STRELLA BIOTECHNOLOGY

One Page Overview

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SUMMARY

Strella creates biosensing platforms that can predict the ripeness of fruit. We use this information throughout various points in the supply chain to optimize scheduling decisions, reduce food waste, and increase produce quality. Our main market is in apple and pear fruit packing, and we are currently expanding into additional downstream maturity inventory management applications.

IMPORT AND EXPORT SHIPPING

Importers must determine produce quality and make inventory decisions for their growers and downstream customers. This is typically done with QC checks, but they are often reactive, not proactive, or not representative of the whole shipment.

Strella creates sensors to monitor produce maturity as it is transported on containers. This enables produce suppliers decide the proper sequencing of containers by maturity for downstream supply chain optimization.

Current Distribution Order (FIFO)　　　Maturity-Based Distribution Order

? 　　　 ? 　　　Ripe 　　　Spoiling
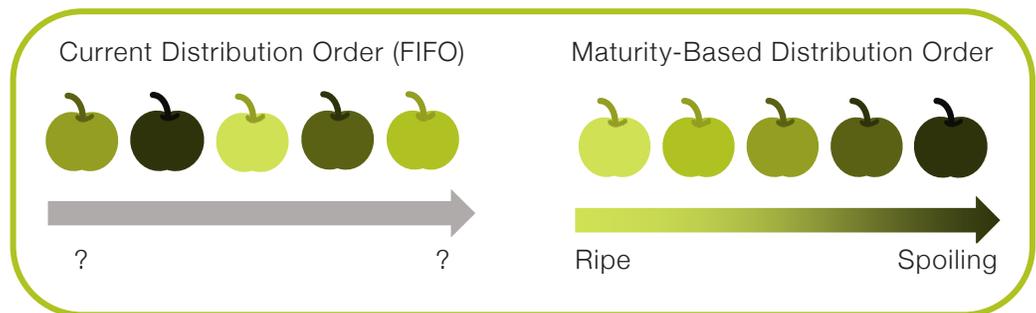
Strella sensors, when placed in containers, can measure relative maturity of product as it moves. At port, this data can be used to make inventory decisons, such as:

› Which fruit can be stored in a warehouse without decreased quality
› Which fruit has a shorter shelf life and must be shipped first
› Which fruit may have quality issues

TECHNOLOGY

Our technology predicts maturity by measuring ethylene gas. Ethylene is the first physiological response in fruits as they begin to mature, and thus provides a proactive metric of quality rather than measuring other physical changes such as color, starch or pressure. There are currently no sensing technologies on the market specific enough for agricultural applications. Standard VOC sensors and other ethylene sensor attempts are cross-reactive with many other gases within produce supply chains and are not sensitive enough to measure fruit emissions. We combine our sensing technology with IoT and analytics to make our data actionable and useful to our customers.