Effective digitization and automation in supply and value chains.

Machine learning, artificial intelligence, and applied robotics are streamlining business processes, enabling data-driven decision-making, and eliminating manual and time-consuming processes. Technology is transforming businesses’ operations and outcomes, including supply chain management.

The online grocery retailer Ocado has moved beyond tactical order fulfillment, focusing on data to predict customers’ needs and improve ordering accuracy and supply chains. At the same time, the company is using robotics to automate the picking and packing of the disparate products that consumers order. This type of specialization has become even more pressing during COVID-19, as retailers and their suppliers have been dealing with supply chain disruptions, shifts in consumer demand, and the need to implement social distancing measures.

Meet Ocado, an online grocery retail giant and tech pioneer.

- Ocado is a top performer in London’s FTSE 100.
- Its commercial grocery delivery service started in 2002.
- The company calls itself the world’s largest dedicated online grocery retailer.
- It has launched new technology, including the use of proprietary robotics and a wide software estate.
- Ocado’s main growth potential lies in its technology licensing business.
- The company has licensing deals with nine partners worldwide.

Consumer packaged goods (CPG) companies can benefit from the data collection, data sharing, and precision that Ocado can provide to its grocery clients globally. Meanwhile, CPG companies are embarking on their own data-driven initiatives. P&G, for example, has for many years been successfully employing machine learning and AI in its operations to drive supply chain improvements.
Korn Ferry spoke with leaders at both P&G and Ocado—pioneers in the application of advanced data technology to supply chain—on the steps, challenges, and gains from their bold initiatives in the space. Impacts on visibility, decision time, and consequent speed to efficiencies were prominent takeaways from our in-depth discussions.

P&G has been successfully reimagining procurement and is two years into a multiyear transformation of its global supply chain through the structuring, translations, and encoding of market, human, and supply chain processes and behaviors to machine models, algorithms, and analytic outputs. The nearly 200-year-old company is advancing digitization to capture meaningful data and insights, resulting in previously unimaginable end-to-end supply chain visibility, value discovery, and significant cost saving.

While P&G will soon head into its third century, Ocado is barely 20 years old—and yet the new company has already forged and advanced a powerful grocery retail platform with its rigorous application of data and AI to connect consumer packaged goods with consumers. In addition to being one of the largest online grocery delivery companies in the United Kingdom, Ocado has leveraged its unique platform and data models to assist retailers outside the UK in harnessing, deploying, and profiting from consumer and distribution data. The group’s pursuits have upended the consumer experience and the economics of the grocery sector.

Unleashing collaboration

As the field’s transformation accelerates, collaboration has morphed from a desired process behavior to a critical success driver and a beneficial outcome. Cheryl D’Cruz-Young, leader of Korn Ferry’s chief procurement officer center of expertise, notes: “Walls come down and functional silos evaporate as the dramatic improvements in real-time visibility confirm how well retailer serves consumer, manufacturer serves retailer, and raw material supplier serves manufacturer. The old zero-sum, pass-the-buck mentality, forever undesirable, is now deprived of all oxygen in the sharply focused bright lights of per-fact, right-now data.”

But there’s more to this data transparency than obliterating inefficiencies and approximations with nowhere to hide. Ask P&G chief purchasing officer, Ana Elena Marziano what she sees as the real benefit of digitization and automation initiatives with suppliers, and her answer may surprise.

P&G - the innovative CPG focusing on the future.

- William Procter and James Gamble founded the company in 1837 as a soap and candle manufacturer.
- P&G has revolutionized the consumer packaged goods (CPG) industry over the generations, innovating products from soap to disposable diapers.
- The company considers constructive disruption in all areas of the value chain as critical to its future success.
- P&G has been honored as a Gartner Supply Chain Master for six years.
- It is ranked by Fortune magazine as one of the world’s most admired companies.

Language, she says, is the true change. “We now speak the same language, use the same data, and have common goals,” Marziano explains. “This enables us to see the end-to-end supply chain with one set of eyes.”

Lost (value) in translation, it seems, no longer applies when data and processes are effectively integrated and universally accessed.
“I don’t need to know that you’re female and 38 years old. All I need to know is how you’re shopping and behaving. We can build an ID based on your buying habits.”

