

# GUIDE TO PRECISION AGRICULTURE AND AG-TECH COMPANIES

**Keeping up with precision agriculture and ag-tech companies can require ... well, a roster. Which is just what we've provided. As compiled by the editors at Meister Media Worldwide, here's company information provided by a wide-sweeping list of the major players as of early winter 2018 in 40 categories:**

Automation .....	2	Input Efficiency .....	35
Big Data Providers .....	4	IoT Field Monitoring Platforms .....	35
Climate   Weather .....	6	Irrigation Hardware.....	38
Cold Chain Monitoring .....	8	Market Information.....	40
Collaboration Resources .....	8	Marketplaces .....	40
Collaboration Technology.....	10	Miscellaneous .....	41
Crop-Farm Management Software .....	11	Next-Gen Farms .....	43
Data-Analytics Platforms .....	17	Quality Management.....	44
Equipment.....	18	Sensors.....	44
Equipment-Asset Tracking .....	21	Smart Irrigation.....	46
ERP — Farm .....	21	Soil .....	48
ERP — Packing   Processing.....	24	Supply Chain .....	49
Field Monitoring Sensor Solutions .....	25	Sustainability .....	51
FMIS (Farm Mgmt. Information Systems) ...	27	Third Party Logistics.....	51
Food Recovery .....	27	Traceability-Safety.....	52
Freshness.....	28	Trading .....	54
Guidance .....	28	UAV Control Platform.....	55
Imagery Analytics .....	29	UAV Platforms-Systems .....	56
Imagery Service Providers .....	31	VRT Analytics.....	59
Imagery Systems.....	33	VRT Applications.....	60

List effective as of February 9, 2018

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## AUTOMATION

### Abundant Robotics

*United States*

**www.abundantrobotics.com**

Abundant Robotics mission is to deliver robotic solutions for the hardest jobs in agriculture. The first automated apple harvesting system that doesn't bruise or damage the produce will be a huge breakthrough in an industry that has been dependent on the challenges of seasonal labor.

### Agrilarity

*Ireland*

**www.agrilarity.com**

Agrilarity has been founded to promote and implement increased digitization and automation of agricultural processes that can reduce cost, waste, and inefficiencies.

### Agro Intelligence ApS

*Denmark*

**www.agrointelli.com**

To develop new technological platforms that can spin out new products and services for arable farming and to contribute to new procedures and methods for developing products with a greater focus on reliability, sustainability, and profit.

### AGROBOT

*Spain*

**www.agrobot.com**

A new generation of machines has just been born -- Strawberry Harvesters, with the world's most advanced technology to give maximum performance to your farm.

### Autonomous Solutions, Inc. (ASI)

*United States*

**www.asirobots.com**

ASI designs and manufactures unmanned vehicles for mining, agriculture, proving grounds, and military. Products: Vehicle

Automation Kit; Mobius Command and Control Software; Guideline Robotic Convoy System; Chaos High Mobility Robot; Autonomous: articulated dump trucks, mining haul trucks, bulldozers, excavators, skid steers, orchard tractors, farming tractors, and more.

### Autonomous Tractor Corporation (ATC)

*United States*

**www.autonomoustractor.com**

ATC develops autonomous tractors for tilling, harvesting, and hauling applications in the agricultural sector.

### Blue River Technology

*United States*

**www.bluerivert.com**

The first smart machine — the lettuce bot — focused on lettuce thinning. This first smart machine takes images, identifies which plants to remove, sprays them, and verifies the accuracy and performance of the system. See and Spray is the next generation of Blue River's technology. Our next-generation See and Spray machines leverage deep learning to enable our machines to identify a greater variety of plants and weeds with better accuracy, custom nozzle designs to enable 1-inch spray resolution, and improved software for faster and more agile crop protection. Blue River is also developing an unmanned aerial system that can survey a field of crops and sense for various plant and environmental characteristics. Through using a drone, this technology can enable our See and Spray technology to be more accurate — measuring and learning every step of the way.

### Clearpath Robotics Inc.

*Canada*

**www.clearpathrobotics.com**

Clearpath Robotics Inc. designs and manufactures unmanned

vehicles for industrial applications. The company offers robotic utility vehicles, unmanned ground vehicles, heavy load material transporters, omnidirectional platforms, and learning platforms for mining, military, and agricultural research; hummingbird and pelican UAVs for dynamic aerial control or multi-robot research; unmanned surface vessels; and accessories, such as sensors, manipulators and actuators, controllers, computers and networking products, infrastructure products, and other accessories. It also offers systems design, perception and mapping, navigation and control, simulation, research and consulting, support and maintenance, materials handling, and industrial services.

### Deepfield Robotics

*Germany*

**www.deepfield-robotics.com**

The Deepfield Robotics team has outstanding competences and experience in robotics, mechatronics and automation, computer vision, software, sensors, and data management on the one hand, and profound agricultural domain knowledge to understand the market needs on the other hand. We use latest research and development results to create easy-to-use and helpful products for agriculture. Additionally we are backed by our Bosch Group with access to resources, technologies, networks, and sales channels. The vision to enable sustainable farming for future generations unites us.

### Energid Technologies

*United States*

**www.energid.com**

Energid Technologies develops advanced software and robotic systems for the aerospace, agriculture, manufacturing, transportation, defense, and medical industries. Energid's

Actin software is a powerful control framework and operating system for commercial, industrial, and mission-critical robots that is sold as a cross-platform application and extensible software toolkit. Energid specializes in the control, simulation, and sensing of complex robotic systems.

### Farmbotix LLC

*United States*

Farmbotix specializes in manufacturing state-of-the-art Farmbots — Robotic Farmers capable of complex tasks currently not possible with machinery of the past.

### FarmWise

*United States*

**http://farmwise.io**

We are building autonomous farming robots for vegetable farms. Robot Capabilities: Weeding with a labor-free and chemical-free process; data gathering and analytics including growth monitoring, yield prediction. Benefits to farmer: Save money up to \$300 per acre; recover labor that used to be assigned on weeding; grow better and healthier product.

### FFRobotics

*Israel*

**www.ffrobotics.com**

For fresh fruit such as citrus, apples, pears, peaches, and cherries, the FFRobotics Picker is fully automated yet designed to be easy to use and easy to maintain. Unlike shake-and-collect methods, the FFRobotics fresh fruit picker can precisely and gently pick 10 times more usable fruit compared with a laborer. Working multiple shifts in all weather conditions, the FFRobotics fresh fruit picker pays for itself quickly and can drastically reduce costs by supplementing or replacing human pickers from the dwindling pool of harvesting labor.

**Know of a company that we may have missed?**

Please contact Judy Gill-Totten, Meister Media's Senior Compilation Editor:  
**JAGillTotten@MeisterMedia.com.**

**GA AG Robotics***United States***www.gaagrobotics.com**

The MAARS (modular agriculture autonomous robotic system) will have a two-year return on investment based on labor savings. Future modules will be used for garlic harvesting and watermelon planting with other crops that are being evaluated to see if robots will be beneficial in their production.

**Harvest Automation***United States***www.public.harvestai.com**

Harvest Automation, Inc. designs, manufactures, and supplies mobile robots for material handling and data management applications in a range of industrial environments. The company offers OmniVeyor family of products to perform material handling tasks in unstructured and challenging environments, such as those found in agriculture, construction, manufacturing, and distribution and fulfillment. Its products include HV-100 robot that is designed to automate spacing, re-spacing, collection, and consolidation on commercial and wholesale nursery and greenhouse operations; and TM-100 robot automates the most arduous parts of each-picking in a distribution or fulfillment center. Its capabilities include autonomously navigating aisles in an existing warehouse, working with and among people, and handling the repetitive and stressful tasks of lifting, carrying and moving materials within an order fulfillment facility.

**Harvest CROO Robotics***United States***www.harvestcroorobotics.com**

Harvest CROO Robotics (HCR) was founded in 2013 by strawberry grower Gary Wishnatzki and robotic engineer Robert Pitzer, with the intention to develop robotics for agriculture.

**Naïo Technologies***France***www.naio-technologies.com**

Naïo Technologies develops and markets robots for agriculture and viticulture. We also hold a range of electric tools for weeding, hoeing, and harvesting to help farmers efficiently collect the fruit of their hard work. Our robots assist farmers in their daily tasks in order to relieve their workload and increase profitability while reducing impact on the environment.

**Neya Systems***United States***http://neyasystems.com**

Neya Systems is a leading developer of advanced unmanned systems technologies. They work with defense, homeland security, and commercial customers to deliver novel solutions to some of the hardest problems related to autonomy, computer vision, and general unmanned systems development and deployment. Note: Acquired by Applied Research Associates [ARA].

**Ramsay Highlander Inc.***United States***www.ramsayhighlander.com**

Ramsay Highlander Inc. engages in the manufacturing of aids for the vegetable growing industry. The company produces harvesting aids including self-propelled lettuce cleaners, field packing aids, and mechanical harvesters. Ramsay Highlander offers clients on-site servicing, support, repairs, and implementation.

**Robotics Plus Ltd.***New Zealand***www.roboticsplus.co.nz**

Robotics Plus Ltd. (RPL) is developing mechanization, automation, robotic, and sensor technologies for horticulture and other primary industries to achieve new levels of productivity.

**Rowbot Systems LLC***United States***http://rowbot.com**

RowBot Systems LLC develops and provides a robotic machine that allows farmers to practice in-season nitrogen management.

**Soft Robotics Inc.***United States***www.softroboticsinc.com**

We design and build soft robotic grippers and control systems that can manipulate items of varying size, shape, and weight with a single device.

**SwarmFarm Robotics***Australia***www.swarmfarm.com**

Robotic farm machinery, using GPS and sensing, can handle routine farm jobs such as spraying using a robotic lightweight tractor. Based in Queensland and with help from Queensland University of Technology and The University of Sydney Field Robotics team this is a low impact, low cost solution for a farm to cut their labor and fuel costs.

**Topcon Positioning Systems***United States***www.topconpositioning.com**

Topcon Positioning designs, manufactures, and distributes precise positioning products and solutions for the global surveying, construction, agriculture, civil engineering, BIM, mapping and GIS, asset management, and mobile control markets. Its primary brands include Topcon, Sokkia, Wachen-dorff Elektronik, Digi-Star, RDS Technologies, and NORAC. The Topcon Positioning Group mission is the smart integration of information and our technology to constantly improve productivity in order to create sustainable infrastructure and agriculture.

**Transcend Robotics***United States***http://transcendrobotics.com**

Transcend Robotics Inc. develops a ground-based robotic mobility platform that maneuvers stairs and other obstacles without added software and electronic complexities. The company offers products based on Articulated Traction Control (ARTI) technology for quickly climbing stairs and other obstacles. Its portfolio includes ARTI3 mobility platform for integrators and developers to mobilize sensors, electronics, and software in industries, including 3D mapping, telepresence, construction management, mining, and manufacturing; ARTI3 Vantage for human and dangerous environments, such as tactical operations and hazardous inspection in manufacturing warehouses and plants, processing plants, industrial mills and plants, and machining firms; and ARTI3 TELETRAK, a solution that facilitates mobile telepresence for the real world primarily at construction sites, manufacturing and processing factories, power plants, and industrial environments.

**Tripod Data Systems (TDS)***United States***www.tdsway.com**

A subsidiary of Trimble, TDS (Tripod Data Systems) is a technique designed to use your handheld devices as rough as you can to make it compatible with intense external environment. They also provide the versatility in the range of friendly software for the mobile computing and for various industries as well. Also, there are GIS systems for the automation and field data collection, which are simple to use and enables users with great level of expertise to assemble correct data accurately.

## Virentes

*Israel*

Virentes offers grafting solution to improve vegetables, flowers, and herbs during the early growth stage. The company provides an automated process and a grafting technique that will increase the number of grafted plants.

## Vision Robotics Corporation (VRC)

*United States*

**www.visionrobotics.com**

Vision Robotics develop robotics systems for a wide range of applications. Our technology base is extensive including machine vision and dynamic arm control. Our applications range from agriculture to consumer to defense projects. Our solutions typically employ vision-based mapping, localization, and navigation systems. Coupling our mature vision algorithms with the output of additional sensors provides a robust base for many applications. In short, VRC has created a uniquely robust and cost effective approach to robotics. Our vision-based algorithms enable robots to autonomously create three-dimensional maps of unknown areas of interest whether this is mapping a building or modeling a grapevine. The maps and models enable robots to intelligently and accurately perform a myriad of tasks whether it is vacuuming a floor or pruning a grapevine.

## Vitirover

*France*

**www.vitirover.com**

Vitirover, agro-ecological robot to eliminate chemical herbicides, reduce professional risks, help save time and money. Using GPS signals to find its way, the robot is programmed by a basic smartphone, can mow vine stocks up to 2 centimeters tall and remain on its own in the vineyard for weeks.

## Wall-Ye Software and Robots

*France*

**http://wall-ye.com**

An advanced robot for use in agriculture and, particularly, in viticulture. Specialized in distribution of mapping (GisMap) and traceability software (GisMap-Trace), develops software for the wine world too. Programs are adapted for winegrowers, cooperative wineries with computerized cadastral lots. With its logic mapping and follow-up software, Wall-YE created robot V.I.N. The robot collects "dynamic data" and performs the work defined by winemakers (pruning, budding, soil working).

## Zymergen, Inc.

*United States*

**www.zymergen.com**

Zymergen, Inc. researches, develops, and manufactures microbes for Fortune 500 companies. The company uses a technology platform to optimize strains that improves economics; improves the existing production strains within existing manufacturing processes; and improves the correlation between the lab and commercial manufacturing.

## BIG DATA PROVIDERS

### AGCO Fuse Technologies

*United States*

**http://www.agcocorp.com/brands/fuse-technologies.html**

Fuse is AGCO's precision agriculture strategy and technology platform for ensuring our customers' operations are always running ... optimized; in the right place at the right time ... coordinated; and seamlessly connected throughout all phases of the crop cycle. AGCO achieves this mainly through the use of machines, technology products, support and training, and technology enabled dealer services used together as a complete solution.

## AGDATA

*United States*

**www.agdata.com**

AGDATA is the leading provider of strategic data and analytical solutions to the world's largest agricultural crop protection and animal health manufacturers. Our company maintains direct connectivity to more than 9,500 industry retailers and distributors, representing more than 90% of the U.S. market. Based in Charlotte, North Carolina, AGDATA operates throughout the United States and Canada. AGDATA provides mission-critical strategic data solutions, including outsourced database management, marketing program administration, data collection, and data analysis services. We assist our clients in reconciliation and market analytics. Our skilled team also designs and administers targeted marketing programs and performs custom market research.

## AgJunction, Inc.

*United States*

**www.agjunction.com**

AgJunction, Inc. provides innovative hardware and software applications for precision agriculture worldwide. The Company holds numerous patents and markets its products and services under leading brand names including Outback Guidance, and Satloc.

## Aglytix

*United States*

**www.aglytix.com**

Aglytix creates Solvers and applies them to the improvement of agriculture. Solvers are advanced analytics that use multiple data sources to detect, locate, quantify, predict, and diagnose crop production issues and their impact on yield. They can identify cost savings opportunities and sustainability practices at the field level. Solvers are a game changer for agriculture; economically and environmentally. And agriculture needs many of them. All sectors of the agricultural value chain

benefit from using Solvers. Equipment OEMs, Input OEM, Retailers, Dealers, Researchers, and of course, the Farmers.

## AgRenaissance Software

*United States*

**www.agrenaissance.com**

AgRenaissance Software provides software solutions to the agricultural community. FieldRx is an innovative and independent web-based precision ag engine designed to create site-specific field prescriptions from Grid Sampling results. FieldRecon is a PC-based software used for agricultural record-keeping. The software is used to track field activities such as planting data, harvest information, spray records, scouting, recommendations, and soil sampling. The FieldX suite of software is used for Scouting, Ag Recordkeeping, and Soil Sampling. The software suite is an easy-to-use cloud-based and mobile system to record and synchronize data across your organization, and includes native software for Windows PC, iPad, and iPhone. FieldX is built upon FieldRecon Technology.

## Agrian

*United States*

**www.agrian.com**

Agrian, Inc. provides a suite of software-as-a-service, mobile phone, and tablet-based applications to various levels of the agrifood supply chain. It offers Agrian Advisor that automatically imports sites from grower permits, generates accurate product recommendations, checks recommendations against manufacturer-approved label database, electronically transfers reports to government agencies, and GIS/GPS-mapping tools for fields; and fumigant management reporting tool that provides a system for various fumigant applicators to manage various reporting requirements introduced by U.S. EPA.



## CDMS

*United States*

**www.cdms.net**

Vision is your mobile crop planning solution. Automatically schedule, track, and adjust season activities. Go beyond product decisions and incorporate more data inputs into your decisions. Advisor is your next generation agronomy management system. An all-in-one system that puts everything — Precision Farming, Soil Management, Crop Protection, Planting, Crop Planning, Logistics, and more inside one powerful and intuitive system.

Guide is the industry's most significant manufacturers Customized Search Profile. Automatic Notification of Label Changes. Complete 50 state coverage including 24(c)'s. Supplemental and Section 18 Labels. Information for PHI, REI, and RUP. Easy to find WPS, Hazmat, PPE, and DOT information. Thousands of specific crop, pest, and rate combinations. Full Label and SDS Access.

## dataTHRESH

*United States*

**www.datathresh.com**

Team dataTHRESH is a growing group of accomplished individuals who are passionate about building the world's leading independent platform of precision ag Data Tools for Farmers. Our dataTHRESH DNA reveals the hybrid vigor of our team. Our dual-threat ag and tech expertise gives us a breakthrough competitive edge. Many team members have a direct interest in developing the best tools in the industry for use on their own family farm. Our technology experts thrive in our legit tech company environment.

## DuPont Pioneer

*United States*

**www.pioneer.com**

Pioneering Science. We use the science of the lab and the land to maximize productivity and sustainability of the world's farmland. It's this — our unwav-

ering dedication to research and development — that yields our customers results.

## Earthtec Solutions

*United States*

**www.earthtecsolutions.com**

Earthtec gathers the critical real-time data about plant well-being and the environment and translates it into precise implementation through a process we call Plant-Triggered Irrigation. Guided by an accurate analysis of what the crop requires for optimal health and yield, Plant-Triggered Irrigation removes the need for human interpretation or intervention.

## eLEAF

*The Netherlands*

**www.eleaf.com**

eLEAF is a Netherlands based high-tech company that works on projects that matter. We are pioneers in operational satellite based solutions, and with our continuously developing algorithms, we make sure we keep offering cutting-edge and relevant products. Our data and applications support clients worldwide to use water sustainably, increase food production, and protect environmental systems. We collaborate with partners that are at the forefront of innovation in food security and water productivity. This enables us to deal with challenges and problems the moment they arise and develop a structural solution for it. eLEAF is active worldwide and has experience with delivering data for more than 50 countries. Our clients range from public authorities that need a solution for complex resource management issues to commercial clients that require reliable operational monitoring products for the optimization of their production processes.

## Esri

*United States*

**www.esri.com**

ArcGIS is a complete mapping & analytics platform with ready-to-use applications to unlock the wealth of information in

your agriculture data. ArcGIS makes geospatial analysis much faster through the power of distributed computing. Now you can analyze and make sense of massive datasets in minutes or hours, not days. ArcGIS works as an optimizer, significantly improving the processing time for very large and detailed datasets. Need a custom software application? Build it with our extensive customization options to create that unique mapping, visualization, or analysis app on any device regardless of your development experience. ArcGIS gives you the ability to easily create, use, and share maps and analysis on any device, anywhere, anytime.

## Farmers Business Network

*United States*

**www.farmersbusinessnetwork.com**

Farmers Business Network is an independent and unbiased, farmer-to-farmer agronomic information network. The Network's mission is to improve the livelihood of farmers by making data useful and accessible. Farmers Business Network (FBN) utilizes data science and machine learning to provide members with unbiased and unprecedented insights about each of their fields, powered by billions of data points from our network. IT provides farmers with product performance, benchmarking, and predictive analytics based on real world performance data.

## FARMserver

*United States*

**www.farmserver.com**

The precision ag concept is really quite simple. Precisely monitor cropping variables, collect data concerning those variables, analyze the data, and then use the learned information to increase productivity on the farm. Until now, farmers have lacked the centralized and universal tools needed to properly implement precision

ag strategies on their farms. Introducing FARMserver, a secure, online, web-based solution that serves as your farm's foundation for all precision ag activities.

## FoodEssentials

*United States*

**www.labelinsight.com**

FoodEssentials aka Label Insight, Inc. is the leading provider of SaaS data solutions, powering insights and strengthening the connections between CPG brands, retailers, and consumers.

## Hexagon Geospatial

*United States*

**www.hexangeospatial.com**

Hexagon Geospatial is part of Hexagon, a leading global provider of information technology solutions that drive productivity and quality across geospatial and industrial landscapes. Hexagon's solutions integrate sensors, software, domain knowledge, and customer workflows into intelligent information ecosystems that deliver actionable information. Used in a broad range of vital industries.

## John Deere ISG

*United States*

**www.deere.com**

John Deere is forging new industry standards for precision and productivity through work performed at their Urbandale, Iowa, location. The John Deere Intelligent Solutions Group is the company's premier development facility specializing in creating technology used in maximizing crop yields and bettering food production infrastructure. By employing a mix of over 800 software developers, systems engineers, product testers, marketers, and customer support personnel, John Deere's Intelligent Solutions Group has invested in technology and ingenuity to create a range of advanced products such as crop management tools, logistics systems, and special hardware used in ultra-accurate GPS-driven tractors.

## Premise Data

*United States*

**www.premise.com**

Human-directed and machine-refined, Premise indexes and analyzes millions of observations captured daily by our global network of contributors, unearthing connections between them to map reality on the ground, and help global decision-makers move faster and make more impactful, data-driven decisions. Headquartered in San Francisco, Premise operates networks in more than 80 cities in 30 countries.

## PriOps

*Spain*

**http://priops.com**

We are big data experts from the primary sector, with a turn-key solution. We help to generate the hidden information in an ocean of data, without forgetting the importance of aspects such as usability or information management. We provide knowledge that optimizes the farmer's decision-making process.

I + D + I: We participate in research and development projects that have a real application in the productive sector in a short-medium term, and that obtains a benefit from the available data. Our role is data management.

**SOLUTION DESIGN:** We study with the development partners the different solutions, in a collaborative process that covers the entire solution life cycle. From making requirements to architecture.

**CONNECTORS:** The data are housed in sources, supports, and heterogeneous applications, which forces us to have a wide variety of connectors to integrate different applications with our platform.

**DATA INTEGRATION:** Protocols to clean, parameterize, and categorize the data, so that it can be used. It encompasses point-to-point filter systems and data flows.

**CLOUD:** The cloud is the solution for managing heterogeneous data in a secure

and reliable way. Our platform has several levels of storage depending on the nature of the data: private, aggregated, and anonymized, or public. **SCIENCE OF DATA:** Techniques and methodologies that allow us to transform data into information. Discover the most important relationships between the sea of data that we can handle.

## Servi-Tech

*United States*

**http://servitech.com**

Servi-Tech is the largest crop-consulting company in the nation, provides crop-consulting services to over 1,900 producers across seven states. **Crop Consulting:** • Soil fertility planning • Irrigation scheduling • Crop budgeting • Pest management • Equipment calibration. **Laboratory Services:** • Soil • Fertilizer • Feed • Wastewater • Water • Manure • Plant • Environmental Solids.

## Simplot Grower Solutions

*United States*

**www.simplot.com**

Simplot Grower Solutions consists of a team of more than 250 Crop Advisors and more than 90 retail locations to help growers maximize return from their land, investment and time. Our product and services offering includes crop nutrition, crop protection, seed, specialty products and Simplot SmartFarm® precision agriculture services. Designed to deliver data-driven agronomy on every acre, Simplot SmartFarm provides a portfolio of data-driven products and services to make informed decisions across the growing cycle: prepare, prescribe, grow and harvest. Because all acres are not created equal, the SmartFarm team helps growers analyze their data, prepare the soil and develop a customized plan to increase efficiency and maximize growing potential, season after season.

## SOILMAP

*United States*

**www.soilmap.com**

SOILMAP is a full-service agronomic center providing precision agriculture solutions through services, sales, and support to customers looking to add value to their farming operations. These products and services assist farmers in gaining insight into each field they operate in order to improve management decisions. All the services and solutions offered by SOILMAPS are customized to each farmer's individual needs to optimize specific objectives.

## Southern States Cooperative

*United States*

**www.southernstates.com**

Southern States provides expert products, services and advice to people who work hard in their communities. Whether you're running a small hobby farm or commercial operation, tending your garden or trying to keep your lawn growing green and healthy - we'll give you the tools and insights you need to get the job done right. **Products:** • Farm Supplies • Petroleum & Bulk Fuel • Grass and Vegetable Seed • Fertilizer • Power Equipment • Pet and Wild Animal Supplies • Livestock Supplies • Horse and Equine Supplies • Fencing Equipment • Apparel and more.

## TapLogic

*United States*

**www.taplogic.com**

At TapLogic, we build web-based and mobile software that is focused on the needs of today's farmers. From farm management software, to precision crop scouting and an app for GPS referenced soil sampling, our farmer-centered apps are tools to manage farm operations with ease. TapLogic builds products that work almost as hard as you do but are probably easier to get along with.

## VanderSat

*Netherlands*

**www.vandersat.com**

VanderSat observes water and temperature at field scale across the globe using satellites. Every day, everywhere on earth, with unmatched accuracy. Soil moisture, the water content of the vegetation, inundation and land surface temperature. All data near real time, globally and daily without cloud interference. Our satellite data can be accessed and ingested easily through our API and viewer and is more than 500 times cheaper than ground sensors. VanderSat insights are backed by our remote sensing scientists. Currently 5000 organizations are powered by our data and services, including some of the world's leading agricultural and insurance firms.

## Wilbur-Ellis

*United States*

**http://ag.wilburellis.com**

Agribusiness addresses crop challenges and individual grower needs with tailored solutions in crop protection, nutrition, and seed technology. We maintain a full network of field specialists who live in the regions they serve. This enables them to gain a clear understanding of the problems their customers face, recognize and respond quickly to opportunities, and develop strong one-to-one relationships. With our advanced crop production technology and earth-friendly operations, we offer solutions that produce the best returns. We have extensive experience in: Pest diagnosis • Yield monitoring • Soil analysis • Water management • Nutrition • Regulatory and environmental issues.

## XSInc.

*United States*

**www.xsinc.com**

XSInc offers internet-based (SaaS — Software as a Service) solutions for improving workplace efficiency, evaluating industry standings, optimizing

marketing efforts, and maximizing client relationships without the disruption and cost of replacing existing systems and processes. Offering custom and standard solutions, XSInc works with all levels of the demand chain including end-user, retailer, distributor, and manufacturer.

## CLIMATE / WEATHER

### Agvesto

*United Kingdom*

<http://agvesto.com>

A climate smart platform with an API to enable sustainable agriculture by providing Risk-as-a-service to market participants.

### aWhere

*United States*

[www.awhere.com](http://www.awhere.com)

aWhere collects and analyzes over a billion points of data from around the globe each day to create unprecedented visibility and insight known as Agricultural Intelligence, critical decision making from farm level through to national policy.

### ClearAg (Iteris)

*United States*

[www.clearag.com](http://www.clearag.com)

The ClearAg Platform combines weather and agronomic data with proprietary land-surface modeling and machine learning to solve complex agricultural problems. Companies use the ClearAg Platform to simulate field conditions and determine how new products may perform on a crop given certain weather and soil conditions. Growers leverage the ClearAg Advisories to determine best times to plant, spray, fertilize, and harvest.

### Climate Corp. (Monsanto)

*United States*

[www.climate.com](http://www.climate.com)

Use Climate FieldView to make data-driven decisions to maximize your return on every acre. We're your data partner to collect and analyze field data,

measure performance, monitor nitrogen, and build tailored seeding prescriptions. Make field data management simple. Collect, store, and view your field data in one easy-to-use digital platform that you can access from the field, office or home. Uncover insights from your unique field data with imagery and performance analysis tools so you can make the best input decisions for your fields. Build a customized plan for each field to manage variability, and maximize yield with variable rate planting prescriptions and nitrogen monitoring tools.

### Descartes Labs

*United States*

[www.descarteslabs.com](http://www.descarteslabs.com)

The Descartes Labs Platform is the missing link in making satellite imagery useful. We collect data daily from public and commercial imagery providers, clean it, calibrate it, and store it in an easy-to-access file system, ready for scientific analysis.

### FarmHub

*United States*

<https://farmhub.net>

FarmHub The Weather Beacon is a complete weather station that provides growers and agronomists with real-time in-field weather data.

### Intelag

*Chile*

[www.intelag.net](http://www.intelag.net)

Intelag provides an automated agronomy service and farm management platform to growers. We collect micrometeorological data from the field using proprietary low power wireless devices and combine it with external weather forecasts and satellite imagery to provide real-time insights to the grower and recommend farm management best practice.

### MDA Information Systems

*United States*

[www.mdaus.com](http://www.mdaus.com)

MDA provides efficient and

advanced information solutions to government and commercial customers in four specialty areas. The Geospatial Solutions division uses remote sensing, GIS, multi-source data, and large volume image and data processing technology to provide cutting edge intelligence and information products and analysis services. The ISR Systems division leverages MDA's world-leading multi-mission ground system experience to provide fixed and transportable remote sensing satellite ground systems. The Weather Services division has been providing unique weather information products and services for energy and agriculture applications for over forty years. The Sensor Systems Technologies division designs, develops, and enhances high performance ISR solutions to exploit data and provide critical information to support our customers' needs.

### Skymet Weather Services

*India*

[www.skymetweather.com](http://www.skymetweather.com)

Skymet has built technologies and instruments to measure weather and agriculture. We have built them for a whole range of sectors: these include small and marginal farmers, urban dwellers, energy companies (renewable and non-renewable), insurance companies, governments, and international NGOs. We can measure and predict yield accurately at the village level for any crop with a very high level of accuracy. We also forecast the weather in the short, medium, and long term accurately. Skymet is currently forecasting for every tehsil in India and can provide accurate forecasts at the village level. Skymet can also provide reliable seasonal forecasts including the Monsoon.

### SO Dakota Wheat Growers

*United States*

[www.wheatgrowers.com](http://www.wheatgrowers.com)

South Dakota Wheat Growers Cooperative promotes agricultural sustainability through the best applications of science and technology in an effort to assist farmers in the production of a safe, healthy, and abundant supply of grain in an economically viable system.

### Understory

*United States*

<http://understoryweather.com>

Understory develops sensor networks that deliver ground truth data and property-level damage analytics. The proprietary sensors, which are entirely solar powered, track the weather in real time, pulling in data on a location's humidity, temperature, wind speed, precipitation, and other weather events. Companies and municipalities insurance, agriculture, and broadcast can use the information to better understand a storm in retrospect.

### VanderSat

*Netherlands*

[www.vandersat.com](http://www.vandersat.com)

VanderSat observes water and temperature at field scale across the globe using satellites. Every day, everywhere on earth, with unmatched accuracy. Soil moisture, the water content of the vegetation, inundation and land surface temperature. All data near real time, globally and daily without cloud interference. Our satellite data can be accessed and ingested easily through our API and viewer and is more than 500 times cheaper than ground sensors. VanderSat insights are backed by our remote sensing scientists. Currently 5000 organizations are powered by our data and services, including some of the world's leading agricultural and insurance firms.

### WDT (Weather Decision Technologies)

*United States*

<http://wdtinc.com>

Weather Decision Technology



gies, Inc. is the industry leader, providing organizations with weather decision support on a global scale. WDT offers specific expertise with Big Data as it applies to hazardous weather detection and prediction, forecast modeling, decision analytics, GIS, mobile apps, and interactive mapping.

## Weather Analytics

*United States*

**[www.weatheranalytics.com](http://www.weatheranalytics.com)**

Weather Analytics is a breakthrough provider of precision climate data, weather intelligence, and dynamic weather and sensor station integration. We find, assemble, and format weather data so that you don't have to. Our climate data is delivered in an easily accessible format that allows customers to focus their efforts on solving business problems versus aggregating and cleansing data from raw sources, which offer very limited value on their own.

## Weather Trends 360

*United States*

**[www.weathertrends360.com](http://www.weathertrends360.com)**

Weather Trends International (WTI) is a 6 time award winning company that uses trade secret algorithms to generate year-ahead weather forecasts for millions of locations in all 195 countries to assist both businesses and consumer applications. Farmers need to maximize yield. Weather Trends' forecasts and planning tools deliver the information you need to plan ahead.

## WeatherFlow

*United States*

**<http://weatherflow.com>**

Use the WeatherFlow WEATHER-meter and your smartphone to capture accurate location-specific weather conditions and report the data instantly to farm managers. Make sure weather conditions comply with regulations before spraying.

## WSI

*United States*

**[www.theweathercompany.com](http://www.theweathercompany.com)**

IBM closes deal to acquire The Weather Company's product and technology businesses. WSI becomes the business solutions unit of The Weather Company, an IBM Business. The Weather Company, through its global B2B division WSI, announced a partnership with IBM to form a ground breaking global strategic alliance to integrate real-time weather insights into business to improve operational performance and decision making.

## COLD CHAIN MONITORING

### ColdPICK

*United States*

**[www.coldpick.com](http://www.coldpick.com)**

ColdPICK International LLC is revolutionizing the way that the fresh produce cold supply chain operates. Our mobile pre-coolers bring rapid cooling technology directly to the grow site, making immediate post-harvest pre-cooling a reality. Our mission is to provide innovative, easy-to-use mobile pre-cooling solutions to the fresh harvest agricultural industry. We work with growers, marketers, and logistics operators to ensure our pre-coolers meet the unique requirements of any given crop.

## Controlant

*Iceland*

**[www.controlant.com](http://www.controlant.com)**

Controlant offers a turn-key service for cold chain monitoring and quality control; from manufacturing, through transportation, storage, and sale. Controlant specializes in wireless temperature monitoring.

## FreshSurety

*United States*

**[www.freshsurety.com](http://www.freshsurety.com)**

FreshSurety measures produce respiration rate to directly determine the ripeness of each food carton using low cost dis-

posable electronic sensors. We provide producers and retailers with up-to-the-minute shelf life information on individual cartons and pallets throughout the supply chain, anywhere in the world. This information enables retailers to market higher quality product with less waste and increase their sales margins by as much as 50%.

## Inteligistics

*United States*

**[www.inteligistics.com](http://www.inteligistics.com)**

Inteligistics is a provider of innovative cold chain and supply chain visibility solutions for the food, logistics, healthcare, and energy monitoring markets. We have created a very agile technology platform under a contract with the US Navy leveraging Machine to Machine (M2M) low power, portable, and wireless sensors and/or passive Radio Frequency Identification (RFID) technologies. Our IntelliView solutions fully integrate cloud based communications gateways, and various environmental, vibration, and chemical sensors, GPS, and security devices for specific customer applications. Insightful and actionable information and alerts provided via a graphics dashboard and data analytics platform deliver high value improvements to cold chain and supply chain performance, productivity, and quality. This allows our customers and partners to focus on process improvements, decreased power usage, increased product throughput, more efficient labor costs, and improved inventory levels.

## PalleTech

*United States*

**[www.palletech.co](http://www.palletech.co)**

PalleTech gives you better cargo monitoring and predictive analytics. Without added infrastructure, PalleTech tracks your cargo and its condition in real time and works directly with your pallet provider.

## TeleSense

*United States*

**<http://telesense.com>**

Experts in moving data. TeleSense™ is an environmental monitoring solution built on the Adolene IoT (Internet of Things) platform. Based in the heart of Silicon Valley, our quickly growing technical team has diverse expertise in hardware design, embedded systems, network security, and enterprise software and app development. Our management is comprised of Silicon Valley veterans with extensive experience in enterprise and startup business management. Together, our team can help you save time and money with our adaptable and customizable products.

