

Testimony of

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With regards to

High Tech Agriculture: Small Firms on the Frontier of Agribusiness

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Energy, and Trade. Rod Blum, Chairman

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Introduction

Thank you, Chairman Blum, Ranking Member Schneider, and members of the Subcommittee, for allowing me to testify today on behalf of IN10T and my partners Randall Barker and Dr. Alice Robinson regarding High Tech Agriculture: Small Firms on the Frontier of Agribusiness. More importantly, thank you for allowing me to share the story on how our small business is working with farmers to shape the future of digital agriculture.

Growing up in production agriculture, I had the pleasure of learning the “art” of farming through my family's farm/ranch in Southern Colorado, which is still in operation today. Over the last 20 years, I have had the opportunity to learn about the “science and technology” of the industry through my experiences in various AgTech companies and ventures. I have learned that successful innovation requires an understanding of the “art” in agriculture combined with a vision for “science” solutions that can advance the agricultural industry.

I am passionate about agriculture and technology. Like many, who have grown up on a farm, I learned how to be an entrepreneur. It is my pleasure to discuss how building a small business linking farmers and agri-businesses is critical to future on-farm innovations.

IN10T is a small company that was started with the simple belief that connecting farmers and businesses doing research grounded in data science was a needed service. What makes our company unique is the founding leadership team with varying capabilities.

- **Randall Barker:** Former Monsanto executive who leads our agri-business development and company strategy. Randy has 25+ years’ experience in innovation, agronomy, marketing, and customer relations.
- **Kevin Heikes:** Early team member of multiple ag-startups with focus on product, implementing systems, farmer relationships, and developing listening models.
- **Dr Alice Robinson:** Research scientist specializing in multiple environmental subject areas integrated with data science, analytics, modeling, experimental design, and data strategy.

We believe it takes a team who understands agri-business and is willing to partner with farmers to test and validate new technologies and products in order to bridge the innovation gap. In essence, our team fuses the “art” and “science” of agriculture in a small business. This has led to a big vision for a small team. Our vision is to be considered by farmers and agricultural innovators to be the best digital agriculture company in the world. IN10T is committed to advancing agriculture by improving farmers profitability, productivity, and sustainability using the latest data-driven technologies.

Why We Started IN10T

IN10T is a digital agriculture company founded in 2016 focused on solving farmer adoption challenges in agriculture. While we create data science solutions for the agriculture industry, our company believes that we must be “intentional” with respect to data. So intentional, in fact, that we chose our company name to signify the importance.

By working with farmers and agribusiness companies, we combine the strength of both groups through the application of science, data analytics, computer science, engineering, and service to improve how digital agriculture works.

Farmers

IN10T is committed to ensuring farmer success and engagement in the innovation process. We do this by guiding farmers through the IN10T product innovation process, while capturing their valuable perspective on how to improve field experience. We work with farmers to collect and manage the data within their current systems in a manner they approve. The most important thing we have learned in the process is to keep talking with and listening to our farmer constituents.

“As both a farmer and a crop consultant IN10T’s trialing process is great. It focuses on gathering data in a true commercial production field environment. This is some of the best data we can use as farmers because it is implemented using realistic production practices and comes from our own fields.” **Bill McDonnell, Farmer and Founder of McDonnell Ag Solutions. Ottawa, IL**

Agricultural Business Innovators

IN10T supports our clients by ensuring rigorous science is applied to our trials for both product performance and grower perceptions in order to deliver reliable results. We continually iterate to deliver better and more reliable answers for farmers and businesses by improving our solutions, partnering, licensing, or acquiring the necessary technologies to execute trials. We are collaborative and will pursue the answers that improve agriculture, innovation, and ag-tech in any manner that is results oriented and is of the highest integrity.

A unique but important element to our company culture is that co-founders (Kevin Heikes and Randall Barker) were both raised on production operations. We understand how the agricultural supply chain functions, and the day to day challenges farmers face. More importantly, we understand the values of farmers and hard work that makes up the agricultural ecosystem. This, combined with a focus on quality data and science headed by Dr. Alice Robinson, drives out

ingenuity in finding new ways to solve problems and approach the challenges in the AgTech landscape. As we build our small firm on the frontier of AgTech, we are reminded that small businesses can truly have an impact so long as we focus on quality and value by putting farmers and customers first.

