

Supporting Ag Retailers as Technology Experts: A Case for Connected Offerings

BY TEDDY BEKELE
Vice President of Ag Technology,
WinField United

Agriculture technology offers amazing potential to help farmers boost yields, reduce input costs, and increase return on investment. In fact, rapid advances in data acquisition and management, modeling, computation power, and information technology provide the opportunity to harness knowledge in new and powerful ways to achieve more productive and sustainable agricultural systems.¹

According to AgFunder.com, \$2.6 billion was invested in farm technology funding in 2017, representing a 32 percent year-over-year increase.² That same year, several significant acquisitions occurred, including John Deere's purchase of robotics company Blue River Technology for \$305 million and DowDuPont's procurement of farm management software platform Granular for \$300 million.³

Ag retailers often represent a farmer's first encounter with ag tech, usually when they provide tools with features such as; satellite imagery; field health status reports; alerts to weed, insect or disease pressure; or information about stresses that fields may be experiencing, including nutrient or water deficiencies. It's time for ag retailers to take their rightful place as technology experts.

RETAILER'S EVOLVING ROLE

As the farmer's local point of contact for agronomic expertise, successful use of ag tech can rest heavily on the shoulders of ag retailers. To support farmers in expanding their use of ag tech, retailers will need to:

- Help farmers successfully navigate a crowded, confusing ag tech marketplace.
- Assist farmers in choosing ag tech tools that fit their needs, budgets and goals.

- Work closely with farmers as they begin using their tools to ensure they are realizing their potential and syncing them appropriately.
- Continue helping farmers play the long game to leverage ag tech to its fullest and help them see what success looks like.
- Encourage farmers to share their successes and serve as advocates about the benefits of implementing ag tech.

How can retailers bring these benefits to farmers so they help them — and their retail businesses — be more successful?

WinField United is the crop inputs and insights business of Land O'Lakes, a national member-owned cooperative, agribusiness, and food company. We work directly with ag retailers to help their businesses succeed and, through their in-house agronomy and technology specialists, help their farmer-customers choose and implement the right ag tech for their particular operations.

Over the seven years we have been invested in the ag tech space, we've learned a lot about what agronomists want, what farmers are seeking, and how to help deliver technology in a useful way. We're still learning, every day, about how to best help ag retailers serve farmers. Here are some insights we've gleaned so far:

1. OFFER A RANGE OF CONNECTED TOOLS.

There are a variety of tools on the market, and it's important to use the ones that can do the right things at the right times. For example, there are tools that help farmers select the best seed for

the soil types found on their farms. In-season tools that guide nutrient application timing and water management. Maps that sync input costs with actual yield to better align these ratios the next season. Ideally, all of these capabilities will be connected and work symbiotically.

Farmers need and want guidance to use their tools in a systems-based way so they get the most out of their technology investment. This not only entails using tools that work well with each other. It also means that tools can be used seamlessly throughout a crop's growth cycle, from selecting the right seed and understanding its characteristics to properly managing

KEY TAKEAWAYS

- Farmers need guidance to help them choose the right tech tools for their unique needs as well as ongoing support to ensure they're using those tools effectively.
- Ag retailers who step up to offer these products and services are well positioned to succeed because they are meeting a customer need and, as a result, growing their businesses.
- It's not enough for retailers to offer connected tools; they must also provide technological and agronomic expertise, individualized counsel, and customer-centric features both in-store and online.

that seed in-season to optimize its potential. But it doesn't stop there: It also means using tools that can evaluate crop performance and ROI so that prompt planning for the following season can begin.

Those who embrace a systems approach are literally reaping the benefits. According to research from the PrecisionAg® Institute, farmers who say they employ a systems-based, rather than a tools-based, approach to ag tech had better yields in 2017.⁴ A strategy of tying tools together to accomplish more is something local retailers can easily facilitate with the farmers they serve.

Of course, no technology tool is going to know a field better than a farmer or a local agronomist does. What a tool can do is help them either reinforce an intuition they have or help them better sort through an action they're already considering. Tools can help with decision-making, but it's the human factor that makes the difference. That said, decisions that were once solely based on intuition can now be backed by data. This is a powerful combination.

2. LEVERAGE EXPERTISE.

As previously noted, no technology tool can substitute for local agronomic expertise. A mouse click can't match a handshake. Our company has known for a long time that there is no substitute for expertise, which is why we partner with local retailers. We've done this with our crop inputs for a number of years, and ag tech is no different. The interesting thing about technology is, some people thought you could algorithm agriculture. But you can't.

I'll be blunt: People who use ag tech will replace those who don't. However, there are many things in agriculture that can't be quantified. Because of this, the trusted local advisor will always be essential in knowing exactly what's happening on the ground, but he or she will be bolstered by technology. It's easy to forget that even with all the benefits of farmers having access to large amounts of data, that data is of little value until it is translated into actionable insights that

improve economic and environmental efficiency.⁵ This is where the retailer becomes absolutely vital. Retailers must seize the opportunity to be indispensable to their customers. A good way to start is by recruiting staff members who can confidently guide those customers through the ag tech process.

