Streamlining the floral supply chain ... one stem at a time

Imagine coordinating the buying and selling of 40,000 varieties of plants and flowers—sourced from 60 countries and exported to 140—in a global supply chain that's becoming more complex at every turn. Logistics and supply chain professionals at Dutch flower cooperative Royal FloraHolland don't have to imagine it; they live it every day and are making strides toward streamlining the "floriculture" supply chain via collaborative digitization efforts and the development of better packaging, storage, and transportation methods, to name just a few projects. *DC Velocity* recently got a firsthand look at the co-op's logistics operation and a glimpse into efforts aimed at improving the global flower trade, one stem at a time.





■ Royal FloraHolland's flagship auction and headquarters location is in Aalsmeer, the Netherlands, just outside of Amsterdam and minutes from Schiphol International Airport. With a total of five locations, FloraHolland is the world's largest flower auction, selling 50 million stems a day and 12 billion stems per year. The organization is a nonprofit cooperative of growers that processes more than 100,000 transactions per day.





▲ FloraHolland has 5,550 suppliers and sources from 60 countries around the world. Flowers and plants are shipped in daily, arriving at the Aalsmeer warehouse in the afternoon for the next morning's auction, where they're sold to wholesalers, exporters, and retailers. More than a quarter of the stems the cooperative sells each year are roses, primarily sourced from Africa. Royal FloraHolland receives 38 full freighter flights of flowers and plants from Kenya per week, for example.



▲ Most products arrive at the cooperative by truck (78%), with 21% arriving via air cargo and just 1% via sea freight— a transport mode rarely used in the flower trade because not all products can withstand the longer transit times. But that may soon change. Due to the rising cost of air cargo, FloraHolland is testing new sea-freight packaging and storage methods in hopes of making lower-cost ocean transport a more viable option for its customers.





▲ "Cold is gold" in the floriculture supply chain, so flowers and plants are stored according to their ideal temperature throughout their journey from grower to customer. The Aalsmeer warehouse is kept cool as products make their way through the facility via trolleys pulled by battery-powered trucks. Flowers are stored in customized reusable buckets that are designed to maximize space on the trolleys. FloraHolland has 265,000 trolleys in use across the organization.





FloraHolland had sales of €4.65 million in 2018 (about \$5.2 million), half of which were via auction and half were direct to customers. Despite the 50-50 split, the auction room at Aalsmeer remains a key part of daily operations, with the bidding process beginning at 6 a.m. five days a week. Years ago, the auction room would be filled with buyers, but today about 80% of buying is done remotely. Most buyers are based in Europe, but some purchase plants and flowers from as far away as Singapore.



➡ FloraHolland is also working to digitize the floriculture supply chain through a variety of efforts. The HFA's Ideal Flowerbox project incorporates GPS tracking technology to monitor flower shipments along every step of the journey, for example. Another project aims to help growers manage their stock, orders, and logistics on a single digital platform called Floriday. Although these are separate initiatives, the cooperative hopes to connect them at some point when they can "add extra value to each other," according to FloraHolland

leaders. Separately, the cooperative hopes to have all ordering transactions conducted digitally by the end of 2020. The ultimate goal? A more streamlined floriculture supply chain.

loading efficiency on cargo planes.
A pilot program with growers
in Kenya is underway and
has improved aircraft
loading efficiency
by 15%.