Luke Jensen, CEO of Ocado Solutions and Executive Director of Ocado Group plc.

Prior to that integration, according to senior purchasing director Matthew McClish, P&G’s material supply chain activities were not fully linked up to the sourcing experts. Resiliency and material supply chains were managed under the supply network operations group and a subset within the group that managed inbound materials from suppliers to operations. Post-integration, it’s a very different story. “We’re finding optimization value in our end-to-end material supply chains where we never had the data or the visibility to look before,” McClish says.

On the other side of the value chain, Ocado is using data to recruit consumer engagement and enable direct consumer collaboration, according to Luke Jensen, CEO of Ocado Solutions and executive director of Ocado Group plc.

In tandem with, among others, Kroger in the United States, Coles in Australia, Groupe Casino in France, Sobeys in Canada, and Aeon in Japan, Ocado is hard-wiring consumer interests directly to the operational processes, in essence putting consumers in the driving seat of change. “We have information on customer behavior,” says Jensen, adding that it directly drives forecasting and CPG to consumer-relationship optimization. “We can bring our technology expertise together with their grocery expertise in retailers’ markets. It is a very exciting proposition for the CPG suppliers to take part in that journey.”

Jensen notes that Ocado’s customers never fill out a profile. “I don’t need to know that you’re female and 38 years old. All I need to know is how you’re shopping and behaving,” he says. “We can build an ID based on your buying habits.”

Relatively small things can influence shoppers’ behavior, and CPGs can choose to take part in that influence. “In a data-rich environment, you can engage shoppers in a more subtle way because you expose them to things they didn’t see,” Jensen says.

Ocado Retail in the UK has more than 4% of sales income from suppliers, which is much higher than the industry average. “That is money that suppliers pay us for the targeted marketing activity,” Jensen says. “A data-rich environment allows you to nudge people and influence those choices.”

For example, technology can transform traditional sampling, in which someone hands out small offerings at random, into a targeted event using data to identify a particular group. “We can track behavior to say the person who got the sample was or was not motivated by it,” Jensen says, adding that the sample then appears with customers’ purchases on subsequent orders, making it easy for them to buy. “Sampling is something super low tech in the physical world that can become super high tech in the digital world.”
“We now speak the same language, use the same data, and have common goals. This enables us to see the end-to-end supply chain with one set of eyes.”

Ana Elena Marziano, Chief Purchasing Officer, P&G

**Precision in planning**

Data transparency enables forecasting accuracy and optimal resource allocation, ensuring the right products are available at the right time. That is critical in a manufacturing environment as well as in the retail space.

In the traditional grocery environment, store managers don’t always receive the products they are expecting. “That is due to two things—mess-ups within the retailer’s own upstream supply chain and a bad match of data and product coming from the suppliers to the retailer’s distribution network,” Jensen says. “It leads to waste and loss. There is the loss of labor because you’re correcting things, and the loss of product because if you don’t have the right things in the right place, you’re less likely to sell it.”

Ocado’s waste in the UK is less than 0.4% of sales. “For typical retailers, it is usually 2.5% to 3% of sales,” Jensen says. “It is always better for the suppliers if the retailers are accurately ordering what they want.”

Ocado has developed sophisticated algorithms to predict what its customers are going to buy. The supply chain’s predictive tools recalculate several times a day based on a real sum of predictive customer behavior, Jensen says, adding that Ocado in the UK repeatedly receives top retail customer-service ratings.

That level of satisfaction is due in large part to the company’s ability to deliver everything customers expect. “Drivers have a much better doorstep experience because they’re turning up and providing what the customers ordered,” Jensen explains. “For most grocery stores providing online ordering, the first thing the driver has to say is, ‘We had to replace this,’ or ‘We’re out of that.’”

What’s more, Ocado believes it can continue to reduce waste and costs within the supply chain by reducing the packaging needed to protect products, since there is a more direct connection between the warehouse and consumers. “This is a game changer for CPG companies that are under pressure to reduce their carbon footprint,” says D’Cruz-Young. “In addition to eliminating the costs associated with overpackaging, it opens up the opportunity to use returnable, multiuse packaging due to this type of closed-loop supply chain. It is a win for everyone, from supplier to consumer.”

