery routes to take account of the time of day, traffic levels and roadworks to ensure on time delivery and reducing fuel emissions.

Results: Across more than 80 applications, AI allows Ocado to work more efficiently, anticipate issues and delight its customers and partners.

For further info
scan the code
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AI driven insight – Amazon

Amazon has taken all of its data sets from across the business and turned it into a technological process, fuelling forecasting, planning, inventory management, sales order processing, marketing activity and ranging.

As an early adopter of AI, Amazon has proven that it's possible to:

- Radically grow inventory
- Reduce cost of sale
- Speed up customer shopping time
- Reduce marketing spend
- Build loyalty

AI is not without obstacles

One of the biggest threats for the wholesale industry has been a lack of investment in technology, with many businesses operating on legacy systems. And of course, replacing that technology is not just a financial outlay - there is also a significant operational risk with re-platforming.

We are also a fragmented channel, made up of many smaller, independently operated businesses, resulting in limited or poor quality data. There is a real danger of “rubbish in, rubbish out” and so there needs to be a clear line of accountability for data quality, no matter the business size.



“The first rule of any technology used in a business is that automation applied to an efficient operation will magnify the efficiency.

The second is that automation applied to an inefficient operation is that it will magnify the inefficiency.”

Bill Gates

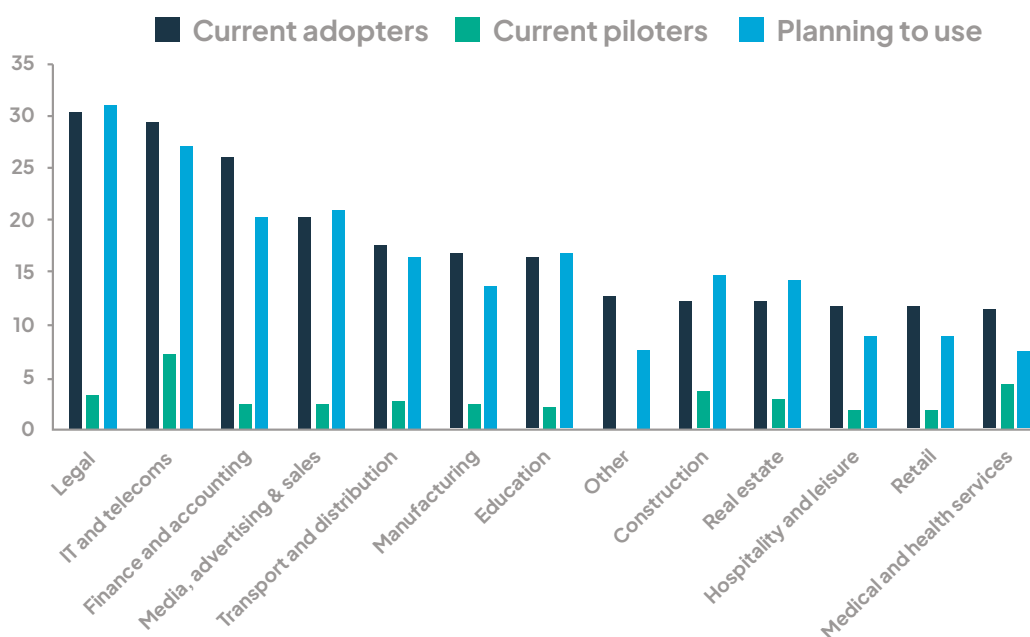
And that's a really important point - don't get left behind. According to a report commissioned by the Department for Digital, Culture, Media & Sport (DCMS), **68%** of large businesses are implementing AI vs. **34%** of medium sized companies and just **18%** of small businesses. Further, large companies are more likely to have adopted multiple AI technologies.

As an industry, we are behind the curve. Whilst the IT and telecommunications and legal sectors have the highest rates of adoption at almost **30%**, hospitality (**11.9%**) and retail (**11.5%**) are at the bottom of the pack.

