











Optimise **network plans** across ground and air Machine learning and predictive analytics can save cost by

> optimising fleet utilisation and empty repositioning. This also enables the real-time reallocation on resources in downtime. Digital Twins, which process real time data, can be

used to enable drivers and planners to efficiently make optimal decisions in the face of unexpected circumstances.1 Chatbots that are enabled by deep learning and

advanced analytics can help deliver information 24/7 about supply chain disruptions and recommend alternative procurement routes.<sup>2</sup>

The world's first autonomous **FACT** commercial freight delivery was

completed in 2016. The self-driving truck was able to successfully deliver 50,000 products across193km. Read more.



**FACT** 

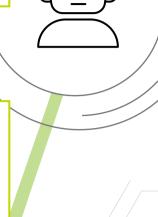
and virtual customer assistants. These tools can help enhance the customer experience by providing timely resolutions to problems and queries. By consolidating customer services platforms based on AI and

IoT, providers can analyse the sentiments and needs of customers enabling a proactive response and targeted action.3 Autonomous drones are being designed to deliver everything

from parcels to medical supplies to food. Drones will allow for a faster and more cost-effective delivery system and will reduce the environmental strain caused by cars and road traffic.4

One organisation has implemented a service robot

in its retail stores to assist the associates on their shifts. The robot is a mobile collection of cameras and sensors that captures and processes data about the store, including inventory. A chatbot functionality converses with customers in multiple languages to answer queries. Read more.









### predict cash flow and interruptions Al and machine learning can be used to handle routine tasks, enabling customer service centres, storage warehouses and

Drive revenue and

assembly-line factories to operate more efficiently at reduced cost. Predictive analytics and digital twin technology can help predict required maintenance, reducing the associated downtime costs.

Using AI for price optimisation can help businesses price products based on forecasted demand as well as the current

economic and competitor environment.



recommendations and decision support.5 By analysing past purchasing behaviour, AI analytics can allow retailers to understand what items will be in demand based on the ability to predict consumers'

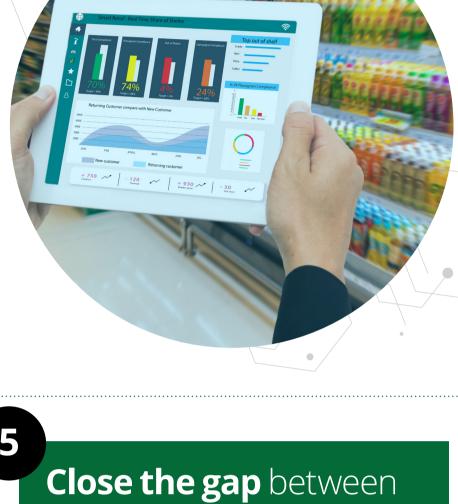
**Know what your customers** 

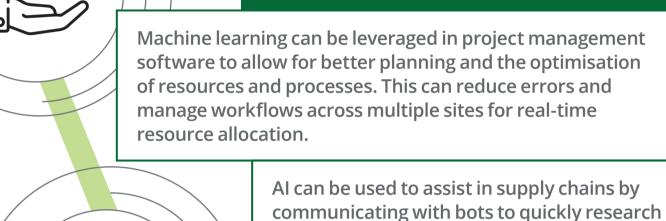
knowing what to stock and when, businesses can also optimise resources and reduce waste. A leading beverage provider used AI to monitor the data from self-service soft drink fountains where customers were able to mix their own drinks. This data then recommended the

next actions and their responses to market trends. By

company's newest beverage flavour. Read more.







products, identify the best deals, place purchasing orders and process invoices.6 A global retailer used AI to predict **FACT** customer patterns based on weather.

supply and demand

The model advised a demand for hamburgers on hot days with clear skies and steaks on cloudy, windy days. Read more.



vague search terms.