## COLLABORATION RESOURCES

### Ag Link

*United States*

**<http://aglink.com>**

In 2010, Ag Link, joined forces with a registered dietitian and veteran to school food regulations to begin consulting with school food service. Ag Link saw an opportunity to take the direct marketing and communication technology they had succeeded with in other industries and help it fill a niche that would benefit both California farmers and schoolchildren. This led to the launch of Ag Link's Farm to School tool - [www.aglinkf2s.com](http://www.aglinkf2s.com) in August of 2012. In the process of building the farm to school supply network, Ag Link encountered many local producers whose products didn't necessarily fit the farm to school market but they were interested in using technology for direct marketing of their products to consumers. In 2014, Ag Link launched its Farm to Consumer iPhone App, Ag Link Connect, to connect consumers to local food, farms, and fun! Web interface at [www.aglinkconnect.com](http://www.aglinkconnect.com).



**AGRISHARES***Sweden***www.agrishareshares.com**

AGRISHARES is an online marketplace for sharing agricultural machinery, equipment, and services. AGRISHARES matches renters' needs and owners' spare resources, optimizing efficiency and reducing costs for both sides and creating a win-win solution.

**Agrobook***Russia***www.agrobook.ru**

Provider of an online community and news source for the agricultural industry in Russia. The company provides a professional network for farmers and agribusiness entrepreneurs and offers online content for farming communities.

**FarmHack****http://farmhack.org**

FarmHack is a community for those who embrace the long-standing farm traditions of tinkering, inventing, fabricating, tweaking, and improving things that break. We are farmers of all ages, but the project has special relevance to young and beginning farmers as a place to learn from their peers' and their elders' successes, mistakes, and new ideas. We also seek to bring our non-farmer allies on board: engineers, architects, designers, and the like. Together, with an open-source ethic, we can retool our farms for a sustainable future. All FarmHack documentation and written materials are open source, both hardware and software.

**Farmist***United States***www.farmist.org**

Farmist is an online platform for small farmers to find, share, and organize the most relevant information about farming and agriculture.

**Grow Crowd***Spain***www.growcrowd.com**

Grow Crowd is online platform/marketplace for selling and buying organic food. We are an online organic farmers market. Grow Crowd works as a local marketplace for organic food where anyone can set up an account and offer to sell their produce to their local community. Users are able to browse organic food providers, and search for products in order to find fresh food that is close to them and place a purchasing order.

**KFarmers***South Korea***www.kfarmers.kr**

KFarmers is a mobile app created to give consumers direct access to farm fresh vegetables and buy them directly from farmers. The app promotes a transparent agricultural production system where farmers are able to share real-time production information with their customers by updating photographs through the app. The app was created to facilitate both farmers and consumers in selling and buying eco-friendly vegetables and fruits. The app is developed on a live journal-based information sharing system that gives consumers a transparent view into the total production process of the vegetables.

**Nile Point***United States***www.nilepoint.com**

Nile Point was started in 2013 with the objective of bringing a new approach to solving food insecurity. We bring a unique outlook to solving complex problems in developing countries based on years of experience in the international development, information technology, education, and energy sectors. Our aim is to support humanitarian actors working in the domain of food insecurity through innovative program design, application

of technology, staff training, and ongoing support. We also seek opportunities for joint ventures with local technology and energy companies as drivers of economic development through job creation.

**Nutri-Tech Solutions***Australia***www.nutri-tech.com.au**

NTS are world leaders in sustainable agriculture, dedicated to training, servicing, and consulting with farmers in 53 countries. We have developed over 300 products applicable to a huge range of diverse crops, combining cutting-edge technology with proven biological 'essentials'. NTS educates farmers in utilizing a variety of in-field monitoring tools, along with conventional soil and leaf tests, to maximize productivity, crop quality, and profitability. While NTS have developed over 60 ACO Certified products for organic agriculture, the majority of our 15,000 Australian clients are conventional farmers seeking to increase their efficiency and sustainability. The uniquely formulated NTS foliar fertilizer range complements an emphasis on soil life stimulation, which includes composted fertilizers, microbial inoculums, and powerhouse bio-promotants. These products include kelp, humic acid, and fulvic acid, which provide plant growth promotion, the magnification and stabilization of fertilizers and potent stimulation of beneficial soil life. NTS has specialised in these three inputs and offers a comprehensive range of high performance, cost-effective options.

**PLOVGH***United States***www.plovgh.com**

PLOVGH makes it simple to source organic and specialty ingredients. We work directly with farmers and processors to provide our buyers with the highest quality products for food, feed, and retail markets. PLOVGH

specializes in grain, emerging seed varieties, and customized sourcing relationships that allow our buyers to access unique and highly specified products. We offer on-the-spot purchases as well as forward contracts for farms and buyers.

**Provender***Canada*

Provender is an online platform that enables farmers to create direct-trade associations with buyers. The platform allows farmers to quantify and organize their yields, and make that data accessible to buyers everywhere.

**Seedbuzz***India***www.seedbuzz.com**

At Seedbuzz.com, our mission is to empower agriculturists with the wealth of crucial knowledge and extend our customized services, as effective means to cater to the pain areas of companies across the world and facilitate the business efficiency of agriculture companies. We wish to be the reliable source of agricultural news, events, articles, and services with a foresight of a highly efficient, swift and well-connected Agri industry. We endeavour to serve as a catalyst for the growth of agriculture, by being a comprehensive web portal and a knowledge hub for people from agriculture and related backgrounds. Our network is spread in the various countries: India, Indonesia, Thailand, Vietnam, Philippines, Maldives, Middle East, Afghanistan, Pakistan, Bangladesh, Myanmar, Nepal, USA, Canada, Brazil, Argentina, Australia, New Zealand, and Central America.

**Treebos***Brazil*

Treebos manages standardized rural units prepared for organic food production, applying the concepts of crowdfunding to sustainable agriculture. We call these areas "Orchards of the

Future". It works like this: on our website you can choose one of our Orchards closest to you, and the kind of fruit you'd want to grow. Treebos will plant the tree for you, will take care of your tree, and you can keep track of its growth over the internet. When your tree starts producing, you will receive part of the harvest at your home, and with the surplus, you can decide to give it to someone else, donate it to charity, or Treebos can sell it and give you the profit. The Treebos proposal changes your role in the food production chain. With Treebos, you will no longer be only a consumer, but also a true food producer, allowing you to contribute to the increasing world food needs, generating employment and sustainability, in a fun and engaging way.

## COLLABORATION TECHNOLOGY

### AGRISHARES

*Sweden*

**www.agrishareshares.com**

AGRISHARES is an online marketplace for sharing agricultural machinery, equipment, and services. AGRISHARES matches renters' needs and owners' spare resources, optimising efficiency and reducing costs for both sides and creating a win-win solution.

### AgriSync

*United States*

**www.agrisync.com**

AgriSync, Inc. develops a mobile application that connects farmers, advisors, and other partners in agribusiness. Its mobile application and Web dashboard enables users to view, solve, and track agriculture support issues; and provides solutions for time tracking, team collaboration, exporting data to excel, sharing results, branding their dashboard, assigning tickets, and calling through a live video technology.

### AgVoice

*United States*

**www.agvoiceglobal.com**

AgVoice is a mobile voice-interaction service designed for food and agriculture professionals to capture insights on the go. Combining the learnings from 12 months of exploration and customer feedback, it is scheduled for launch in 2017.

By using proprietary analytics and processing of raw voice files including captured time stamps and location data, users can improve productivity and workflow management, increase documentation accuracy, and gain valuable insights to optimize the use of resources in crop and animal production for a sustainability and environmental impact.

AgVoice is designed for use across the food and agriculture ecosystem, including livestock and crop production, agronomy, animal health and wellness, and machinery repair.

### EM3 Agri Services

*India*

**www.em3agri.com**

At EM3 we are breaking traditional stereotypes for increasing agricultural productivity by bringing tech and mechanization for the farming community on a Pay-for-Use basis. This approach greatly deepens the impact on farm viability. We are harnessing the power of information technology and mobile telecom services, financial services, etc. to integrate and strengthen the value proposition. India is an agrarian society with over thousands of years of farming experience in one of the most fertile regions of the world. Ninety million households are directly engaged with agriculture. Given such a large pool of natural advantages, wisdom and experience, Indian farm productivity sadly remains way below the global standards. Samadhan - FaaS (Farming as a Service) creates a platform that enables technology to reach the farmer and the farm in an efficient and affordable manner

through a network of farm centers (Samadhan Kendras). Each center, managed through IT enabled systems and manned by agri-professionals, is equipped to handle a comprehensive suite of basic and precision farm operations throughout the entire crop production cycle.

### Esri

*United States*

**www.esri.com**

ArcGIS is a complete mapping & analytics platform with ready-to-use applications to unlock the wealth of information in your agriculture data. The power of ArcGIS creates deeper understanding, through visualization of spatial data. It is used to create actionable information by gaining an understanding of relationships across all your data. Our solution leverages configurable apps, so customers gain immediate return on investment, however, if you need a solution tailored for a specific need there are extensive options for customization to build that unique mapping, visualization, or analysis software application on any device regardless of your development experience. ArcGIS gives you the ability to easily create, use, and share maps and analysis on any device, anywhere, anytime.

### Farmers Business Network

*United States*

**www.farmersbusinessnetwork.com**

Farmers Business Network is an independent and unbiased, farmer-to-farmer agronomic information network. The Network's mission is to improve the livelihood of farmers by making data useful and accessible. Farmers Business Network (FBN) utilizes data science and machine learning to provide members with unbiased and unprecedented insights about each of their fields, powered by billions of data points from our network. IT provides farmers with product performance,

benchmarking, and predictive analytics based on real world performance data.

### HarvestPort

*United States*

**https://harvestport.com**

HarvestPort is a shared economy platform for seasonally used agricultural assets. Our farmer-to-farmer marketplace allows participants to procure planting, harvesting, transport, and storage resources at the lowest possible price, and to monetize idle resources during their off-season. The adaptable on-demand nature of HarvestPort mitigates risk in an industry where production can be unexpectedly affected by weather, labor availability, and shifting market preferences. Ultimately, HarvestPort's streamlined sharing system improves industry-wide supply chain utilization, increases profitability for small farmers and large agribusinesses alike, and contributes to a reduction in the carbon footprint of goods from farm to table.

### Hello Tractor

*United States*

**www.hellotractor.com**

Hello Tractor aspires to be the leading agricultural inputs provider in sub-Saharan Africa, promoting inclusive economic growth and regional food security. Hello Tractor transforms lives by delivering reliable and affordable tractor co-sharing services.

### ProducePay

*United States*

**https://producepay.com**

ProducePay offers various cash flow solutions allowing fresh produce farmers (growers) to be paid the day after they ship instead of 30-45 days later. Our cash flow solutions also benefit distributors by relieving the burden of providing advance payments to select growers. Additionally, we match fresh-produce buyers with sellers creating new trading relationships and

helping companies compete and grow.

## WeFarm

*United Kingdom*

<https://wefarm.org>

WeFarm is a unique platform that enables smallholder farmers across Africa and Latin America to share and access vital information on farming via SMS (short message service) and online. WeFarm's free, peer-to-peer service facilitates knowledge sharing in the global agricultural community, especially amongst farmers living in rural areas without internet access. WeFarm users can ask questions about agriculture, answer questions, and share farming tips with other farmers around the world even on the most basic feature phone, simply by sending an SMS.

## CROP-FARM MANAGEMENT SOFTWARE

### 365FarmNet GmbH

*Germany*

[www.365farmnet.com](http://www.365farmnet.com)

365FarmNet, a holistic software-based service (SaaS), entered the market with the aim of supporting farmers in all aspects of farm management — 365 days a year. Open to all manufacturers, suppliers, and market players, we link together knowledge, information, and resources with innovative solutions. We support all farmers and stakeholders with the optimization of their individual business, irrespective of the type, size or philosophy of the business.

## AEGRO

*Brazil*

[www.aegro.com.br](http://www.aegro.com.br)

AEGRO is a farm management software to plan crops, control costs, and get everyone working together. AEGRO goes far beyond spreadsheets. Access all your information from anywhere

and from any device. • Save time planning your crops • Record precisely the farming activities • Store safely your production history.

## AgCode

*United States*

[www.agcode.com](http://www.agcode.com)

Ag Code, Inc. provides software solutions for agribusinesses. It offers payroll, contractor tracking, equipment tracking, harvest and scale, field inspection, grower management, pick code, mapping, seed tracking, grower management, pest control, budget, and billing solutions. The company also provides software as a service, integration, and mobile technology solutions.

## AgDNA

*Australia*

<https://agdna.com>

AgDNA is a mobile GPS app allowing farmers and vehicle operators to track their in-field activities using GPS position. When combined with the wireless capabilities of a smartphone, AgDNA automatically synchronises all location based job activities to the cloud in real-time.

## AgFleet (ZedX)

*United States*

[www.agfleet.com](http://www.agfleet.com)

[www.zedxinc.com](http://www.zedxinc.com)

AgFleet, developed by ZedX Inc., is a powerful decision-support system used to manage the productivity of agricultural land in North America and continues to meet the ever-changing needs of growers, dealers, and other ag-professionals in the arena of precision agriculture. AgFleet's web-based applications provide an efficient management solution to operations of all sizes. Users maintain continuous real-time access to their data along with the added benefit of up-to-date software, at no additional cost. With a focus on increased productivity, AgFleet pioneered the process of the "Lab Uploader" system which eliminated the countless hours

users spent in front of their computer uploading lab soil analysis files. With its anytime, anywhere access, AgFleet aims to lower operating costs by providing users a powerful, web-based decision support system for cropland management. Note: ZedX acquired by BASF in April, 2017.

## AgKnowledge

*United States*

[www.agknowledge.com](http://www.agknowledge.com)

With roots stretching back to 1982, TechKnowledge Associates, Inc., has established itself as an industry leading Agribusiness software and services supplier to medium and small fresh fruit and vegetable producers and distributors. The firm has successfully deployed hundreds of applications for thousands of users that have helped these companies increase market share, improve operational efficiency, and most importantly generate higher profits.

## Agrian

*United States*

[www.agrian.com](http://www.agrian.com)

Agrian, Inc. provides a suite of software-as-a-service, mobile phone, and tablet-based applications to various levels of the agrifood supply chain. It offers Agrian Advisor that automatically imports sites from grower permits, generates accurate product recommendations, checks recommendations against manufacturer-approved label database, electronically transfers reports to government agencies, and GIS/GPS-mapping tools for fields; and fumigant management reporting tool that provides a system for various fumigant applicators to manage various reporting requirements introduced by U.S. EPA.

## Agrible

*United States*

[www.agrible.com](http://www.agrible.com)

At Agrible, we're leading the field by researching every acre of it. We create predictive analytics tools by growing digital

crops. Through our software, growers get field-level insights to help them make the best decisions possible for their farm and improve production, that's "The insight to decide."

## Agrimaster

*Australia*

[www.agrimaster.com.au](http://www.agrimaster.com.au)

A financial software program that's been created by farmers for farmers. Agrimaster handles your day to day accounts and cash book, but more importantly helps you plan and create budgets from your data to explore the 'what if' options - it even intelligently interfaces with your bank. Note: Owned by Mastergroup.

## AgriTask

*Israel*

[www.agritask.com](http://www.agritask.com)

AgriTask integrates your various data sources into one comprehensive, yet easy to use system, which serves all your management levels.

Imagery: Get real benefit from satellite and UAV image layers and indexes.

Climate: Build automatic models with information from stations and forecast.

Mobile app: Digitalize your field data and build your own app protocols.

Sensors and Machinery: Integrate machines and third party sensor data.

Plan and Execute: Easily detect problems, define, plan, and control activities.

## Agrivi

*United Kingdom*

[www.agrivi.com](http://www.agrivi.com)

Agrivi is knowledge-based cloud farm management software that helps fruit, vegetable, and grain producers to improve their productivity and profitability. With the help of best practice farming processes knowledge base for over 100 crops, farmers can easily plan all seasonal activities, track their execution, and related costs. Advanced reports and dashboards help



farmers make data-driven decisions needed for improving their production. Agrivi also helps farmers to ensure high yield with smart pest and disease alarms that detect weather conditions on farmer's fields that are suitable for pest and disease occurrence and alert the farmer. With on-time spraying, farmers reduce the risk of lower yield caused by pests and diseases.

## AgriWebb

*Australia*

**www.agriwebb.com**

Farm management software solving problems of data records, accreditation compliance, and profitability for livestock production. AgriWebb coordinates a tablet application, an online sales platform, and custom sensors designed to give time back to managers and improve profits.

## AgShift

*United States*

**www.agshift.com**

AgShift indexes and analyzes observation points captured daily across the food supply chain - automating key elements of food assessment and unearthing connections that improve transparency. Collect daily observations and data from your farms and supply chain using our simple, easy to use, mobile-first platform. Our proprietary machine learning algorithms automate key elements of food quality assessment across the supply chain and monitor data streams in real-time. Indices, condition reports, maps, and data feeds are published in real-time, unearthing patterns in your supply chain for improved transparency.

## AgSolver

*United States*

**https://agsolver.com**

AgSolver is an agribusiness company combining data management and simulation to increase profits and improve investment returns.

## AgSquared

*United States*

**www.agsquared.com**

AgSquared is a cloud-based workflow management platform that helps farms run more efficiently. Our tools help farmers plan their seasons, manage day-to-day operations, keep detailed and organized records, and make smarter decisions. Over 7,500 farms in 88 countries use AgSquared. We aggregate and analyze the data entered by all of the farms that use AgSquared, allowing them to achieve big-data insights typically only accessible to very large farms that help them minimize losses and grow profitably and sustainably. AgSquared users have already entered more than one million farm records.

## AgSync

*United States*

**www.agsync.com**

AgSync's concept and continued development is a combined effort of air applicators, ag retailers, hardware manufacturers, growers, and crop consultants. The goal is to make AgSync a logistics management tool for the crop production industry. AgSync provides tools for you to break through the barriers in communication, limited resources, management, and integration in the precision ag industry.

## AgVerdict (Wilbur-Ellis)

*United States*

**https://agverdict.com**

For growers AgVerdict is your single source for storing, accessing, and managing agronomic and operational data specific to your fields and farms. For agronomists AgVerdict provides a secure, single point of entry for all of your grower's information and field records. AgVerdict is designed with permission-specific authorizations to keep data available, up-to-date, and protected. After completing our research, we are

able to bring you comprehensive precision agriculture and farm management software. By providing all of the tools to simplify farm management, overall efficiency and performance are enhanced. AgVerdict stores information in a cloud-based system for easy access anywhere. It supports GPS tracking, farm and field mapping software, crop management, performance monitoring, record keeping, and unlimited data storage.

## AgVision

*United States*

**www.AgVision.com**

DMI Computer Technologies, known by its trademark and brand name AgVision, specializes in agribusiness accounting and inventory management software for grain, feed, seed, ethanol, fertilizer, treenuts, and other commodities. We have several hundred customers, and thousands of users, nationwide.

## AgWorks LLC

*United States*

**www.agworks.net**

We are committed to providing innovative software products that manage agronomy needs. Our recent releases include sales management innovations, new tools for retail connectivity to farmers, and precision software. We have additional visionary products under development; all designed to serve ag retailers. It is our goal to provide "state of the art" software products that support ag retailers as they strive to work more efficiently and build closer working relationships with their customers.

## Agworld

*United States*

**www.agworld.co**

We build Collaborative Farming Solutions that go beyond farm management and work on your iPad, iPhone, and the web to simplify your farming experience and give you full control of your farm, wherever you are.

## Cengea (Trimble)

*United States*

**www.trimble.com**

In September 2010, Trimble acquired privately-held Cengea Solutions Inc., based in British Columbia. Cengea is a leading provider of spatially-enabled business operations and supply chain management software for the forestry, agriculture, and natural resource industries. The acquisition is part of Trimble's initiative to bring productivity solutions to the forestry and other industries. Cengea's forestry enterprise software solution manages the operational activities associated with producing raw materials such as lumber, paper, and other forest products throughout the value chain — from initial project planning to scheduling of work, growing, harvesting, delivery, tracking of goods, payment, inventory management, and real-time reporting. The operational data can be integrated with maps and other spatial data to provide a complete perspective on activities and costs. The combination of Trimble and Cengea's forestry solutions can provide organizations with a comprehensive set of tools to collect accurate operational information faster, manage and analyze the information to facilitate better decision making, and optimize operational activities to improve productivity, efficiency, and safety.

## Climate Corp. (Monsanto)

*United States*

**www.climate.com**

Use Climate FieldView to make data-driven decisions to maximize your return on every acre. We're your data partner to collect and analyze field data, measure performance, monitor nitrogen, and build tailored seeding prescriptions. Make field data management simple. Collect, store, and view your field data in one easy-to-use digital platform that you can access from the field, office, or home. Uncover insights from



your unique field data with imagery and performance analysis tools, so you can make the best input decisions for your fields. Build a customized plan for each field to manage variability and maximize yield with variable rate planting prescriptions and nitrogen monitoring tools.

## Conservis

*United States*

<http://conserviscorp.com>

Conservis provides farm management software to help you see your operation from the dirt up. Track field activities, manage inventories, and analyze yields. The Conservis platform connects your information to manage your progress today and harvest opportunities ahead.

## Countryside Data

*United States*

[www.countrysidedata.com](http://www.countrysidedata.com)

Specializing in accounting and payroll for farmers, ranchers, contract labor firms, and agribusiness. Great I-9 tracking. Pay by piece, hour, salary, or commission.

## Crop Production Services

*United States*

[www.cpsagu.com](http://www.cpsagu.com)

Crop Production Services, Inc. operates a chain of retail outlets that sell agriculture products in the United States and Canada. It offers crop protection products and advice; fertilizers and nutritionals, including liquid, bagged and bulk dry, custom-blended, specialty, and granulated fertilizers, as well as lime and landplaster, lawn and garden, and fertilizer materials; seeds; and Echelon, a precision agriculture solution that provides analysis and advice to help users interpret data, as well as agronomists to help make recommendations to improve returns for growers. The company also provides soil and tissue sampling, field scouting, and application services.

## CropIn Technology Solutions

*India*

<http://cropin.co.in>

Cropin provides Farm-Businesses/Growers with farm management software and mobile apps, which enable them to do connected, and data driven farming. It allows them to take advantage of real time data and insight from farms (an accurate view of their operation throughout the entire growing season) and to improve financial, operational, and agronomical aspects.

## Decisive Farming Corp.

*Canada*

[www.decisivefarming.com](http://www.decisivefarming.com)

Provides a comprehensive data platform that serves as the primary operating system for farmers including Farm Management for improved performance and compliance reporting, Precision Agronomy to drive better yields through variable rate technology, and Crop Marketing/Risk Management to grow farmer revenue with near real-time margin tracking.

## eFarmer

*The Netherlands*

<http://efarmer.mobi>

eFarmer is working hand in hand with our clients to incorporate technological innovations and make farming more productive and efficient. Since 2006, we have nurtured and developed our idea — to create and spread smart agriculture innovations. With our technological, farming, and entrepreneurship talent we create user-friendly precision farming solutions for family farms around the world. We facilitate farmer-to-farmer collaboration, efficient use of natural resources, and work/life balance.

## EFC Systems

*United States*

[www.efcsystems.com](http://www.efcsystems.com)

EFC Systems delivers a com-

prehensive software offering to manage precision, agronomic planning, and sustainability solutions for Ag retailers. FieldAlytics is our cloud-based field data management platform that handles all aspects of field level data, asset tracking and a work order processing. In order to improve farmer / customer profitability, FieldAlytics is integrated to our agronomic planning and sustainability tools powered by AgSolver. FieldAlytics is also integrated to our backend financial / E.R.P. solution Merchant Ag.

## Encirca (Pioneer)

*United States*

[www.pioneer.com](http://www.pioneer.com)

ENCIRCA STAND SERVICE

— Every farm is unique and every field is variable. Continuous seeding rates on variable ground can potentially limit yield due to under-seeding or over-seeding. Getting the most from your seed investment requires matching rates with differing productivity areas within the field.

ENCIRCA NITROGEN SERVICE

— Nitrogen is a critical input in farming and one of the most difficult to manage. Soil variability and weather uncertainty make it hard to know where and when nitrogen is needed in your fields. Encirca Nitrogen service provides real-time and future nitrogen levels for all your fields.

ENCIRCA FERTILITY SERVICE

— Soil fertility inputs, such as phosphorous, potassium, and lime, are a significant investment in your operation. Many growers take a blanket approach and inevitably under-apply or over-apply, limiting their return on investment. The Encirca Fertility service provides valuable recommendations to help you get the most from your investment.

ENCIRCA VIEW SERVICE —

Accurate, real-time information is critical to managing any farm operation. Gathering and analyzing information for weather, grain markets, news, and input costs from a variety of sources,

however, can be overwhelming. That's why Pioneer has teamed up with DTN/Progressive Farmer to create Encirca View service.

ENCIRCA SYNC SERVICE — Encirca Sync Service makes it easy to put your data to work, so you can make data-driven decisions to help boost profits. Within the service, you can easily transfer field data and prescriptions to leverage your operation's data in a whole new way.

## Esri

*United States*

[www.esri.com](http://www.esri.com)

ArcGIS is a complete mapping & analytics platform with ready-to-use applications to unlock the wealth of information in your agriculture data. The power of ArcGIS creates deeper understanding, through visualization of spatial data. It is used to create actionable information by gaining an understanding of relationships across all your data. Our solution leverages configurable apps, so customers gain immediate return on investment, however, if you need a solution tailored for a specific need there are extensive options for customization to build that unique mapping, visualization, or analysis software application on any device regardless of your development experience. ArcGIS gives you the ability to easily create, use, and share maps and analysis on any device, anywhere, anytime.

## Famous Software

*United States*

[www.famoussoftware.com](http://www.famoussoftware.com)

Famous Software LLC develops, markets, installs, customizes, and supports industry-specific, integrated enterprise solutions for agricultural and produce industries. It offers products in the areas of produce traceability initiative-style case tagging, APIs, financials and banking, cost accounting, purchasing and accounts payable, payroll, billing, order management, multiple currencies, inventory and warehouse, shipping

management, invoicing and AR, grower accounting, RFID tag printing, forms printing and design, report administration, food safety/traceability, mobile, and business intelligence. The company also provides custom development/programming, consulting, training, network, integration, and software support services.

## Farm Dog

*Israel*

**[www.farmdog.ag](http://www.farmdog.ag)**

Farm Dog is a software management platform that helps growers optimize pesticide treatments. The end-to-end decision support system provides growers and their agronomists with in-field scouting tools, treatment decision support, efficacy analyses, and communication tools. Farm Dog is suitable for large teams as well as small ones, integrates with John Deere Operations Center, and is optimized for offline use.

## Farm Works (Trimble)

*United States*

**<https://agriculture.trimble.com>**

By combining three cutting-edge ag software platforms — Connected Farm, Farm Works Software, and Agri-Data Solutions — into one powerful end-to-end ag solution, Trimble Ag Software drives productivity, profitability, and sustainability. It's a revolution in online and mobile-enabled farm data management that is transforming the way ag professionals work.

## FarmBrite

*United States*

**[www.farmbrite.com](http://www.farmbrite.com)**

Farm Bookkeeping and Accounting, Animal and Livestock Record Keeping, Crop Planning and Tracking, Farm Planning, Management and Scheduling, Tools and Equipment Record Keeping, Customer and Contact Management, Custom Online Farm Website and Store.

## Farmdok GmbH

*Germany*

**[www.farmdok.com](http://www.farmdok.com)**

Farmdok is the simple agricultural software for crop records in agriculture. It consists of a smartphone app for recording actions directly on the field and a web client for evaluating, managing, and creating reports.

## Farmers Edge

*Canada*

**[www.farmersedge.ca](http://www.farmersedge.ca)**

Farmers Edge specializes in data science, precision agronomy, GIS, hardware engineering, software development, soil science, and sustainability. By remaining an independent and unbiased company, Farmers Edge supports growers around the world by providing industry-leading VRT, field-centric data management and analysis, along with reliable boots-on-the-ground support.

## FarmLogic

*United States*

**[www.farmlogic.com](http://www.farmlogic.com)**

FarmLogic is a web-based farm record keeping system. Easy to use and essential farm management software, FarmLogic puts farm records, soil sampling, crop scouting, equipment maintenance records, tank mix calculator, and gps field mapping when and where you need it. FarmLogic is designed for use in the field on your mobile device or office desktop computer.

## FarmLogs

*United States*

**<https://farmlogs.com>**

AgriSight, Inc., doing business as FarmLogs, provides online farm management software solutions for farmers worldwide. It offers FarmLogs Standard, FarmLogs Advantage, FarmLogs Prescriptions, and FarmLogs Flow software tools that offer a range of solutions, such as field mapping, crop health monitoring, rainfall tracking, activity tracking, nitrogen monitoring, scouting and notes, yield maps,

soil composition maps, variable rate nitrogen/seed prescriptions, input planning, inventory management, and growth stage analysis.

## Granular

*United States*

**<http://granular.ag>**

Granular powers the world's most efficient farms. The company's cloud software and analytics platform helps farmers become more efficient and make better business decisions. Granular is headquartered in San Francisco and is backed by premier Silicon Valley investors Andreessen Horowitz, Google Ventures, and Khosla Ventures.

## iCropTrak

*United States*

**<https://icroptrak.com>**

We create Farm software that focuses on using technology to improve customer efficiency in data collection, management, reporting, and results. CropTrak offers high performance, flexible, commercial farm framework software to land managers, growers, consultants, and food companies that helps them be more efficient in collecting, protecting, and reporting field, crop, and food data.

## iFood Decisions Sciences

*United States*

**[www.idsfoodsafety.com](http://www.idsfoodsafety.com)**

iFood Decision Sciences develops dynamic data management software solutions for growers, harvesters, coolers, packers, processors, and shippers. The company works extensively with companies and associations across the produce industry and constantly evaluates and refines software to meet our client's ever-evolving data needs.

## Intelligent Wireless Networks, Inc.

*United States*

**[www.intelligentwirelessnetworks.com](http://www.intelligentwirelessnetworks.com)**

Intelligent Wireless Networks, Inc. is a provider of rural WiFi networks, applications, and software to support precision farming. We design, build, monitor, and maintain our proprietary wireless networks in the agriculture and entertainment venue industries. Our networks bridge the gaps left behind in rural communities and the high-density urban communities. While the tech world frantically works on the newest application and device, we focus on the overlooked need for robust networks that these gadgets and gizmos are designed to operate.

## ISAGRI

*France*

**[www.isagri.com](http://www.isagri.com)**

ISAGRI SAS, develops farm management software solutions for agriculture and wine industries. It offers field, livestock, swine, and vineyard software solutions; and arable farms, specialized crops, beef and dairy cattle, pig production, and financial management solutions.

## JustFoodERP

*United States*

**<http://justfooderp.com>**

JustFoodERP delivers software and services to food processors and distributors. Our trusted food experts help your company lower costs, improve food safety. JustFoodERP delivers software and services for the food industry. Our trusted food experts help your company lower costs, improve food safety, and manage compliance to keep customers successful. They do this by matching up the best software technology with the best business processes. Their food industry experts have built a product roadmap that takes you where you want to grow.

## Landmapp

*The Netherlands*

**[www.landmapp.net](http://www.landmapp.net)**

Landmapp is a mobile platform that provides smallholder farmer families with documentation

of their land. We also provide them a profile with which they can access services that are precisely tailored to their circumstances.

## LinkFresh

*United Kingdom*

**www.linkfresh.com**

LINKFRESH Software Limited provides software and information technology consulting services. It offers LINKFRESH, an ERP application that provides a business management system for fresh food sector; a supply chain solution for fresh produce growers, packers, and shippers to manage production, distribution, and marketing through to the point of sale; and supports recipe and packaging requirements of beef, poultry, pork, and fish processing enterprises, as well as egg processors. The company also provides solutions in the areas of Microsoft Dynamics NAV, mobility, and ISV solutions. Its services include consultation services, deployment and development, support services designed to keep systems operational, and customer care and cloud services.

## MapShots

*United States*

**www.mapshots.com**

MapShots is a software development company specializing in crop management applications for agriculture. Their flagship product, EASi Suite, a desktop software application, is a complete crop management software package, providing crop planning, crop recordkeeping, and GIS/Precision Ag functionality. Their customer base includes growers, crop consultants, crop insurance agents, independent fert-chem retailers, and farm supply cooperatives.

## MimosaTEK

*Vietnam*

**https://mimosatek.com**

We are fully aware that the current agricultural practices in Vietnam are still very manual and mainly experience-based rather

than scientifically-proven. Despite their high costs and risks, the farmers' efforts do not always result in high crops yield. If environmental factors and needs of plants can be measured precisely in real time, it will provide the ideal basis for farmers to take proper care of their crops. Therefore, we use this principle as the foundation of precision agriculture which aims to help farmers to operate sustainably by optimizing yield while cutting cost and reducing risks.

## OnFarm

*United States*

**www.onfarm.com**

OnFarm was born as a unique farm management tool that displays and analyzes data from many different sources in a single, easy-to-use application. More importantly, it turns that data into valuable information, aiding growers and their trusted advisors in making sound, science-based decisions in near real-time.

## PickTrace

*United States*

**http://picktrace.com**

Field collection software and hardware for capturing, storing, and sending real-time workforce production data at massive scale.

## Plan2Profit Agri (P2P Agri)

*Australia*

**http://p2pagri.com.au**

We are one of Australia's leading farm training and advisory services, providing farm business management support, training, and consulting to Australia's agricultural and agri-business industries. The basis of our training and support is the software program P2PAgri. This program, originally called 'Plan to Profit', has been developed by Mike Krause, a Farm Business Management consultant with over 30 years' experience working with farmers, viticulturists, pastoralists, and agri-business.

## Produce Pro Software

*United States*

**www.producepro.com**

Produce Pro is a comprehensive enterprise resource planning (ERP) solution that helps companies of all sizes increase their organizational efficiency, minimize waste and loss, and grow revenue. Our integrated approach seamlessly connects traditional, core ERP functionality with our complete suite of Produce Pro add-ons, from slick mobile apps to robust warehouse management solutions. There's no need for complicated, expensive interfaces: our tools are already designed with the ability to communicate with each other in real time.

## Red Wing Software

*United States*

**www.redwingsoftware.com**

Red Wing Software, Inc. develops and integrates accounting, agriculture, business management, and payroll software for small- to mid-sized businesses, agribusinesses, and producers in North America. It offers CenterPoint Accounting Software, a financial accounting software with customization capability and reporting options; TurningPoint, an accounting and inventory management software; and CenterPoint Accounting for Agriculture to manage farm's finances and profitability with software specifically for agriculture.

## Rezare Systems

*New Zealand*

**www.rezare.co.nz**

Rezare Systems is an established and growing company that provides ideas, guidance, software, and product development expertise for those working in the agricultural sector.

## SageInsights

*United States*

**www.sageinsights.com**

**www.MyAgCentral.com**

SageInsights is a wholly owned subsidiary of DN2K. This new company was formed to initially

serve the agriculture industry utilizing software solutions that fuels unparalleled results. The data management platform for agriculture, myAGCentral, streamlines the business management process and exposes insight for ag retailers and service providers. This customer-centric platform aggregates and simplifies data, bringing value to every agribusiness engagement.

MyAGCentral is a software solution designed to bring value to every agribusiness interaction. Its outcomes-based, ever-evolving technology fuels improved productivity, efficiency, and profits. Our comprehensive platform consolidates ag data to empower you with the right information, so you can make the most of your one-on-one conversations with growers. Because it supports the operational details, myAGCentral enables you to focus on what truly matters: building valued relationships. Simply put, it's a streamlined solution that benefits your business and your growers, allowing you to do more of the things that matter. Designed for business, connected for growth.