In a manufacturing facility, product mismatches impact production and product availability. At P&G, automation and digitization support the company’s governance systems, providing visibility into what was ordered, if orders were fulfilled, and if they were delivered on time. “All of that has to be governed and has to be governed digitally,” Marziano says. “Integrating the systems and people can provide incremental value to suppliers and consumers.”

Additionally, P&G has built resiliency into its supply chain of more than 15,000 suppliers across hundreds of thousands of material supply chains. “We’re finally having the right conversations,” McClish says. “We have awareness and visibility into all of the dialogue that goes around it. We’re speaking with one voice.”

The end-to-end nature of this integration with suppliers and customers is making a real difference, notes Gregor Fiabane, leader of Korn Ferry’s supply chain management center of expertise in Latin America. “It is great to see leading companies now successfully rotating talent through different parts of their supply chain and cross-functionally to develop skills such as stakeholder engagement,” he says. “It helps individuals better navigate networks and
maximize value. This allows them to spot innovation proactively and the organization then benefits from unique supplier capabilities.”

**Leading change, creating opportunities**

The integration at P&G brought about significant organizational change. “Like any other organization, we had people at the beginning who were afraid and scared, not knowing what their career is going to look like,” Marziano says. However, engaging associates in the process helped to mitigate some of that fear and turned the change into a growth opportunity for team members.

“We’re letting people own and execute on digital connectivity projects as part of their role, increasing their impact and overall growth,” McClish says. “People feel excited and supported.”

Marziano shared that P&G has now broadened the career environment within the function; employees have greater choices during their careers than ever before. She is encouraged that her team is excited by the breadth now on offer. By staying at P&G, Marziano’s associates have a clear line of sight into roles in supply, sourcing, and source-to-pay organizations. The integration of the material management and purchases organization opens a wide set of opportunities for associates who can continually learn new skills, apply different approaches, and most importantly, see the impact of their creativity across the entire materials supply chain.

**Pioneering new technology**

The right technology has to be in place to obtain the data and visibility needed to drive automation and digitization. Both Ocado and P&G have created the information architecture and identified the right technology tool sets to be effective.

Ocado Technology, a division of Ocado Group, develops most of that organization’s technology in-house and has launched new, groundbreaking innovations. “The advantage of being in a very creative, technology-driven business is that people are very good at coming up with solutions,” Jensen says.

Applied robotics is a good example of tech and operational fit. With thousands of robots operating within its warehouses, Ocado has created fully automated pick stations that apply visual AI models, using multi-access robots and gripper systems that enable the company to pick as many as 45 to 50 items in two to three minutes. The automated devices share vast amounts of data. “There was no Wi-Fi network that could handle that, because we have thousands of bots talking. Our tech people basically created a private 5G network before 5G existed,” Jensen says.

When Ocado wanted to optimize its delivery vans, the company found that off-the-shelf software couldn’t handle the necessary volume of optimizations. “We got a bunch of programmers and PhDs who are good at predictive mathematics to create software that goes beyond anything that was available,” Jensen says.

Ocado is also trialing future technologies. Ocado Technology recently unveiled Armar-6, a humanoid robot that can help workers with maintenance tasks. Ocado has worked with academic partners throughout Europe on the project for the past five years.

**Determining data’s value**

Meanwhile, too much data can be overwhelming, and sharing unfiltered information with suppliers can cause more confusion than help. To ensure the data is meaningful, P&G is democratizing data with its suppliers to determine what to share and when. “The thing about data is that not all data is valuable data. Just because we have data doesn’t mean we want to visualize and share it all,” McClish says.

P&G not only focuses on what is useful to share but also on what is helpful to receive. “We’re very cautious not to create this monster where we’re just exchanging massive amounts of data we can’t use,” McClish says. “I need to have the right processes and capabilities with my people to understand what to do with the data, how to visualize it, and how to make it impactful.”
“We are changing the way we engage with our people and listen to our people, so we are culturally aware.”

Tamsin Bulmer, Head of People Solutions and Client Services, Ocado

The company has created systems that are capable of connecting with a wide range of suppliers. P&G’s strategic suppliers range in size, from massive corporations to small businesses. “You run the gamut of capability and capacity to engage with systems, but we still need to have the same degree of connectivity,” McClish says. “So the question we asked was: How do you build a platform and system that allows you to integrate to the level that you need, with all of the different variables in place?”