**FACT** 

stocked and operational with little or no human involvement. Customers can walk out without even checking out.7 Al can help customers to instantly determine which clothing

A major grocery market in Australia is

allows customers to simply scan the item(s) they wish to purchase and pay digitally, without going to a check-out counter. Al enabled scales are even

able to weigh fresh produce and automatically know

using a computer vision application that

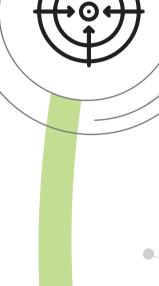
search online for items based on an image, rather than

items are the best fit. A combination of machine learning, computer vision, and 3D scanning can obtain a shopper's measurements in real time which can then be matched against a database of clothing to find the best fit, improving customer satisfaction and reducing the cost of returns.

Deep learning software—in conjunction with cameras

and sensors—can recognise everything that is happening within a store making it possible for the store to remain fully

what the customer is weighing. Read more.







### available sizes.8 Al and ML can help combat food waste by offering dynamic pricing based on an item's expiration date. For food that is thrown out, computer vision technology is able to analyse and assign the item to the correct waste management system.9

A major retailer uses AI to help

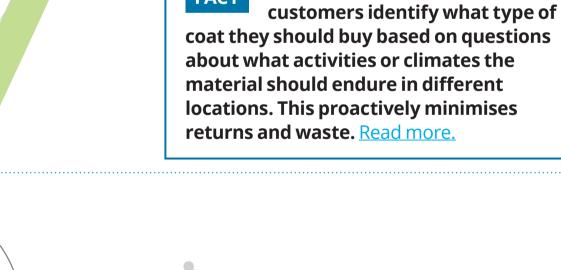
Sustainably change the way

with your business.

customers **shop and interact** 

Al-enabled touchscreen mirrors in stores allow customers to browse items and inspiration. The mirrors are then able to know what customers are trying on through RFID (Radio Frequency Identification) and advise other colours or

returns and waste. Read more.



**FACT** 

Predictive modelling and machine

learning can help to identify high-risk situations in food and product facilities, improving safety and minimising recalls.

Don't sacrifice **product** 

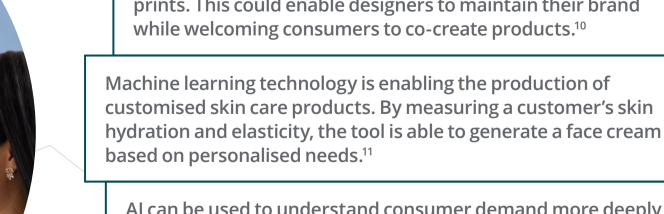
quality for productivity

Robotic process automation in factory lines can help businesses ensure and maintain quality and consistency in their products. Computer vision can

identify broken or damaged goods and remove

these items prior to consumer purchase.







Al can be used to understand consumer demand more deeply by analysing a wide range of factors such macroeconomic elements and competitor activities. Al can examine clusters of products and reveal hidden demand patterns for similar and contrasting product groups.<sup>12</sup> One Australian fashion designer has used Al **FACT** to develop catwalk collections. A combination

> of computer vision and machine learning provided the designer with insights into the latest consumer trends



efforts achieving carbon neutrality, forecasting future

# and design possibilities. Read more.



## Get in touch

**9.** https://www.wasteless.com/

levels with AI.<sup>13</sup>



10. https://wired.me/culture/design/your-ai-generated-clothes-are-trending/

**11.** https://pitchbook.com/profiles/company/513474-04#overview



Al Institute Lead, Australia





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13. https://www.weforum.org/agenda/2023/01/here-s-how-artificial-intelligence-benefit-retail-sector-davos2023/ This publication contains general information only. Liability limited by a scheme approved under Professional Standards Legislation.

# $\textbf{8.} \ https://www.forbes.com/sites/blakemorgan/2019/03/04/the-20-best-examples-of-using-artificial-intelligence-for-retail-experiences/?sh=3552b9a54466$