## SciCrop

*Brazil*

**https://scicrop.com**

AgroAssist: Solution to manage all of your property data, monitor productivity, get news and commodities prices, obtain real-time hyperlocal climate forecasts, and enjoy a personalized administrative / financial assistant. WebFarms: White label platform for online and integrated customer portfolio management, risk evaluation for agricultural credit, farm data search, and market intelligence. Allows remote productivity monitoring, real-time climate risk assessment, and customized reports and data from the agricultural sector. Sputnik AgroStation: Agro-meteorological station for remote collection of hyperlocal climatic and soil data through installation in the



rural property, providing accurate and customized decision making.

## ScoutPro

*United States*

**www.scoutpro.org**

ScoutPro, Inc. develops agricultural applications for smartphone, iPad, and other tablet devices. It offers ScoutPro, an application that allow users to scout and identify weeds, insects, and diseases, as well as to manage crop scouting reports; ScoutPro Corn, a mobile field scouting application for farmers and agricultural industry professionals; and ScoutPro Corn — Consultant and ScoutPro Soy — Consultant, mobile field scouting applications for agricultural consultants.

## SIGA Farm Software

*Canada*

**www.siga.net**

SIGA Farm Software develops and sells farm management software. The company offers a suite of management software packages for accounting and business management, dairy and swine herd management, least cost rations, field and crop management, and fertilization applications. It provides Siga-Finance, a tool for enterprise finance management; SigaField, a field and crop management tool; SigaDairy, a tool for dairy herd management; SigaBeef, a tool for least-cost beef rations; and SigaPig, a swine herd management tool. The company also provides technical support services.

## Siseth

*Poland*

**http://en.siseth.com**

Depending on the customer's needs, we provide in-house, individually designed desktop and mobile solutions, as well as increasingly popular SaaS solutions, which require no IT infrastructure investments and are ready to use 'as is.' We design both complex IT systems for corporate clients and

small-scale solutions for small and medium businesses. Our extensive knowledge is used by a variety of industries ranging from heavy production to transport and logistics to agriculture, food, and tobacco.

## SMAG

*France*

**www.smag-group.com**

SMAG develops information systems for farming and agroindustrial sectors. One of the major challenges in the farming sector today is to find the right balance of economic performance and ecological efficiency. SMAG focuses both on developing Web solutions for managing and generating value from agronomic data, and on offering custom agro-environmental services that enable every individual operation to optimize its farming practices.

## Software Solutions Integrated

*United States*

**www.agvance.net**

With a fully integrated and modular approach, Agvance helps you manage your business more effectively with a single software solution. With everything from an accounting system to wireless inventory technology and mobile sales tools, Agvance puts the power in your hands to access information, visualize opportunities, and grow your business like never before.

## SOYL

*United Kingdom*

**www.soyl.com**

SOYL provides mySOYL a web based platform for growers and advisors to view and analyze multiple layers of precision farming data including soil samples, satellite imagery, soil zones and yield data. The platform supports growers who use SOYL's precision agronomy services in a number of European countries. iSOYL for iPad brings variable rate application to an iPad whilst field scouting is made simple

with our iSOYLscout app. Our vision is Making Every Hectare Count, these tools help facilitate just that

## Specialized Data Systems

*United States*

**www.farmbiz.com**

Farm Biz uses a specially designed chart of accounts for Farm and Ranch businesses. No debits, credits, or knowledge of complex accounting practices are needed to get started. It works like magic. Farm Biz is highly recommended by Farm and Ranch Management Instructors as the most cost effective software to use. My Field and Crop monitors your Seed, Fertilizer and Chemical costs by crop, field, and per acre. The user simply sets up the fields; all other information can be added on the fly. Utilizes FSA or Google Earth Maps. Chemical tank mix formulations. The software is EPA compliant. Break-even analysis reports by crop or field. Multiple year history. Complete program now with What-If Planning for input costs, anticipated yields, and prices to determine the break-evens by field and crop. Ultra Farm is a cash farm accounting system with integrated Payroll, Enterprise Analysis, and Perpetual Inventory. Reports include Cashflows, Crop Break-even, Livestock Analysis, Balance Sheet with supporting schedules, Schedule F, and more. Check Writing, Payroll, 1099's, and W-2 Information Returns are also prepared with Ultra Farm.

## Spokane Software

*United States*

**www.sssonline.com**

The Spokane System is a leading agricultural ERP system for the grower, packer, and shipper of agricultural products throughout the U.S. for over 37 years. Spokane's PackPoint module is the answer to the Produce Traceability Initiative PTI and Global Trade Item Number

GTIN requirements. PackPoint is feature-rich with real-time detailed packer and product information, including a payroll interface. Spokane Software develops platform-independent clients that take full advantage of the latest desktop technology and applications that utilize IBM Power Systems technology for reliability, performance, and ease of use. The resulting solutions are powerful, fast, easy to use, and comprehensive. In addition to full-featured, ready to run applications, we provide custom modifications and enhancements. Users of the Spokane System applications enjoy the benefit of a product that evolves with the industry and their business.

## SST Software

*United States*

**www.sstsoftware.com**

To provide decision support tools that help farmers, worldwide, achieve long-term sustainability. LOCATION: Collect and store geospatial data. STANDARDIZATION: Standardize data content. CENTRALIZATION: Centralize data in the cloud. AUTOMATION: Automate geospatial information and products. COMMUNICATION: Communicate products to all stakeholders.

## Strider

*Brazil*

**www.strider.ag**

Strider, a mobile application and a geo-based big-data engine that reduces the usage of pesticides based on actionable information. Its application enables user to monitor pests, diseases, and weeds; view areas affected by pests and weeds, find blind areas and routes, and control scouting; and monitor the effectiveness of sprayings over pest population, and control tank mixture, as well as maintain track/record date, time, site, crop protectants used, and climate conditions.



**Trecker***Germany***www.trecker.com**

Trecker is a SaaS-based platform for the agriculture industry. It enables farmers and contractors to cover their administrative needs.

**VitalFields***Estonia***www.vitalfields.com**

VitalFields is a digital agriculture company that offers an easy-to-use farm management system for farmers to plan, manage and analyze their field activities, including simplified tracking and reporting of all crop inputs to help ensure compliance with European Union environmental standards. Note: Acquired by The Climate Corporation which is now a Div. of Monsanto.

**WinField United (Land O'Lakes, Inc.)***United States***www.winfieldunited.com**

WinField United, the crop inputs and insights business of Land O'Lakes, Inc., works with nearly 1,300 locally owned and operated cooperative and independent agricultural retailers to help farmers unlock the greatest potential of every acre. An insights company with agriculture at its core, WinField United provides proven products, data, technology tools and agronomic expertise that turns even the smallest detail from the field into actionable insights to help farmers achieve predictable, sustainable outcomes.

**Zoner (Bayer)***Germany***https://zoner.bayer.com**

Zoner includes a comprehensive range of organizational and analytical functions, and provides an unprecedented opportunity for georeferenced data storage and analysis:

1) Organization and storage of raster and vector data for agricultural enterprises, farmers, consultants, and government

organizations;

2) Assessment of land resources (determination of field fertility and field area);

3) Analysis of field variability and the delineation of areas within the field for variable rate (VR) fertilization, VR seeding, and site-specific application of pesticides using multiple sources of data;

4) Planning soil sampling points for zone sampling and navigation route;

5) Assessment of current crop conditions;

6) Current weather monitoring and forecast of crop disease;

7) Creation of prescriptions for VR fertilization, seeding, and site-specific application of pesticides.

**DATA-ANALYTICS PLATFORMS****Agralogsics***United States***http://agralogsics.com**

Agralogsics is making layers upon layers of pixelated geospatial data easily and instantaneously accessible for the food ecosystem.

We are on the road to giving the food ecosystem:

- 1) Easy access to public and personal data;
- 2) Intuitive data visualization and insight;
- 3) Actionable intelligence to drive decisions;
- 4) Indispensable predictive analytics capabilities.

**Agribile***United States***www.agribile.com**

At Agribile, we're leading the field by researching every acre of it. We create predictive analytics tools by growing digital crops. Through our software, growers get field-level insights to help them make the best decisions possible for their farm and improve production, that's "The insight to decide."

**Agrilyst***United States***www.agrilyst.com**

Agrilyst is the intelligence platform for indoor farms, and helps greenhouse operators run their operations more efficiently by pulling in data from sensors in the greenhouse and information about crop yields and other metrics.

**Agronóstico***Uruguay***www.agronostico.com**

All your production information in one place. Spend more time on your production and less on planning. Predict: Know how your crop will respond to changes in planning (changes in seeds, fertilizer, and planting). Optimize: Personalized recommendations for each plot to maximize your profitability. Optimally plan each harvest. Monitor: All your crop information in one place. Meteorology. State of the soil. State of cultivation. Satellite images.

**agX (SST)***United States***www.agxplatform.com**

agX Guiding Principles: Standardization — In order for multiple applications to collect and share data on a consistent basis, all data must be collected in a standardized format. This standardization includes reference data as well as spatial records, such as field boundaries.

Synchronization — Synchronization with a central data repository ensures that all data collected is in adherence to agX standards and is available for sharing among agX compliant applications in a seamless manner.

Automation — Once standardization and synchronization are in place, repetitive human interaction for processing data may be replaced with automated processing of pre-defined tasks.

Communication — Seamless communication is necessary

between all users who have an interest on a particular field. This communication is safe-guarded by data-specific permission settings.

**aWhere Inc.***United States***www.awhere.com**

aWhere delivers agricultural intelligence into the hands of farmers, commercial growers, commodity traders, and policy makers everywhere. aWhere operates a global-scale agronomic modeling environment with immense processing capacity that collects over seven billion points of data every day to create unprecedented visibility and insight across the agricultural earth. aWhere is helping to transform how agricultural decisions are made by providing a level of visibility and insight that has never existed before. aWhere collects and analyses over a billion points of data from around the globe each day to create unprecedented visibility and insight known as Agricultural Intelligence, critical decision making from farm level through to national policy.

**ClearAg (Iteris)***United States***www.clearag.com**

The ClearAg Platform combines weather and agronomic data with proprietary land-surface modeling and machine learning to solve complex agricultural problems. Companies use the ClearAg Platform to simulate field conditions and determine how new products may perform on a crop given certain weather and soil conditions. Growers leverage the ClearAg Advisories to determine best times to plant, spray, fertilize, and harvest.

**CropZilla***United States***https://cropzilla.com**

CropZilla is software for farm resource planning and operations. Our farmers are able to design and plan their planting, growing

season, and harvest by testing resource allocation in multiple operating scenarios. We help our customers make intelligent decisions to improve their operational efficiency and ultimately their profitability. CropZilla is provided as SaaS with subscription costs calculated based on acreage.

## ec2ce

*Spain*

**www.ec2ce.com**

Decoding the future by advanced math modeling of Big Data and market knowledge to create and model different output scenarios by utilizing sophisticated machine-learning methodologies, which include proprietary association rules and fuzzy logic algorithms to predict the evolution of a given target, with applications in smart-agro and e-health. ec2ce has developed a tech tool that applies AI to the ag-tech sector (smart-agro), providing predictions of the evolution of yield parameters, fertilizer management, irrigation, and spread of pests from all the agricultural data from different sources, facilitating farmer decision making. The models provide predictions and optimization involving intelligent tools for data processing, providing smart solutions for decision making in the agricultural sector. That is what we call decision agriculture, the next step from precision agriculture

## Esri

*United States*

**www.esri.com**

ArcGIS is a complete mapping & analytics platform with ready-to-use applications to unlock the wealth of information in your agriculture data. ArcGIS makes geospatial analysis much faster through the power of distributed computing. Now you can analyze and make sense of massive datasets in minutes or hours, not days. ArcGIS works as an optimizer, significantly improving the processing time for very large and detailed data-

sets. Need a custom software application? Build it with our extensive customization options to create that unique mapping, visualization, or analysis app on any device regardless of your development experience. ArcGIS gives you the ability to easily create, use, and share maps and analysis on any device, anywhere, anytime.

## FarmLink

*United States*

**www.farmlink.com**

FarmLink is the first company to present farmers with objective data that allows them to understand the full range of performance potential for their entire portfolio, down to the field, zone, and micro-field level. We are data analytics people who have found a unique way to analyze the harvest and turn it into useful data for farmers everywhere.

## FluroSat

*Australia*

**www.flurosat.com**

FluroSat is an ag tech company diagnosing crop performance using satellite and drone imagery. We collect multi-/hyperspectral images of the crop using drones and satellites, identify the stressors limiting the yield potential and produce recommendations to a farmer. We advise growers where, when, and how much fertilizer, fungicide, and water to apply. Our insights help farmers significantly save money on input costs and improve yields. Combined improvement in agricultural efficiency is estimated at 5-25% of the yield.

## Fruition Sciences

*United States*

**https://fruitionsciences.com**

Fruition Sciences provides wine-makers and grape growers with a holistic plant-based decision tool to optimize the quality of their grapes. The tool can be accessed from a desktop, laptop, or mobile phone via a standard web browser. Using

proprietary algorithms, sap flow and weather data are analyzed and processed to compute three parameters: reference evapotranspiration, plant transpiration, and vine stress. Users can connect, integrate, and overlay vineyard information using the web-based application. Sap Flow Sensors are installed in the vineyard to identify how the vineyard is transpiring and responding to the weather; a wireless network is added to sensors to allow automatic data retrieval, which is done every 15 minutes and transmitted in real time; and the weather and sap flow data are routed to a central server where the data is stored.

## MyAgData

*United States*

**www.myagdata.com**

MyAgData is a cloud-based application that automates the data collection and reporting process required by the U.S. Department of Agriculture (USDA) to satisfy obligations for crop insurance and Farm Service Agency (FSA) program participation.

## Onsite/Agintegrated (Deere)

*United States*

**www.agintegrated.com/onsite-platform**

**www.agintegrated.com**

Incompatible software and data. Dozens of proprietary equipment file formats. Inefficient data collection and file transfer. Inadequate data file storage and sharing. Our solution to these challenges: Onsite.

The Onsite technologies enable the flow of information between disparate systems (software, data, and equipment) and empowers the network of individuals that work with them. As a service provider or software vendor, do you need an out-of-the-box solution to complement and improve the efficiency of the precision ag software products you deploy? Onsite Out-of-the-Box Technologies apps streamline the collection of as-applied,

as-planted, and yield files, facilitate the transfer of prescription files to equipment in the field, and centrally organize/share files so you can focus on what you do best. We know how important your brand is to you and your customers so all of these apps can be white-labeled with your branding.

## Praedictus Climate Solutions

*United States*

**http://praedictus.com**

Praedictus Climate Solutions has developed new software tools that provide more accurate and timely projections of crop yields than current approaches.

## Premier Crop Systems

*United States*

**www.premiercrop.com**

Premier Crop Systems (PCS) was built on the foundation that growers were not able to realize the full potential of their agronomic data. Recognizing that the future of crop production would be driven by the analysis of a grower's field data, our system was built to help growers realize the potential of their data. Premier Crop Systems quickly identified that in order to increase yields, it was necessary to efficiently identify problems AND produce solutions based on smart agronomy. Our program has evolved into a comprehensive approach to crop production, integrating fertility, seeding, management systems, and the analytical horsepower to 'dig deeper' into the data. Now growers can identify problems, implement solutions, and measure their effectiveness to continually improve upon their agronomic practices.

## Prospera Technologies

*Israel*

**http://prospera.ag**

We develop computer vision technologies that continuously monitor and analyze plant health, development, and stress.

Our technology captures climate and visual data from the field and provides actionable insights to growers via mobile and web.

## SOYL

*United Kingdom*

**www.soyl.com**

SOYL provides mySOYL a web based platform for growers and advisors to view and analyze multiple layers of precision farming data including soil samples, satellite imagery, soil zones and yield data. The platform supports growers who use SOYL's precision agronomy services in a number of European countries. iSOYL for iPad brings variable rate application to an iPad whilst field scouting is made simple with our iSOYLscout app. Our vision is Making Every Hectare Count, these tools help facilitate just that

## Via Science

*United States*

**www.viascience.com**

Via Science creates software applications that identify and prioritize risks to critical infrastructure using a combination of high-performance computing, machine learning, and causal analytics.

## WinField United (Land O'Lakes, Inc.)

*United States*

**www.winfieldunited.com**

WinField United, the crop inputs and insights business of Land O'Lakes, Inc., works with nearly 1,300 locally owned and operated cooperative and independent agricultural retailers to help farmers unlock the greatest potential of every acre. An insights company with agriculture at its core, WinField United provides proven products, data, technology tools and agronomic expertise that turns even the smallest detail from the field into actionable insights to help farmers achieve predictable, sustainable outcomes.

## EQUIPMENT

### AG Express Electronics

*United States*

**www.agexpress.com**

Ag Express provides services and support for a wide variety of electronic and electro/mechanical devices. We can offer component level repair of an individual customer's unit, or, remanufacture and rework hundreds of units for an OEM or an Electronic Manufacturer. From through hole technology to high population fine pitch surface mount, from simple units to complex industrial units.

### AGCO Global Technologies

*United States*

**www.agcocorp.com**

AGCO is a global leader in the design, manufacture, and distribution of agricultural equipment. Through well-known brands including Challenger, Fendt, GSI, Massey Ferguson, and Valtra, AGCO Corporation delivers agricultural solutions to farmers worldwide through a full line of tractors, combine harvesters, hay and forage equipment, seeding and tillage implements, grain storage and protein production systems, as well as replacement parts.

### Agri-Tronix

*United States*

**www.agritronixcorp.com**

Agri-Tronix is your source for agricultural electronics. Specializing in planter monitors, scale systems, tractor pulling electronics, and more.

### Ally Precision Industries

*United States*

Ally Precision Industries is an American company that integrates the best components in the world to create precision agriculture products with superior functionality and ease of use. Integration with the best of the business also brings

together reliability, feature sets, and flexibility. API was formed by industry leaders in Mobile Electronics, Hydraulics, and Telematics.

### Arvus Tecnologia SA

*Brazil*

A subsidiary of Hexagon AB, Arvus Tecnologia develops solutions in the areas of agriculture and forestry precision through the sale of equipment (hardware with embedded software) and services. It has equipment installed in large enterprises of pulp and paper, as well as large farms such as those of rice, soybean, corn, beans, cotton, and sugarcane.

### CapstanAG Systems

*United States*

**www.capstanag.com**

CapstanAG, a technology-based company, specializes in creating proprietary systems for the agricultural industry, primarily focusing on chemical and fertilizer applications. Headquartered in Topeka, Kansas, Capstan AG's inventive process involves research, engineering, design, and lab and field testing. CapstanAG maintains strong ties to numerous university agricultural departments across North America, and company professionals regularly work with other industry experts.

### Case IH

*United States*

**www.caseih.com**

Case IH is a global leader in agricultural equipment. With headquarters in the United States, Case IH has a network of more than 4,900 dealers and distributors that operates in over 170 countries. Case IH is committed to collaborating with our customers to develop the most powerful, productive, reliable equipment - designed to meet today's agricultural challenges - like feeding an expanding global population on less land, meeting ever-changing government regulations, and managing input costs. The Case IH lineup

includes combines, tractors, sprayers and floaters, planters and seeders, tillage equipment, specialty harvesters for cotton, sugar cane, and coffee, balers and hay tools, and precision farming tools and technology.

### DICKEY-john

*United States*

**www.dickey-john.com**

DICKEY-john has been revolutionizing electronics for more than 50 years. Customers look to Dickey-john for market-leading monitors, controllers, moisture testers, ground speed sensors, and a variety of other systems used in agricultural, public works, and analytical markets. Today, Dickey-john has extensive expertise in the areas of engineering and manufacturing. Continuous research and customer partnerships help us develop the latest technological advances in designing precision instrumentation. And our highly-integrated manufacturing is performed in an ISO 9001:2008-certified facility. Customers range from individual farmers to original equipment manufacturers (OEMs). No matter what the size, the expectations are the same: a cost-effective, technologically advanced, precision product. This level of performance makes Dickey-john products the standard equipment for the largest OEMs in the industry.

### Farb Guidance Systems

*United States*

**http://farbgs.com**

Farb Guidance Systems provides agricultural manufacturers the technical solutions to incorporate driverless guidance and propulsion into their product lines of equipment to operate safely, around the clock, from anywhere in the world. With the use of this technology, farmers can be in control of their fields hundreds of miles away from their home, worry free, as their fields are being farmed, without a driver on the tractor, by a simple hand-held computer.



## Geometrics

*United States*

**www.geometrics.com**

Geometrics has supplied the world with rugged, portable, easy-to-use, and technologically-innovative geophysical instruments.

## Geophysical Survey Systems Inc. (GSSI)

*United States*

**www.geophysical.com**

Geophysical Survey Systems, Inc. (GSSI) is the world's leading manufacturer of ground penetrating radar (GPR) equipment. With cutting-edge products designed to address a wide range of challenging applications, the GSSI name is synonymous with unsurpassed data quality and field-proven reliability. GSSI offers the industry's broadest range of ground penetrating radar solutions - covering a range of applications from archaeology; geology and environmental; utility detection; concrete inspection; and bridge and road condition assessment.

## GeoShack

*United States*

GeoShack is North America's largest distributor of leveling, alignment, measurement, guidance, and grade control solutions to the Construction, Survey, Agricultural, Landfill, Mining, Aggregate, and Industrial markets. Our goal is to provide our customers with a total solution of quality products and services to meet their needs. Our job as the technology leader is to stay at the forefront of emerging technologies, weeding out the exceptional from the unproductive to bring you only the best.

## Hemisphere GNSS

*United States*

**https://hemispheregnss.com**

Hemisphere GNSS is a leader in high-performance satellite positioning with a strong technology foundation and a relentless focus on innovation. Building on

its powerful intellectual property portfolio, Hemisphere develops and delivers flexible, high-accuracy commercial satellite positioning products and services that enable its customers to easily and cost-effectively get the positioning solution they need.

## Intuicom

*United States*

**www.intuicom.com**

Intuicom, Incorporated is a leader in providing ruggedized wireless solutions that enhance precision GPS/GNSS applications, traffic control, transportation, and automation. Operating on all seven continents and in every possible climate, Intuicom solutions can satisfy the most demanding requirements. We offer expertise in serial, I/O, Ethernet/IP as well as GPS, GNSS, and other geo-referenced specific applications. In addition, Intuicom provides OEM products as well as custom product development capabilities to those with unique applications or requirements. Our wireless networking solutions are available in several frequency bands, including license free bands in many locations. Special frequencies are also available for government and other qualified users.

## Juniper Systems

*United States*

**www.junipersys.com**

Juniper Systems, Inc. designs and manufactures ultra-rugged handheld computers, including the Archer, Allegro MX, and TK6000 Field PCs and the brand new Mesa Rugged Notepad. Our "rock solid, field ready" handhelds are designed to survive the most demanding environments, promising safe data and worry-free workdays.

## Kinze Manufacturing

*United States*

**www.kinze.com**

Kinze is a global manufacturer of planters and grain carts. We are still family owned and operated. As farmers ourselves, we

are focused on innovation.

## Leica Geosystems

*United States*

**https://lasers.leica-geosystems.com**

Leica Geosystems has been building precision surveying equipment since 1921. In 1993, building from reflectorless technology that revolutionized land surveying, Leica introduced the first handheld laser distance meter. Even this first generation DISTO had features that went well-beyond simple "point and shoot" measurement. Take those two "on" buttons, for example. Press the upper one to measure from the front, or the lower one to measure from the back. They are the ancestors of the intelligent endpiece DISTOs use today. For over twenty years, the DISTO team has been hard at work, incorporating advancements in technology to make DISTOs smaller, lighter, more powerful, and ever more useful. In the years since that first DISTO, new products such as Lino laser levels and the 3D DISTO have been added to a long line of precision measuring equipment.

## Loup Electronics

*United States*

**http://loupelectronics.com**

Loup Electronics is proud to be of service to the Agricultural and Construction Equipment markets. The Loup Electronics product line includes Drill Monitors, Population Monitors, Blockage Monitors, Yield Monitors, Shaft Monitors, Acre Counters, and Agricultural Control Systems. Our industrial equipment includes on board wheel loader scales for a variety of construction and mining equipment including skid steers and telehandlers. Loup Electronics products are designed to perform in the harsh environment that is normal for these industries.

## LumiGrow

*United States*

**www.lumigrow.com**

LumiGrow, the leader in smart

horticultural lighting, empowers growers and scientists with the ability to improve plant growth, boost crop yields, and achieve cost-saving operational efficiencies. LumiGrow offers a range of proven grow light solutions for use in greenhouses, controlled environment agriculture, and research chambers. LumiGrow solutions are eligible for energy-efficiency subsidies from utilities across North America.

## ManPlan Inc.

*United States*

**www.manplan.net**

ManPlan Inc. is a family owned corporation engaged in providing nutrient management planning services for agriculture. We specialize in livestock industry regulations. Our web-based nutrient management planning program can record farm data and create reports for Nutrient Management Plans. Our web-based program can be customized per state requirements and integrated livestock systems to manage nutrient management data for multiple sites. We work with local consultants to develop practical nutrient and manure management plans.

## Micro-Trak Systems

*United States*

**https://micro-trak.com**

Micro-Trak Systems is an aggressive, young company, investing substantial resources internally for continued research and development. Since our beginning in 1982, we've consistently pushed beyond conventional thinking to develop better, more economical monitoring and control equipment for farming, custom application, and grounds maintenance. "Precision Farming" is a current buzz word among agricultural circles. It means carefully tailoring soil and crop management to fit the different conditions found in each field. The real value for the farmer is that he can adjust seeding rates, plan more accurate crop protection programs, perform more timely tillage, and know the yield variation within



a field. These benefits will enhance the overall cost-effectiveness of his crop production.

## New Holland Agriculture

*United States*

**www.newholland.com**

With more than a 120 year history of innovation in agricultural equipment, New Holland has been serving the needs of farmers and ranchers across North America. New Holland manufactures a wide range of equipment, including a full line of tractors; hay and forage equipment; and harvesting, crop production, and materials handling equipment. New Holland also manufactures a compact tractor line equipped with the same comfort and easy-to-use features designed for larger tractors.

## NovAtel

*Canada*

**www.novatel.com**

NovAtel's complete product line is developed to meet a wide range of accuracy and cost requirements. Providing exceptional positioning performance with leading edge technology, NovAtel receivers are known for their low power consumption and comprehensive message suites for configuration and data logging. Our product line also extends to sophisticated reference receivers which we supply to the national aviation ground networks of USA, Japan, Europe, China, and India. By searching for true innovation in RF (Radio Frequency) and digital design, signal processing, and embedded software, NovAtel continues to build its technology and product portfolio thereby strengthening its position as a true innovator and technology leader in precise positioning.

## Precision Planting

*United States*

**www.precisionplanting.com**

Precision Planting is the place for new ideas and technology

that help you achieve the best possible control of singulation, spacing, and emergence. Products: YieldSense, 20/20 Seed-Sense, AirForce, DeltaForce, RowFlow, BullsEye, CleanSweep, eSet, vSet, vDrive, Keeton Seed Firmer, PrecisionMeter, WaveVision, SpeedTube, vSet Select, vDrive Insecticide, FurrowJet, vApply HD, FlowSense, and SmartFirmer.

## Satcon System

*Germany*

**www.satconsystem.de**

We develop and distribute hardware and software for smart farming. This includes navigation systems for agriculture, machine control, and sensor technology. So that you can work as a farmer more effectively and economically.

## Sensorian

*South Africa*

**www.sensorian.co.za**

Sensorian provides unique proprietary telemetry used for the collection of data from a multitude of sensor devices. Our company is dedicated to providing technical solutions for the reading, storage and display of sensor data. Sensorian transmits collected data using the most advanced and suitable communication methods available to our clients industry. Our software platform further allows for the remote activation of devices and the setting of alerts. We offer a single location from where you can view or control various types of sensors and actuators.

## Topcon Positioning Systems

*United States*

**www.topconpositioning.com**

Topcon Positioning designs, manufactures, and distributes precise positioning products and solutions for the global surveying, construction, agriculture, civil engineering, BIM, mapping and GIS, asset management, and mobile control markets. Its primary brands in-

clude Topcon, Sokkia, Wachen-dorff Elektronik, Digi-Star, RDS Technologies, and NORAC. The Topcon Positioning Group mission is the smart integration of information and our technology to constantly improve productivity in order to create sustainable infrastructure and agriculture.

## Tripod Data Systems (TDS)

*United States*

**www.tdsway.com**

A subsidiary of Trimble, TDS (Tripod Data Systems) is a technique designed to use your handheld devices as rough as you can to make it compatible with intense external environment. They also provide the versatility in the range of friendly software for the mobile computing and for various industries as well. Also, there are GIS systems for the automation and field data collection, which are simple to use and enables users with great level of expertise to assemble correct data accurately.

## EQUIPMENT ASSET TRACKING

### AgTerra

**Technologies, Inc.**

*United States*

**www.agterra.com**

A computer software company based out of Sheridan, Wyoming that specializes in mobile and cloud based mapping and record keeping systems.

### Esri

*United States*

**www.esri.com**

ArcGIS is a complete mapping & analytics platform with ready-to-use applications to unlock the wealth of information in your agriculture data. ArcGIS gives you the ability to simultaneously tap into, analyze, and display real-time streaming data from practically any type of sensor. You can define filters and location-based analytics

that automatically refine and focus real-time data on events that matter most to you. Decide faster. Respond instantly. Need a custom software application? Build it with our extensive customization options to build that unique mapping, visualization, or analysis app on any device regardless of your development experience. ArcGIS gives you the ability to easily create, use, and share maps and analysis on any device, anywhere, anytime.

### Geoforce

*United States*

**www.geoforce.com**

With Geoforce Track and Trace solutions, agricultural producers, rental companies, contract farmers, and service providers save on input costs and improve performance through better planning and decision making. No matter your field type, crop type, or vehicle fleet, Geoforce provides critical information about your agricultural equipment so you don't have to rely on guesswork and can reduce the time and money you spend.

### HeavyConnect

*United States*

**www.heavymconnect.com**

HeavyConnect is a cloud-based collaboration platform that utilizes mobile devices to simplify the operational tasks of farming managers. It helps its users easily manage equipment tracking, work scheduling, and other activities.

### JCA Electronics

*Canada*

**www.jcaelectronics.ca**

JCA Electronics is an Electronic Integration Centre (EIC) that is able to apply the right technology, products, and services in a cost effective and timely manner. JCA specializes in the design and manufacture of electronic control systems for original equipment manufacturers (OEMs). JCA strives to not only understand the design and function of our customers' products, but also the company

that produces them. Starting with requirements and concept, next prototyping and testing the system, and then through production and service, the company's designed systems effectively blend physical and digital products. JCA's innovative devices incorporate wireless technology and machine-to-machine (M2M) communications, to enhance customer's time to market and the experience and productivity of their end users.

## New Boundary Technologies, Inc.

*United States*

**www.newboundary.com**

A global provider of IT management and remote monitoring and control solutions that help organizations become more efficient, secure, and productive. Drawing on 25 years of expertise in computer configuration and remote device management, we develop solutions and technologies that empower people to control their information technology assets and remote equipment from anywhere in the world. Specialties: M2M Technology, PC Power Management, Software Deployment, IT Asset Management, Patch Management, PC Security Policy Compliance and Enforcement, Configuration Management, VMI Solutions, and Remote Monitoring and Control Systems.

## ERP — FARM

## Ag Connections (Syngenta)

*United States*

**www.agconnections.com**

A firm specializing in the development of software for crop production management and compliance. Land.db, Land.ec and Land.db Cloud APIs.

## AgCode

*United States*

**www.agcode.com**

Ag Code, Inc. provides software solutions for agribusinesses. It offers payroll, contractor track-

ing, equipment tracking, harvest and scale, field inspection, grower management, pick code, mapping, seed tracking, grower management, pest control, budget, and billing solutions. The company also provides software as a service, integration, and mobile technology solutions.

## AgKnowledge

*United States*

**www.agknowledge.com**

With roots stretching back to 1982, TechKnowledge Associates, Inc., has established itself as an industry leading Agribusiness software and services supplier to medium and small fresh fruit and vegetable producers and distributors. The firm has successfully deployed hundreds of applications for thousands of users that have helped these companies increase market share, improve operational efficiency, and most importantly generate higher profits.

## AgriEdge Excelsior (Syngenta)

*United States*

**www.syngenta-us.com/agriedge/agriedge-excelsior.aspx**

AgriEdge Excelsior is a program that combines total-farm management with record-keeping software and personalized, on-farm support to take the guesswork out of production and profit potential. From determining a cost-benefit analysis to product selection, the program can simplify these complex challenges to help you ultimately improve your bottom line.

AgriEdge Excelsior offers:

Product portfolio — A comprehensive agribusiness portfolio of products to address yield-limiting factors throughout the year.

Advanced technology — An exclusive farm management software to better manage growers' business.

Shared risk management — A unique, cost-sharing opportunity with Syngenta to help mitigate

risk in crop production.

Outstanding service — A dedicated team of AgriEdge Excelsior professionals and support staff to help guide growers throughout the season.

## Agrinavia

*Denmark*

**www.agrinavia.com**

We focus on offering our customer solutions in both business management and precision farming. For your crop management, you can choose software products / applications in three areas:

- 1) Field planning, documentation, and optimization
- 2) Cartography and surveying
- 3) Mobile and online management of field and activities.

## AgVision

*United States*

**www.AgVision.com**

DMI Computer Technologies, known by its trademark and brand name AgVision, specializes in agribusiness accounting and inventory management software for grain, feed, seed, ethanol, fertilizer, treenuts, and other commodities. We have several hundred customers, and thousands of users, nationwide.

## BovControl

*United States*

**www.bovcontrol.com**

BovControl provides cloud-based data collection app for cattle management and livestock ranchers. Its app provides reports, graphics, and analysis of cattle.

## Conservis

*United States*

**http://conserviscorp.com**

Conservis provides farm management software to help you see your operation from the dirt up. Track field activities, manage inventories, and analyze yields. The Conservis platform connects your information to manage your progress today and harvest opportunities ahead.

## Countryside Data

*United States*

**www.countryside.com**

Farmers, ranchers, agri-business leaders, producers, and rural business have used Countryside Data's, ag-finance, bookkeeping (accounting), ag-payroll software, and support for over 31 years. Our recently updated WinOne VB 2016 is now available! Designed for Agriculture's unique needs, with a personal touch. Say good bye to Quickbooks, Red Wing, and Peachtree. Income / expenses tracked by enterprise, crop, field, head or off the farm.

## Crop Tech Solutions

*United States*

**www.croptechsolutions.com**

We understand farming operations are made up of several experienced and skilled people. We assist in planning, preparing, and implementing unique solutions specific to your farm. Our employees come from ag backgrounds and have had a hand in the development of the data management application. Your representative will learn your operation and manage data entry to aid in making profitable decisions.

## CropIn Technology Solutions

*India*

**http://cropin.co.in**

Cropin provides Farm-Businesses/Growers with farm management software and mobile apps, which enable them to do connected, and data driven farming. It allows them to take advantage of real time data and insight from farms (an accurate view of their operation throughout the entire growing season) and to improve financial, operational, and agronomical aspects.

## Cultura Technologies

*United States*

**www.culturattech.com**

Cultura Technologies provides comprehensive, proven software solutions for agribusinesses

to simplify data management, streamline processes, and improve business analysis and decision making.

## EFC Systems

*United States*

**[www.efcsystems.com](http://www.efcsystems.com)**

EFC Systems delivers a comprehensive software offering to manage all aspects of an Ag retailer. Merchant Ag is a single solution that manages Agronomy, Energy, Feed, and Grain. In order to streamline operational efficiencies, Merchant Ag is also integrated with our field data management solution FieldAnalytics.

## Esri

*United States*

**[www.esri.com](http://www.esri.com)**

ArcGIS is a complete mapping & analytics platform with ready-to-use applications to unlock the wealth of information in your agriculture data. The power of ArcGIS creates deeper understanding, through visualization of spatial data. It is used to create actionable information by gaining an understanding of relationships across all your data. Our solution leverages configurable apps, so customers gain immediate return on investment, however, if you need a solution tailored for a specific need there are extensive options for customization to build that unique mapping, visualization, or analysis software application on any device regardless of your development experience. ArcGIS gives you the ability to easily create, use, and share maps and analysis on any device, anywhere, anytime.

