The Al and cloud strategy behind Mondra's supply chain edge



Even for experienced business leaders, grasping the full potential of cloud and AI for accelerating innovation and sharpening competitive edge can be challenging – especially without a deep tech background. However, when organisations take a bold, strategic approach to infrastructure and AI, the business impact can be transformative.

Mondra – a net zero transition company and SaaS platform provider helping the food sector measure and improve the environmental impact and resilience of its supply chains – is a strong example.

"We now know and understand the global supply chain for more than half of all the food consumed in the UK - right up to one step away from the farmer," says Tom Holden, Mondra's Chief Product Officer. "That's a powerful place to be. It means we can help customers make better decisions – despite the multi-dimensional complexity they're dealing with."

By investing in its tech stack, 'data estate', AI, and partnering with the right experts, Mondra has built an innovative platform that delivers carbon accounting – down

to the ingredient level – across more than 60,000 products. This helps retailers and manufactures cut emissions, improve resilience, and source more sustainably.

Its platform also tracks a broader range of metrics to support better all-round food sourcing. Customers can take a more data-driven approach to managing the array of interconnected challenges facing the UK food sector - from reliance on imports and disruption from extreme weather or labour shortages, to rising ingredient and fertiliser costs.

Yet it would have been all too easy to take a less ambitious, less impactful route.

Create a strategic differentiator

Supply chains are made up of thousands of moving parts, from farms and factories to packaging plants, distribution centres and retailers. The instinct when modelling these systems and building digital twins for customers is often to simplify – to make a minimum viable product that just gets close enough. Mondra took a different approach. By developing the Al tools and computational scale to handle this complexity, the company has been able to embrace it. In doing so, it has created a unique offering and competitive advantage compared to anyone else in the industry.

Today, Mondra's platform delivers all the carbon accounting customers need while monitoring more than one million ingredients and serving 85% of the UK grocery retail market – all with a team of just 50 people.

"Choosing to embrace this complexity, knowing the capabilities of Azure, has been the most important decision in the history of our company," says Marco De Sanctis, Mondra's Chief Technology Officer.

Build faster while protecting trust

Having access to the latest generative Al models through Azure OpenAl - before they were publicly available - gave Mondra a head start in developing Sherpa, its generative Al assistant. Sherpa is a chatbot that allows customers to interrogate their supply chain data using natural language, receiving accurate, personalised answers immediately.

Being able to switch between different AI models quickly and easily during the experimentation and testing phases accelerates the speed at which innovative new tools and services can be created. For example, Mondra built Sherpa as a proof of concept in just six weeks, before refining and launching it as a customer-facing product in under six months.

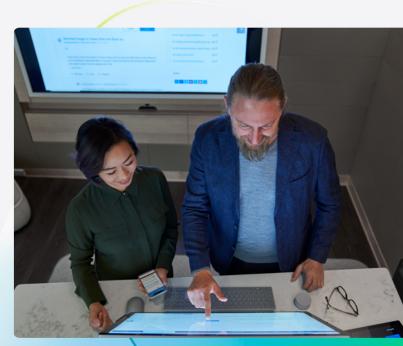
"The pace at which we've been able to develop would have been simply unthinkable, just a couple of years ago," says De Sanctis.

However, being able to anticipate or react to customers' changing needs more quickly must never come at the expense of customer trust. In the food sector - as in every other industry - clients' appetite and demand for Al tools is growing rapidly, but so too is the need for assurance around how their data is

used and protected. Agility must be underpinned by privacy and security.

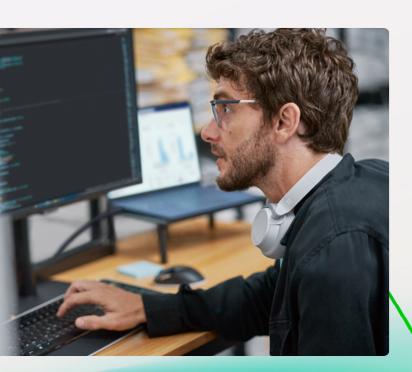
This was essential for Mondra, because the platform also functions as a collaboration space, bringing together multiple stakeholders across the food and CPG supply chain to share information, generate insights, and take coordinated action. This means hosting sensitive data from a variety of clients, each with their own requirements around security and compliance. Ensuring data remains segregated, encrypted, and fully controlled is critical.

Built-in data protection and compliance features, plus data encryption in transit and at rest - play a key role when building an enterprise-ready platform that maintains customer trust in cloud- and Al-powered innovation.



Democratise AI to unlock value

Another key lesson for business leaders is that Al-powered, data-driven insights are only valuable if people across the organisation can access and apply them. Democratising Al tools like Sherpa - by making them easy for everyone to use, while tailoring them to individual and team-level use cases is vital for unlocking their full value.



For example, the vast majority of Mondra's customers use Microsoft at the desktop. Azure's integration with Microsoft 365 means supply chain data, insights, and analytics can be connected directly and seamlessly into core tools and workflows throughout the enterprise.

As Tom Holden explains, friction is the enemy of action: "There's something very elegant about that stack – from the cloud services where the data sits, with third parties like Mondra delivering the data, all the way down to the desktop experience. All is only going to magnify that effect.

For our customers, it overcomes the domain knowledge barrier between the people who understand sustainability and the people on the commercial side who can enact change - by putting the data into the hands of everybody, wherever and whenever they need it."

Lay the foundations for continuous innovation

Looking ahead, Mondra continues to build on these strong foundations. Sherpa will become further embedded into the platform, surfacing insights contextually and enabling them to be easily shared in formats like PowerPoint or scenario-based models. Customers will be able to run real-time 'what-if' analyses, instantly visualising the impact of potential sourcing decisions across their supply chains.

By layering environmental, nutritional, social, and commercial metrics into its digital twins – from carbon and water risk to modern slavery and geopolitical volatility – Mondra will continue to enable new levels of data-driven supply chain strategy.

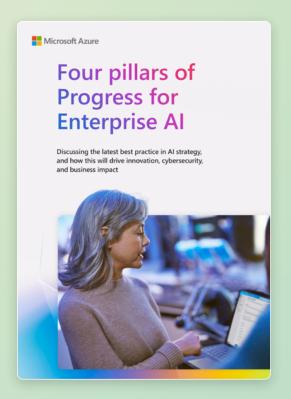
Mondra's journey demonstrates how cloud and AI technologies can go beyond operational efficiency to shape long-term strategic advantage. By leveraging Azure, the company has been able to embrace complexity and revolutionise food supply chain management - setting new standards for the industry. It also underscores the importance of building trust in data and making AI accessible to all – to support data-driven decision making throughout the enterprise.

For business leaders ready to turn their challenges into a competitive edge, Mondra's experience illustrates why organisations with the with the right cloud and AI foundations are so much better positioned to lead, adapt, and thrive.

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