3. PRACTICE WHAT YOU PREACH.

Retailers are on the front lines of encouraging farmers to explore the types of technology that are most appropriate for their unique operations. However, even while they are working to promote the benefits of tech on the farm, some retailers have inadequate technology of their own. Either they can't respond nimbly to farmer requests for product demonstrations, their websites don't offer an exclusive portal where farmer information is stored, or they don't have enough technology specialists on staff to offer guidance to farmers.

We work with retailers to identify their specific online needs and configure solutions that meet them. One of the primary ways

we do this is through our ATLAS® program, which combines dedicated support from a technology manager on the ground with digital communications assistance.

We perform the backroom setup for each retail location that participates in the ATLAS program, branding its website with retailer-specific and local information, as well as supplying materials such as expert articles and reviews of ag tech tools. This helps the retailers position themselves as technologically savvy, with adequate capabilities to serve the needs of their farmers. Retailers should require their ag tech partners to have the tools that make their businesses appealing to farmer-customers in terms of capabilities, know-how and speed. And they should provide ongoing coaching and follow-up to ensure retailers are up to date on the latest tools and trends.

4. OFFER AN E-COMMERCE CAPABILITY.

Farmers don't always go to their local retail location to purchase inputs. As they cope with low commodity prices, some are comparison shopping online for the



This tech capability allows farmers to compare seed products and place them in various scenarios to see how they could perform on fields like theirs. This screen shows the comparison for soil types, where farmers can view how hybrids have performed on fine, medium and coarse soils. This allows farmers to make the best placement decisions based on field variability.

“The interesting thing about technology is, some people thought you could algorithm agriculture. But you can’t.”



In-season crop models can help retailers assess the demands of a plant throughout the growing season to determine what applications could help the farmer address crop stress and meet specific goals.

best price on products.⁴ And, though most ag professionals probably aren't happy about this, they also understand what is causing it. They still want to avail their customers of the benefits technology can bring, so they are helping farmers determine the best ways to spend their limited budgets⁴ and optimize their investments. They also want to retain their customer base, so making product ordering easy and fast doesn't hurt either.

The one thing farmers cannot currently do on many retailer websites is place an order. Instead, the farmer needs to call the agronomist and have him or her come out to the farm to place an order or talk

on the phone about what is needed. This process could cause some farmers not only to shop around for cheaper products on other e-commerce websites but also to make product purchases online. In actuality, local retailers often have the better price, especially when they are able to customize a package for a customer.

Think of how appealing that tailored pricing could be if it were paired with an e-commerce capability. If, in the future, the agronomist could electronically make the proper recommendation, then create an order for the farmer so he or she could review pricing in the cart before hitting "submit," and have the ability to track

the order or service requested. Or, if the farmer preferred to make an in-store pick-up, the retailer could still receive the order electronically, and have the order prepped and ready for the farmer to come get it when it's convenient.

The next frontier with our ATLAS system is for farmers to have access to materials that include invoices and prepays, as well as product ordering and order review capabilities to provide an end-to-end user experience. Once the retailer is able to provide a holistic service, it's more likely the farmer will stay on the website to see what other products and services the retailer can offer.

5. PERSONALIZE THE EXPERIENCE.

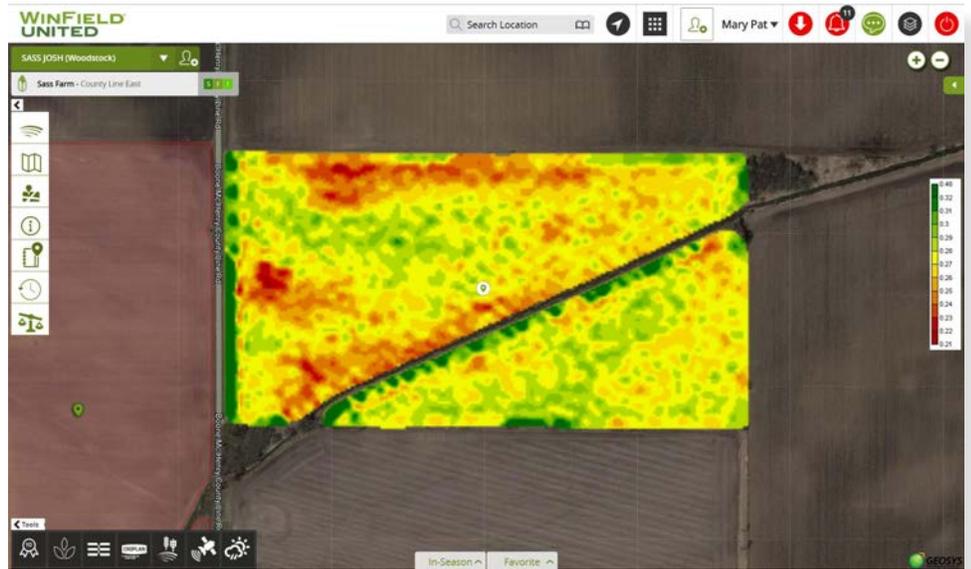
Farmers are looking for specific, tailored information that lets them know their retailer is looking out for them and is there to help. Retailers have an incredible opportunity to supply farmers with more of the things they need. For example, retailers can offer them insights about their operation through crop models or satellite images, as well as seasonal tips, such as when to apply nitrogen for optimal uptake.