## Famous Software

*United States*

**[www.famoussoftware.com](http://www.famoussoftware.com)**

Famous Software LLC develops, markets, installs, customizes, and supports industry-specific, integrated enterprise solutions for agricultural and produce industries. It offers products in the areas of produce traceability initiative-style case tagging;

APIs, financials and banking, cost accounting, purchasing and accounts payable, payroll, billing, order management, multiple currencies, inventory and warehouse, shipping management, invoicing; and AR, grower accounting, RFID tag printing, forms printing and design, report administration, food safety/traceability, mobile, and business intelligence. The company also provides custom development/programming, consulting, training, network, integration, and software support services.

## Farmeron (Virtus)

*United States*

**[www.farmeron.com](http://www.farmeron.com)**

Farmeron helps farmers across the world to manage their farming data online and to do farm performance analysis using exciting statistics. By integrating Farmeron with machinery being used on farms of the world, we're able to speed up data retrieval process and ease core farming data management operations. Adding an analytics layer on top this data, Farmeron delivers statistics and reports to farmers, and these can be used to monitor production performance, adjust production plans and also for government reporting needs.

## Farmflo

*Ireland*

**<https://farmflo.com>**

Farmflo is an easy to use and cost effective web-based farm management application that allows farmers to capture information on their farm. This information is then transformed into a format that helps them farm more efficiently. It allows farmers use an Internet-connected device to capture the information real time in the field, yard, or barn, rather than in the evenings after a hard day's work.

## Farmigo

*United States*

**[www.farmigo.com](http://www.farmigo.com)**

Farmigo provides an online mar-

ketplace for consumers to find, select, and receive fresh food. Its online marketplace enables the group-buying of fresh food directly from local farms and producers.

## Flux (Agrilarity)

**[www.agrilarity.com](http://www.agrilarity.com)**

Digitisation and automation of manual processes, enabling Big Data analytics for enterprises. Flux enables your team to do what they do best — create and innovate. By digitizing all company processes, management can monitor the health of the enterprise in real time and free up resources to scale rapidly and profitably. Flux is built for you. It is designed to be completely adaptable to your on-going needs. As industry and technological changes impact your business needs, Flux will evolve in tandem. Agrilarity: Agriculture is the single greatest driver of climate change on the planet. We believe that by digitizing today's agricultural practices and then using the data to create innovations through AI analysis and automation, we can create a new, sustainable agricultural paradigm.

## GrainBridge

*United States*

**<https://grainbridge.com>**

We provide Software as a Service (SaaS) which is another way of saying we build web based software. Our flagship products help those involved in agriculture plan, manage, communicate, and trade.

## Granular

*United States*

**<http://granular.ag>**

Granular powers the world's most efficient farms. The company's cloud software and analytics platform helps farmers become more efficient and make better business decisions. Granular is headquartered in San Francisco and is backed by premier Silicon Valley investors Andreessen Horowitz, Google Ventures, and Khosla Ventures.

## IntelliFarms

*United States*

**<https://intellifarms.com>**

You may be familiar with us as IntelliAir. When IntelliAir was established, we were solely focused on developing technology to improve grain bin management and yield. Since that time, we've become an industry leader in designing grain bin management solutions to improve our customers' businesses and profitability. But it's not in our genes to stop there. We know first-hand the challenges that farmers face in this continually evolving industry. And we see opportunity to help, by bringing technology-based solutions to points across the farm. Solutions that will increase efficiency, reduce uncertainty, and maximize yield and profits.

## ISAGRI

*France*

**[www.isagri.com](http://www.isagri.com)**

ISAGRI SAS, develops farm management software solutions for agriculture and wine industries. It offers field, livestock, swine, and vineyard software solutions; and arable farms, specialized crops, beef and dairy cattle, pig production, and financial management solutions.

## JustFoodERP

*United States*

**<http://justfooderp.com>**

JustFoodERP delivers software and services to food processors and distributors. Our trusted food experts help your company lower costs, improve food safety. JustFoodERP delivers software and services for the food industry. Our trusted food experts help your company lower costs, improve food safety, and manage compliance to keep customers successful. They do this by matching up the best software technology with the best business processes. Their food industry experts have built a product roadmap that takes you where you want to grow.



**LINKFRESH***United Kingdom***www.linkfresh.com**

LINKFRESH Software Limited provides software and information technology consulting services. It offers LINKFRESH, an ERP application that provides business management systems for fresh food sector; a supply chain solution for fresh produce growers, packers, and shippers to manage production, distribution, and marketing through to the point of sale; and supports recipe and packaging requirements of beef, poultry, pork, and fish processing enterprises, as well as egg processors. The company also provides solutions in the areas of Microsoft Dynamics NAV, mobility, and ISV solutions. Its services include consultation services, deployment and development, support services designed to keep systems operational, and customer care and cloud services.

**Onsite/Agintegrated (Deere)***United States***www.agintegrated.com/onsite-platform****www.agintegrated.com**

Incompatible software and data. Dozens of proprietary equipment file formats. Inefficient data collection and file transfer. Inadequate data file storage and sharing. Our solution to these challenges: Onsite.

The Onsite technologies enable the flow of information between disparate systems (software, data, and equipment) and empowers the network of individuals that work with them. As a service provider or software vendor, do you need an out-of-the-box solution to complement and improve the efficiency of the precision ag software products you deploy? Onsite Out-of-the-Box Technologies apps streamline the collection of as-applied, as-planted, and yield files, facilitate the transfer of prescription files to equipment in the field, and centrally organize/share files so you can focus on what

you do best. We know how important your brand is to you and your customers so all of these apps can be white-labeled with your branding.

**Plan2Profit Agri (P2P Agri)***Australia***http://p2pagri.com.au**

We are one of Australia's leading farm training and advisory services, providing farm business management support, training and consulting to Australia's agricultural and agri-business industries. The basis of our training, and support is the software program P2PAgri. This program, originally called 'Plan to Profit', has been developed by Mike Krause, a Farm Business Management consultant with over 30 years' experience working with farmers, viticulturists, pastoralists, and agri-business.

**Produce Boss***United States***www.produceboss.com**

The Produce Boss Team is focused on achieving our client's Agribusiness success in sales, marketing, operations, and management. With a wealth of experience spanning over 50+ years, Produce Boss is optimizing Agribusiness, Fresh Produce, and Indoor Agriculture.

**Produce Pro Software***United States***www.producepro.com**

Produce Pro is a comprehensive enterprise resource planning (ERP) solution that helps companies of all sizes increase their organizational efficiency, minimize waste and loss, and grow revenue. Our integrated approach seamlessly connects traditional, core ERP functionality with our complete suite of Produce Pro add-ons, from slick mobile apps to robust warehouse management solutions. There's no need for complicated, expensive interfaces: our tools are already designed with

the ability to communicate with each other in real time.

**Spokane Software***United States***www.sssonline.com**

The Spokane System is a leading agricultural ERP system for the grower, packer, and shipper of agricultural products throughout the U.S. for over 37 years. Spokane's PackPoint module is the answer to the Produce Traceability Initiative PTI and Global Trade Item Number GTIN requirements. PackPoint is feature rich with real-time detailed packer and product information, including a payroll interface. Spokane Software develops platform-independent clients that take full advantage of the latest desktop technology and applications that utilize IBM Power Systems technology for reliability, performance, and ease of use. The resulting solutions are powerful, fast, easy to use, and comprehensive. In addition to full-featured, ready to run applications, we provide custom modifications and enhancements. Users of the Spokane System applications enjoy the benefit of a product that evolves with the industry and their business.

**ERP —  
PACKING |  
PROCESSING****CropIn Technology Solutions***India***http://cropin.co.in**

Cropin provides Farm-Businesses/Growers with farm management software and mobile apps, which enable them to do connected, and data driven farming. It allows them to take advantage of real time data and insight from farms (an accurate view of their operation throughout the entire growing season) and to improve financial, operational, and agronomical aspects.

**Famous Software***United States***www.famoussoftware.com**

Famous Software LLC develops, markets, installs, customizes, and supports industry-specific, integrated enterprise solutions for agricultural and produce industries. It offers products in the areas of produce traceability initiative-style case tagging, APIs, financials and banking, cost accounting, purchasing and accounts payable, payroll, billing, order management, multiple currencies, inventory and warehouse, shipping management, invoicing and AR, grower accounting, RFID tag printing, forms printing and design, report administration, food safety/traceability, mobile, and business intelligence. The company also provides custom development/programming, consulting, training, network, integration, and software support services.

**FoodLogiQ***United States***www.foodlogiq.com**

FoodLogiQ provides traceability, food safety compliance, and supply chain transparency software solutions. We help restaurant operators, food retailers, consumer packaged goods companies, and other food companies achieve end-to-end traceability while supporting safe and high quality food products across the supply chain. With FoodLogiQ's platform, food companies can build an online supplier community, onboard suppliers all at once, and stay on top of supplier audits and assessments. Manage quality incidents, report them directly to suppliers, and recoup the costs of stock withdrawals. And with lot-level traceability, see exactly where your product is at all times, especially when it matters most during an investigation.

**iSmart***South Africa***www.ismart.co.za**

iSmart, one of several suc-



successful businesses within the Digicall Group, has been operating in the mobile industry within South Africa since 2004. Initially, the business white-labelled outbound campaigns on behalf of Autopage and MTN. More recently iSmart has been responsible for running SmartMobile campaigns, including, but not limited to, the launch of a MVNO. Outbound sales agents have worked with iSmart for over 11 years, offering you great products at a fair price. iSmart has created a vibrant, dynamic, and service-oriented business. The team's dedication to training and on-going improvement enables iSmart to provide a reliable service to customers and suppliers alike. iSmart is committed to continually exceeding your expectations.

### iTradeNetwork

*United States*

**[www.itradenetwork.com](http://www.itradenetwork.com)**

iTradeNetwork, Inc. provides Web-based software that automates the supply chain for the retail and foodservice industries. It offers on-demand e-business solutions. The company's suite of workflow products include forecast/demand solutions, order management system, logistics, contract and rebate management, ad/promotional planning, trade spend optimization, data synchronization, VMI, and financial services and content. Its system streamlines the information flow between buyers, sellers, and carriers.

### N2N Global

*United States*

**<https://n2nglobal.com>**

N2N Global is an "end to end" software and services company offering SaaS based, vertically focused solutions for the food industry. Our vision is to enable the world to have a safe, affordable, reliable, and profitable global integrated food supply chain with the highest achievable quality.

### NutStar Software

*United States*

**<http://nutstar.net>**

For over 10 years Nutstar Software has been developing software for tree nuts and fruit growers. Our software "Nutware" has been designed by top leaders in the industry. With their innovations and best practices, Nutware provides a complete solution for Handlers, Processors, Cleaners, Hullers, Shellers, and Brokers.

### Produce Pro Software

*United States*

**[www.producepro.com](http://www.producepro.com)**

Produce Pro is a comprehensive enterprise resource planning (ERP) solution that helps companies of all sizes increase their organizational efficiency, minimize waste and loss, and grow revenue. Our integrated approach seamlessly connects traditional, core ERP functionality with our complete suite of Produce Pro add-ons, from slick mobile apps to robust warehouse management solutions. There's no need for complicated, expensive interfaces: our tools are already designed with the ability to communicate with each other in real time.

### Spokane Software

*United States*

**[www.sssonline.com](http://www.sssonline.com)**

The Spokane System is a leading agricultural ERP system for the grower, packer, and shipper of agricultural products throughout the U.S. for over 37 years. Spokane's PackPoint module is the answer to the Produce Traceability Initiative PTI and Global Trade Item Number GTIN requirements. PackPoint is feature rich with real-time detailed packer and product information, including a payroll interface. Spokane Software develops platform-independent clients that take full advantage of the latest desktop technology and applications that utilize IBM Power Systems technology for reliability, performance, and ease of use. The resulting solu-

tions are powerful, fast, easy to use, and comprehensive. In addition to full-featured, ready to run applications, we provide custom modifications and enhancements. Users of the Spokane System applications enjoy the benefit of a product that evolves with the industry and their business.

### WaudWare

*Canada*

**[www.produceinventory.com](http://www.produceinventory.com)**

We excel at writing and delivering software that handles functions such as produce traceability, buying and selling, inventory, production, packing, re-packing, brokerage, accounting, security, and process control. Our flagship products, PICS - the Produce Inventory Control System and WebPICS - Web-based Produce Inventory Control System - were specifically created for the fresh produce industry. We also create customized business software that is specially designed to meet individual customer needs. We develop software for traditional P.C. networks, the Internet, Intranet, hand-held devices, and touch screens.

## FIELD MONITORING SENSOR SOLUTIONS

### AGERpoint

*United States*

**<https://agerpoint.com>**

AGERpoint, Inc. provides information management solutions to growers of tree and vine based crops, insurers, investors, and others. It offers technologies that redefine data acquisition, analysis, and translation; and GroveTracker, which provides growers with critical data that gives them an understanding of their crop holdings, including statistical and photographic inventory of their groves, orchards, and vineyards.

### AgriSource Data, LLC

*United States*

**<http://agrisourcedata.com>**

Turning data into actionable intelligence that impacts your farm means more than just collecting information. Our products and services get data you can use out of your fields and into your hands when you need it.

### Apitronics, Inc.

*United States*

Provides a cloud based environmental monitoring platform for farm data collection. The company's platform is connected to a network of sensors and a hive deployed on site or cloud, which helps farmers monitor environmental conditions from home on phone, tablet, or computer allowing them to make informed management decisions. Its system is suitable for a garden, a large acre farming operation, or other environmental monitoring and automation applications.

### Arable

*United States*

**[www.arable.com](http://www.arable.com)**

Arable is an agricultural business intelligence solution founded on in-field measurements. Arable enables data-driven decisions in agriculture and natural resource management with Measurements that Matter.

### CropX Ltd.

*Israel*

**[www.cropx.com](http://www.cropx.com)**

An ag-analytics company, CropX develops cloud based software solutions integrated with wireless sensors, which boost crop yield and saves water and energy. It offers advanced adaptive irrigation software service that delivers crop yield increase, and water and energy cost saving services while conserving the environment. The company also generates irrigation maps and automatically applies the right amount of water to different parts of the same field. It serves farmers worldwide.

## Esri

United States

**www.esri.com**

ArcGIS is a complete mapping & analytics platform with ready-to-use applications to unlock the wealth of information in your agriculture data. ArcGIS gives you the ability to simultaneously tap into, analyze, and display real-time streaming data from practically any type of sensor. You can define filters and location-based analytics that automatically refine and focus real-time data on events that matter most to you. Decide faster. Respond instantly. Need a custom software application? Build it with our extensive customization options to build that unique mapping, visualization, or analysis app on any device regardless of your development experience. ArcGIS gives you the ability to easily create, use, and share maps and analysis on any device, anywhere, anytime.

## FarmQA, Inc.

United States

**www.farmqa.com**

FarmQA is a suite of industry-leading intelligence applications and devices that connects data from the best soil, plant, machine, animal, and processing applications into a single, easy-to-use dashboard. Our solutions help large-scale growers measure, analyze, adjust, and ultimately manage the whole farm with greater predictability and control.

## FarmX

United States

**www.farmx.co**

FarmX sensors measure soil, plant, and environmental variables to accurately measure water stress. Our advanced predictive algorithms deliver real-time irrigation actions.

## GroGuru

United States

**http://groguru.com**

GroGuru's sensors provide highly accurate, affordable, and reliable sensors that are easy to

install and maintain. Real-time access to data is available on mobile devices such as iPhones, iPads, and Android devices. Services such as irrigation scheduling and threshold-based alerts are supported through monthly subscription.

## gThrive, Inc.

United States

**www.gthrive.com**

gThrive is a hardware and software field monitoring solution measuring 5 key parameters and delivering that information wirelessly to your smartphone or laptop. gThrive provides more coverage, so you get more insights. It installs in minutes, quick to relocate, and wireless.

## Keedagro

India

**www.keedagro.com**

Keedagro is an Agro-Tech company introducing irrigation scheduling systems to emerging markets with the help of proprietary moisture sensor technology and cloud based models. The farmers receive actionable output on their mobile phones based on water level of their field, how much they need to water, and when they need to water via SMS alerts, Voice Alerts, and a mobile app.

## Mimosa Technology Co. Ltd. (MimosaTEK)

Vietnam

**https://mimosatek.com**

MimosaTEK provides farm management solutions for both smallholder farmers and large agricultural companies in different parts of Vietnam and for different crops. For instance, our solutions are applied for short-day plants such as vegetables and perennial plants such as black pepper, maca, citrus trees. MimosaTEK collaborates with reputational partners in irrigation infrastructure supplies, and greenhouse construction to provide complete solutions for our customers. As an agtech company, MimosaTEK keeps enhancing our solutions and

listening to customers' needs. Optimizing the solution is always at core of our strategy.

## Multi-Tech Systems, Inc.

United States

**www.multitech.com**

MultiTech designs, develops, and manufactures communications equipment for the industrial Internet of Things — connecting physical assets to business processes to deliver enhanced value. Our commitment to quality and service excellence means you can count on MultiTech products and people to address your needs, while our history of innovation ensures you can stay ahead of the latest technology with a partner who will be there for the life of your solution.

## Phytech Ltd.

Israel

**www.phytech.com**

Phytech provides growers with a decision support service to increase their yields and to optimize irrigation. The service is based on soil, climate, and innovative plant sensors which monitor the plant's growth in real-time and provide the grower critical alerts through the web and mobile applications.

## Saturas

Israel

**www.saturas-ag.com**

The Saturas stem water potential (SWP) sensor-based precision irrigation system provides a solution that combines accuracy, ease of use, and affordability. Embedding sensors in the trunk provides direct contact with water tissues for accurate and continuous water status measurement.

## Semios

Canada

**http://semios.com**

Semios prides itself in being able to set-up a robust network that allows you to place devices anywhere in your field. This means you no longer have to

worry about sim cards or data plans — let us know where you want information and we can get it for you. Semios blankets each orchard block in a mesh network — allowing us to put hundreds of devices in the field including pheromone dispensers, automated traps, soil moisture meters, or leaf-wetness devices. We continually add the best devices available on the market into our portfolio so you can connect with the information you need. Semios works with leading manufacturers of soil and temperature probes to allow you to connect different types of sensors based on your ranch conditions. Each qualified probe is guaranteed to work on the Semios portal which then identifies important water conditions such as permanent wilting point, field capacity, and maximum allowable depletion based on your crop. Information is sent across Semios' network so you don't have to manually check sensors.

## Senet, Inc.

United States

**www.senetco.com**

Senet, Inc. operates a public provider of low power wide area networks with modulation for Internet of Things (IoT) applications. It offers long distance, long range connectivity, and IoT platform services for businesses across various industries.

## Sigfox, Inc.

United States

**www.sigfox.com**

Sigfox is the world's leading provider of connectivity for the Internet of Things (IoT). The company has built a global network to connect billions of devices to the Internet while consuming as little energy as possible, as simply as possible. Sigfox's unique approach to device-to-cloud communications addresses the three greatest barriers to global IoT adoption: cost, energy consumption, and global scalability.

## Spensa Technologies Inc.

*United States*

**www.spensatech.com**

Provides pest management tools for modern agriculture. The company offers Z-Trap that provides real-time trap data from orchards by monitoring pest populations from laptop and smartphone; and MyTraps, a pest management software to track and visualize pest populations, and record pesticide applications. Its cloud-based system monitors insects in real-time allowing farmers to reduce and control the amount of pesticide they use.

## Taranis

*Israel*

**www.taranis.ag**

Taranis is a precision agriculture intelligence platform that will help you monitor your fields, make informed decisions, and then act on them. The Taranis platform is a revolutionary tool that will change the way of managing agricultural activities by analyzing farm "big data". Having all the information in one place makes it easy to communicate within the team with screen sharing and chat. Alternatively, visualize data with maps, reports, graphs, and insights. All of your valuable historic data is saved in Taranis so you can learn from year to year, insight that could otherwise be lost. Taranis lets you detect and predict problems early on and react quickly.

## Telular Corp.

*United States*

**www.telular.com**

Telular develops products and services that utilize wireless networks to provide data and voice connectivity among people and machines. Products: IoT solutions for commercial telematics, security, and bulk storage management.

## VanderSat

*Netherlands*

**www.vandersat.com**

VanderSat observes water and temperature at field scale across the globe using satellites. Every day, everywhere on earth, with unmatched accuracy. Soil moisture, the water content of the vegetation, inundation and land surface temperature. All data near real time, globally and daily without cloud interference. Our satellite data can be accessed and ingested easily through our API and viewer and is more than 500 times cheaper than ground sensors. VanderSat insights are backed by our remote sensing scientists. Currently 5000 organizations are powered by our data and services, including some of the world's leading agricultural and insurance firms.

## WaterBit, Inc.

*United States*

**www.waterbit.net**

Our patent pending, wireless, moisture sensor is 1/10th the TCO of alternate solutions, while measuring 1600X the soil volume. Additionally, unlike capacitance and TDR based sensors, it works in any soil type — including amended soils and potting soils. In addition to our moisture sensor, we also implement above-ground sensing systems to provide a comprehensive view of the farm. All our sensors are easy to install, easy to maintain, and they provide real-time soil moisture and temperature data, which we fuse with imaging, weather, soil, and crop data to create recommendations and alerts that are tightly focused on the growers' real needs.

## FMIS

## MyEasyFarm

*France*

**www.myeasyfarm.com**

Agriculture in the 21st century faces many challenges: feeding the world, with an ever-increasing demand from

emerging countries in animal and vegetable proteins; reduce its environmental footprint, participate in the fight against climate change and adapt by producing agro-ecological transition; finally provide the raw materials suitable for energy purposes, chemicals or materials by fully exploiting biomass. MyEasyFarm was founded by an experienced team of professionals in the agricultural and IT environment to meet these challenges and provide a modern tool data management and activities for farms. Easy to use, single platform, interoperability of multi-vendor hardware through ISOBUS.

## FOOD RECOVERY

### Copia

*United States*

**www.gocopia.com**

We recover and redistribute high-quality food for the people we serve. We give food with dignity. Okay world hunger, the jig is up! We've been told that hunger is a scarcity problem. The truth is: We have more than enough. The real problem? We couldn't deliver it to those who need it. Until now. Copia makes food more accessible to people in our community by redistributing surplus food to feed people in need. By reducing food waste, we save money and resources, minimize environmental impacts, and most importantly, move towards a world where everyone has enough to eat. Let's end world hunger. It's not if. It's when.

### CropMobster

*United States*

**http://cropmobster.com**

CropMobster's mission is to empower communities to transform food waste, surplus, and loss into new value, celebration, and resource efficiency. They empower their clients with the knowledge, training, and gear to harness the power of community to ignite crowdsourcing, sharing, and measurable results. And they're also, if you

haven't noticed, on a mission to have FUN! By leveraging social media and instant alerts they're able to spread the word quickly about local food excess and surplus from any supplier in the food chain, get healthy food to those in need, help local businesses recover costs, prevent food waste, and connect their community in new and fun ways. We Partner with Bold Community Leaders to Grow Inspired, High-Impact Local Food Networks.

- Drive Your "Farm to Fork" Economy for Local Farms and Food Entrepreneurs
- Engage Your Local Community to Reduce Food Waste
- Nurture Your Hunger Relief and Food Security Programs
- Spark Your Material and Resource Sharing Community

### Food Cowboy

*United States*

**www.foodcowboy.com**

Food Cowboy uses mobile technology to help food companies (throughout the supply chain) reduce their carbon footprints by routing wholesome unsaleable food to charities (anywhere in the country) and spoiled food to composters, anaerobic digesters, and other sustainable disposers, instead of to landfills. Its cloud-based systems facilitate scheduling, expedite tax paperwork, and offer food safety guidance so food can be routed appropriately without unacceptable risks or efficiency losses.

### Foodfully

*United States*

**http://foodful.ly**

Foodfully provides kitchen inventory management and cooking assistance to users with the goal of reducing food waste. The company develops a platform for food waste reduction that offers The Fridge, which shows users' purchased items and which items are approaching spoilage so they never forget about their food; and The Stove, which gives users recipes that prioritize the food that will spoil soonest.



## Full Harvest

United States

<https://fullharvest.com>

Full Harvest helps growers get the most out of a harvest, and food companies save money by bringing farm excess to market. We are a B2B platform connecting large farms to food businesses to sell significantly discounted, yet perfectly good surplus and imperfectly shaped produce that would have otherwise gone to waste. Approximately 20 billion pounds of produce go to waste in the U.S. annually simply because they are not perfectly shaped for strict retailer standards. We aim to solve this problem by creating a marketplace for this unutilized edible and delicious produce. Our vision is three-fold: bring an additional revenue stream to farmers, lower the cost of healthy food production, while significantly reducing wasted food and resources.

## Imperfect Produce

United States

[www.imperfectproduce.com](http://www.imperfectproduce.com)

Imperfect Produce purchases fruits and vegetables from farmers that are rejected by retailers due to irregular sizing and resells them to consumers in the Bay Area. It offers its products online.

## Spoiler Alert

United States

[www.spoileralert.com](http://www.spoileralert.com)

Spoiler Alert offers a collaborative, online platform and value-added service that enable food businesses, farms, and nonprofits to create or recover value from surplus food and organic waste. Our scalable technology platform: • Provides real-time capabilities to create and manage food donations, buy-sell transactions, and distributions networks; • Enables organizations to coordinate and simplify fulfillment; and • Offers the relevant accounting and reporting systems to capture tax benefits and document important financial, environmental, and social metrics.

## WISerg

United States

<https://wiserg.com>

WISerg has developed a waste-to-resource conversion process that captures the nutrient value of discarded food and makes it available to commercial and residential growers in a patented liquid fertilizer that eliminates the drawbacks - and exceeds the benefits - of other natural or synthetic soil additives. The fertilizer is certified for organic agricultural production.

## FRESHNESS

### AclarTech

Israel

[www.aclartech.com](http://www.aclartech.com)

AclarTech is an innovative start-up introducing revolutionary yet simple approach for measuring fruits and vegetables ripeness quality, freshness, durability, and taste. AclarTech's mobile application, AclaroMeter, monitors and analyzes fruit quality, ripeness, and freshness, delivering considerable financial and operational benefits to its users.

### Apeel Sciences

United States

<http://apeelsciences.com>

Apeel Sciences creates products from natural plant extracts that allow growers to reduce reliance on pesticides, increase produce quality and crop yield, and provide superior shelf life without refrigeration.

### BluWrap

United States

<http://bluwrap.com>

BluWrap provides naturally extended shelf-life technology that has revolutionized fresh protein supply chains worldwide.

### Hazel Technologies LLC

United States

[www.hazeltechnologies.com](http://www.hazeltechnologies.com)

Hazel Technologies develops solutions to mitigate the produce harvested waste in order

to improve the efficiency of their fresh produce supply chain.

The products of the company are FruitBrite and BerryBrite. FruitBrite is a carton insert that extends the shelf life of ethylene sensitive produce, especially tropical produce varieties and commercial melon cultivars and BerryBrite is a berry flat insert that uses a blend of essential oils to increase the shelf life of berries in cold storage.

## InspiraFarms

United Kingdom

[www.inspirafarms.com](http://www.inspirafarms.com)

InspiraFarms supplies modular, FOOD-SAFE certification ready modular processing and cold storage technology.

## WisePack

France

[www.wisepack.fr](http://www.wisepack.fr)

Our ambition is to redesign the packaging and modes of consumption while protecting the environment. We're testing new classes of materials that allow us to innovate in this area and our research focuses on beverage packaging. In partnership with industry experts, we develop packaging with new materials. This has led to trials of less polluting and edible packaging like the encapsulation work we have conducted so far. Wise Pack is considering many resources devoted to R&D and industrialization of these processes. We will expand our fields of research, particularly in the area of green biotechnology and biopolymers.

## GUIDANCE

### AgJunction

United States

<http://corp.agjunction.com>

Provides innovative hardware and software applications for precision agriculture worldwide. The Company holds numerous patents and markets its products and services under leading brand names including Outback Guidance, and Satloc.

• The Outback product line has

set the standard for reliability, accuracy, and simplicity in precision guidance and machine control for over 10 years.

• Our Satloc family of aerial application solutions is the industry leader in precision application products for agricultural pilots and their dealers worldwide.

Note: Merged with Novariant.

## AG-NAV

Canada

[www.agnav.com](http://www.agnav.com)

The Company's primary market segment is associated with Agriculture and the use of GPS technology in this area. The AG-NAV Guia is a navigation system that gives the operator GPS Precision Navigation for the placement of sprayed fertilizers and pesticides for aerial applications. The product offering for this segment has expanded to the development of accurate flow control equipment for the deployment of liquid and dry materials used in this industry. Nowadays the AG-NAV's products are used in various applications: Agricultural and Forestry Aerial Applications; Larviciding and Mosquito Control; Wildlife Tracking, Baiting, and Controlling; Wildfire Suppression Coordination; Geophysical Navigation; Photo and Remote Sensing Navigation.

## Fuse (AGCO)

United States

[www.agcotechnologies.com](http://www.agcotechnologies.com)

Fuse is AGCO's precision agriculture strategy and technology platform for ensuring our customers' operations are always running ... optimized; in the right place at the right time ... coordinated; and seamlessly connected throughout all phases of the crop cycle.

## GK Technology

United States

[www.geektechforag.com](http://www.geektechforag.com)

Your Source of Software for Precision Farming, Mapping Services and Drainage Solutions.

• Zone Soil Testing Software Solutions • Variable Rate Fertility Solutions • Variable Rate Seeding Solutions • Topography, Watershed Modeling, and Drainage.

## Hexagon Agriculture

*Brazil*

**www.hexagonagriculture.com**

A leading global provider of information technologies that drive quality and productivity improvements across geospatial and industrial enterprise applications.

## Kawak Aviation Technologies

*United States*

**https://kawakaviation.com**

We provide and support the aviation industry with high performing solutions that improve safety and increase productivity for our customers and their aircraft. Kawak is predominantly engaged in the research, design, development, manufacture, integration, and support of aviation technology systems, products, and services. Kawak specializes in Aerial Agriculture, Helicopter firefighting, Flight Control Quadrants, Electric motors, fast-track product development and auxiliary mission power systems.

## MagGrow

*Ireland*

**www.maggrow.com**

MagGrow is a pioneering, patented magnetic spraying technology system for the horticulture and arable sectors of the agricultural industry.

## My Way RTK

*United States*

**www.mywayrtk.com**

RTK (Real Time Kinematic) positioning is the most accurate signal available for farmers looking to use precision farming technology. RTK signals talk with your tractor, your combine, your application rig, and help guide it accurately through the field. MyWay RTK is a solution that delivers the RTK correction via a cellular modem. Investing

in this type of RTK correction puts you in a position to one day profit from wireless data transfer technologies that will allow interaction with your trusted service providers in new, more efficient ways.

## NORAC (TopCon)

*Canada*

**www.norac.ca**

NORAC products lead the industry in accuracy by maximizing application deposition. The system will keep the boom at an entered, preset height, allowing chemicals to be applied in an optimum spray pattern. With NORAC, you're maximizing your inputs through consistent application and reduced spray drift. The boom height control comes in various levels (standard control, passive roll, active roll, active wing roll).

## Novariant

*United States*

**www.novariant.com/precisionag**

Novariant technology features an open and flexible architecture that is interoperable with any vehicle interface, display, GNSS or other positioning system (field prep, planting, spraying, harvesting). Note: Merged with AgJunction.

## OmniSTAR

*United States*

**www.omnistar.com**

OmniSTAR is a world leader in providing high accuracy positioning data via satellite and is a leading developer of Differential GNSS (DGNSS) positioning technology delivered via satellite. Using over 100 reference stations, six satellites, and two global network control centers, OmniSTAR delivers real-time reliable positioning services for land and air applications worldwide, 24/7.

## Onset Computer Corp.

*United States*

**www.onsetcomp.com**

Onset's mission is to be a global

leader in data logger and monitoring solutions used to measure, record, and manage data for improving the environment and preserving the quality of temperature-sensitive products. We are committed to a culture of continuous improvement, innovation, and world-class customer support.

## Reichardt Innovation

*United States*

**www.reichhardt.com**

Pilot System Reichardt (PSR) is capable of sensor input via tactile, ultrasonic, and mechanical sensors.

Tactile Row Guidance (PSR TAC): Reichardt Tactile Row Guidance is steering by the aid of a flexible tactile sensor. Sonic Guidance (PSR SON-IC): Reichardt Sonic Guidance is steering by the aid of ultrasound. The vehicle or implement is guided by use of ultrasound measuring distance from a tramline, row, hill, marker track, or wheel track.

Mechanical Guidance (PSR MEC): Reichardt Mechanical Guidance is steering by the aid of mechanical sensors. Sensors guide off sugar beets or potato hills to control the vehicle.

Autoguidance with GPS (PSR SKY): Reichardt GPS guidance makes it possible to steer a vehicle with accuracy by the aid of GPS navigating signals. Minibatt Sample Harvester: The Minibatt is a mini-harvester that will save you time and money. For harvesting small grains like wheat, barley, oats, rye, milo, canola, and medicinal plants or spices.

## Salvarani North America

*Canada*

Salvarani North America specializes in the manufacturing of agricultural, turf, grounds maintenance, and landscaping products for the U.S. and Canadian markets.

## Swift Navigation

*United States*

**www.swiftnav.com**

Piksi Multi is your affordable solution to high-precision GPS for agricultural equipment. Whether built into navigations systems or added to equipment as an after-market capability, Piksi Multi can help improve fuel usage, reduce row overlap, monitor fertilizer and seed placement, track equipment, and aid navigation-focused tasks.

## Trimble

*United States*

**www.trimble.com**

Trimble integrates a wide range of positioning technologies including GPS, laser, optical and inertial technologies with application software, wireless communications, and services to provide complete commercial solutions. Its integrated solutions allow customers to collect, manage, and analyze complex information faster and easier, making them more productive, efficient, and profitable.

## Trimble Correction Services

*United States*

**www.trimble.com/positioning-services**

Trimble RTX (Real Time eXtended) technology utilizes data from a global reference station infrastructure to compute high accuracy positions based on satellite orbit and clock information. Trimble RTX supports a suite of real-time correction services delivering a range of accuracies from better than 4 centimeters (1.5 inches) to sub-meter performance. Trimble RTX-based positioning innovations are available via convenient, easy-to-access satellite delivery or via cellular/IP communication, providing users with flexible options to obtain high accuracy positions in nearly any work environment. Trimble RTX correction services are available throughout most of the world.

## Veris Technologies

United States

[www.veristech.com](http://www.veristech.com)

Veris Technologies, Inc. designs, builds, and markets sensors and controls for precision agriculture. Veris is a sister company of Geoprobe Systems (<http://geoprobe.com>), a world-wide supplier of environmental and geo-technical equipment.

## IMAGERY ANALYTICS

### Aerial Intelligence

United States

[www.aerialintel.com](http://www.aerialintel.com)

Aerial Intelligence is an early-stage enterprise bringing state-of-the-art data science to the world's agricultural community. They're building a data platform to help crop producers, distributors, and traders buy, sell, and move the world's \$1.3 trillion of crop. Their platform helps agricultural traders and enterprises gather and analyze disparate data sources, including complex satellite data, crop supply statistics, and their own higher level insights.

### AgPixel

United States

[www.agpixel.com](http://www.agpixel.com)

AgPixel assists customers using unmanned aerial vehicles (UAV) and manned aircraft systems in acquiring, processing, and analyzing agricultural data, often by the next business day. Through their in-house research and development, they produce the most advanced data products available in the field.

### AirFusion

United States

[www.airfusion.com](http://www.airfusion.com)

AirFusion was founded to develop next generation software tools to better gather, analyze, and commercialize data from aerial sensors. The AirFusion platform fuses sensor data, applies highly advanced cognitive analytics, and connects the results seamlessly to the enter-

prise to provide unparalleled and actionable intelligence.