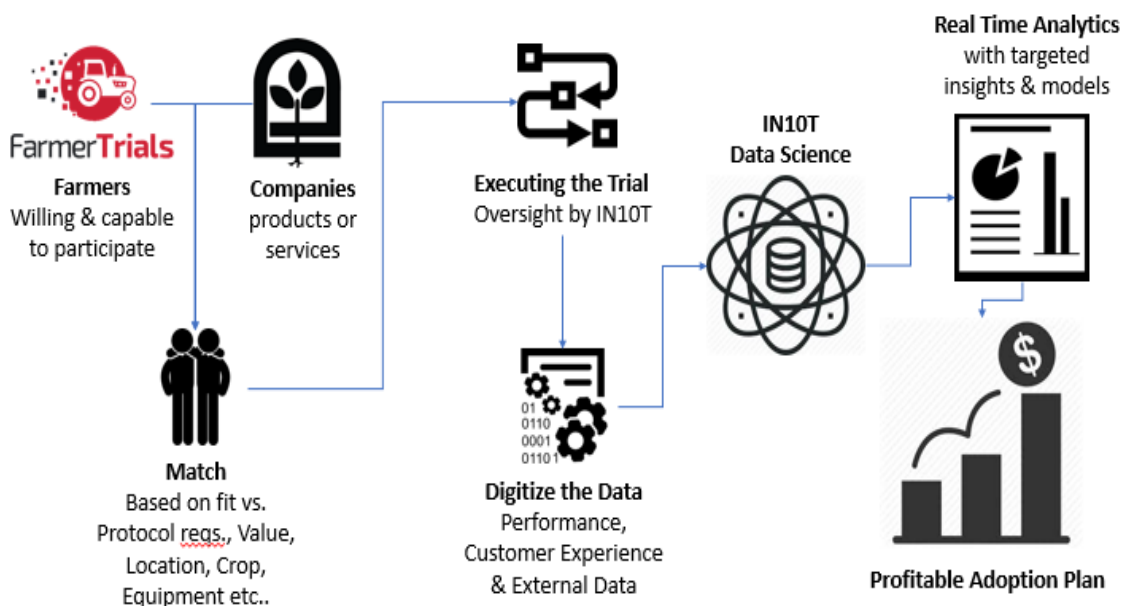
Digital Agriculture and Data

The digital and precision world has arrived – we can capture more data, and move it faster than ever. Each pixel of data from each piece of equipment can be valuable when it is managed properly. From these pixels, IN10T believes that every farmer has a digital footprint; that with this increased digitization of agriculture comes increased opportunities for other small businesses to deliver solutions that didn't exist yesterday.

The number one question we receive from farmers is, "How well did 'x' work on my farm last year?" Thanks to advances in on-farm technology, data science, connectivity, and remote sensing, it is possible for a wide network of farmers to actively participate in finding answers to their questions, and get paid for meaningful research through farmer trials.

IN10T establishes paid experiments linking business research with a qualified farmer customer base, capturing data that drives insights on business-critical questions. Farmers can choose which field trials that work best for their farm operations. IN10T collaborates closely with farmers, ensuring understanding of the data, and converting data into invaluable, applicable insights.

IN10T Digital Agriculture Process



Farmers at the Center of Innovation

As noted in our IN10T process, farmers are a key component of the IN10T vision, thus we required a way to engage and recruit farmers. When IN10T was founded, the existence of a neutral platform in which farmers could indicate interest in field trial opportunities was lacking. IN10T determined there had to be a better way to engage with farmers interested in participating in field research opportunities. IN10T launched FarmerTrials, a platform for farmers to find field trials in their area that they were interested in participating in.

FarmerTrials Platform

FarmerTrials is a simple concept in which our company connects farmers to agri-businesses. We believe farmers can and should be paid to execute valuable research on their farms. As we listened to farmers, we heard that payment is not about revenue generation, but more about valuable time spent in the innovation cycle. Since farmers are continually trying new things, we tell them, “The worst thing that can happen is that you get paid for a field trial; the best thing that could happen is that you rapidly grow your knowledge about your farm to drive profits and join a community of like-minded farmers!”

Agri-business companies need real-time and real-world information to compete and deliver farmer value in a digital and precision-driven world. Rather than more products, these companies need better products in the right locations. Better products are a result of product feedback and customer perception.

New technologies need to be evaluated on real farms to understand value and utility. FarmerTrials is a place in which objective data and farmer feedback regarding new technologies can be generated to drive better innovation.

Observations

AgTech

Increasingly more solutions are being introduced to the market by startups throughout the US. This is significant because agriculture and food production are receiving the necessary capital and resource allocation required for long-term growth. However, resource availability remains

limited and hesitant at the farm level. Data science solutions and full field trials are necessary to understand product performance and efficacy, in addition to driving user interest and adoption.

Collaborations

IN10T believes in partnership and collaborations. We were recently awarded The JumpStart grant which is a partnership with the Kansas Department of Commerce and Kansas Department Agriculture to encourage and support agricultural entrepreneurship.

“The agricultural technology and entrepreneurship industry offers huge potential for growth, with unlimited possibilities. To foster this potential will require ongoing input and discussion among key partners as a long-term strategy for growth is developed to guide the industry. Many current resources that encourage business growth could be directed toward agricultural technology entrepreneurs.” **The Kansas Agricultural Growth Strategy project - Kansas Department of Agriculture**

These opportunities afford small businesses the ability to invest in strategic initiatives. Furthermore, it increases information sharing between small business and government.

Small Business

Small businesses work well within the Agriculture industry and must be part of the launching pad for new products and offerings. Due to the personalized service, trust, and accountability small businesses provide, partnerships with farmers can be established and sustained long-term. These effective relationships result in the increasing adoption of products and services by continually delivering valuable results. Our economy wins by taking advantage of our greatest assets: farmers and innovative AgTech companies. Ensuring the industry finds success faster is our objective and we are confident this will help our US farmers and the overall ag economy. Small business can be agile and move quickly to respond to the complexities of agriculture. Additionally, small business can engage and expand rural communities by growing businesses, employment and opportunities, by deploying technology and agricultural resources in these areas.

On behalf of our small business, IN10T, we thank you for allowing us to share our thoughts regarding agriculture, technology, and small business in agriculture.