There has been favorable engagement with P&G’s suppliers, and the company is mindful of suppliers’ user experiences. “We have a lot of tools that are being developed or could be developed to solve problems in the future,” McClish says. “If the supplier has to log into 15 different screens, that isn’t a win. Our tools are being developed with our suppliers in mind.”

**Finding the right talent**

Digitization and analytics also change the talent component, and Ocado, P&G, and many other digitally enabled organizations are fully focused on building teams that are well versed in analytics.

Marziano shared that today’s new hires must be digitally savvy, and P&G has seen a general elevation in data and organizational skills among applicants. For them, that’s table stakes. “The most important thing is what they do with the data and their analytical skills, and how they integrate those into their strategies and decision-making process,” she says. “We also ask ourselves what we need traditional buyers to learn about supply, and what are the sourcing skills the supply group needs to operate at an even higher level. These complementary skills built into our learning platform will ensure the sourcing-supply integration is systemic.”

Ocado similarly seeks out people with strong analytics capabilities. “They don’t have to be data scientists, but they have to be people who are comfortable with data,” Jensen says, adding that the data scientists help identify the right questions to ask, so the company can use machine learning to get to the right tools.

For buyers, digitization and automation are changing the necessary skill sets; data analytics are particularly critical. “Traditionally, food and product buyers felt they were valued by how smart they were at making decisions based on their gut or their taste,” Jensen says. “Today, a buyer in a data-rich environment is making sure they have a good handle on what the data is telling them about what customers want to buy. The buyer is the voice of demand, rather than attempting to be their own voice and second-guessing what they should be buying.”

Ocado is expanding to new jurisdictions and countries, so it needs people who can solve complex problems in a matrix environment and have an international perspective. “It is a big ask,” says Tamsin Bulmer, Ocado’s head of people—solutions and client services. “We are changing the way we engage with our people and listen to our people, so we are culturally aware.”

At Ocado, talent historically has focused on centralized engineering capabilities. “As we move to delivering more projects globally, that has moved the need to find talent on an international scale and incorporate a mix of talent,” Jensen says.

Now more than ever, today’s companies view diversity as a force multiplier that allows them to have a more global perspective. “Through veteran hiring and cross-industry hiring, Ocado is leveraging past performance from a wide variety of platforms and experiences,” says Dave Bakkeby,
“We are already evolving our capability expectations and talent development programs with an eye on the digital skills our people will need in 2025 and beyond.”

Matthew McClish, Senior Purchasing Director, P&G

Korn Ferry’s sector leader of aerospace and defense/transitioning military. “Veterans, in particular, bring the technical expertise, attention to detail, work ethic, and international experience to the equation. From technicians to former military officers, they have been successful in engineering and project management roles.”

Building toward the future

Marziano has P&G building the foundation for the digital connectivity needed to drive additional value in the future. “We are already evolving our capability expectations and talent development programs with an eye on the digital skills our people will need in 2025 and beyond,” McClish explains.

Ocado is investing in its people to drive global growth and realizes the skill sets needed in the future may shift. “The talent we’re looking for is really different, and they will bring muscles we don’t necessarily have flexed at the moment,” Bulmer says, adding that Ocado is looking for people who are comfortable with ambiguity. “People say they like change, but really, how comfortable are they with change?”

For many organizations, the idea of a supply chain future powered by talent that’s so different from the present is a powerful but challenging notion. Melissa Swift, Korn Ferry’s global leader for workforce transformation, notes that organizations can start today with some very concrete actions. “Being crisp about your vision for future talent—really defining the specificity of what you need—is a crucial step,” she says. “And then you want to be thoughtful about how you look at your current folks. You may have some future-ready individuals hiding in plain sight. But you’re not going to find them if you don’t take a really programmatic look.”
About Korn Ferry

Korn Ferry is a global organizational consulting firm. We work with our clients to design optimal organization structures, roles, and responsibilities. We help them hire the right people and advise them on how to reward and motivate their workforce while developing professionals as they navigate and advance their careers.