### Cainthus

Ireland

[www.cainthus.com](http://www.cainthus.com)

Using our unique expertise, we turn visual information into actionable data. While our technology has a wide variety of potential applications, our focus is currently on agriculture, where we can have the greatest impact on global sustainability issues. By providing data driven solutions we can reduce inefficiencies in food production and facilitate the more effective, environmentally sustainable use of land.

### Cropio

United States

<https://about.cropio.com>

Cropio is a satellite field management system that facilitates remote monitoring of agricultural land and enables its users to efficiently plan and carry out agricultural operations. Cropio provides real-time updates on current field and crop conditions, determines vegetation levels and pinpoints problem areas, delivers precise weather forecasts and an actual overview of the soft commodity market.

### Descartes Labs

United States

[www.descarteslabs.com](http://www.descarteslabs.com)

A deep-learning image analysis company, specializes in taking deep learning and other advanced machine learning algorithms to categorize still images found on the Internet and develop them so they can be applied to visual data coming from various sensors on the planet, such as satellites, UAVs, cameras, cell phones.

### Digital Harvest

United States

[www.digitalharvest.farm](http://www.digitalharvest.farm)

Digital Harvest is currently the only private company operating the Yamaha RMAX unmanned aerial crop sprayer in the U.S. Building on the 20+ years of

operational success of the RMAX system, Digital Harvest is developing new, specialized applications such as night time crop spraying operations, precision spot spraying, and even cherry drying. These uses and others are being evaluated in real-world, agricultural conditions in an effort to increase the economic value of leasing or operating a large rotorcraft UAV platform like the RMAX.

### Esri

United States

[www.esri.com](http://www.esri.com)

ArcGIS is a complete mapping & analytics platform with ready-to-use applications to unlock the wealth of information in your agriculture data. ArcGIS Image Server provides a scalable way to analyze, process, manage and serve large collections of imagery and raster data for massive imagery exploitation. As add-on capabilities to ArcGIS Enterprise, the dynamic image services and raster analytics in ArcGIS Image Server provide both fast access to, and information extraction from imagery and raster data. Need a custom software application? Build it with our extensive customization options to create that unique mapping, visualization, or analysis app on any device regardless of your development experience. ArcGIS gives you the ability to easily create, use, and share maps and analysis on any device, anywhere, anytime.

### FarmShots

United States

<http://farmshots.com>

FarmShots analyzes satellite and drone imagery of farms. Map out potential signs of diseases, pests, and poor nutrition for scouting, reducing the area that needs to be covered by hand as much as 90%. With blazing-fast, high resolution imagery, detecting crop problems and resolving issues is easier than ever. Turn imagery into a prescription map for fertilizer application. Optimize farm production and view analytics

on farm performance. Data is exportable into nearly all agricultural software for prescription creation.

### Frontec SA

Argentina

[www.frontec.net](http://www.frontec.net)

Frontec S.A. operates a technological platform to provide solutions to the agribusiness value chain. Its platform offers zone-specific agriculture solutions, such as productivity maps, cartographic unit maps, working unit maps, prescription maps, yield monitoring, image processing, and geographic planimetrics; and online monitoring solutions, including field health maps.

### Gamaya

Switzerland

<http://gamaya.com>

Gamaya addresses the need to increase efficiency and sustainability of large industrial farming, as well as the productivity and scalability of small-holder farming, by deploying the world's most advanced solution for mapping and diagnostics of farmland. Gamaya farmland analytics solution improves production efficiency and risk management by facilitating optimum decision making, including use of chemicals and fertilizers, and resulting in larger and better yields, while minimizing the impact on the environment.

### GeoVantage

United States

<http://geovantage.com>

GeoVantage applies today's advanced technology to a revolutionary airborne imaging approach. This approach provides on-demand land asset information more quickly and cost-effectively than ever before. State-of-the-art sensors composed of integrated GPS, inertial measurement units and 3 or 4-band digital cameras, enable rapid response and worldwide geographic coverage — we measure turn-around times in days, not months.



## GeoVisual Analytics

*United States*

**www.geovisual-analytics.com**

Using routine monitoring of fields with airplanes, drones, and mobile phones, we're applying our NASA-funded AI algorithms to analyze crop maturity, health, and predicted yields, helping farmers to dramatically reduce production uncertainties and increase profits.

## IntelinAir

*United States*

**www.intelinair.com**

IntelinAir, Inc., is an aerial imagery analytics company focused on agriculture with a goal to deliver actionable intelligence to help farmers make data-driven decisions to improve operational efficiency, yields, and ultimately their profitability.

## Intermap Technologies

*United States*

**www.intermap.com**

Intermap Technologies is an industry leader serving a diverse geospatial marketplace. We provide highly accurate elevation information to help commercial enterprises and government agencies make better location-based decisions. Our high-resolution NEXTMap database provides seamless, wide-area digital elevation data and images. We also provide comprehensive geospatial services, from custom 3D mapping and data fusion to a Web-based software application, InsitePro, that delivers custom risk scores specific to insurance underwriting.

## OmniEarth

*United States*

**www.omniearth.net**

OmniEarth is an emerging company focused on changing the way the Earth is understood. Through a constant stream of geoinformatics, OmniEarth subscribers always have access to imagery and derived information products from any location on Earth — on demand and over

time. The company delivers analytics-ready, multispectral imagery from everywhere on Earth every day, enabling subscribers to see, analyze, and react to change in real time. OmniEarth provides enhanced decision making tools for subscribers in the environment, agriculture, energy, public, and private sectors ... and everyone else who needs a more comprehensive understanding of Earth.

## Orbital Insight

*United States*

**https://orbitalinsight.com**

Orbital Insight is a Geospatial Big Data company leveraging the rapidly growing availability of satellite, UAV, and other geospatial data sources. The company's goal is to understand and characterize socio-economic trends at global, regional, and hyper-local scales.

## Peat Technology

*Germany*

**http://peat.technology**

Peat is a deep learning AgTech startup. Their software automatic image recognition for plant damages, every plant disease, pest, or nutrient deficiency leaves a specific pattern. Their software quickly learns to detect these patterns with an estimation accuracy up to 95% with their software. They can provide customized solutions for every need.

## Precision Partners

*United States*

**www.precisionpartners.com**

Precision Partners, Inc.'s suite of software, branded ProfitZ, is used by crop consultants in order to maximize profitability in all areas of a grower's field. ProfitZ precision agriculture software helps growers save on inputs, improve yields, crop quality, and make more informed decisions. Precision Partners, Inc. also develops custom software for agriculture companies, which they use and brand as their own. We can develop software from the

ground up, or we can improve your existing software. We have familiarity with both agriculture and programming—so you spend less time explaining your business to us.

## Prospera Technologies

*Israel*

**http://prospera.ag**

We develop computer vision technologies that continuously monitor and analyze plant health, development, and stress. Our technology captures climate and visual data from the field and provides actionable insights to growers via mobile and web.

## Redbird

*France*

**www.getredbird.com**

Redbird was acquired by Airwave in 2016 and offers global solutions to optimize resources, improve performances, and secure operations via the analysis and the processing of aerial data acquired by drones.

## S4

*Argentina*

**www.s4agtech.com**

Over the last few years, S4 (formerly, Solapa4) has been one of the fastest growing "Ag-Tech" start-ups in Argentina, a country in which agriculture plays a critical economic role. Ag tech companies (like S4) focus on developing data analytics to decision-making tools that can both improve agricultural yield and manage risk. According to Techcrunch, "Ag tech is the new queen of green". With the global population expected to increase from 7.2 billion to 9.6 billion over the next 35 years, food supply will have to increase by 70% to adequately feed the population. Ensuring such a huge increase in global food demand, will require the use of ag tech. S4 will make a valuable contribution to this effort as a regional actor with strong global ties to international companies, including in the USA.

## Satshot Inc.

*United States*

**www.satshot.com**

Satshot is a fully customized cloud-based online GIS mapping engine that manages high, medium, and low resolution satellite imagery for distribution and management for the precision ag industry. Satshot uses 3 main products to help make use of this data. Mapcenter, Landscout, and iCue. Satshot can be used to monitor crops, look at crop health and stress throughout the season, access crop damage for insurance, manage land use and sustainability, create VRA maps, or other processes and needs that a land owner or operator may have.

## SpaceKnow

*United States*

**https://spaceknow.com**

SpaceKnow is a Silicon Valley venture capital backed startup. SpaceKnow brings transparency to the global economy by tracking global economic trends from space. We develop products for monitoring economic activity for a wide variety of both consumer and enterprise clients.

## TartanSense

*India*

**www.tartansense.com**

TartanSense provides image analytics based on ultra high resolution aerial and near infra red images acquired by UAVs. For the agriculture sector, NIR (Near Infra Red) sensors enables us to distinguish between plants that exhibit stress versus plants that are healthy by analyzing aerial images. This data enables farmers to make precise decisions on where to irrigate and fertilize, thereby directly improving their bottom line.

## VanderSat

*Netherlands*

**www.vandersat.com**

VanderSat observes water and temperature at field scale across the globe using satellites. Every day, everywhere on earth,

with unmatched accuracy. Soil moisture, the water content of the vegetation, inundation and land surface temperature. All data near real time, globally and daily without cloud interference. Our satellite data can be accessed and ingested easily through our API and viewer and is more than 500 times cheaper than ground sensors. Vander-Sat insights are backed by our remote sensing scientists. Currently 5000 organizations are powered by our data and services, including some of the world's leading agricultural and insurance firms.

## VINSIGHT

*United States*

**[www.vinsight.co](http://www.vinsight.co)**

Vinsight is an application that aggregates geospatial data, weather data, and sensor-based data to provide the agriculture industry with analytics for what is happening in the field. Their goal is to improve yield and revenue for growers while providing insight and transparency to other areas of the value chain.

## IMAGERY SERVICE PROVIDERS

### Aerial Imagery Solutions (AIS)

*United States*

**[www.aerialimagerysolutions.com](http://www.aerialimagerysolutions.com)**

AIS provides high quality, precision aerial imagery throughout the U.S. Midwest. We have partnered with the experienced agronomists at Crop IMS, an agricultural data management company, and with SST Software, a global leader in agriculture software development and information services.

### AeroHarvest LLC

*United States*

Providing vineyard and crop managers with the high resolution remote sensing, data processing, and descriptive analytics to make informed

decisions to manage costs, control yields, and reduce water consumption.

### Airinov

*France*

**[www.airinov.fr](http://www.airinov.fr)**

Airinov designs drone solutions for agronomic use, with an optical sensor and processing chain used to observe farms and agricultural operations.

### AirMap

*United States*

**[www.airmap.com](http://www.airmap.com)**

AirMap is helping make drones a part of everyday life by building the foundations for the low-altitude air navigation systems of the future. The emergence of small, powerful, and autonomous drones is transforming society. Drones are being used for agriculture, public safety, aerial photography and cinematography, and soon, package delivery. The next century of aviation innovation is happening at the local level, not across oceans, and it's happening below 500 feet. AirMap is organizing this low altitude information so innovation can take flight. AirMap works collaboratively with industry partners to create the future for drones. We focus exclusively on providing accurate, reliable, and trustworthy airspace information so that others in our nascent industry can build amazing vehicles and applications. AirMap is a member of the Small UAV Coalition and the NASA Unmanned Traffic Management (UTM) program.

### Airphrame

*United States*

**[www.airphrame.com](http://www.airphrame.com)**

Airphrame provides geospatial data and aerial imagery solutions on demand. The company offers Airphrame, a turnkey data service that allows users to obtain aerial data without having to be concerned about vehicle specifications or operations. It controls a network of remote sensing devices that are able

to operate over developed rural and urban land in the United States. The company serves engineering, insurance, geospatial, volumetric, agriculture, urban planning, infrastructure, catastrophe response, appraisal, inspection, and modeling industries.

### All Drone Solutions

*United States*

**[www.alldroneolutions.com](http://www.alldroneolutions.com)**

All Drone Solutions specializes in Precision California Agriculture. We are involved in research and development to determine how remote sensing can be used for the types of crops grown in California. Most importantly we have to do this with less inputs due to regulations and limited water allocation. Drone data for growers in the Midwest has proven to be very helpful in yield evaluations and data sets for variable rate applications. But here in California we grow over 400 types of crops and we do things differently than those elsewhere. All Drone Solutions and our ROAM system is truly in house and your data is processed right here in Exeter, CA the same day we collect it. Your data is delivered in hours ... not days. We fly purpose built sensors designed for agriculture use including a Micasesens multispectral sensor and a FLIR thermal sensor. These highly calibrated sensors when combined with soil compensated processing provide accurate and reliable results. Our drones will produce Thermal data will allow us to assist farmers and growers during these difficult times of the California drought. All Drone Solutions can provide custom processing and data collection. We go well "BEYOND NDVI" for growers who demand actionable, quantitative, and calibrated data rather than just a pretty picture.

### DroneView Technologies

*United States*

**[www.droneviewtech.com](http://www.droneviewtech.com)**

DroneView Technologies is a

leading drone services company, who works with enterprise customers throughout the United States - collecting, processing, and extracting real value out of aerial data. DroneView Technologies focuses on commercial applications and photogrammetry where the benefits of using drones and piloted aircraft to collect and process aerial image/video data yields discernible value, namely Quicker, Safer, More Accurate and Lower Cost, in the areas of: Stockpile Volumetric Measurement • Aerial Mapping, Topography, and 3D Modeling • Inspection and Asset Monitoring: Wind Turbine, Cell Tower.

### FarmSolutions

*United States*

**<https://farmsolutions.com>**

Farm Solutions is an agricultural technology company providing leading-edge solutions for today's farmers, ranchers, and growers. Our expertise in precision agriculture coupled with our proven success in technology development has enabled us to create advanced solutions and deliver superior service. As a California-based firm, we know first-hand the challenges farmers and ranchers face on a daily basis. We provide user-friendly tools that allow growers to optimize resources, improve labor efficiency, and increase yields.

### Monarch Inc.

*United States*

**[www.monarchmakers.com](http://www.monarchmakers.com)**

Our engineers created the Monarch AG after working with local farmers, crop specialists, and California technology companies to develop the best robotic system for mapping and crop analysis using multispectral cameras and software.

### MosaicMill Oy

*Finland*

**[www.mosaicmill.com](http://www.mosaicmill.com)**

MosaicMill Oy develops digital imaging and image processing systems. It offers EnsoMOSAIC,

an image processing software to ortho-rectify aerial imagery and imagery taken with imaging systems with a frame camera. The company's EnsoMOSAIC software includes EnsoMOSAIC 3D, a software for 3-D data extraction and point cloud management; NavCam, an in-flight software for aircraft navigation and camera control; and FlyPlan, a collection of tools for numerical and graphical flight planning. Its EnsoMOSAIC software also comprises CalCam, a software for the calculation of camera internal orientations; DigiPreProcess, a preprocessing software for optimizing RAW CIR and RGB images; and SeamLineEditor, a software for improving mosaics of city and town areas. The company's products are used in various applications, such as agriculture, conservation, forestry, plantations, oil and gas, mining, power lines, roads, topography, urban, and disaster applications.

## Ninox Robotics

*Australia*

<https://ninox-robotics.com>

Ninox Robotics utilises drones for invasive pest detection and management, infrastructure asset monitoring, bio-security, and other agri-business purposes. Their team quickly deploys to location, with everything they need for a single flight to a month long operation.

## Planet Labs

*United States*

[www.planet.com](http://www.planet.com)

Planet's high-frequency imaging satellites deliver a constant stream of current information to identify changes in crops and soil. This continuous flow of data is readily accessed from Planet's cloud-based platform, enabling you to make smarter decisions, optimize inputs, increase profitability, and enhance sustainable farm practices.

## Resson Aerospace

*Canada*

[www.resson.com](http://www.resson.com)

Resson Aerospace is a bioinformatics and data analytics company, delivering customized agriculture solutions for large corporate clients. Utilizing recent advances in large-scale cloud-based data processing, swarm robotics, and advanced data analytics, its proprietary Resson Agricultural Management and Analytics System gives the agricultural operator analytical insight and dynamic control over the farm area. Resson Aerospace's Resson Agricultural Management and Analytics System, data-driven agriculture solution, analyzes crop metrics to assess crop status and health, providing operators with the information required to optimize agricultural operations, improve efficiency, boost yields, and maximize profitability. It is headquartered in Fredericton, NB, Canada.

## Satshot Inc.

*United States*

[www.satshot.com](http://www.satshot.com)

Satshot is a fully customized cloud-based online GIS mapping engine that manages high, medium, and low resolution satellite imagery for distribution and management for the precision ag industry. Satshot uses 3 main products to help make use of this data. Mapcenter, Landscout, and iCue. Satshot can be used to monitor crops, look at crop health and stress throughout the season, access crop damage for insurance, manage land use and sustainability, create VRA maps, or numerous other processes and needs that a land owner or operator may have.

## TerrAvion, Inc.

*United States*

[www.terravion.com](http://www.terravion.com)

TerrAvion provides real-time aerial imagery services for the agriculture sector in the United States. Its aerial imagery service is used to optimize irrigation to improve yield and uniformity, or reduce water use; make scouting; detect anomalies caused by disease or pests;

and supervise and monitor interventions. It offers natural color, color infrared, thermal, and oblique imagery solutions; normalized difference vegetation index maps; and relevant agricultural data solutions.

## UAV-IQ Precision Agriculture

*United States*

[www.uaviq.farm](http://www.uaviq.farm)

The company provides agricultural producers with cost-effective, actionable intelligence via field scouting services that provide high precision imagery, accessible in and out of the field. Along with the imagery, the company equips clients with proprietary management tools to fully incorporate the data into daily operations as well as critical decision making.

## VanderSat

*Netherlands*

[www.vandersat.com](http://www.vandersat.com)

VanderSat observes water and temperature at field scale across the globe using satellites. Every day, everywhere on earth, with unmatched accuracy. Soil moisture, the water content of the vegetation, inundation and land surface temperature. All data near real time, globally and daily without cloud interference. Our satellite data can be accessed and ingested easily through our API and viewer and is more than 500 times cheaper than ground sensors. VanderSat insights are backed by our remote sensing scientists. Currently 5000 organizations are powered by our data and services, including some of the world's leading agricultural and insurance firms.

## Ventus Geo

*Canada*

<http://ventusgeo.com>

Ventus Geospatial Services Inc. is a dynamic multi-faceted company which provides industry with a variety of solutions. The Ventus team members have a vast background in agriculture, oil and gas, surveying, GIS, and

remote sensing making Ventus the complete package. Ventus uses a various UAV platforms to accomplish many of its tasks providing high-resolution imagery and video to satisfy the needs of industry. The Ventus team has an array of sensor packages including; near infrared, thermal, visual, and GH gases. The processing expertise possessed within Ventus creates the ability to tackle a wide range of applications. The imagery provided by Ventus can be implementing in GIS, mapping, and planning programs giving the individuals involved a visual aid to project. These visuals aids are invaluable as the detail that can be achieved with our system is second to none (5 cm resolution) and also provide a record of the site at the time of image capture. This has had a major impact on large construction projects, enabling detailed surveys of large areas, and to monitor progress. Further, the imagery capture can also be used to create digital surface models (DSM) through photogrammetric processing. Ventus Geospatial Services leverages the amazing versatility of UAS to great effect; from streaming live aerial video for environmental monitoring, to producing stunning imagery for inspections, mapping, and agriculture. We can provide this ultra-high-resolution data because unmanned aerial systems capture the best imagery available today, some 25 times finer than satellite using the latest visual, infrared, and thermal sensors.

## IMAGERY SYSTEMS

### Aeroptic, A KeyW Company

*United States*

[www.aeroptic.com](http://www.aeroptic.com)

Aeroptic manufactures aerial remote sensing systems for natural resource conservation, precision agriculture, and emergency management applications. It



offers multispectral, and hyper and thermal camera systems; and geo processors.

## AGERpoint

*United States*

<https://agerpoint.com>

AGERpoint, Inc. provides information management solutions to growers of tree and vine based crops, insurers, investors, and others. It offers technologies that redefine data acquisition, analysis, and translation; and GroveTracker, which provides growers with critical data that gives them an understanding of their crop holdings, including statistical and photographic inventory of their groves, orchards, and vineyards.

## Astro Digital

*United States*

<https://astrodigital.com>

Astro Digital US Inc. is a new name of Aquila Space after its merger with Astro Digital Inc. Company is located in the heart of Silicon Valley at NASA AMES Research Park, Moffett Field. The mission of Astro Digital is to enable daily delivery of high resolution multi-spectral images of all arable and populated land on our planet. Taking a truly commercial approach, the team at Astro Digital and partner companies have identified remote sensing markets that cannot be satisfied with traditional remote sensing satellite designs and costs. Astro Digital is now designing satellite platforms to satisfy these markets while working closely with image processing and data distribution partners to achieve a clean seamless flow of data from sensor to customer.

## Canary Drones

*United States*

[www.canarydrones.co](http://www.canarydrones.co)

Developing early detection algorithms to detect disease earlier, more accurately, and faster than a human. Currently focused on Pierce's Disease affecting the viticulture industry.

## Ceres Imaging

*United States*

[www.ceresimaging.net](http://www.ceresimaging.net)

Ceres Imaging specializes in spectral imaging technology to help farms increase yields by more efficiently applying water and fertilizer. Specifically, we use aerial imagery and spectral image processing to monitor crop variables like plant nutrient and water content (fertilizer/irrigation deficiencies), as well as the presence of diseases/parasites/weeds in crops. We help growers use this data to improve crop management practices like fertilizer application, irrigation schedules, stress/problem detection, and other applications.

## Gamaya

*Switzerland*

<http://gamaya.com>

Gamaya addresses the need to increase efficiency and sustainability of large industrial farming, as well as the productivity and scalability of small-holder farming, by deploying the world's most advanced solution for mapping and diagnostics of farmland. Gamaya farmland analytics solution improves production efficiency and risk management by facilitating optimum decision making, including use of chemicals and fertilizers, and resulting in larger and better yields, while minimizing the impact on the environment.

## Geosys

*United States*

[www.geosys.com](http://www.geosys.com)

We supply real-time, satellite- and weather-based data to clients across the agriculture industry and around the globe.

## GeoVisual Analytics

*United States*

[www.geovisual-analytics.com](http://www.geovisual-analytics.com)

Using routine monitoring of fields with airplanes, drones, and mobile phones, we're applying our NASA-funded AI algorithms to analyze crop maturity,

health, and predicted yields, helping farmers to dramatically reduce production uncertainties and increase profits.

## Ground Level Data

<https://groundleveldata.net>

We have developed breakthrough technology in vision based software. We use this technology to redefine data acquisition, analysis, and translation for growers. Ground Level Data a tech service company with an emphasis in maximizing the efficiency of technology for mid and large scale growers. We provide growers access to high quality visual imagery and consulting services on demand.

## Mavrx Inc.

*United States*

[www.mavrx.co](http://www.mavrx.co)

Mavrx provides tools and platform to connect existing infrastructure to information about the changing planet from ground to space. The company offers an online software and sensor platform that maps land with various imaging technologies and delivers actionable insights to land managers. Its continual imaging packages provide remote sensing and NDVI mapping for the precision land management of vineyards, commodity crops, and citrus crops. The company's online software stores and tracks all data layers, such as time, weather, soil, inputs, and images to enables users to see all changes in one place.

## Planet Labs

*United States*

[www.planet.com](http://www.planet.com)

Planet's high-frequency imaging satellites deliver a constant stream of current information to identify changes in crops and soil. This continuous flow of data is readily accessed from Planet's cloud-based platform, enabling you to make smarter decisions, optimize inputs, increase profitability, and enhance sustainable farm practices.

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*Canada*

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## SLANTRANGE, Inc.

*United States*

[www.slantrange.com](http://www.slantrange.com)

SLANTRANGE develops and delivers airborne remote sensing and intelligence systems and analytics solutions for agriculture intelligence applications.

Its products include SL4000c calibrated multispectral imaging system, which is used to measure crop conditions from lightweight/low-flying aircraft, including fixed wing and multicopter configurations; and SLANTVIEW, a data processing and visualization suite for visualizing and interacting with data products generated by the imaging system. The company's analytics solutions translate raw and narrow-band multispectral sensor data into information layers, which provide crop status, health trajectory, and projected performance for supporting input decision of growers.

### TerrAvion, Inc.

*United States*

**www.terravion.com**

TerrAvion provides real-time aerial imagery services for the agriculture sector in the United States. Its aerial imagery service is used to optimize irrigation to improve yield and uniformity, or reduce water use; make scouting; detect anomalies caused by disease or pests; and supervise and monitor interventions. It offers natural color, color infrared, thermal, and oblique imagery solutions; normalized difference vegetation index maps; and relevant agricultural data solutions.

### VanderSat

*Netherlands*

**www.vandersat.com**

VanderSat observes water and temperature at field scale across the globe using satellites. Every day, everywhere on earth, with unmatched accuracy. Soil moisture, the water content of the vegetation, inundation and land surface temperature. All data near real time, globally and daily without cloud interference. Our satellite data can be accessed and ingested easily through our API and viewer and is more than 500 times cheaper than ground sensors. VanderSat insights are backed by our remote sensing scientists. Currently 5000 organizations

are powered by our data and services, including some of the world's leading agricultural and insurance firms.

## INPUT EFFICIENCY

### Adapt-N

*United States*

**www.adapt-n.com**

Powered by Agronomic Technology Corp. Adapt-N is a professional software tool for agronomists to help deliver exceptional in-field performance to growers.

### Agnition

*United States*

**www.agnition.com**

Agnition develops cutting-edge technologies that improve the quality of your soil and the health of your farms.

### AutoAgronom Israel Ltd.

*Israel*

**www.autoagronom.com**

Our commitment is to significantly improve efficiencies of water and fertilizer usage for the protection of our environment. Our goal is to measurably increase farmers' productivity and crop yields, and strengthen their operations.

### CiBO Technologies

*United States*

**www.cibotechnologies.com**

We generate agronomically derived outcomes through a unique understanding of what is and what could be true of agricultural systems. Because our products are designed to accomplish this across many crops in all geographies, we are able to do this for customers across the entire ag value chain. Some of the challenges we are helping our customers solve are Farm Services, Agribusiness, Sustainability, Insurance, Financial Services, and Consumer Goods.

### Farm Dog

*Israel*

**www.farmdog.ag**

Farm Dog is a software management platform that helps growers optimize pesticide treatments. The end-to-end decision support system provides growers and their agronomists with in-field scouting tools, treatment decision support, efficacy analyses, and communication tools. Farm Dog is suitable for large teams as well as small ones, integrates with John Deere Operations Center, and is optimized for offline use.

### FieldIn

*United States*

**https://fieldintech.com**

FieldIn helps farmers and their stakeholders track operational progress and reduce work errors, offering new, previously inaccessible layers of information that support decision makers at every junction. FieldIn combines innovative hardware with an array of sensors, agricultural best-practices, data science analytics, and proprietary algorithms into one integrative solution that captures the farm's pulse. We provide farm professionals with visualized insights and practical tools to manage every step of the pest control process, creating a new level of transparency, traceability, and collaboration.

### IRRIGO Irrigation

*Canada*

**http://irrigo.ca**

We provide high quality irrigation, rainwater harvesting, and landscape lighting services to Greater Victoria.

### iTK

*France*

**www.itk.fr**

Vintel is the first web-based tool for real-time and predictive management of agronomic decisions, using environmental and climatic data. The aim of iTK USA is to commercialize Vintel solution on the American market.

### PowWow Energy, Inc.

*United States*

**www.powwowenergy.com**

PowWow Energy is a leading innovator in the Agriculture and Food sector, bridging the gap between the Ag community and the Tech sector with valuable Software-as-a-Service applications.

### Strider

*Brazil*

**www.strider.ag**

Strider is a mobile application and a geo based big-data engine that reduces the usage of pesticides based on actionable information. Its application enables users to monitor pests, diseases, and weeds; view areas affected by pests and weeds, find blind areas, and routes, and control scouting; and monitor the effectiveness of sprayings over pest population, and control tank mixture, as well as maintain track/record date, time, site, crop protectants used, and climate conditions.

### Wexus Technologies Inc.

*United States*

**https://wexusapp.com**

Wexus remotely connects with your pumps, buildings, utility electric meters, and water flow meters via cloud technology.

## IOT FIELD MONITORING PLATFORMS

### Acuity Agriculture

*United States*

**www.acuityagriculture.com**

Developer of wireless sensors for farm soil analysis. The company develops wireless sensors that enable users to view and analyze soil conditions such as moisture content, salinity, and temperature and also receive data-driven insights and updates about soil conditions via a mobile application.

**ADCON Telemetry***Austria***www.adcon.com**

ADCON Telemetry focuses on telemetry solutions, based on its own ultra low-power radio technology and GSM/GPRS/UMTS modems, both being integrated into our own range of loggers. What makes the ADCON solution unique is a range of unrivaled product features: unsurpassed user friendliness of its whole product line; extremely low power consumption, using the smallest solar panels in the industry. extremely high receiver sensitivity, resulting in very high transmission distances; the networking capability of each long-range station, which can at the same time function as relay for others; the integration of all of these devices into one Telemetry Gateway, that can manage all of them; a powerful SCADA software, collecting, distributing, storing, processing and visualizing all of this data. With all these features in place ADCON has gained a very strong position in many countries, being the market leader particularly in agricultural applications.

**AgRite***United States***www.ag-rite.com**

AgRite allows you to decide critical growing processes for your individual plants needs. Using proven wireless valves and field sensors for soil tension, soil moisture, pH, temperature, EC, humidity, and other conditions. AgRite gives you the flexibility to remotely view, control, trend, and change your system dynamics. If any of your field parameters change, the AgRite system immediately notifies you via cell, email, or text message.

**agroNET Solutions (DunavNET)***Serbia***www.dunavnet.eu**

agroNET is a suite of smart agriculture services that are

aimed at small and large agriculture producers for boosting the agricultural production and efficiency in different domains covering the wide spectrum of food production and consumption processes, from farm to fork. The agriculture producer selects and deploys the relevant services that are applicable to the production processes, infrastructure, and types of crops in place. The services cover the following aspects of production: pestNET — detection of pests in the fields • irrigNET — optimisation of irrigation • trapNET — automatic detection of insects in traps • ekoNET — monitoring of environmental and meteorological parameters • greenhouseNET — automatic control of hydroponic vegetable production and management of greenhouses • growNET — monitoring of plant growth in the field.

**AgSense, LLC***United States***www.agsense.net**

CONNECT: AgSense connects your farm to your computer, smartphone, or tablet utilizing state-of-the-art software and digital modem technology. ALERT: From stuck pivots to grain bin hot spots to wire theft, find out your farm's status with up-to-the-minute alerts. CONTROL: Control your irrigation systems, bin, and barn fans, and more right from your mobile or desktop device of choice. REPORT: Learn from your past - with historical reporting, download your data in easy-to-read, customizable formats. MONITOR: Check up on real-time weather, irrigation, soil moisture, bin temperature, and pump and storage tank data on the go. EVALUATE: Simplify decision-making - real-time data makes for easy analysis of successes and opportunities.

**AgTech Industries (ATI)***United States***https://agtechindustries.com**

AgInstinct: Offering both Apple and Android mobile applications, allows you to save time while making better informed growing decisions. The ability to confidently schedule, control, and monitor irrigations through your phone provides the flexibility to pulse irrigate with real time information throughout your fields. AgriCapture is a smart infield telemetry system, designed to collect sensor data and control irrigation on a grower's ranch. This system has been designed to be installed by the grower, reliable and supported by a local dealer near you.

**Apitronics, Inc.***United States***www.apitronics.com**

Provides a cloud based environmental monitoring platform for farm data collection. The company's platform is connected to a network of sensors and a hive deployed on site or cloud, which helps farmers monitor environmental conditions from home on phone, tablet, or computer allowing them to make informed management decisions. Its system is suitable for a garden, a large acre farming operation, or other environmental monitoring and automation applications.

**ATEK Access Technologies***United States***http://atekcompanies.com**

Our industry leading brands use the power of advanced machine-to-machine technologies to give you access to superior efficiencies and savings, essential data and systems, improved safety and control, and expert solutions and support. Access the power of technology.

**Banner Engineering Corp.***United States***www.bannerengineering.com**

Banner's impressive portfolio of sensors combined with our secure, robust wireless networks enable real-time access to information and equipment deployed in remote and distant locations, eliminating the need for site visits and onsite staff. Wirelessly monitor soil moisture, crop temperature, weather station data, and environmental conditions at the site. Remotely actuate valves, pumps, and even entire irrigation systems.

**ClimateMinder (Rain Bird)***United States***www.rainbird.com**

The Rain Bird ClimateMinder System is a revolutionary monitoring and control solution for agriculture. Its mobile network technology sends key data directly from the field right to your fingertips via your mobile phone, computer, or tablet. • Monitors soil, weather, plant conditions, and more • Controls water irrigation, even in small acreage plots • Sets up a low cost wireless technology on your field • Enables easy learning and use. The ClimateMinder System Helps You: • Increase crop yields and quality • Reduce water, fertilizer, and chemical application costs • Respond to frost conditions immediately.

**CropMetrics***United States***http://cropmetrics.com**

CropMetrics is a precision agriculture company focused on advanced agronomic solutions while specializing in precision irrigation management. Our mission is to develop and supply precision management technology solutions that increase water, nutrient, and energy use efficiency while fostering natural resource conservation. CropMetrics is a leader in Precision Irrigation Management with the



introduction of the first commercially available full-service Variable Rate Irrigation program. CropMetrics continues its pursuit in innovation and strives to deliver ultimate value to the grower customer.

## Farmobile

*United States*

**www.farmobile.com**

Farmobile is the farm data company. We help farmers own their data outright. Our products are used to store, share, and sell valuable agronomic and machine data to vetted third parties. After all, data is among the most valuable commodities a farm produces.

## FarmSolutions

*United States*

**https://farmsolutions.com**

FarmSolutions is an agricultural technology company providing leading-edge solutions for irrigation, task management, and image analysis. Our expertise in precision agriculture coupled with proven success in technology development has enabled us to create advanced solutions and deliver superior service. The FarmSolutions Irrigation Management system enables users to create optimized water budgets, irrigation schedules, and seamlessly integrates with automated valves. Task Management brings all essential farm tasks together with unmatched precision and can quickly be shared with employees or service providers to deliver detailed task instructions. FarmSolutions Image Analysis service transforms aerial imagery or reports into a visual format that provides actionable information allowing users to see more than ever before.

## Grove Streams LLC

*United States*

**https://grovestreams.com**

The Grove Streams Data Analytics Platform is a cutting-edge cloud-based service providing decision making capabilities to many users and devices as data

arrives from many sources. It was designed to be easy to use across multiple platforms by everyone from corporate app developers to product managers to sensor engineers to electronic enthusiasts. The Platform is easily scalable from one device to one million devices. There are dozens of sensors used in Agriculture today. Use your gateway to send weather data, soil moisture, irrigation equipment status, yields, and other crop-based information in order to make correct economic decisions for the farm. Also use Grove Streams to monitor animal health and welfare in the barn environment by monitoring and alerting on temperature, humidity; water usage/availability; feed usage/availability; air flow; CO, NH<sub>3</sub>, H<sub>2</sub>S, and other toxic gas concentrations. Tie your feed usage into the local grain elevator for automatic feed ordering and delivery scheduling.

## Hortau

*Canada*

**http://hortau.com**

For more than a decade, Hortau has been an industry leader in precision soil moisture monitoring, developing one of the first web-based irrigation management systems on the market and helping growers take the guesswork out of irrigation management. Using soil tension to determine the precise amount of water to be applied, Hortau's proprietary system has helped growers of countless crop types improve plant health, boost yields, and cut irrigation costs. Hortau's wireless irrigation field technology, combined with its simple, cloud-based software, securely reports to owners and ranch managers how crops are faring in real time. The patented soil tension sensors allow growers to detect plant stress, which is the driving factor in crop yield and quality, before the damage is done. This proven technology greatly increases a grower's water-use efficiency and cuts down on fertilizer leaching, thus improving the bottom line.

