

Plowing ahead

Enid Food Forum shows it's a high-tech world down on the farm

BY JIM STAFFORD
For The Oklahoman

ENID — Brent Kisling is executive director of the Enid Regional Development Alliance, but at his core he's a farm boy, raised on a farming operation near Burlington. Kisling's dad and brother still operate the family farm, tilling the soil, planting, raising and harvesting a wheat crop every year.

It is farm life as the Kislings have always known it, but with a not-so-subtle difference. Technology now plays a major role in everyday farming operations.

That's why Brent Kisling often receives a phone call when his dad is on the tractor.

"I can tell the days that my dad is driving the tractor for my brother because he always calls," Kisling said. "Used to be, we had tractors that didn't even have cabs on them, maybe had an AM radio. Today, they are run by GPS (global positioning system). You turn a corner, push a button and the tractor drives by itself.

"It's a really good time for a farmer to call his



Charles Studer

son."

Or time to read a farming publication or even a good book, said Charles Studer, director of Industry Relations for the John Deere Company.

"Certainly, GPS technology has revolutionized agriculture in many ways," Studer told an audience at the recent Oklahoma Future of Food Forum here, which was sponsored by the Enid Regional Development Alliance.

Satellite positioning technology has allowed farm equipment — and farmers — to be much more productive, Studer told an audience of about 100 people.

"It's also created a whole new experience in our vehicles," he said. "Today, someone can pull into a field, and as



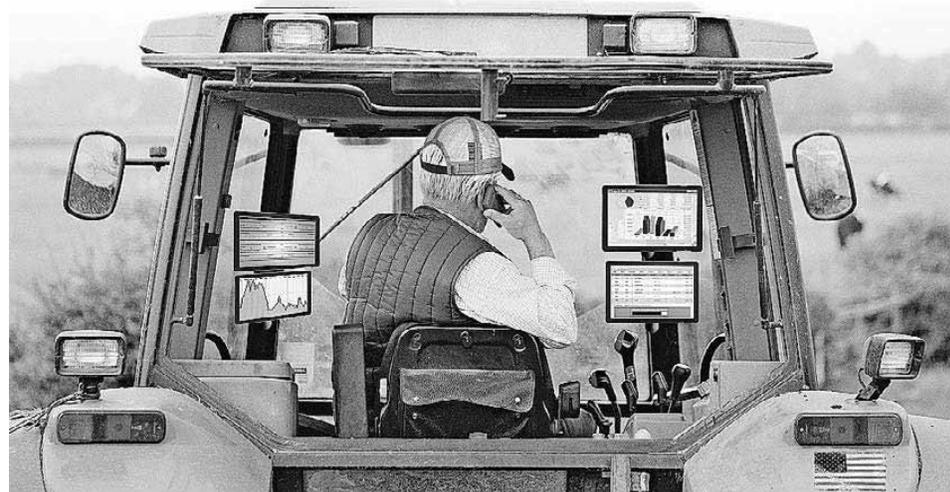
Brent Kisling

they move through the field, they can push a button and the vehicle will guide them to the exact place it should be, freeing up the operator's time to do other things."

Studer was one of three speakers who addressed topics of technology, transportation of agricultural commodities and evolving trends in consumption of food around the world.

One of the world's oldest farm implement companies, the John Deere Co. has embraced new technologies such as GPS, sensors and battery-generated power. This isn't your granddad's John Deere Co.

"I think there's no doubt that we're an innovation and technology company," Studer said. "If I was to go back early



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in my career, I would have told you that we were focused on being the best possible farm equipment company. But over the past several decades, we realized that's not where we add value. We add value from technology, from being innovative."

So, that means that tractors and combines are now guided by GPS. And that sensors assess exactly how much fertilizer needs to be applied in each location it passes over in the field.

The Enid food forum drew a diverse audience of area business leaders, economic development professionals and north-

ern Oklahoma farmers who were eager to hear some perspective on their profession.

Sitting in the audience was Wendell Vencel, who farms east of Enid and employs three tractors, a combine and an air drill for planting, all made by John Deere. He recited the model numbers such as 4450, 8200, 7200 and 9670.

"Farmers have such a connection with the land, so that connection with the machinery kind of goes with it," Vencel said. "Generally, the newest and best technology is GPS. That has been the biggest advancement. It's unmatched."

Coming over the horizon is even more amazing technology, Studer promised. There are diesel-electric tractors headed to the farm. And pure battery-powered implements are not far behind.

"You are going to see

a lot more adaptation of electrification in our vehicles," Studer told the audience. "I think the second thing and the one that will have the most broad impact is this ongoing flood of data that we are going to have.

"As we get more smart sensors, as we get smarter machines, we are able to do more predictive analysis."

The bottom line to all of this is it's a changing world down on the farm, just as it is in the city. That means that Brent Kisling can expect a phone call from Dad whenever he's on the GPS-driven tractor.

"In many ways, it's almost created a new social experience," Studer said.

Jim Stafford writes about Oklahoma innovation and research and development topics on behalf of the Oklahoma Center for the Advancement of Science & Technology.