Many farmers have a bunch of downloaded ag tech apps on their phones, but without a means to stitch them together, those apps will only go so far in providing a complete picture of an operation and what it needs. Ag retailers can offer farmers access to a comprehensive suite of tools that work together, providing a systems approach to helping ensure a farm's health.

6. BRING FARMERS ALONG GRADUALLY.

Some farmers are reluctant to expand the technological capabilities of their operations because of cost. More frequently, they are daunted by having to navigate through a confusing, crowded marketplace — often filled with tech tools that don't communicate with each other and tout results that don't come to fruition.

Implementing ag tech in stages can help make the process more manageable, less intimidating and more conducive to achieving success. This means farmers are more likely to try new things and stick with them, provided they are successful. It takes time and patience to complete a marathon. Slow and steady wins the race to implement technology, too. Those retailers who ease customers into tailored ag tech opportunities, then provide ongoing counsel along the way, will win.



Satellite images indicate areas of high and low biomass so farmers can address areas of the field that need attention. Areas in red indicate lower biomass, while green areas indicate higher biomass. High biomass does not necessarily mean a highly productive crop; it may indicate a heavy weed pressure. That's why it's important to pair technology tools with boots-on-the-ground scouting to get a complete picture.

Market	Delivery Start	Delivery End	Base Month	Future Price	Base	Cash Price
Coat	Jan 18	Jan 18	Mar 18	206.4	-29.00	\$1.28
Coat	Feb 18	Feb 18	Mar 18	206.4	-31.00	\$1.29
Mkt	Jan 18	Jan 18	Mar 18	206.4	-2	\$1.51
Mkt	Feb 18	Feb 18	Mar 18	206.4	-20	\$1.20
Stockman	Jan 18	Jan 18	Mar 18	192.0	-16	\$1.94
Stockman	Feb 18	Feb 18	Mar 18	192.0	-40	\$1.23
Wheat	Jan 18	Jan 18	Mar 18	439.8	-26	\$1.47

An example of a home page for a retail location enrolled in the ATLAS® program, with field reports, account information and current weather conditions among the specifics included for quick reference. It's a one-stop shop to assess operations and prioritize initiatives.

“Those retailers who ease customers into tailored ag tech opportunities, then provide ongoing counsel along the way, will win.”

7. KNOW THAT THE FUTURE IS HERE.

Ag retailers will need to be even more nimble tomorrow, and tech tools can help them provide optimal service to more customers. For example, in-season monitoring tools and satellite imagery can help farmers scout more efficiently and plan input applications more precisely by providing up-to-date crop information throughout the season. The tech-savvy agronomist can look at imagery from the fields of farmers who have subscribed to the retail location's ag tech offerings and know, “Today, these five farmers are having this problem in their fields because it appears biomass is trending down. I'm going to talk with them and see how I can help.”

This capability lets agronomists concentrate first on farmers with very specific problems that need to be addressed quickly versus randomly trying to determine where they should pay attention.

PICKING UP THE TECHNOLOGY MANTLE

There is great potential for ag retailers who step up to offer guidance to farmers in the ag tech arena. Here's an analogous example from the retail industry: Best

Buy survived and thrived the Amazon e-commerce wave once it realized that it shouldn't try to be more like Amazon. Instead, it became better at its own game, but it also implemented technology. This allowed the company to parlay its online presence into a gateway to its physical stores, have products on-site for consumers to test and take home that day, and maximize the in-store experience — at a comparable price.

Ag retailers can offer customers valuable expertise in person at the store level, just like Best Buy — something Amazon isn't currently offering. Likewise, the retail agronomist's on-farm visits are extremely valuable. However, those visits can be augmented by arriving at the farm equipped with the right technology and perhaps even supplying the farmer with a few items in advance to inform the conversation.

These types of engaged partnerships help farmers become more successful and sustainable. They empower proactive ag professionals to be much more effective and even stronger trusted advisors. That is a combination that wins in the field as well as the marketplace.

REFERENCES

1. Antle JM, Basso B, Conant RT, et al. Towards a new generation of agricultural system data, models and knowledge products: Design and improvement. *Agricultural Systems*. July 2017; vol. 155, 255–268.
2. *AgFunder AgriFood Tech Funding Report: Year in Review 2017*; page 34.
3. *AgFunder AgriFood Tech Funding Report: Year in Review 2017*; page 12.
4. *Precision Ag Institute Farmer Panel #9*. Millennium Research, Inc. March 11, 2018.
5. Basso B, Dobrowolski J, McKay C. From the Dust Bowl to Drones to Big Data: The Next Revolution in Agriculture. *Georgetown Journal of International Affairs*. Fall 2017; vol. 18, no. 3; 158–165