## Infiswift Inc.

*United States*

**https://infiswift.com**

Infiswift is an enterprise IoT platform that connects and manages devices, users, and cloud-based services. Its architecture enables security and scalability with a development environment and analytics front end for custom implementations.

## John Deere Field Connect

*United States*

**www.deere.com**

John Deere Field Connect uses field-installed probes to monitor moisture levels at various depths. It then sends the information to a web-based interface where you can see the data on your computer or mobile device, so you can make timely irrigation decisions from anywhere. No more overwatering ... studies show that 80% of producers overwater, which not only increases your operating costs, it can saturate the soils, reducing growth and yield, and increasing the chance of soil fungal disease. And no more under-watering ... obviously you want to get the most out of every drop, and Field Connect delivers. You can improve plant health by increasing moisture at key stages, such as pollination, or to help plants pull in nutrients. Crop stress can be better monitored and managed, helping you build root zones for a better stand and better yield.

## Libelium Distributed Communications SL

*Spain*

Libelium is a wireless sensor network platform provider that delivers, open-source, low-power consumption devices that are easy to program and implement for Smart Cities solutions and a wide range of M2M and sensor projects. All of Libelium's products are modular, horizontal, and easy to integrate into third-party systems. Because of its innovative hardware integration design and horizontal

approach, Libelium's Waspmote — the company's open-source wireless sensor platform — has the potential to be the standard, universal platform for the upcoming technological age of the Internet of Things.

## New Boundary Technologies, Inc.

*United States*

**www.newboundary.com**

New Boundary Technologies' Connected Ag Portfolio provides a suite of wireless IoT (Internet of Things) applications to monitor and control stationary and mobile assets. Independent of hardware, we integrate best-in-class industry applications customized to your needs - providing access from a single web-based dashboard. Our web applications power IoT solutions from leading sensor and equipment manufacturers. Connected Ag Portfolio includes applications to manage: Agriculture Bin and Tank Levels • Livestock Feed Usage • Barn or Poultry House Environment • Irrigation Equipment • Soil Moisture Content and Temperature • Remote Equipment GPS Tracking.

## Observant Pty Ltd.

*Australia*

**https://observant.net**

Observant Pty Ltd. develops farm information management platforms and applications. The company offers pump management and irrigation automation, livestock and asset management, crop and pasture management, and irrigation scheduling solutions through its C3, Pico, and V1 brands. Note: Acquired by Jain Irrigation, Inc.

## PrecisionKing

*United States*

**www.precisionking.net**

Easier farming with water management technology. Our devices provide everything you need to monitor the health of your farm straight from your computer, phone, or tablet.

## Puresense (Jain)

United States

[www.jainsusa.com](http://www.jainsusa.com)

Puresense is the industry leading farm data solutions division of Jain Irrigation. Jain has been an innovator of drip and micro irrigation products for 30 years. The combination of Puresense's powerful software analytics and Jain's robust irrigation equipment ensures our customers are using the latest technology to assist their farm management needs. Reacting quickly to changing crop conditions is crucial to every farming operation. Puresense built a stable connectivity platform for our customers to receive their crop performance information. This information is accessible on any mobile device with an internet connection. Note: Acquired by Jain Irrigation, Inc.

## pycno agriculture

United Kingdom

[www.pycno.co.uk](http://www.pycno.co.uk)

All in one, simple dashboard: Irrigation control • Advanced mapping and heatmaps • Growing degree days, Chilling hours • Weather forecast • Alerts based on rules.

Intelligent forecasts: Combine data from pycno sensors and local stations • Get notifications based on trends • Use local weather stations and satellite data • Predict diseases and insect growth • View any potential plant stress factors.

Explore visually: Use heat-maps and colors to instantly identify trends in your field • Filter and visually analyse sensor data • Draw common crop, irrigation, and soil areas.

Monitor your soil: Know and understand your soil capacity • Optimise the rate and volume of water needed • Monitor soil temperature, for sensitive crops. Apply phenological and disease models to your data: Select your variety and stage of crop • Predict disease and insect eruption • Calculate growing degree days • Calculate chilling hours • Understand stress factors that influence growth. Dive into data: Analyse all data

coming in, spot outliers • Let your agronomist look at all the raw information • Export your data to a spreadsheet.

## Ranch Systems LLC

United States

[www.ranchsystems.com](http://www.ranchsystems.com)

Ranch Systems LLC develops wireless equipment for field monitoring and control in agricultural and environmental applications. The company offers weather and climate, soil moisture tracking, irrigation, and equipment control, tank and pond monitoring, remote cameras, and alerting solutions. It serves vineyards, orchards, and field crop markets.

## Semios

Canada

<http://semios.com>

Semios prides itself in being able to set-up a robust network that allows you to place devices anywhere in your field. This means you no longer have to worry about sim cards or data plans — let us know where you want information and we can get it for you. Semios blankets each orchard block in a mesh network — allowing us to put hundreds of devices in the field, including pheromone dispensers, automated traps, soil moisture meters, or leaf-wetness devices. We continually add the best devices available on the market into our portfolio so you can connect with the information you need. Semios works with leading manufacturers of soil and temperature probes to allow you to connect different types of sensors based on your ranch conditions. Each qualified probe is guaranteed to work on the Semios portal which then identifies important water conditions such as permanent wilting point, field capacity, and maximum allowable depletion based on your crop. Information is sent across Semios' network so you don't have to manually check sensors.

## Sensorian

South Africa

[www.sensorian.co.za](http://www.sensorian.co.za)

Sensorian provides unique proprietary telemetry used for the collection of data from a multitude of sensor devices. Our company is dedicated to providing technical solutions for the reading, storage and display of sensor data. Sensorian transmits collected data using the most advanced and suitable communication methods available to our clients industry. Our software platform further allows for the remote activation of devices and the setting of alerts. We offer a single location from where you can view or control various types of sensors and actuators.

## The Climate Corp. (FieldView)

United States

[www.climate.com](http://www.climate.com)

A Division of Monsanto Co. The Climate FieldView Drive allows you to see your field maps build in real time and easily transfer that data to your account. The FieldView Drive is simple to install and currently compatible with most John Deere planters, air seeders, sprayers, and combines and with several Case planters and combines. Watch field maps build in real time so you can identify and address critical issues in the moment. Find out what's happening beyond the end rows with imagery that can help identify issues early and prioritize scouting.

Evaluate the impact of agronomic decisions on yield this season, so you can maximize profitability next season. Use your historical yield data, combined with proprietary field testing results, to generate planting scripts tailored to your unique yield or profitability goals with Advanced Scripting. All scripts are fully customizable. Stay on top of changing conditions that affect nitrogen availability in your fields. Monitor nitrogen by customizable zones and spot potential shortfalls to ensure you have enough nitrogen to meet your yield goals.

## The Yield

Australia

[www.theyield.com](http://www.theyield.com)

Make faster, more informed decisions with on-farm sensing and 7-day predictions. Sense, Analyse, Predict, Inform.

## ThingWorx (PTC)

United States

[www.thingworx.com](http://www.thingworx.com)

[www.ptc.com](http://www.ptc.com)

ThingWorx develops application platforms. The Company builds connected applications within client's intranet of equipment, processes, and systems, as well as searchable and semantic data collection frameworks that allow collective intelligence to be applied. Note: Acquired by PTC.

## Wildeye Enterprise

United States

[www.mywildeye.com](http://www.mywildeye.com)

Wildeye Enterprise is a powerful and flexible monitoring platform designed for partners and resellers to offer a range of powerful options to growers. Web-based graphing with powerful tools including fleet and group management, stacking of soil moisture, set-points for field capacity and stress points, calculation of PAW, automatic emailing of graphs, email, and SMS alerts. Partners can supply and install 3rd party sensors, handle interface wiring, and select sensor types in the website setup.

## WiseConn Engineering

United States

[www.wiseconn.com](http://www.wiseconn.com)

The WiseConn platform is a field monitoring and control network, consisting of interconnected hardware and software. Information is transferred from the field to a central gateway, responsible for communicating the network information and control commands to a secure web server.

## IRRIGATION HARDWARE

### Deep Root Irrigation LLC

*United States*

**www.dri-products.com**

DRI's innovative and patented Deep Root Irrigation design reduces irrigation cost, saves water, and increases crop yields.

### IRROMETER Co.

*United States*

**www.irrometer.com**

Sometimes referred to as the most important development in soil moisture measurement since the original IRROMETER, the low cost and reliable technology of the WATERMARK sensor has made a major impact on the large scale use of soil moisture measurement technology by production agriculture throughout the world.

### Lindsay Corporation

*United States*

**www.lindsayir.com**

Lindsay has irrigation systems operating in more than 90 countries. Lindsay irrigation systems have been the choice of the world's irrigators for over 50 years. The company's success comes from finding a better way to irrigate almost any crop on varied terrain and soils to increase yields and better utilize natural resources.

### Magnation Water Technologies

*United States*

**www.rainlikewater.com**

Magnation is dedicated to promoting environmental health and safety by helping water consumers around the globe improve the quality and productivity of water with scientifically-proven and data-backed, environmentally-friendly, chemical-free water treatment devices. We are passionate about water conservation through improved water productivity, reducing chemicals, and energy consumption with top-quality products made in the United States.

### McCrometer

*United States*

**www.mccrometer.com**

McCrometer is a leading global flow instrumentation specialist. We specialize in the design, manufacture, installation, and testing of flow metering solutions. Instrument, process, facility, and consulting engineers worldwide have confidently chosen McCrometer's flow meters for more than 60 years.

### MicaSense

*United States*

**www.micasense.com**

MicaSense offers sensor technologies for unmanned aircraft systems, and cloud-based data processing solutions.

### MyRainReport.Com

*United States*

**http://myrainreport.com**

MyRainReport.com delivers accurate, site-specific rain reports to your e-mail address without any on-site hardware and without visiting your site. How do we do it? We use your site's latitude and longitude, combined with all of the available rainfall data, our own data set, proprietary algorithms, and a proven quality control system.

### Netafim USA

*United States*

**www.netafimusa.com**

Manufactures irrigation systems for applications in agriculture, greenhouses, landscaping, and mining. The company offers drippers and dripper lines; sprinklers and micro sprinklers; and crop management products, flexible pipes, accessories and connectors, agro machinery products, as well as filters, valves, and pumps. It also provides HydroCalc PRO, an irrigation system design software solution; IrrCAD Pro, a computer-aided design software solution for designing and optimizing pressurized irrigation systems; agronomy services; and project designing services.

### Omni Environmental Group Pty. Ltd.

*Australia*

**www.OmniEnviro.com.au**

Omni Environmental Group Pty. Ltd. has been manufacturing magnetic / electromagnetic water treatment systems in Australia for over 10 years and since have exported our products and established partnerships in Asia, Brazil, USA, Europe, Egypt, Jordan.

### Rain-Tal Ltd.

*Israel*

**www.rain-tal.com**

A producer of advanced irrigation devices and a leader of implementing novel watering technologies and systems for over 30 years. The company specializes in unique solutions for arid and semi-arid climates, where water saving is highly important, in low volume irrigation for greenhouses and mist generation for germination, as well as in orchards and open field agriculture.

### Reinke Manufacturing

*United States*

**www.reinke.com**

Reinke Manufacturing designs and builds mechanized agricultural irrigation equipment (center pivots and lateral move systems) to meet the ever-changing needs of our customers in the U.S. and abroad. Not only have Reinke products proven to stand the test of time through quality materials and superior workmanship, but state-of-the-art engineering and futuristic research and development in all areas of manufacturing continue to make Reinke products such as the Ontrac By Reinke satellite monitoring controls and the Navigator series of GPS Controls among most technologically sophisticated enhancements available in the irrigation industry. These advancements along with a network of highly qualified Dealer Professionals provide our customers with products, service, capabilities, and efficiencies above and beyond their expectations.

### Rivulis Irrigation Ltd.

*Israel*

**http://rivulis.com**

Rivulis Irrigation offers a full line of irrigation products including drip lines, drip tapes, filters, hose and tubing, sprinklers, sprays, and valves. Our products are sold through our network of dealer partners in several markets including agriculture, horticulture, landscape, and mining. It's about applying the right amount of water at the right time throughout the whole season. An irrigation system comprised of Rivulis Irrigation products can generate greater yields using the same, or even less, water and nutrients than with previous water distribution systems.

### Sensorian

*South Africa*

**www.sensorian.co.za**

Sensorian provides unique proprietary telemetry used for the collection of data from a multitude of sensor devices. Our company is dedicated to providing technical solutions for the reading, storage and display of sensor data. Sensorian transmits collected data using the most advanced and suitable communication methods available to our clients industry. Our software platform further allows for the remote activation of devices and the setting of alerts. We offer a single location from where you can view or control various types of sensors and actuators.

### Silicon Sensing Systems Ltd.

*United Kingdom*

**www.siliconsensing.com**

Manufacturers of silicon MEMS inertial measurement sensors for world-wide commercial and industrial motion-sensing markets. Silicon MEMS gyroscopes, accelerometers, and Inertial Measurement Units, plus foundry services.



## SureFire Ag Systems

*United States*

**[www.surefireag.com](http://www.surefireag.com)**

SureFire Ag specializes in providing solutions for the control and application of liquid and dry fertilizer, seed, and chemical the SureFire way. We believe in looking beyond convention to be an innovating leader in a dynamic industry. Our team brings experience in equipment engineering, crop input application, and customer service to your field. Our products and services have reached customers across the United States and internationally. We believe in farming smarter, not harder. From simple, standard single-product liquid fertilizer application systems, to complex, custom-designed systems, SureFire Ag is committed to helping you farm the way you want.

## SWIIM System

*United States*

**<https://swiimsystem.com>**

SWIIM provides a new standard in water measurement than allows growers to receive an accurate accounting of the water both delivered and consumed on their fields. This patented process was developed with the help of the USDA and is being used successfully by growers and water providers. SWIIM accounts for your water with the same precision as your CPA accounts for finances. With the regulations and the increase costs associated with water usage this information is invaluable.

## Tal-Ya Agriculture Solutions

*Israel*

**[www.tal-ya.com](http://www.tal-ya.com)**

Tal-Ya manufactures a unique, patented polypropylene tray that covers the plant's root system, directing water and fertilizer directly to the root, while protecting the earth around the root from weeds and extreme temperatures. The trays are easy to use and bring

tremendous added value to farmers, dramatically increasing crop yield, and enabling farmers to harvest more from each tree, faster. Additionally, use of Tal-Ya trays has been proven in research and in the field to bring a savings of at least 50% in water, 50% in fertilizer use, and an alternative to herbicides. The trays are fully compatible with drip irrigation and other types of irrigation, as well as making optimal use of rainwater and dew.

## The Toro Company

*United States*

**[www.thetorocompany.com](http://www.thetorocompany.com)**

Toro's drip irrigation solutions help growers of permanent, field, and row crops around the world realize substantial benefits in yield, quality, and water savings from the precise application of water and nutrients.

## MARKET INFORMATION

### AcreValue (Granular)

*United States*

**[www.acrevalue.com](http://www.acrevalue.com)**

**[www.granular.ag](http://www.granular.ag)**

AcreValue is brought to you by the team at Granular, Inc., based in San Francisco. Granular's mission is to help professional farms operate more efficiently and profitably with technology and data analytics. AcreValue offers professional farms the analytical tools they need to find the right land at the right price, and, at the same time, provides the whole industry with a single convenient and free site to access all the public data on farmland.

AcreValue aggregates and analyzes terabytes of data about soils, climate, crop rotations, taxes, interest rates, and corn prices to calculate the estimated value of an individual field. With its map-based web interface, AcreValue provides easy access to this data with a simple click on a field. AcreValue is currently available in all U.S.

states except Alaska, Hawaii, Alabama, and Florida. Estimated values are currently available in Iowa, Illinois, Indiana, and Minnesota.

## AgriData Inc.

*United States*

**[www.agridatainc.com](http://www.agridatainc.com)**

In the late 90's, AgriData, Inc. developed a mapping system for crop insurance companies to document and recall policy information in a geospatial mapping interface. This product later became Surety Customized Online Mapping or also known as simply, Surety. Building off what they had already established with the insurance companies, AgriData, Inc. in 2004 began releasing features for other Ag Industries as well. Surety focused on providing a straightforward mapping experience that was easy to use yet still contained a variety of valuable land data that when using typical methods would require a substantial amount of time and effort to compile. Surety not only saved time, it ensured accuracy of the mapped areas, consistency between different maps, as well as increased the professionalism of the way the maps looked. Soon other agribusinesses found the value within Surety. Ag applicators, financial institutions, real estate agents, farmers, seed salesman, and more all began using Surety Customized Online Mapping and found many valuable resources within it. This diversity of clientele helped shape the product into what it is today. In April of 2012, AgriData, Inc. expanded its offerings by releasing Surety Pro, a more advanced mapping software system sold as an upgrade to Surety. Surety Pro is an ambitious software development that uses maps as its backbone and enables the mapper to save information geospatially within a personal or company account. With the release of the unprecedented Forms Designer a year later, Surety Pro became a tremen-

dous tool for anyone, not just those within the ag industry, to store and retrieve their geospatial information and data. By allowing clients to save their own custom setup of information, Surety Pro becomes something uniquely valuable to each company or individual utilizing it.

## Farm Market iD

*United States*

**[www.farmmarketid.com](http://www.farmmarketid.com)**

Farm Market iD offers the only data solution for agri-marketers that identifies the matrix relationship between individuals and farms. By showing the relationship from the land, to the crop, to the people, to the farm, and then the relationship between farms, we are able to arm our clients with the intelligence they need to make highly targeted marketing decisions. Adding this geospatial intelligence to our integrated marketing options of address, phone, email, and online ad targeting, we have you covered.

## Gro Intelligence

*United States*

**<https://grointelligence.com>**

Gro Intelligence cultivates opportunities. We gather, aggregate, and process data using proprietary algorithms to unlock crucial insights into weather patterns, trade flows, pricing dynamics, and production. We provide our users actionable agricultural data to drive higher productivity and greater access to capital.

## Mercaris

*United States*

**<https://mercaris.com>**

Our market data and auctions are helping to grow organic and non-GMO agriculture in the U.S. The development of sustainable agriculture is at a critical point. While some resources are in place to educate consumers, address public policy, and support scientific research on sustainable agricultural crops, far less emphasis has been placed on the market infrastructure

upon which participants, from producers to retailers, depend. Mercaris was formed to address this gap through two types of services. First, we provide up-to-date, accurate information on market conditions for organic and non-GMO commodities. Second, our trading platform allows buyers and sellers to meet on-line and trade physical commodities.

## Premise Data

*United States*

**www.premise.com**

Human-directed and machine-refined, Premise indexes and analyzes millions of observations captured daily by our global network of contributors, unearthing connections between them to map reality on the ground, and help global decision-makers move faster and make more impactful, data-driven decisions.

## Terva

*United States*

**www.terva.ag**

Terva is an online marketplace that connects farmers with the right farmland at the right time.

## MARKETPLACES

### Aggrigator

*United States*

**www.aggrigator.com**

We empower small farmers — giving them access to bigger markets and enabling them to grow their businesses by selling directly to a wide range of commercial buyers — grocers, restaurants, and institutions. Our marketplace platform provides small farmers with critical adjacent ecosystem services — financing, transportation, logistics — to meet demand in the world's most important markets.

### Agriconomie

*France*

**www.agriconomie.com**

Agriconomie is a marketplace specialized in agriculture. While many farmers use their smartphones and modern

technologies to help them, there are still multiple problems. The most important one is that they have to get to the supplier very often. On average, suppliers are 50 kilometers away from their farms. Agriconomie is an ecommerce website for all your farming needs so that you don't lose time.

### AgroStar

*India*

**http://agrostar.in**

AgroStar is India's leading direct-to-farmer digital platform where farmers can procure quality agri inputs at fair price just by using a mobile phone. Indian farmers face multiple challenges in procuring agri inputs for their farming needs. AgroStar aims to simplify the whole Agri-Business experience of farmers in Rural India by addressing the challenges of Indian farmer through smart and innovative uses of technology. AgroStar's service is powered by over 200 highly motivated employees and state-of-the-art multilingual call center. AgroStar currently operates in the states of Gujarat, Maharashtra, Madhya Pradesh, and Rajasthan. Farmers in these states can procure an entire range of good quality and branded agri-inputs like seeds, crop nutrition, crop protection, and agri-hardware products through the company's m-commerce platform and a free to download mobile app 'AgroStar'.

### HarvestPort

*United States*

**https://harvestport.com**

HarvestPort is a shared-economy platform for seasonally used agricultural assets. It offers a marketplace for farmers and agricultural professionals to rent assets and equipment according to their seasonal needs. The service includes documentation of available assets and equipment, matching of requests with qualified lenders, analyzing profiles and making targeted recommendations, managing transactions, and billing for the assets and equipment.

### Hello Tractor

*United States*

**www.hellotractor.com**

Hello Tractor aspires to be the leading agricultural inputs provider in sub-Saharan Africa, promoting inclusive economic growth and regional food security. Hello Tractor transforms lives by delivering reliable and affordable tractor co-sharing services.

### La Ruche Qui Dit Oui!

*France*

**https://laruchequiditoui.fr**

"Online food co-op La Ruche Qui Dit Oui! combines an internet speciality — cutting out the middleman in the supply chain connecting consumers with producers — with grass-roots social networking. The yes-saying beehive of the name represents the consumers who club together to source a food order: when the required size is met, the order is triggered and the consumers receive their goods. With 467 hives across France it's generating a buzz."

### Maiaki

*United States*

**https://maiaki.com**

Maiaki Inc. is a specialty crop e-commerce company. It operates online B2B platform, connecting U.S. producers directly with traders overseas. The global food system needs more efficiency and transparency. Maiaki is the online, one-stop shop platform for buyers to find, purchase, pay, and ship specialty products from U.S. to Europe.

### Yagro

*United Kingdom*

**https://yagro.com**

Yagro offers a software solution that enables farmers to manage their supply chain. It enables them to connect with suppliers and collect quotes, compare, and order chemicals, fertilizers, seeds, fuel, lubricants, and feed.

## MISCELLANEOUS

### ADC Bioscientific

*United Kingdom*

**www.adc.co.uk**

ADC produces the most portable and user-friendly equipment on the market. The photosynthesis measurement systems — ranging from ultra-compact to sophisticated systems for comprehensive experiments — are invaluable tools for thousands of researchers worldwide. To accurately and non-destructively measure leaf area and associated parameters, ADC produces the most compact and portable commercially available device. ADC's hand-held Chlorophyll Content Meter is a highly reliable and affordable instrument to non-destructively quantify chlorophyll. To allow plant stress to be investigated through chlorophyll fluorescence, ADC supplies a range of chlorophyll fluorometers — from compact hand-held devices to fluorometers that offer exceptional experimental control and more testing protocols than any other portable fluorometer.

### AGRICOLUS

*Italy*

**www.agricolus.com**

AGRICOLUS is a cloud ecosystem, with web components, desktop, and mobile, which includes several applications. AGRICOLUS born to support farmers, agronomists and other operators in the agricultural world in optimizing agronomic practices through the acquisition and analysis of data for crops. AGRICOLUS integrates the latest data collection technologies and provides several features: AGRICOLUS Decision Support System is a cloud solution for precision farming that allows farmers to modify the distribution of plant protection products and to act promptly against phytopathologies. AGRICOLUS AWARENESS is the alert system designed for big companies, farmers associations or public administration,

available on web and mobile devices.

OLIWES (Olives Warning Enterprise Suite) is a software that supports operators in defending olive groves against diseases.

## AgriSmart Information Systems LLC

*United States*

**www.agrismartis.com**

AgriSmart Information Systems develops online software services for the companies involved in applying agricultural chemicals by airplane or ground application equipment.

## Agrometius BV

*The Netherlands*

**www.agrometius.nl**

Agrometius is a technical trading and service organization that has specialized in GPS technology and precision farming. Agrometius was founded in 2010 from the privatization of the agricultural department of Geometius. In recent years, the agricultural branch has become a dynamic company with more than 40 employees and offices in the Netherlands and Belgium. This will help you quickly and competently.

## Ayrstone Productivity LLC

*United States*

**www.ayrstone.com**

Wireless Farm Data Networks using WiFi. Ayrstone Productivity introduces the AyrMesh System of Wireless Farm Networking for your farm, ranch, or other rural property. The AyrMesh system is designed for easy set up and use by people with farm backgrounds. It uses standard WiFi signals and standard Ethernet connectivity, so it can connect a huge variety of household and industrial equipment. All Ayrstone devices come with a 90-day limited money-back guarantee and a 1-year replacement warranty, so you can confidently join the thousands who have already adopted the AyrMesh system on their properties.

## Delta-T Devices

*United Kingdom*

**www.delta-t.co.uk**

Delta-T Devices specializes in instruments for environmental science, in particular: agronomy, plant physiology, eco-physiology, data logging, meteorology, soil moisture, solar energy studies, and environmental monitoring.

## Ecorobotix

*Switzerland*

**www.ecorobotix.com**

We develop and manufacture Autonomous Weeding Robots. The first ever completely autonomous machine for the ecological and economical weeding of row crops, meadows, and intercropping cultures.

## eLEAF

*The Netherlands*

**www.eleaf.com**

eLEAF provides satellite based applications and data to optimise crop production and water management. Whether you are managing a multinational agro-holding or developing complex water management policies, our state-of-the-art products will provide an extra dimension and support you to optimize your outputs.

## Geocledian

*Germany*

**www.geocledian.com**

We are a start-up specialized in designing and providing geospatial cloud services. Our goal is to provide high quality, easy-to-use, low cost information products based on satellite data and other sources. As we are a team of remote sensing experts with a strong research background we are always working hard on bringing the newest research developments in remote sensing to you. Our expertise covers not only all fields of remote sensing like optical and microwave, active and passive remote sensing, vegetation modelling, time series analysis, and big data techniques, but also IT and system design.

## Ice Miller Legal Counsel

*United States*

**www.icemiller.com**

Steve has been selected for inclusion in the Best Lawyers in America since 2006 and has been named to the Indiana Super Lawyers list each year since 2004. In 2007, he was profiled by Super Lawyers for his work on the Indiana Toll Road transaction, one of the first and largest public infrastructure transactions in U.S. highway history. In addition, he has been recognized by Chambers USA as one of the leading attorneys in corporate/mergers and acquisitions.

## Ignitia

*Ghana*

**www.ignitia.se**

Ignitia developed the first highly accurate, highly scalable tropical weather forecasting model. We produce hyper-local, highly-accurate weather forecasts for the tropics. Unlike other regions, rain in the tropics is produced by small-scale systems where convection is a driving force. These convection forces can appear much more quickly, and without seemingly any notice to the untrained eye. Our technology is specifically designed to predict this kind of weather. Most people, and farmers, in Africa have access to a phone. Delivering our forecasts via SMS enables us to reach our target audience on a much larger scale. Ignitia is not an app. Farmers are often portrayed as unintelligent, but that couldn't be further from the truth. What farmers need is reliable information, and access to technology in order to make more informed decisions. Farmers know how to farm, we're simply giving them a better tool.

## Insero AgOtter

*United States*

**www.agotter.com**

The AgOtter allows you to see, monitor, and record all the sprayer's essential information.

See your speed, acres, gallons, and rate (for left boom, right boom, and total output of the sprayer). AgOtter's Valve controls to a constant rate of spray regardless of ground speed. Set it to a rate and forget it. AgOtter's Controller can send alarms to any Apple device. Texts can be sent about overspeed or undesirable rate application. Make sure your application is done right.

## Israel Cleantech Venture (ICV)

*Israel*

**http://icv.vc**

ICV is the leading venture capital firm dedicated to partnering with exceptional entrepreneurs in Israel building businesses that leverage technology to enhance sustainability. ICV currently manages over \$150M in two funds and has completed more than 25 investments. ICV funds are backed by leading institutional investors, multinational corporations, and family offices in Europe, the U.S. and Israel.

## Kilimo

*Argentina*

**www.kilimo.com.ar**

We are an agtech startup from Córdoba, Argentina. Our mission is to make farming easier by using Big Data as a decision support tool for every day farm management. We provide a decision support tool for irrigation management in extensive agriculture. Using satellite, climate, and on site data, we feed our proprietary Big Data engine to make the best possible irrigation prescription for each crop, improving yields up to 30% and water use efficiency up to 70%. **THREE STEPS FOR THE FARMING OF THE FUTURE**

**SOIL TESTING:** We order soil samples of the farm to adjust the algorithm to the site specific soil conditions.

**BIG DATA:** Our servers get satellite and climate data for each plot, and keep our proprietary water modeling algorithm



running 24/7.

**DECISION SUPPORT:** We provide the exact irrigation prescription through our web or the mobile application. The advice is based on the farmers' strategy.

## Lindsay Corporation

*United States*

**www.lindsay.com**

Lindsay is a single-source expert for developing large-scale irrigation solutions for agriculture investors. Our portfolio of products and services can be customized to create fully integrated irrigation solutions that meet any grower's requirements.

## Logiqs BV

*The Netherlands*

**www.logiqs.nl**

Logiqs is a leading developer of automated logistics systems for the worldwide horticulture sector. We advise, design, produce, and install complete logistical systems, manual or automated, for pot plants, cut flowers, tree nurseries, flower bulb growers, and vegetables.

## Persistence Data Mining

*United States*

**http://persistencedata.com**

A.R.M.D.S. (Aerial Remote Mineral Detection System). Persistence Data Mining designed our UAV (Unmanned Aerial Vehicle) for long flight durations, large payload, and steady flight for quality hyperspectral imaging. Hyperspectral cameras capture images beyond the human range of vision. Specific minerals and elements can be identified from these images. Our goal is to capture soil nutrient images including Nitrogen, Phosphorus, and Potassium within a precision of one square meter. More precise data empowers farmers to proactively optimize costs and increase yields. Modern farmers apply varying rates of fertilizer by programming their machinery with computer generated "prescription maps". Currently, prescription maps use data from soil

sampling, last season's harvest, and/or satellite images of crops growing. The precision of our data can revolutionize the accuracy of prescription maps and variable rate fertilizers.

## PestWorks

*United States*

**http://pestworksap.com**

855bugs.com, a residential and commercial pest management franchise based in Waco, Texas, has released PestWorks, its proprietary industry management software. The owners of 855bugs.com have worked in pest management for a combined 33 years. They designed PestWorks to focus on empowering employee productivity and removing friction. Tools like Tech Dashboard allow pest professionals to view their schedules, create estimates, and complete and invoice jobs on site. Features like auto-pay, print-to-mail, and an owner's dashboard are currently in the works. The software can be accessed on any device and is compatible with all browsers, the company says.

## Planet

*Germany*

**www.planet.com**

Planet's high-frequency imaging satellites deliver a constant stream of current information to identify changes in crops and soil. This continuous flow of data is readily accessed from Planet's cloud-based platform, enabling you to make smarter decisions, optimize inputs, increase profitability, and enhance sustainable farm practices.

## Prolific Earth Sciences (MicroBiometer)

*United States*

**www.microbiometer.com**

The Biometer measures the number of microbes less than 10um in diameter in a sample of soil or compost tea — these are the microbes that form the basis of the food web. It is well documented that nutrition poor and challenged soils have very low microbial populations and

that remediation that supports vegetation results in an increase in the microbial population. It is generally accepted that the nutrition available to plants in a growing season is mineralized in the microbial population. Initial studies supported by PES indicate that the microbial population of a soil/compost sample reflects the nutritional level of the substrate. Still to be answered are questions such as how high a microbial count of compost tea will generate the best results — and how crop, season and area dependent this is.

## Sensoterra

*The Netherlands*

**www.sensoterra.com**

Sensoterra provides new generation soil moisture sensors, embedded in IoT/precision agriculture. Sensoterra is the low-cost, wireless solution to real-time soil moisture measurement for agriculture, horticulture, nature restoration, and landscaping.

## NEXT-GEN FARMS

### Advanced Reconnaissance Corp.

*United States*

**http://timefirevr.com**

ARC has developed unique engineering technologies, yielding sensors which are smaller, smarter, more accurate, more reliable, more durable, and more cost-effective than existing solutions. These sensors are easily integrated with any airborne (including UAV's) or ground based platforms and are fully capable of exploiting the potential of tomorrow's integration needs. ARC provides a complete turnkey system from sensor hardware to data exploitation using proprietary system technology and algorithms not found anywhere else. Note: ARC was acquired by EnergyTek Corp. September 2016. EnergyTek Corp. merged with TimefireVR September 2016.

## AeroFarms

*United States*

**http://aerofarms.com**

AeroFarms is an urban agricultural company which provides aeroponic growing systems that grow and produce with neither soil, or sun, in any location. This is all possible due to the nature of their modular stackable systems which are easy to store as well as enabling of local production of pesticide-free greens. This allows the food production system to become more sustainable, efficient, and safe by creating commercial-scale farming in urban centers.

## Alesca Life

*China*

**www.alescalife.com**

Alesca Life Technologies creates next-generation urban farming solutions using advanced software technology.

## Bowery

*United States*

**http://boweryfarming.com**

Bowery is the Modern Farming Company on an ambitious mission to transform the future of food and change the face of agriculture. They believe in better food, better access to that food, and better care for the world around us. By leveraging automation, software, and controlled environment technology, we're building an innovative new way of growing food locally that's over 100x+ more productive than the same square foot of farmland, while using 0 pesticides and 95% less water.

## BrightFarms

*United States*

**http://brightfarms.com**

BrightFarms finances, designs, builds, and operates greenhouse farms at or near supermarkets, cutting time, distance, and cost from the produce supply chain.

## Freight Farms

*United States*

**www.freightfarms.com**

Freight Farms offers high-volume crop production units made from upcycled shipping containers to support farming in any climate. Leafy Green Machine (LGM) is a complete hydroponic growing system built entirely inside a shipping container with all the components needed for commercial food production. With an internet connection users are able to stay connected to their operation anywhere in the world, 24/7. Through the farmhand app it's possible to monitor and control all the environmental components inside the farm directly from an iOS device.

## FreshBox Farms

*United States*

**http://freshboxfarms.com**

All of our produce is grown hydroponically in specially outfitted enclosures. Each unit operates on its own as a fully sustainable farm with its environment carefully managed through mechanical and digital controls. This means year-round quality food production without the need to transport food cross-country. A clean growing environment also means no need for pesticides or herbicides.

## Gotham Greens

*United States*

**http://gothamgreens.com**

Gotham Greens designs, builds, and operates commercial scale greenhouse facilities in urban areas for fresh vegetable production. Gotham Greens' pesticide-free produce is grown using ecologically sustainable methods in technologically-sophisticated, 100% clean energy powered, climate controlled urban rooftop greenhouses. We proudly grow in New York City and Chicago.

## Green Sense Farms

*United States*

**www.greensensefarms.com**

Green Sense Farms owns and operates an indoor, commercial, and vertical farm. It grows pesticide/herbicide free and GMO-free vegetables, herbs, leafy greens, and lettuces. Green Sense Farms controls the entire process from seed to supermarket. We grow, pack, and ship our leafy green vegetables and comply with rigorous food safety and product traceability programs.

**n.io**

*United States*

**https://n.io**

A software company that has built the n.io platform to empower your real-time world. Our purpose is to enable you to create transformational applications, products, and services. The world is racing towards sensorization and smart connected things. n.io software takes on the toughest challenges of interoperability, latency, database dependency, and user complexity. n.io enables adaptable real-time intelligence and automation, and empowers you to exploit the vast potential of technology and the internet.

## Zeltex

*United States*

**www.zeltex.com**

In the field or in the lab — Zeltex is a leader in portable and laboratory Near-Infrared analyzers. Zeltex designs and manufactures analyzers for the Petroleum, Grain, Seed, Cheese, Food, and other industries.

