DATA IS THE KEY
to the future of agriculture

by Naeem Zafar, Co-founder and CEO, Telesense Inc, USA

Technological innovation in agriculture is moving faster than ever. Twenty-five years ago, innovation in our industry was driven by machinery and chemical developments. Adding an additional row to combines or planters was considered a state-of-the-art advancement.

Fast forward to today, and agricultural innovation primarily comes in the form of better data analysis and metrics. After all, if you can't measure it, then you can't improve it!

Today, everyone from farmers to processors to distributors has the ability to pinpoint what they should do to increase yields and profits. As operational efficiency becomes key to staying profitable, it will be the people who adopt innovations in data and analytics who succeed.

In the same way that a mule cannot compete with a John Deere plow, grain managers who don't adopt data and analytics technologies will soon be unable to compete with grain managers who do.

But what makes data so valuable to agriculture? Afterall, data doesn't do anything. Data can't pick corn, it can't be added to soil, and you can't put it in a trailer and sell it at the local co-op. What gives data value is the insight which comes from it. Data helps people learn to do things better.

For example, let's say that you are measuring the temperature of stored corn in the middle of a silo. The thermometer reads 80 degrees. That is a piece of data.

You read it again the next day, and it is 85 degrees. A day later it is 90 degrees. The next day it is 100 degrees and you realise that a hotspot is forming, and you need to take care of it immediately. That is insight.

If it weren't for you measuring that temperature data, you never would have had the insight to manage the hotspot. At best, you would have lost the corn in that hotspot. At worst, the hotspot may have spontaneously combusted.

The link between data, profit, and safety is clear. In this instance, the data driven decision to manage that hotspot could have saved this farmer thousands of dollars in damage caused by an unmanaged hotspot. Even more importantly, he better ensured his team's safety.

Farmers have been using data for centuries to make better farming decisions. In fact, The Farmer's Almanac was originally nothing more than a book of data to help farmers make planting and harvesting decisions. And we're all familiar with the saying, "Knee high by the Fourth of July." That saying is simply a data-supported observation that, in a good harvest year, corn is typically above knee height by July 4th. It is just a piece of data which indicates success.

In reality, agriculture is all about data. The question is always, "What can be done to consistently increase profitability?" We certainly know some things which help, but we don't know everything.

For example, 100 years ago no one knew what soil nitrogen levels were. Today, we know that soil nitrogen levels are incredibly important for increasing yields. Therefore, today, a farmer would be crazy if he didn't measure and analyse his soil's nitrogen levels. It makes you wonder, what aren't we measuring today that people will look back on in 100 years and laugh at?

Given the near-infinite number of data points for grain managers to measure and keep track of, the best solution is to let a computer to do all the work. The future of agriculture is software companies which help grain managers to measure data and provide insight. In this data-driven future, there is one company which consistently pushes the innovation envelope.

A small company, down the road from Google and Apple in Sunnyvale, California, is taking advantage of its Silicon Valley roots to provide the agriculture industry with the best products and services from the information-technology industry.

TeleSense, Inc.® creates wireless grain storage monitoring solutions for preventing spoilage. Not only that, but they are leading the pack in terms of data analysis, and now have the largest independent grain storage data set in the world.

This month, TeleSense is releasing a new product which solves a long-standing issue with nearly every tech product: compatibility. Through an acquisition, TeleSense now has a portfolio of grain monitoring solutions which all connect to their TeleSense application for laptops, tablets, and smartphones.

With such an integrated system, managing spoilage has never been so easy and efficient. Having a wide variety of monitoring solutions under one roof will solve a major pain point for large operation, which oftentimes have to switch between platforms and can't make those platforms communicate with one another.

This new platform, combined with the unique monitoring solutions provided by TeleSense, shows that the future for data analytics in agriculture has never looked brighter.

www.telesense.com