CONDUCTING RIPENESS MONITORING AND QUALITY CHECKS OF APPLES

THE CHALLENGE
- Monitoring the ripening process of apples over the entire growing period can only be conducted invasively, resulting in fruit loss.
- No possibility for producers to predict the harvest window for their fields themselves or determine the order in which the apples on each plantation should be harvested.
- No way for the producers to prove the quality of the apples to the distributors.
- It is time consuming for cooperatives to visit producers and determine harvest windows.

THE CURRENT APPROACH
- Measurements of sugar, firmness and starch index are carried out using several different devices and complex methods which are time consuming.
- All those methods are destructive.
- Background knowledge, experimental skills, and occasionally chemicals are needed to perform only a few measurements.

ASTOUNDING REAL LIFE DATA
- Worldwide there are just over 86 million metric tons of apples harvested each year.
- Apple trees take at least four to five years to start producing fruit, some take as many as 10 years.
- Most apples in the world are still picked by hand.
- Some of the most common varieties of apples are Elstar, Gala, Granny Smith and Pink Lady.

THE BETTER WAY
- A spectroscopic sensor can determine all parameters using only a single device.
- Apples are not destroyed during the measurements and can still be sold afterwards.
- Performing measurements on more apples to collect data representing the whole plantation, using only one device and without any experimental skills.

THE BENEFITS
- No food waste as sample apples can still be sold after taking the measurements and batches won’t be over-stored due to knowledge of ripeness.
- Ability to prove the quality of your apples to the distributors.
- Measurements can be taken directly at the tree.

THE SENORICS SOLUTION
Senorics’ innovative spectrometer-on-chip sensor solution enables:
- Fast, simple and non-invasive measurements.
- All-in-one measurement with a pocket-sized device, no chemicals or lab equipment required.
- Easy determination of all relevant parameters such as sugar, acid content, firmness and starch index.

THE NEXT STEP / GET IN TOUCH
Are you interested in our solution? Please visit our webpage for more information or contact us.
Are you facing similar challenges in your process? Let’s join forces to solve your challenge.

senorics.com
linkedin.com/company/senorics
bit.ly/senorics-yt
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USE CASE SUMMARY
AGRICULTURE

Robust, small, mobile
Low cost & powerful
Fully customizable

Broad spectral coverage

detect. know. decide.