## QUALITY MANAGEMENT

### AssurX

*United States*

**www.assurx.com**

AssurX's flexible software system automates quality management and compliance processes so issues can be centrally managed — from detection to

corrective action and trend analysis. It helps collect, organize, analyze, and share information to better manage risk and improve quality management and compliance performance everywhere in your enterprise. Using AssurX's closed-loop quality management and regulatory compliance software, you not only know immediately when an issue arises, all relevant areas of your organization share the information needed to contain, evaluate, and quickly resolve the problem. With its powerful analytical tools, AssurX also helps companies identify, assess, and remediate their risk exposure, and perform the detailed trend analysis needed to prevent future quality and compliance problems.

## CropTrak | Cogent3D, Inc.

*United States*

**https://icroptrak.com**

CropTrak is dedicated to feeding the world with safe and traceable food by deploying flexible farm software that tracks the dirt, the crop, and the food using advanced mobile and web-based technologies. We create Farm software that focuses on using technology to improve customer efficiency in data collection, management, reporting, and results while helping produce safer food. WHO WE DO IT FOR: Farming operators, food companies, insurance companies, consulting companies, and AgRetailers.

## FreshSurety

*United States*

**www.freshsurety.com**

FreshSurety measures produce respiration rate to directly determine the ripeness of each food carton using low cost disposable electronic sensors. We provide producers and retailers with up-to-the-minute shelf life information on individual cartons and pallets throughout the supply chain, anywhere in the world. This information enables retailers to market higher quality product with less waste

and increase their sales margins by as much as 50%.

## Invisible Sentinel

*United States*

**http://invisiblesentinel.com**

Diagnostic solutions for multiple industries. We are the inventors of Veriflow technology, a patented, DNA Signature Capturing Technology that draws from our core competencies in molecular diagnostics, antibody design, and immunoassays. Our Veriflow test kits are finding applications across multiple industries. We help the food industry to detect foodborne pathogens. We work with winemakers and beer artisans to cost-effectively improve the quality of their products. And we can apply Veriflow technology to challenges in other industries, too, designing custom solutions for healthcare, veterinary services, biodefense, and environmental testing. Each solution is specific, but each retains the inherent advantages of Veriflow technology — it's simple, accessible, and affordable.

## Lotpath

*United States*

**http://lotpath.com**

We build apps for any platform — Web, desktop, scanners, touchscreens, tablets, and smartphones. Windows, Apple iOS, and Android. If you've got a device, we can build an app for it. In the cloud or on your network. We work with you to design the right software solution to solve your business problems.

## Mekitec

*United States*

**www.mekitec.com**

Mekitec Ltd. is a Finnish company, with headquarters based in Oulu. We are a leading European manufacturer of X-ray food inspection systems, dedicated to provide next generation quality control systems for the global food industry. Mekitec has experienced rapid growth and expansion over the last decade. We are now present on

three continents and will establish more distribution centers in the near future. This enables us to provide prompt and effective services to meet the requirements of our customers globally. Our corporate mission focuses on ensuring food safety for our customers.

## N2N Global

*United States*

<https://n2nglobal.com>

N2N Global is an "end to end" software and services company offering SaaS based, vertically focused solutions for the food industry. Our vision is to enable the world to have a safe, affordable, reliable, and profitable global integrated food supply chain with the highest achievable quality.

## Prestodiag

*France*

[www.prestodiag.com](http://www.prestodiag.com)

Prestodiag develops, manufactures, and sells innovative solutions for rapid detection of bacteria. Our analytical solutions are based on an innovative optics technology called Surface Plasmon Resonance imaging and allow detection and identification of pathogenic bacteria such as Salmonella, Listeria, or E.coli. We provide users with a result in just a few hours instead of one to several days. Our market is primarily the food safety sector, and also on medical and environmental applications.

## Spektrotech

*United States*

<http://spektrotech.com>

Spektrotech AMERICA Inc. is a U.S.-based developer of a crossmorphic sensor for the analysis of food and agricultural products.

## SENSORS

### Amber Agriculture

*United States*

[www.amber.ag](http://www.amber.ag)

Amber Agriculture, a startup from the University of Illinois, introduced farm technology that

helps to limit grain spoilage, a large problem that often goes overlooked. Amber Ag helps farmers monitor and manage the condition of their crops in storage, through a system of wireless sensors communicating information to a phone app, so that they can capture the highest possible price per bushel.

### AquaCheck

*United States*

[www.aquachecktech.com](http://www.aquachecktech.com)

Soil moisture management probes.

### AquaSpy Inc.

*United States*

<http://aquaspy.com>

Soil moisture monitoring systems.

### Arable

*United States*

[www.arable.com](http://www.arable.com)

Arable is an agricultural business intelligence solution founded on in-field measurements. Arable enables data-driven decisions in agriculture and natural resource management with Measurements that Matter.

### Banner Engineering Corp.

*United States*

[www.bannerengineering.com](http://www.bannerengineering.com)

Banner's impressive portfolio of sensors combined with our secure, robust wireless networks enable real-time access to information and equipment deployed in remote and distant locations, eliminating the need for site visits and onsite staff. Wirelessly monitor soil moisture, crop temperature, weather station data, and environmental conditions at the site. Remotely actuate valves, pumps, and even entire irrigation systems.

### Cambell Scientific, Inc.

*United States*

[www.campbellsci.com](http://www.campbellsci.com)

We are a leading designer and manufacturer of dataloggers, data acquisition systems, and

measurement and control products used worldwide in a variety of applications related to weather, water, energy, gas flux and turbulence, infrastructure, and soil. We specialize in rugged, low-power systems for long-term, stand-alone monitoring and control.

### Centaur

*United States*

<http://centaur.ag>

Centaur develops and markets end-to-end solutions for the Internet of Things, focused on the quality and safety of stored goods. Our mission is to dramatically increase post-harvest yields and eliminate waste from farm to shelf.

### Cermetek Microelectronics, Inc. (LeafMon)

*United States*

[www.cermetek.com](http://www.cermetek.com)

New sensor technology, LeafMon allows growers for the first time to base irrigation decisions on a measure of plant hydration.

### ClimateMinder (Rain Bird)

*United States*

[www.rainbird.com](http://www.rainbird.com)

The Rain Bird ClimateMinder System is a revolutionary monitoring and control solution for agriculture. Its mobile network technology sends key data directly from the field right to your fingertips via your mobile phone, computer, or tablet. • Monitors soil, weather, plant conditions, and more • Controls water irrigation, even in small acreage plots • Sets up a low cost wireless technology on your field • Enables easy learning and use. The ClimateMinder System helps you: • Increase crop yields and quality • Reduce water, fertilizer, and chemical application costs • Respond to frost conditions immediately.

### Cool Planet

*United States*

[www.coolplanet.com](http://www.coolplanet.com)

Cool Planet is addressing three of the world's largest markets: food, water, and energy. Currently we are commercializing Cool Terra products, Engineered Biocarbon that helps to improve soil health, as well as Cool Fauna for use in animal health and nutrition. Cool Terra Engineered Biocarbon sequesters carbon and creates value for the agriculture, water, and livestock industries, and has a lasting impact beyond the annual economic benefits of application. Cool Planet's Engineered Biocarbon platform improves the soil for generations; users create lasting value, enhance their property, and leave a legacy in their soil.

### Davis Instruments Corp.

*United States*

[www.davisnet.com](http://www.davisnet.com)

Weather monitoring systems.

### Decagon Devices, Inc.

*United States*

[www.decagon.com](http://www.decagon.com)

[www.metergroup.com](http://www.metergroup.com)

Produces and sells research grade scientific instrumentation for soil, plant, water, and environmental sciences. Note: Decagon Devices, Inc. merged with UMS AG to become METER Group.

### Dualem

*Canada*

[www.dualem.com](http://www.dualem.com)

Dualem sells electromagnetic (EM) geophysical instruments for conductivity surveys of soil, groundwater, minerals and bedrock, and detection of buried metal.

### FieldIn

*United States*

<https://fieldintech.com>

FieldIn helps farmers and their stakeholders track operational progress and reduce work errors, offering new, previously inaccessible



sible layers of information that support decision makers at every junction. FieldIn combines innovative hardware with an array of sensors, agricultural best-practices, data science analytics, and proprietary algorithms into one integrative solution that captures the farm's pulse. We provide farm professionals with visualized insights and practical tools to manage every step of the pest control process, creating a new level of transparency, traceability, and collaboration.

### Flux IoT

*United States*

<http://fluxiot.com>

Eddy is a Growbot that ensures your grow's success. Get real-time pH, temp, and nutrient reads. Ensure your first grow is a success. Improve your grow yield and keep your plants happy.

### Geonics Ltd.

*Canada*

[www.geonics.com](http://www.geonics.com)

World leader in the design, manufacture, and service of electromagnetic geophysical instrumentation.

### Grownetics

*United States*

<http://grownetics.co>

Grownetics was founded to solve the world's agricultural inefficiencies. Our tools empower growers, farmers, and botanists to cultivate the best food and medicine while saving time and reducing risk. Our community-based grow optimization platform leverages hardware sensing and automation tools to make growing your plants easier than ever while sharing tips and tricks to better yields for measurable improvement.

### MotorLeaf

*Canada*

[www.motorleaf.com](http://www.motorleaf.com)

MotorLeaf has been built primarily to help growers produce more, and a better quality product by automatically adjusting to the needs of your crop. MotorLeaf builds separate

components, each of which has a specific set of functions. They can operate separately, or if you add onto the MotorLeaf HEART - operate as a larger whole. With automated adjustments to your crop, and notifications on when there may be a problem for you to look into - you decrease your loss, saving/making you more money.

### Odyssey Sensors

*United Kingdom*

[www.odysseysensors.com](http://www.odysseysensors.com)

Agri-aquacultural technology company focused on designing, developing, and delivering sensors and sensor networks that increase the environmental and financial sustainability of smallholder farmers. Worldwide.

### Phytech Ltd.

*Israel*

[www.phytech.com](http://www.phytech.com)

Phytech's patented technology, based on unique plant sensors, enables growers to receive and share a constant, real-time stream of data, helping them to understand the crop's moment to moment needs.

### Prospera Technologies

*Israel*

<http://prospera.ag>

We develop computer vision technologies that continuously monitor and analyze plant health, development, and stress. Our technology captures climate and visual data from the field and provides actionable insights to growers via mobile and web.

### Saturas

*Israel*

[www.saturas-ag.com](http://www.saturas-ag.com)

The Saturas stem water potential (SWP) sensor-based precision irrigation system provides a solution that combines accuracy, ease of use, and affordability. Embedding sensors in the trunk provides direct contact with water tissues for accurate and continuous water status measurement.

### Sencrop

*France*

[www.sencrop.com](http://www.sencrop.com)

Sencrop democratizes precision farming. The connected agro-weather station allows farmers to be informed in real time of the condition of their plots and the local agro-climatic conditions, from their smartphone or computer. Rain Gauge: Only accessible station to offer the system with double tipping bucket, recognized for its reliability of measurement of the rain accumulations. Anemometer: The Sencrop station is equipped with modern sensors. It determines the temperature, humidity, direction and wind strength, current and forecast on your plots even if they are distant or dispersed.

### Sentek Technologies

*Australia*

[www.sentek.com.au](http://www.sentek.com.au)

Sentek provides sensors and solutions for precision measurement and management of soil water and salinity dynamics.

### Smart Yields

*United States*

<https://smartyields.com>

Smart Yields is an agriculture technology platform that gives farmers, indoor growers, and gardeners real-time information, trends, and forecasts, and recommendations via an intuitive and customizable mobile app. While designed to be simple and easy to use, Smart Yields connects with a wide variety of sensors and hardware and taps a diverse array of data sets and agronomy best practices to give farmers a flexible yet powerful tool to help protect crops, optimize operations, and increase yields.

### SycliQ Geospatial Pvt Ltd.

*India*

<http://sycliq.com/v2>

We draw data-driven insights using our hyper-local sensing platform in real-time to draw operational and environmen-

tal insights to recommend remedial/prescriptive actions in real-time for various market segments such as corporate farming, ripening centers, cold storage units.

### VanderSat

*Netherlands*

[www.vandersat.com](http://www.vandersat.com)

VanderSat observes water and temperature at field scale across the globe using satellites. Every day, everywhere on earth, with unmatched accuracy. Soil moisture, the water content of the vegetation, inundation and land surface temperature. All data near real time, globally and daily without cloud interference. Our satellite data can be accessed and ingested easily through our API and viewer and is more than 500 times cheaper than ground sensors. VanderSat insights are backed by our remote sensing scientists. Currently 5000 organizations are powered by our data and services, including some of the world's leading agricultural and insurance firms.

### WeatherHawk

*United States*

[www.weatherhawk.com](http://www.weatherhawk.com)

WeatherHawk, a division of Campbell Scientific, Inc., is responsible for the sales and

support of the WeatherHawk family of personal weather stations.

### WellIntel, Inc.

*United States*

[www.wellintel.com](http://www.wellintel.com)

WellIntel is the first-ever groundwater information system for homeowners, farmers, and scientists.

### Yuktix Technologies Pvt. Ltd.

*India*

[www.yuktix.com](http://www.yuktix.com)

We provide data capture and communication solutions for remote monitoring and environment sensing.

## SMART IRRIGATION

### AutoAgronom Israel Ltd.

Israel

**www.autoagronom.com**

Our commitment is to significantly improve efficiencies of water and fertilizer usage for the protection of our environment. Our goal is to measurably increase farmers' productivity and crop yields, and strengthen their operations.

### AWL Group (Agro Web Lab)

Israel

**http://supplant.me**

SupPlant is an AWL Group brand. AWL (Agro Web Lab) Group was established in 2012 as an R&D project to engage in agricultural monitoring, data analysis, and crop management using a SaaS model. The group develops software for farmers and agriculture companies to enhance their decision-making and improve productivity.

### Common-Sensor Ltd.

Israel

**www.common-sensor.com**

The CommonSensor is a computerized irrigation interface that represents an entirely innovative and revolutionary approach to irrigation: Rather than have the farmer make the watering choices, all daily irrigation decisions are made by the plant. This is achieved by enabling the plant control of the irrigation valve, and thus of its water supply, via the CommonSensor.

### EDYN

United States

**https://edyn.com**

Stay connected to your garden. Planted in the soil, the Edyn Garden Sensor continuously monitors environmental conditions in your garden. Real-time guidance sent to your phone. The Garden Sensor connects to your Wi-Fi network to send you valuable insights through the

corresponding Edyn app. You'll never overwater or underwater your garden again. The Edyn Water Valve automatically gives your plants exactly the amount of water they need.

### Falcon Soil Technologies

United States

**www.FalconSoil.com**

The Falcon System: Superior Customer Satisfaction. Timely, high-resolution soil samples give customers confidence that precision variable-rate fertilizer applications will improve productivity. Improved Sample Quality: Falcon's superior sampling efficiency allows more cores to be included in each sample, with each core taken at a uniform depth, which dramatically improves sample accuracy and repeatability. Cover More Ground Per Day: At recommended field speeds of 8 to 12 mph, the Falcon can collect 40 or more cores every minute as it crosses a field. This enables more cores per sample for higher accuracy — and increases the number of acres sampled each day. Optimize Input Efficiency: Variable-rate fertility programs maximize productivity for each input dollar when they are based on accurate, high-resolution soil samples made possible by the Falcon system.

### Flowius

United States

**www.flowius.com**

**www.3blenterprises.com**

Triple Bottom Line (3BL) Enterprises is a for-profit social enterprise that works with villages to drastically lower the cost of piped water systems. 3BL Enterprises is developing Flowius which builds radically affordable piped water systems. The result: networks that are so cost-effective that rural and peri-urban homes in the developing world living on \$1.50 a day can afford to have water piped to them. We utilize a franchise-based business model combined with a suite of mobile tools to build systems that are

locally owned and operated by governments and communities.

### Hortau

Canada

**http://hortau.com**

For more than a decade, Hortau has been an industry leader in precision soil moisture monitoring, developing one of the first web-based irrigation management systems on the market and helping growers take the guesswork out of irrigation management. Using soil tension to determine the precise amount of water to be applied, Hortau's proprietary system has helped growers of countless crop types improve plant health, boost yields, and cut irrigation costs. Hortau's wireless irrigation field technology, combined with its simple, cloud-based software, securely reports to owners and ranch managers how crops are faring in real time. The patented soil tension sensors allow growers to detect plant stress, which is the driving factor in crop yield and quality before the damage is done. This proven technology greatly increases a grower's water-use efficiency and cuts down on fertilizer leaching, thus improving the bottom line.

### HydroBio

United States

**http://hydrobioars.com**

HydroBio is a SaaS-based agricultural technology company that uses satellite image-driven analytics to conserve water and maximize crop yields. It offers its users irrigation prescription, equipment integration, and crop monitoring services. They are partnered with companies such as VALLEY, aWhere, AgSense, and CropTech. The technology is used for the assessment of crop water needs, relative yield, and pest detection. The company serves agricultural producers, agronomists, and research organizations. It combines satellite data, measured environmental variables, and pivot conditions to provide irrigation prescriptions, as well as deliver prescriptions and supporting data to

growers through a web-based decision support system.

### HydroPoint Data Systems

United States

**www.hydpoint.com**

HydroPoint Data Systems develops various irrigation system controllers for residential and commercial landscape applications. HydroPoint's WeatherTRAK solution delivers a multitude of financial and environmental benefits by reducing the greatest area of waste in urban water use: landscape irrigation. Landscapes consume 58% of urban water, and are overwatered by 30-to-300%. WaterCompass: real-time leak detection and water use analytics. Discover, track, and know what's being used, where, and when 24/7. Get up-to-the-minute visibility and intelligence into leaks and water use through real-time, non-invasive flow sensors, comprehensive dashboards, and powerful analytics.

### Livn

Chile

**http://livn.garden**

At Livn.in, we develop technology specially designed to make your life easier. We are currently marketing Livn, an intelligent irrigation system that will make you completely forget about your watering, keeping your garden vibrant, and saving up to 60% water. Cool, is not it?

### Magitec

United States

**http://magitecllc.com**

Auto Soil Probe by Magitec. Because soil core quality is also important there is an adjustable limit sensor to deliver consistent depth control. After completing the first Magitec unit it was time to field test it. It worked very well first time out. After a few minor adjustments and upgrades it has been working trouble free for two years and has probed the soil approximately 170,000 plus times. Everyone in the agricultural top

soil sampling business that have seen it have expressed positive support in the usefulness and features the Magitec provides.

## Net Irrigate, LLC

*United States*

<http://netirrigate.com>

Net Irrigate manufactures remote monitoring technology for ag irrigation systems, pumping stations, field instrumentation, and controls. Our OEM Solutions group also produces IoT technology with customer specific requirements based on our existing remote monitoring platform.

## Praxidyn

*United States*

[www.praxidyn.com](http://www.praxidyn.com)

MIXMATE: Mixmate is a precision chemical mixing system. Keep expensive machines rolling. Reduce errors and lost inventory. Product inventory and usage information is available at your fingertips. The Mixmate app can be used stand-alone for manual data entry or add components to automate features. INTERSECT: The Intersect cloud service has features that allow you to synchronize data between multiple Android devices and the office. Manage and track assets and inventory directly from your web browser. Build jobs with maps and assign to operators and equipment in minutes.

## Redshield Technology

*United States*

Redshield Technology introduces SoilSens instant soil nitrogen tester, a portable machine that tests soil nitrate levels by mixing soil with de-ionized water and then detects nitrate ions in the water.

## Rivulis Irrigation Ltd.

*Israel*

<http://rivulis.com>

Rivulis Irrigation offers a full line of irrigation products including drip lines, drip tapes, filters, hose and tubing, sprinklers, sprays, and valves. Our products are sold through our network of dealer

partners in several markets including agriculture, horticulture, landscape, and mining. It's about applying the right amount of water at the right time throughout the whole season. An irrigation system comprised of Rivulis Irrigation products can generate greater yields using the same, or even less, water and nutrients than with previous water distribution systems.

## Sensorian

*South Africa*

[www.sensorian.co.za](http://www.sensorian.co.za)

Sensorian provides unique proprietary telemetry used for the collection of data from a multitude of sensor devices. Our company is dedicated to providing technical solutions for the reading, storage and display of sensor data. Sensorian transmits collected data using the most advanced and suitable communication methods available to our clients industry. Our software platform further allows for the remote activation of devices and the setting of alerts. We offer a single location from where you can view or control various types of sensors and actuators.

## Smart Farm Systems

*United States*

<http://smartfarm.ag>

Smart Farm has developed a unique, large-area, wireless monitoring and control system for remotely located irrigation pumps and environmental, soil moisture, and water level monitoring devices. Our proprietary wireless network provides farmers real-time, actionable information regarding the status of their pump equipment and monitors. We do that by integrating pump control modules, sensors, and 900-MHz wireless technology into a seamlessly integrated, farm-wide solution. Our system enables farmers to provide just the right amount of water at just the right time on a field-by-field basis, resulting in a significant improvement in profitability.

## Smart! Fertilizer

*Israel*

[www.smart-fertilizer.com](http://www.smart-fertilizer.com)

We provide fertilizer management tools that agriculturalists and farmers can make use of to attain better, high quality yield and effectively decrease their production costs. With proper use of one of the most important resources — fertilizers — we can revive the industry of agriculture and achieve a healthier environment.

Our SMART! software platform has been tested and used professionally and has been proven effective in producing better crop yields, lowering costs, and helping minimize environmental pollution. Thousands of commercial agricultural projects have used our management system and found it to be effective and beneficial. With their trust, we have made a difference in the agriculture of more than 62 countries.

## Sprinkl

*United States*

<http://sprinkl.io>

Schedule and control your irrigation system from the comfort of your own iOS/Android phone. Compatible with all existing controllers. Integrates with municipal water sites, where available, for automatic compliance. Manage your system's schedule, conservation rules, and remotely enable or disable watering from the Sprinkl app. For property owners and management companies, the Sprinkl app allows you to manage your properties all from a single location.

## SWIIM System

*United States*

<https://swiimsystem.com>

SWIIM provides a new standard in water measurement than allows growers to receive an accurate accounting of the water both delivered and consumed on their fields. This patented process was developed with the help of the USDA and is being used successfully by growers and water providers. SWIIM accounts for your water

with the same precision as your CPA accounts for finances. With the regulations and the increased costs associated with water usage this information is invaluable.

## Tevatron Ltd.

*Israel*

<http://tevatronic.net>

We have developed a technological solution that makes growing crops fully autonomous from irrigation and fertilization aspects. Our system is fully capable of deciding when and how much to irrigate, and it executes the irrigation decision without human intervention.

## Tule Technologies Inc.

*United States*

[www.tuletechnologies.com](http://www.tuletechnologies.com)

Tule provides site-specific irrigation recommendations based on your production goals, so you can efficiently make more accurate irrigation decisions about when and how much to irrigate.

## United Soils — I.F.A.R.M.

*United States*

[www.unitedsoilsinc.com](http://www.unitedsoilsinc.com)

[www.ifarminc.com](http://www.ifarminc.com)

I.F.A.R.M. was designed to help its customers utilize a single platform to manage data and decisions. Whether through current functions, or the means to bring in outside data, or to send data to other platforms ... I.F.A.R.M. is positioning itself to best manage data from one program; to be a data and decision hub for your farm management needs.

## Varigate

*New Zealand*

Varigate is the world's most advanced irrigation software service, delivering dramatic water cost savings and increased crop and dairy yield.

## Waypoint Analytical

*United States*

[www.waypointanalytical.com](http://www.waypointanalytical.com)

Waypoint's agricultural labs are strategically located to provide



its clients with timely and accurate analytical data for making decisions that positively impact sales and profits. Soils and Media • Plant Tissues • Water • Diagnostics • Compost and Manufactured Soils.

## SOIL

### Acuity Agriculture

*United States*

**www.acuityagriculture.com**

Developer of wireless sensors for farm soil analysis. The company develops wireless sensors that enable users to view and analyze soil conditions such as moisture content, salinity, and temperature and also receive data-driven insights and updates about soil conditions via a mobile application.

### AgRobotics, LLC

*United States*

**www.agrobotics.com**

Provides soil sampling solutions. The company offers AutoProbe, a soil sampling technology that pulls up to 40 cores of soil samples from various distances, angles, and depths from the comfort of the tractor cab. Its AutoProbe technology can also be configured for zones and other creative sampling regiment; and for collecting subsamples. Note: Purchased By Agronomic Innovations.

### Davco Optisurface Pty Ltd.

*Australia*

**www.optisurface.com**

For leading farmers, agricultural consultants, and earthmoving contractors who want to improve farm profitability through improved water management, OptiSurface Designer is the worlds' most powerful analysis and design software for agricultural land-forming. It calculates the optimized field topography that satisfies water management goals while minimizing earthworks and without ditches. It does this using our patented system incorporating Infinitely

Variable Grades (IVG) along with 3D GPS machine control technology.

### Intelag

*Chile*

**www.intelag.net**

Intelag provides an automated agronomy service and farm management platform to growers. We collect micrometeorological data from the field using proprietary low-power wireless devices and combine it with external weather forecasts and satellite imagery to provide real-time insights to the grower and recommend farm management best practice.

### Monford AG Systems Ltd.

*Ireland*

**www.grassometer.com**

Monford AG Systems Ltd. develops GrassOmeter, a mapping, measurement, and management system for grassland farms. Its GrassOmeter is operated via an app on farmers' mobile phones that allows them to maximize grass growth, optimize fertilizer use, plan when to reseed, extend grazing period, improve pasture quality, and manage seasonal variation.

### Next Instruments

*Australia*

**www.nextinstruments.net**

Next Instruments is an Australian owned family company that has been developing innovative analyzers for the food and agriculture markets since 1997. The company has sourced instrument technologies world class analytical instruments including: Near Infrared Analysers • Seed Image Analysers • Enzymatic Digestion System • Sieving and Test Weight Analysers.

### SenSprout Inc.

*Japan*

Optimize the use of water using low-cost printed electronics sensors. Our product can measure the soil moisture by sensors that can detect the change in capacitance. Since we use printed tech-

nology, we can make the sensors low-cost whether for small amount or for mass production. We believe that the sensors can be used for optimization of irrigation in large farms or cash crops, and also for predicting natural disasters like landslides and cliff collapses.

### Veris

### Technologies, Inc.

*United States*

**www.veristech.com**

**http://geoprobe.com**

Veris Technologies, Inc. designs, builds, and markets sensors and controls for precision agriculture. Veris is a sister company of Geoprobe Systems (geoprobe.com), a worldwide supplier of environmental and geo-technical equipment.

## SUPPLY CHAIN

### Agforce Logistics

*United States*

**http://agforcelogistics.com**

**http://agspring.com**

Agforce manages the flow of agricultural commodities from the point of origin to downstream processing. With a broader focus than traditional merchandising but composed of seasoned industry veterans, Agforce brings superior logistics alternatives to niche market suppliers and end users. As a non-facilities-based member of the Agspring network, Agforce leverages the significant technological and financial resources of Agspring along with an inherently entrepreneurial culture.

### Agrilarity QS (Agrilarity)

*Ireland*

**www.agrilarity.com**

Agrilarity QS is a hardware project to improve quality analytics and reporting in bulk grain supply chains.

Agrilarity has been founded to promote and implement increased digitization and automation of agricultural processes that can reduce cost, waste, and inefficiencies.

### arc-net

*Ireland*

**http://arc-net.io**

arc-net connects every step of your product's journey to deliver supply chain transparency and product security. The arc-net toolset provides an easy to use scalable platform, powering the strategic insights that unlock profit. Transparency, honesty, and integrity are at the heart of our business decisions and are vital to our relationships with our partners. The arc-net platform is designed to introduce confidence in a global supply chain that grows more convoluted every day. We strive to foster stronger relationships between all participants in the supply chain, providing organizations with the information they need to grow. Utilizing the transformative power of the Blockchain.

### ArrowStream

*United States*

**www.arrowstream.com**

Arrowstream, Inc. provides Software-as-a-Service (SaaS) solutions for the supply chain. The company offers Crossbow, a SaaS solution that enables to plan, monitor, and improve inbound logistics program; and OnDemand, a SaaS solution that provides supply chain insight and analytics for restaurant supply chain managers and executives. It also provides customized programs for truckload, less-than-truckload, and intermodal shipping.

### Athena Intelligence

*United States*

**http://project-athena.com**

Athena is a data processing and visualization platform for the data of land, food, water, and energy.

**BUSINESS INTELLIGENCE APPLICATION:** Access and understand the data necessary to create resource operations that are efficient, secure, and sustainable.

**DATA SERVICES:** Athena provides data services to make custom tailored

solutions more accessible for each organization. Our business intelligence application makes it easy for companies and organizations managing food, water, or energy production to analyze the risks and opportunities in their supply chain by combining natural resource, processing/manufacturing, and production practice data. By enabling the utilization of existing data and allowing for easier capture of new data, we unlock the value in the supply chain's data and make it simple for companies to manage their resources more intelligently. We sell data services to provide higher level awareness within the market about the state of land, food, water, and energy.

## Ceres Global Ag

*United States*

**www.ceresglobalagcorp.com**

Ceres Global Ag Corp. operates as an agriculture and commodity logistics company. The company engages in grain storage, procurement, merchandizing, and process ready cleaning of specialty grains and oilseeds, such as oats, barley, rye, and durum wheat; and offers a range of services to its customers to help manage the risks associated with the price, quality, and availability of these critical food grains.

## ChainPoint

*The Netherlands*

**www.chainpoint.com**

ChainPoint offers software for sustainable supply chains. At ChainPoint we believe that collaboration and sharing of information is crucial for the efficient production of high quality, safe, and sustainably produced products. ChainPoint is a secure, online software platform to manage and share product, process and supplier information, from raw material to finished product. With their software and services we help companies improve quality and sustainability while reducing cost and risk.

## Clear Labs

*United States*

**www.clearlabs.com**

Clear Labs is the standard for molecular food quality in the global food industry. We are pioneering food analytics, enabling the world's most respected food brands to differentiate on quality and to stand behind their value. Clear Labs was founded in 2014 by a group of software engineers and genomic scientists to index the world's food supply and set worldwide standards for food integrity.

## eHarvestHub

*United States*

**https://eharvesthub.com**

eHarvestHub develops a software solution for small- to mid-sized growers to manage their produce life cycle, from seeding to shipping.

## Elemica

*United States*

**www.elemica.com**

Elemica is the leading Supply Chain Operating Network for the process industries. We drive bottom line results by promoting reduced cost of operations, faster process execution, automation of key business processes, removal of transactional barriers, and seamless information flow between trading partners. Elemica transforms supply chains by replacing manual and complex approaches with efficient and reliable ones.

## Esri

*United States*

**www.esri.com**

ArcGIS is a complete mapping & analytics platform with ready-to-use applications to unlock the wealth of information in your agriculture data. The power of ArcGIS creates deeper understanding, through visualization of spatial data. It is used to create actionable information by gaining an understanding of relationships across all your data. Our solution leverages configurable apps, so customers gain immediate return on

investment, however, if you need a solution tailored for a specific need there are extensive options for customization to build that unique mapping, visualization, or analysis software application on any device regardless of your development experience. ArcGIS gives you the ability to easily create, use, and share maps and analysis on any device, anywhere, anytime.

## First4Farming (Adaptris Group)

*United Kingdom*

**www.f4f.com**

F4FAgriculture provides both expertise and a technology solutions framework that is focused on integrating ALL parts of the agricultural supply-chain and providing custom data-management business solutions. F4F enables manufacturers, logistics partners, distributors, expert advisors, and growers to work more effectively together in meeting the challenges of 21st century food production. Our business solutions are designed to service: • Precision agriculture enablement • Helping suppliers get closer to their customer • Providing real time data and delivering custom information services • Enabling the streamlining of logistics and distribution processes across 3rd parties • Opening enterprise information and processes to the field. F4F has specialist solutions to help meet the supply-chain challenges in the grain, seed, crop protection, and fertilizer sectors.

## Foodem (RKA)

*United States*

RKA Enterprises LLC operates Foodem.com, an online trading, business intelligence, and process automation solution for the wholesale food distribution industry in the United States. It operates a marketplace that connects food distributors, local farms, and specialty food manufacturers with wholesale food buyers, such as restaurants, hotels, schools, and hospitals.

## Inteligistics

*United States*

**www.inteligistics.com**

Inteligistics is a provider of innovative cool chain and supply chain visibility solutions. Leveraging Machine to Machine (M2M) low power, portable, and wireless sensors and or passive Radio Frequency Identification (RFID) tags, our IntelliView solutions fully integrate cloud based communications gateways, patented portable readers, and controllers. Insightful and actionable information and alerts provided via a graphics dashboard and data analytics platform deliver high value improvements to cool chain and supply chain performance, productivity, and quality.

## iTradeNetwork

*United States*

**www.itradenetwork.com**

iTradeNetwork, Inc. provides Web-based software that automates the supply chain for the retail and foodservice industries. It offers on-demand e-business solutions. The company's suite of workflow products include forecast/demand solutions; order management system; logistics; contract and rebate management; ad/promotional planning; trade spend optimization; data synchronization; VMI, and financial services and content. Its system streamlines the information flow between buyers, sellers, and carriers.

## Maiaki

*United States*

**https://maiaki.com**

Maiaki Inc. is a specialty crop e-commerce company. It operates online B2B platform, connecting U.S. producers directly with traders overseas. The global food system needs more efficiency and transparency. Maiaki is the online one-stop shop platform for buyers to find, purchase, pay, and ship specialty products from U.S. to Europe.

## Prophet Software

*United Kingdom*

**www.prophet.co.uk**

We work exclusively in the perishable food industry, it's our sole focus. Our software can be implemented quickly and surprisingly economically. Whether your business is small, medium or large, we can meet your software requirements. Prophet – PR3: Pr3 is Prophet's latest enterprise-ready, supply-chain focused, comprehensive ERP management software for small, medium, and large multi-site, multi-country companies.

Prophet – PROPACK: Prophet's ProPack software is specifically tailored to provide an economical, low cost of ownership solution to the grower / packer / shipper sector of the produce industry. Prophet – QX: QX is the definitive software solution for small to medium size exporters of fresh produce. As an off-the-shelf product, it offers rapid implementation based on our workflow.

## Ripe.io

*United States*

**http://ripe.io**

Ripe.io is creating the Blockchain of Food. Their technology provides a distributed, shared system of trust needed for the food supply chain to profoundly change and improve industry goals for sustainability, spoilage reduction, safety, nutrition, and quality. Join us in this conversation about our food.

## Shelf Engine

*United States*

**www.shelfengine.com**

Shelf Engine uses machine learning to help grocery stores dial in their orders to minimize waste and maximize profits.

## Sourcemap

*United States*

**www.sourcemap.com**

Sourcemap Inc. provides supply chain visualization solutions. The company offers Sourcemap for Enterprise, a software-as-a-service for organizations

to map their supply chains, as well as provide supplier collaboration, compliance, traceability, real-time monitoring, and decision-making; and Sourcemap Free, an open platform for anyone to publish supply chain maps to the Web. Its Sourcemap for Enterprise is used in various organizations and academic institutions. The company serves individuals, businesses, and NGOs. The company works with brands in retail, manufacturing, life sciences, food and beverage, and consumer and household goods.

## SupplyShift

*United States*

**www.supplyshift.net**

SupplyShift is a secure, cloud-based enterprise sustainability management platform for companies with many suppliers to reduce risk and enhance sustainability in supply chains. SupplyShift encourages competition and information sharing to drive sustainability improvement. Buyers collect and analyze supplier sustainability information and risk profiles through SupplyShift, while suppliers get a dashboard that tells them where they stand compared to their industry peers. Buyers gain access to more sustainable suppliers through the cloud-based sharing of information, and suppliers can access information about how to improve.

## Till Mobile

*United States*

**https://tillmobile.com**

Till uses automated calls and text messages to connect brands to small farms and facilities. It's free for suppliers and helps improve financial, operational, and safety performance.