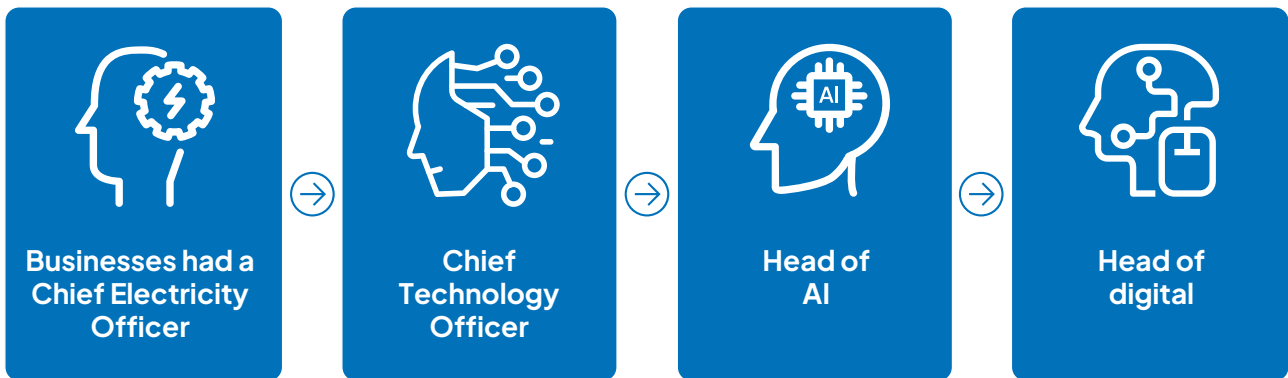
Top Tips

1. Allocate a "Head of AI" - or at least someone who understands technology and can adapt your current operational processes to exploit the benefits of AI technologies.
2. Ask for help or outsource if this is not your area of expertise. TWC can help here!
3. Learn from what others are doing and how it could be applied to your own operation.
4. Consider what problem/s you want AI to solve. Identify the business objective and the specific task/s AI will perform.
5. Test any system change or conduct small trials behind the scenes before rolling out more widely. Also consider how it will integrate with your existing infrastructure and systems.
6. Avoid "rubbish in, rubbish out" by reviewing the quality of the data right across your business and allocating clear accountability for implementation of quality standards.
7. Ignore AI at your peril!

Share of businesses adopting by sector, 2020 (per cent)



Source: Capital Economics and DCMS (2022)



It is not an exaggeration to liken AI to the invention of electricity. It is simply not an option to ignore it - and we can see from the DCMS report referenced above that small businesses in particular need to catch up. One of the best ways to do this is to make somebody in the business accountable for AI.

At the very least this should be someone who understands technology and can look to adapt your current processes to exploit AI technologies where it makes sense to do so.



BRINKER
INTERNATIONAL

Organisation: Brinker International (a leading casual dining chain with brands including Chili's Grill & Bar)

Industry: hospitality

Outline: Recognising the correlation between on-time orders and a positive guest experience, the business uses AI models with machine learning to accurately predict how long an order will take. In addition, using table-top tablets in their outlets, the business collects around 25 million surveys a year, analysing the data to understand what is working and not working.

Results: Improved customer experience by managing expectations around order lead times and taking action to improve based on direct customer feedback.

For further info scan the code and watch the video:





Organisation: Walmart

Industry: grocery retail

Outline: The world's largest retailer has invested in a state-of-the-art analytics hub named the Data Cafe in its US headquarters. Combining 200 billion rows of transactional data with 200 other data sources (such as Nielsen, weather data, economic data etc), Walmart is using machine learning in real time to analyse customer behaviour and purchases and adjust inventory accordingly.

Results: Stock and order management is based on real-time purchases to minimise out of stocks AND reduce stock on hand to minimum levels. Walmart is also able to respond immediately to changing customer needs, for instance the business responded to an increase in searches for 'free from' with an expansion of its range of allergen-free products.



Organisation: Zara

Industry: fashion retail

Outline: Zara has an AI driven supply chain solution that connects supplier performance, consumer demand, shipping, logistics and fulfillment, to optimise availability. The business combines the principles of just-in-time inventory management with AI and real-time data analytics. Real time data on traffic, weather and port clearance provides optimised routes as well as monitoring and reporting against fulfillment targets.

Results: Zara's AI strategy has yielded efficiencies, cost reduction and increased customer satisfaction.

How TWC can help:

- We offer data management strategy consultancy to anyone looking to move forward in this area
- Our data service operates on AWS cloud-based technology without reliance on legacy systems
- We are trialing machine learning on our data quality management, providing consistent data cleansing for our clients
- We are testing AI driven insight / automated reporting for clients

As an industry, we have a long journey ahead but TWC is there to support you, every step of the way.

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To find out more:

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