## SUSTAINABILITY

### Agren Tools

*United States*

**www.agrentools.com**

Agren's suite of precision conservation software is revolu-

tionizing soil and water management. The smart and practical online conservation planning tools from Agren enable users to get done in minutes what farmers have traditionally waited weeks and months for from local public agencies. Service providers can now offer practical, value-added soil and water management solutions, empowering farmers and land managers to make profitable decisions that ultimately enhance agricultural productivity and sustainability.

## Athena Intelligence

*United States*

**http://project-athena.com**

Athena is a data processing and visualization platform for the data of land, food, water, and energy.

**BUSINESS INTELLIGENCE**

**APPLICATION:** Access and understand the data necessary to create resource operations that are efficient, secure, and sustainable.

**DATA SERVICES:** Athena provides data services to make custom tailored solutions more accessible for each organization. Our business intelligence application makes it easy for companies and organizations managing food, water, or energy production to analyze the risks and opportunities in their supply chain by combining natural resource, processing/manufacturing, and production practice data. By enabling the utilization of existing data and allowing for easier capture of new data, we unlock the value in the supply chain's data and make it simple for companies to manage their resources more intelligently. We sell data services to provide higher level awareness within the market about the state of land, food, water, and energy.

## FigBytes

*Canada*

**www.figbytes.com**

FigBytes can track your sustainability/CSR programs from high-level goals down to daily data, making sense of every

step of the journey to every stakeholder. Our implementations typically replace multiple disconnected layers of PowerPoint, Excel, PDFs, and clunky EHS compliance data systems. Our platform uniquely allows for embedding sustainability and CSR directly into all key aspects of the organization - Strategy, Brand, Performance, and Reporting. Every solution is available as a stand-alone module or as part of an integrated platform, tailor-made for your particular needs. Start with a top-down strategy implementation and build down to data, or solve a key carbon data challenge first and then build up towards the strategy. Data modules such as carbon and water can integrate with your strategy and brand modules to transform performance and engagement. Map your strategy and upload your data or solve a "data nightmare". Then allow the strategy module to track your long term goals.

## SureHarvest

*United States*

**www.sureharvest.com**

SureHarvest provides a full set of solutions for growers and agrifood companies pursuing sustainability strategies - farming management software, sustainability management software, sustainability consulting services, and third-party sustainability certification - throughout the agrifood supply chain.

## WeSustain

*Germany*

**www.wesustain.com**

WeSustain develops and sells web-based software for enterprise sustainability management. The company's ESM software is a management support system that helps companies go green and manage products, processes, and technologies in an environment-friendly manner. WeSustain's ESM software enables the clients to establish a software-supported ESM solution, as well as manage, improve,



and report their ESM performance on a global basis while mitigating sustainability risks.

## THIRD PARTY LOGISTICS

### Agforce Logistics

*United States*

<http://agforcelogistics.com>  
<http://agspring.com>

Agforce manages the flow of agricultural commodities from the point of origin to downstream processing. With a broader focus than traditional merchandising but composed of seasoned industry veterans, Agforce brings superior logistics alternatives to niche market suppliers and end users. As a non-facilities-based member of the Agspring network, Agforce leverages the significant technological and financial resources of Agspring along with an inherently entrepreneurial culture.

### Cargo Chief

*United States*

[www.cargochief.com](http://www.cargochief.com)

Cargo Chief is a highly innovative third party logistics company developing advanced, patented, proprietary technology to deliver an exceptional level of service to shippers. Our platform enables seamless integration with our capacity partners resulting in the access to 500,000+ trucks. Cargo Chief's leading logistics solutions provide enhanced services like: Cargo Locate, our own 24/7 real time on-map tracking, instant pricing, and automated persistent carrier insurance and safety compliance.

### Convoy

*United States*

<https://convoy.com>

Convoy.com is reinventing the trucking industry with an on-demand service for regional and local shipments. Convoy uses the latest technology to connect shippers with nearby trucking companies, helping them book jobs instantly without haggling

over price — even on short notice.

### Delta Valley Ag

*United States*

<http://deltavalleyag.com>  
<http://www.agloads.com>

As long time agriculture industry professionals, Delta Valley Ag strives to simplify the workday of agribusinesses and farmers. With you in mind, we design products that help you streamline your business and stress less about logistics. We believe in keeping our word and giving world class service to our customers.

### eHarvestHub

*United States*

<https://eharvesthub.com>

eHarvestHub's mission is to connect small farmers directly to retailers and truckers to help them increase their profits. Farmers use eHarvestHub's applications to strategically manage inventory, streamline ordering, and maximize efficiencies in shipping and delivery.

### FLEXE

*United States*

[www.flexe.com](http://www.flexe.com)

FLEXE makes on-demand warehousing possible by connecting organizations in need of additional space to organizations with extra space. Their cloud-based platform powers unified warehouse sourcing and set up, while also streamlining material handling operations. FLEXE requires no technology investments, long-term leases, or process interruptions. As a result, adding storage capacity is now easier, more flexible, and more cost effective than ever before.

### Flexport

*United States*

[www.flexport.com](http://www.flexport.com)

Flexport is a licensed customs brokerage and freight forwarder built around a modern web application. Our freight service includes an online dashboard for businesses to easily under-

stand, purchase, manage, and track the services required for global trade. Our team of logistic experts lets you focus on your core business by ensuring goods arrive to fulfillment/distribution centers on time and at the lowest cost.

## TRACEABILITY-SAFETY

### Ancera

*United States*

[www.ancera.com](http://www.ancera.com)

Ancera is focused on engineering simple, practical, rapid, and cost-effective diagnostics products that can cause a revolutionary change to the quality of service provided to the end user. Their flagship product is a rapid, labor- and label- free cell sorter and immunoassay. It is capable of cell sorting, concentration, manipulation, and detection of clinically significant samples (>1cc) in <10 minutes. Their device has high sensitivity and specificity and does not require any sample preparation, handling, or incubation.

### AstRoNA Biotechnologies

*United States*

[www.astronabio.com](http://www.astronabio.com)

Food poisoning is a serious global concern today with over 1 in 6 people getting food poisoning resulting in over 128,000 hospitalizations in just the U.S. every year. AstRoNA Biotechnologies is engineering a simple to use detector that can be deployed on-site at every phase of food production from field to table. Their technology can screen all food types in under an hour versus today's 48 hour standard food safety process.

### Esri

*United States*

[www.esri.com](http://www.esri.com)

ArcGIS is a complete mapping & analytics platform with ready-to-use applications to unlock the wealth of information in your agriculture data. The power of

ArcGIS creates deeper understanding, through visualization of spatial data. It is used to create actionable information by gaining an understanding of relationships across all your data. Our solution leverages configurable apps, so customers gain immediate return on investment, however, if you need a solution tailored for a specific need there are extensive options for customization to build that unique mapping, visualization, or analysis software application on any device regardless of your development experience. ArcGIS gives you the ability to easily create, use, and share maps and analysis on any device, anywhere, anytime.

### Food Genius

*United States*

<http://getfoodgenius.com>  
[www.usfoods.com](http://www.usfoods.com)

Food Genius acquired by US Foods is a leading foodservice data provider specializing in collecting, analyzing, and delivering granular foodservice data and analytics services. Our team use proprietary data and technologies to drive growth by making foodservice data and analytics accessible and easily digestible. We support foodservice manufacturers, distributors, and operators with straightforward ways to interact with, manipulate, and extract value from messy foodservice data.

### Food Origins

*United States*

[www.food-origins.com](http://www.food-origins.com)

Food Origins will provide IOT devices to companies that utilize labor to hand harvest fruits and produce. Food Origins will also provide unique labels that can be pre-applied to packaging. Employees will scan bar codes in the field registering the location, package, and employee ID. This data is passed via the cloud to provide information regarding the progress of the harvest, the density of the production in the field, and the velocity of the harvest. Farmers and marketers will have logis-

tical data to ensure they have sufficient crew to complete the harvest and market for the sale of the product. The same data will enable retailers and consumers to understand the freshness, food miles, and source of the produce. The data will also allow precision comprehension of who and where the produce was originated during food safety call-outs. The same data will also be utilized to communicate the productivity information of the harvesters. Food Origins will provide an employee portal where more productive harvesters can be presented with individualized opportunities for work and unique pay.

## FoodLogiQ

*United States*

**[www.foodlogiq.com](http://www.foodlogiq.com)**

FoodLogiQ provides traceability, food safety compliance, and supply chain transparency software solutions. We help restaurant operators, food retailers, consumer packaged goods companies, and other food companies achieve end-to-end traceability while supporting safe and high quality food products across the supply chain. With FoodLogiQ's platform, food companies can build an online supplier community, onboard suppliers all at once, and stay on top of supplier audits and assessments. Manage quality incidents, report them directly to suppliers and recoup the costs of stock withdrawals. And with lot-level traceability, see exactly where your product is at all times, especially when it matters most during an investigation.

## Frequentz

*United States*

**<http://frequentz.com>**

Frequentz is a technology company that provides comprehensive data warehousing, traceability, and information management solutions to help improve productivity, product quality, and profitability. Its solutions help target markets

collect, store, and analyze serialized life histories of events and objects which bring insight to end-to-end supply chains and business processes. Frequentz product portfolio includes solutions for information repository and intelligence server, mobile, track and trace, serialization, verification, applications, and insights.

## GrowerPro / Cherry Software

*United Kingdom*

**[www.cherry-software.co.uk](http://www.cherry-software.co.uk)**

GrowerPro is a stock traceability software package designed by Cherry Software for companies in the food growing, food processing, and food packing industry. GrowerPro provides Stock Control, Quality Control, Despatch, Invoicing, Container Tracking, and Labor Recording Modules.

## HarvestMark

*United States*

**[www.harvestmark.com](http://www.harvestmark.com)**

HarvestMark is the fresh food traceability and insights platform from Trimble, Inc. HarvestMark provides transparency and connection from the first to the last mile of the supply chain, enabling food producers and retailers to meet food safety requirements, build shopper loyalty, and optimize freshness and quality.

## iFood Decisions Sciences

*United States*

**[www.idsfoodsafety.com](http://www.idsfoodsafety.com)**

iFoodDecisionSciences develops dynamic data management software solutions for growers, harvesters, coolers, packers, processors, and shippers. The company works extensively with companies and associations across the produce industry and constantly evaluates and refines software to meet our clients' ever-evolving data needs.

## ImpactVision

*United States*

**[www.impactvi.com](http://www.impactvi.com)**

ImpactVision's mission is to build a more transparent and secure global food system, using hyperspectral technology. Their software platform provides insights about the quality and characteristics of different foods non-invasively and rapidly, using image recognition and predictive learning.

## iTradeNetwork

*United States*

**[www.itradenetwork.com](http://www.itradenetwork.com)**

iTradeNetwork, Inc. provides Web-based software that automates the supply chain for the retail and foodservice industries. It offers on-demand e-business solutions. The company's suite of workflow products include forecast/demand solutions; order management system; logistics; contract and rebate management; ad/promotional planning; trade spend optimization; data synchronization; VMI, and financial services and content. Its system streamlines the information flow between buyers, sellers, and carriers.

## N2N Global

*United States*

**<https://n2nglobal.com>**

N2N Global is an "end to end" software and services company offering SaaS based, vertically focused solutions for the food industry. Our vision is to enable the world to have a safe, affordable, reliable, and profitable global integrated food supply chain with the highest achievable quality.

## NubeTrak

*United States*

**[www.nubetrak.com](http://www.nubetrak.com)**

NubeTrak provides a real-time data collection, analysis, and reporting system that requires minimal IT support from management. It offers mobile user capability, and remote accessibility, using the power of the internet and state-of-art wireless communications to

provide real-time information. All agriculture records are saved and retrieved from one system's single location. NubeTrak systematically provides a standard platform for all parties, whether they are growers, handlers, or harvesters.

## Origins of Food

*United States*

**[www.theoriginsoffood.com](http://www.theoriginsoffood.com)**

Origins of Food is an educational food tourism service provider focused on reconnecting people with where food comes from. We will visit and partner with various food producing, food justice, and food education organizations and companies to learn more about where food comes from, how to become an ethical consumer, and how to become an advocate in your hometown. Following the themes of Ethical Consumerism, Food Sustainability, and Food Sovereignty, we hope to educate and inspire individuals interested in the food system to consider their current food habits and to challenge their conceptions of sustainable consumption.

## Produce Pro Software

*United States*

**[www.producepro.com](http://www.producepro.com)**

Produce Pro is a comprehensive enterprise resource planning (ERP) solution that helps companies of all sizes increase their organizational efficiency, minimize waste and loss, and grow revenue. Our integrated approach seamlessly connects traditional, core ERP functionality with our complete suite of Produce Pro add-ons, from slick mobile apps to robust warehouse management solutions. There's no need for complicated, expensive interfaces: our tools are already designed with the ability to communicate with each other in real time.

## RedLine Solutions

*United States*

**[www.redlineforproduce.com](http://www.redlineforproduce.com)**

Our complete solutions include software, hardware, and

professional services. RedLine's experienced team will help you plan, install, and launch your new system. The support does not end with install — training (on-site and online) is provided and our team of professionals can support your label and hardware maintenance.

## RizePoint

*United States*

**<https://rizepoint.com>**

RizePoint's growth has been driven by increased demand for brand protection among global organizations. Compliance auditing programs are heavily analyzed by executive leaders under pressure to deliver quality and positive customer experiences in today's highly digital environment. RizePoint At-a-Glance: RizePoint mobile and cloud-based software helps organizations improve the quality, safety, and sustainability of their products and services. RizePoint serves more than 285,000 users in 120 countries and territories speaking 40 languages. RizePoint customers range from regional chains to the world's largest brands.

## SafeTraces

*United States*

**[www.safetraces.com](http://www.safetraces.com)**

SafeTraces provides on-food traceability solutions that trace the product, not the package. Edible, invisible, odorless, tasteless, FDA approved barcodes are applied to fresh or processed foods, pharmaceuticals, and many other commodities. The barcodes carry complete traceability information across the supply chain.

## Sample6

*United States*

**[www.sample6.com](http://www.sample6.com)**

Sample6 is the world's first synthetic-biology based bacteria diagnostic system capable of enrichment-free detection. Our technology detects as low as 1CFU/ml in just 4 hours. Our proprietary Bioillumination Platform was developed by

Professor Tim Lu (MIT) and Dr. Michael Koeris in the lab of Professor James Collins at the Howard Hughes Medical Institute and Boston University. The platform allows for the engineering of bioparticles that target and "light up" specific unwanted bacteria — or specific groups of bacterial species. We couple this capability with highly sensitive sensor technology that detects low levels of pathogens to see results in minutes — right on-site — with no laboratory required. Sample6's mission is to improve the health and safety of global consumers by building integrated systems that quickly and easily detect harmful and unwanted bacteria. We see applications in food production, retailing, health-care, and beyond — anywhere humans and bacteria intersect.

## SnapDNA

*United States*

**<http://snapdna.com>**

SnapDNA enables DNA analysis in a fraction of the time and with far greater specificity, convenience, accessibility, and affordability than current tests. This simple concept is enabled by highly defensible, proprietary technology and demonstrated with some of the most stringent DNA tests.

## Trace Genomics

*United States*

**[www.tracegenomics.com](http://www.tracegenomics.com)**

When a soil sample arrives at the Trace Genomics laboratory, our molecular biologists extract the nucleic acid material out of the sample and turn the nucleic acid material into a sequencing library. From there, the DNA gets sequenced and sent to our computer cluster in the cloud. Gigabytes of DNA sequences are then analyzed through our microbial discovery and analytics platform, and the results are uploaded onto a secure online dashboard and surfaced in an easy to read and beautifully designed report. Trace Genomics is delivering an unprecedented view into our

soils. We are democratizing microbiome analysis, making this available to users from small scale organic berry farmers to produce companies with large scale field trials. We are using genome sequencing, computational analysis, and data science tools to deliver an unprecedented view into our soils.

## TraQtion

*United States*

**[www.traqtion.com](http://www.traqtion.com)**

TraQtion is a powerful software-as-a-service (SaaS) solution that comprehensively manages all aspects of your supply chain, product, or site quality and compliance. Put another way: With TraQtion you can easily monitor all the moving parts in your supply chain and know that everyone and everything is up to your standards. If everything isn't in order, TraQtion gives you the tools to jump in and fix the problem. TraQtion even helps you anticipate problems and take preventative measures. And you can do it all from anywhere.

## Two Pore Guys

*United States*

**[www.twoporeguys.com](http://www.twoporeguys.com)**

Two Pore Guys develops a handheld point of use diagnostic platform that examines DNA and RNA, and analytes (proteins, viruses, antibodies, etc) from any life form. Use in human and animal diagnostics, agriculture, food safety testing, environmental monitoring, and more.

## Veritide

*New Zealand*

**[www.veritide.com](http://www.veritide.com)**

Real-time bacteria detection systems for food processors who desire higher quality food, lower processing costs, and better returns. Veritide's technology will provide them with the ability see where to make processing improvements and to reduce spoilage bacteria and lower the risk of pathogen outbreaks in their food products. This gives both higher revenue and lower costs for food processors.

## Where Food Comes From

*United States*

**<http://wherefoodcomesfrom.com>**

We offer third-party verification services to literally hundreds of claims, programs, and markets. These include Process Verified Programs, Safe Quality Food initiatives, Organic Certification, Non-GMO Project Verification, and many more. No matter what you produce or how you produce it, there's likely a program — or programs — that fit your needs perfectly.

## TRADING

### Agribile

*United States*

**[www.agribile.com](http://www.agribile.com)**

Agribile develops products and analytical tools that deliver field-specific data to help with decision making in the agriculture industry.

### AgriClear

*United States*

**<https://agriclear.com>**

Buying and selling cattle is becoming more complex all the time. AgriClear's platform seamlessly addresses this complexity, while allowing for ease of use, improved efficiency, and reduced costs. You can access markets anywhere and at any time in the U.S. and Canada to find buyers for your cattle, or cattle that meets your specific requirements.

### Agronometrics

*Chile*

**[www.agronometrics.com](http://www.agronometrics.com)**

Agronometrics is a market intelligence platform that collects, standardizes, and presents prices and volumes for agricultural commodities from all over the world daily. Personalized services offered by Agronometrics: Private Data Management • Custom Studies • Consulting Services.



**Agvesto***United Kingdom***<http://agvesto.com>**

A climate smart platform with an API to enable sustainable agriculture by providing Risk-as-a-service to market participants.

**Esoko***Kenya***[www.esoko.com](http://www.esoko.com)**

Esoko is an information and communication service for agricultural markets in Africa. We provide advice directly to farmers (market prices, weather forecasts, and growing tips) to help them increase yields and profits. We also provide solutions to businesses to help them connect with farmers (marketing products, monitoring activities, and sourcing goods). Esoko uniquely provides an entire ecosystem to make this work; including the content, software, and field support.

**Farmers Business Network***United States***[www.farmersbusinessnetwork.com](http://www.farmersbusinessnetwork.com)**

Farmers Business Network is an independent and unbiased, farmer-to-farmer agronomic information network. The Network's mission is to improve the livelihood of farmers by making data useful and accessible. Farmers Business Network (FBN) utilizes data science and machine learning to provide members with unbiased and unprecedented insights about each of their fields, powered by billions of data points from our network. IT provides farmers with product performance, benchmarking, and predictive analytics based on real world performance data.

**FarmLead***Canada***<https://farmlead.com>**

FarmLead is a digital marketplace that allows buyers and sellers to list, negotiate, and finalize grain deals. Available

online and as a mobile app, FarmLead increases market reach, provides 24-7 access, and reduces brokerage fees. The FarmLead Marketplace facilitates greater efficiency in grain marketing. Farmers find more buyers and identify the best possible deal, while grain buyers easily identify the grain for sale in their desired location.

**FarmTrade***United States***[www.farmtrade.com](http://www.farmtrade.com)**

Farmtrade, through its subsidiaries, operates an auction site for distributors, manufacturers, and dealers to sell chemicals, seeds, and other agricultural products.

**First4Farming (Adaptris Group)***United Kingdom***[www.f4f.com](http://www.f4f.com)**

F4FAgriculture provides both expertise and a technology solutions framework that is focused on integrating ALL parts of the agricultural supply-chain and providing custom data-management business solutions. F4F enables manufacturers, logistics partners, distributors, expert advisors, and growers to work more effectively together in meeting the challenges of 21st century food production. Our business solutions are designed to service: • Precision agriculture enablement • Helping suppliers get closer to their customer • Providing real time data and delivering custom information services • Enabling the streamlining of logistics and distribution processes across 3rd parties • Opening enterprise information and processes to the field. F4F has specialist solutions to help meet the supply-chain challenges in the grain, seed, crop protection, and fertilizer sectors.

**Foodem (RKA)***United States*

RKA Enterprises LLC operates Foodem.com, an online trading, business intelligence, and

process automation solution for the wholesale food distribution industry in the United States. It operates a marketplace that connects food distributors, local farms, and specialty food manufacturers with wholesale food buyers, such as restaurants, hotels, schools, and hospitals.

**Graindex***United Kingdom***[www.graindex.com](http://www.graindex.com)**

Graindex is an internet marketplace enabling the online trade of combinable crops (currently grain, rape seed, and pulses) between farmers and their downstream trading chain (other farmers, local/regional merchants, and national/international merchants).

**IRON Solutions (Trimble)***United States***[www.ironolutions.com](http://www.ironolutions.com)**

IRON Solutions' market analytics platform and cloud-based enterprise system for equipment sales, including valuation and risk management tools. Our farm equipment, dealer, and industry domain knowledge, independence, and trust combined with Trimble's leadership in agricultural technology can enable a farmer and their service provider to better drive efficiencies.

**La Ruche Qui Dit Oui!***France***<https://laruchequiditoui.fr>**

"Online food co-op La Ruche Qui Dit Oui! combines an internet speciality — cutting out the middle-man in the supply chain connecting consumers with producers — with grass-roots social networking. The yes-saying beehive of the name represents the consumers who club together to source a food order: when the required size is met, the order is triggered and the consumers receive their goods. With 467 hives across France it's generating a buzz."

**Mercaris***United States***<https://mercaris.com>**

Our market data and auctions are helping to grow organic and non-GMO agriculture in the U.S. The development of sustainable agriculture is at a critical point. While some resources are in place to educate consumers, address public policy, and support scientific research on sustainable agricultural crops, far less emphasis has been placed on the market infrastructure upon which participants, from producers to retailers, depend. Mercaris was formed to address this gap through two types of services. First, we provide up-to-date, accurate information on market conditions for organic and non-GMO commodities. Second, our trading platform allows buyers and sellers to meet on-line and trade physical commodities.

**ProducePay***United States***<https://producepay.com>**

ProducePay offers various cash flow solutions allowing fresh produce farmers (growers) to be paid the day after they ship instead of 30-45 days later. Our cash flow solutions also benefit distributors by relieving the burden of providing advance payments to select growers. Additionally, we match fresh-produce buyers with sellers creating new trading relationships and helping companies compete and grow.

**Stratus Ag Research***Canada***[www.stratusresearch.com](http://www.stratusresearch.com)**

We have brought clarity and insight to the agriculture industry for over 15 years. Agri-businesses come to us when they want to grow their operation, diversify their product line or do a better job of meeting their customers' needs. Our syndicated approach delivers data that is accurate, relevant, and true to farmers. We are all about agriculture, and we're experts

in the industry. Our team has extensive experience working in this multi-faceted market. We apply our combined agri-business knowledge to provide the best information to clients. We transform reams of complex research data into useful information that our clients can put into action. Most importantly, we put farmers first. Their time and experience is essential to our studies, so we honor their opinions and tell their story without bias. Sharing their information helps agri-businesses make better decisions. That's good for agriculture, and what's good for agriculture is good for all of us.

## UAV CONTROL PLATFORM

### **Airware, Inc.**

*United States*

**www.airware.com**

Airware, Inc. provides autopilots that act as development platforms for micro to mid-size fixed-wing, helicopter, multiple-rotor, and custom configuration unmanned aerial systems (UAS). The company offers os-Series Autopilot platforms for UAS development and IP creation, such as osFlexPilot, an autopilot for the control of fixed-wing and helicopter UAS; osFlexQuad, an autopilot for the control of multi-rotor vehicles; and osNanoPilot for the control of micro fixed-wing and helicopter UAS that require an autopilot with minimum form-factor and weight. It also provides custom solutions for various UAV applications.

### **DroneDeploy**

*United States*

**www.dronedeploy.com**

Infatics, Inc., doing business as DroneDeploy, develops and delivers cloud-based drone software solutions. It delivers orthorectified maps, topographic modeling with DSMs and DTMs, crop health visualizations, and 3D models and point clouds. The company also

develops a mobile application that provides aerial mapping, imaging, and drone automation solutions. It provides its solutions to agriculture, mining, real estate, construction, and other industries in the United States, Canada, the United Kingdom, and Australia.

### **Esri**

*United States*

**www.esri.com**

ArcGIS is a complete mapping & analytics platform with ready-to-use applications to unlock the wealth of information in your agriculture data. ArcGIS turns raw imagery from drones into orthomosaics, 3D meshes, and more. Create 2D and 3D maps of hard-to-access areas. Monitor change, perform crop analysis and inspections. Need a custom software application managing drone collected data? Build it with our extensive customization options to create that unique mapping, visualization, or analysis app on any device regardless of your development experience. ArcGIS gives you the ability to easily create, use, and share maps and analysis on any device, anywhere, anytime.

### **Geosys**

*United States*

**www.geosys.com**

We supply real-time, satellite- and weather-based data to clients across the agriculture industry and around the globe.

### **GIS Solutions Inc.**

*United States*

**www.gis-solutions.com**

The industry's leading provider of GIS services and products. Located in Springfield, Illinois, GIS Solutions delivers custom applications and enterprise solutions based on client's needs.

### **Vinveli**

*India*

**https://vinveli.org**

Vinveli is an international technology solutions provider specializing in the aerospace

and robotics industry. They are driven by the vision of a future that is heavily driven by automation and efficiency. They strive to be at the forefront of this cutting edge technology revolution.

## UAV PLATFORMS-SYSTEMS

### **Abundant Robotics**

*United States*

**www.abundantrobotics.com**

Abundant Robotics develops and manufactures harvesting robotic systems. The Company offers systems for fruit plants. Abundant Robotics serves clients in the State of California.

### **AeroDreams**

*Argentina*

**www.aerodreams-uav.com**

AeroDreams is a technology-based and regional company that develops and produces unmanned aerial vehicles and provides services in the areas of intelligence, surveillance, reconnaissance and agriculture.

### **AgEagle Aerial Systems**

*United States*

**http://ageagle.com**

AgEagle is a leading FAA 333 exempt provider of state-of-the-art Unmanned Aerial Vehicle (UAV) data acquisition drones for precision agriculture. AgEagle's drone technology is able to easily and quickly capture aerial images of crop health. The resulting prescription map identifies areas of stress — from disease to pests to improper irrigation — days before they can be seen by the naked eye! Equipped with AgEagle, precision growers are able to utilize their equipment more efficiently, reduce input cost, increase crop yields, and minimize environmental impact.

### **Agribotix**

*United States*

**http://agribotix.com**

Agribotix provides fully support-

ed, easy-to-use drone-enabled technologies and services, purpose-built for precision agriculture. Our singular focus on agriculture, coupled with responsive customer service and a culture of innovation, makes Agribotix the ideal strategic partner. Agribotix processes and analyzes agricultural data gathered by drones. This agricultural intelligence is applied to increase yields and maximize the bottom line while reducing the environmental footprint. All Agribotix solutions include FarmLens, the leading cloud-based data analysis and reporting solution for people using drones in agriculture. Outputs include prescription maps for in-season fertilization, weed reports for geolocating resistant patches and estimating coverage, and specialized reporting.

### **Airwood**

*India*

**www.airwood.in**

Airwood is a full-stack agri production management and data sciences company. We help farmers, FPOs, aggregators, and agri-entrepreneurs realize the full potential of their farms. We don't provide software and leave the farmers to figure out the rest. We handhold them from sowing to harvest by providing them manpower assistance, technology solutions, and insights from farm analytics.

### **Applied Aeronautics**

*United States*

**www.appliedaeronautics.com**

Versatile Design. Endless Applications. Our Albatross platform seamlessly integrates with most leading cameras and sensors creating a truly customizable UAV experience. At Applied Aeronautics we seek to develop solutions that are as dynamic as the users who operate them.

### **AutoCopter**

*United States*

**www.autocopter.net**

In 2016, AutoCopter introduces

the Inspector Series of UAV solutions. The units are unique in that they carry the Thermal camera and HD Color cameras on both models. Both cameras have zoom, still image capture, and storage on each camera. Look up, look straight ahead, or look down, all while recording data. Live feed to ground control station - crews remain on the ground but can inspect in real time.

## Autonomous Solutions, Inc. (ASI)

*United States*

**www.asirobots.com**

Each unmanned farm vehicle is equipped with a series of hardware and software components that permit a user to toggle between manual and robotic control. The components work with the existing by-wire, mechanical, or hydraulic control system and link vehicles to a central command station, allowing a single operator to simultaneously manage multiple vehicles throughout a farm operation.

## Canary Drones

*United States*

**www.canarydrones.co**

Developing early detection algorithms to detect disease earlier, more accurately, and faster than a human. Currently focused on Pierce's Disease affecting the viticulture industry.

## Crop Copter

*United States*

**www.cropcopter.co**

Crop Copter creates UAVs designed by farmers for farmers. They know that an agricultural UAV needs to be durable, cost effective, and easy to use.

## Delair-Tech

*France*

**www.delair-tech.com**

Delair-Tech designs, manufactures, and markets solutions for aerial observation for the industrial and agricultural sectors using long-endurance Unmanned Aerial Systems (UAS).

The company offers a range of observation systems for customers looking for long-endurance, robust, autonomous, and safe products. Delair-Tech also offers training and maintenance contracts for its systems.

## DJI

*China*

**www.dji.com**

DJI is the global leader in developing and manufacturing high performance, reliable, and easy-to-use small unmanned aerial systems (UAS). Our products are redefining industries. Professionals in filmmaking, agriculture, conservation, search and rescue, energy infrastructure, and more trust DJI to bring new perspectives to their work and help them accomplish feats safer, faster, and with greater efficiency than ever before.

## DroneDeploy

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and inspections. Need a custom software application managing drone collected data? Build it with our extensive customization options to create that unique mapping, visualization, or analysis app on any device regardless of your development experience. ArcGIS gives you the ability to easily create, use, and share maps and analysis on any device, anywhere, anytime.

## GreenSight Agronomics

*United States*

**http://greensightag.com**

GreenSight Ag is a leading turfgrass and agricultural drone services provider. Using automated drone technology we scan every inch of your property multiple times a week. Our custom multispectral camera captures 5 times the data of a typical camera and enables us to detect evidence of pest and pathogens before their impact becomes visible to the naked eye. Our thermal camera measures the detailed temperature differentials over every inch of your fields. After a drone scan the drone lands back on our base station and automatically is recharged and the data downloaded. This detailed data is processed using our proprietary analysis software. We scan the multispectral image data for evidence of pests and track daily changes so we can alert you when an issue begins, before it gets out of hand. The temperature data is analyzed and used to develop a soil moisture map for each field. Areas that are too dry or too wet are flagged, before the crop health begins to deteriorate.

## H3 Dynamics

*Singapore*

**www.h3dynamics.com**

H3 Dynamics is a Singaporean industry leader for energy storage, advanced robotics, field communications, and real-time analytics providing innovative service solutions. Our team consists of HES Energy Systems and HUS

Unmanned Systems. Both business units have their own product lines, teams, and strategies to form a vertically integrated solution that combines augmented robotics, advanced communications (IoT), and real-time contextual awareness analytics. We are former technologists, engineers as well as successful entrepreneurs, and industry leaders who bring a wealth of technical and business expertise from our respective fields.

## Harvest CROO Robotics

*United States*

**www.harvestcroorobotics.com**

Harvest CROO is solidly funded startup completing the development of the first commercially viable autonomous robotic harvesters, using advanced GPS technology, patented systems, and other technologies, which will revolutionize how strawberry and other row crop farming is done. The Harvest CROO robotic harvester can replace substantially all of the strawberry harvest labor, which will reduce the amount of strawberry crop that is left to rot in the field because of lack of labor and improve the competitiveness of U.S. strawberry growers. The total available market for Harvest CROO is over \$1.5 billion worldwide and over \$700 million domestically. In addition, workers will no longer be required to perform backbreaking harvesting of strawberries. Harvest CROO is primarily funded by over a dozen major US strawberry growers who realize that this problem must be solved if they are to be competitive in world markets and remain in business.

## Heurobotics Corp.

*United States*

**http://heurobotics.com**

Heurobotics Mark II is designed to stay aloft for up to 20 minutes and on a single battery charge. This means more time flying and less time combing fields. While in horizontal flight, the Mark II can scan even the



largest fields and crops. One fully charged set of batteries has the capability to scan 250 acres of land. Additionally, the batteries only take 45 minutes to recharge so you can be in the air again faster than ever.

## HoneyComb Corp.

*United States*

**[www.honeycombcorp.com](http://www.honeycombcorp.com)**

HoneyComb is an Oregon-based company focused on drone-based aerial imaging solutions for precision agriculture and forestry. Since inception, agriculture has been their #1 market, with all of their products, services, and values reflecting that. As a company, HoneyComb believes in innovation and supporting traditional values. They do this by supporting their community and rural development, and by providing technologies and services that have a direct impact on efficiency, productivity, and profitability.

## IDETEC Unmanned Systems

*United States*

**[www.idetec-uas.com](http://www.idetec-uas.com)**

IDETEC Unmanned Systems is a company with a strong expertise in unmanned aviation. Design, Development, Production, Training, and Support is our core business and we encourage our engineers, technicians, and business partners to always improve and introduce innovative features in our products. We have a continuous development program with a clear and ambitious roadmap. This program has been the key of our success, delivering high-end technology to our customers. Our products has been used in tough environments, both for the UAS and the Operator. We are proud of our quality and milestones across the years.

## Leading Edge Technologies

*United States*

**<http://dronesforag.com>**

Leading Edge Technologies distributes products for agricul-

ture, construction, topography, mining, and natural resources management applications. The company offers ruggedized laptops, unmanned aerial systems, grain management systems, and weather stations. It also provides crop monitoring services.

## Measure

*United States*

**[www.measure.aero](http://www.measure.aero)**

Measure was founded specifically to help customers avoid the capital expense and operating risks of establishing their own drone programs and to purchase drone support in a way which better fits their operations and cost profiles. In a market largely comprised of manufacturers, Measure is the model for how drone services will develop and grow in the future.

## Novadrone

*Spain*

**<https://novadrone.com>**

Novadrone is a drone manufacturer, at the forefront of drone engineering, that produces high quality drones for professional use in commercial applications. Using only the highest quality technology and materials — carbon fiber and Kevlar — combined with innovative design, Novadrone is focused on enabling: Better quality information • Rapid response • Better decision making • Reduced operating costs and improved profitability • Reduced risk to people and projects. With an international presence, we participate in R&D projects with universities, research centres, and other private companies. These projects allow us to develop innovative products, algorithms, and procedures for the processing of information captured in flight. We also provide engineering services for the design and integration of avionics and sensors. On request, we provide demonstration flights, training, and maintenance services.

## Pix4D

*Switzerland*

**<https://pix4d.com>**

Pix4D offers a software package that converts standard pictures into professional geo-referenced images and 3D models. Their team knows what it's like to fly drones every day and feel amazed by maps made from images. They want to share that with you by providing the best possible tools for more exciting and efficient work. Since their founding in 2011, Pix4D software has been committed to creating professional, georeferenced maps, and models from drone imagery. As a spinoff of EPFL in Switzerland, they're technically solid, built on years of academic research. Join us in pioneering mapping innovation for your industry.

## PrecisionHawk

*United States*

**[www.precisionhawk.com](http://www.precisionhawk.com)**

PrecisionHawk is the one stop-shop for adding aerial data to your precision agriculture workflow. Our drone services and data products are designed to work independently or holistically from start to finish so you can maximize crop performance, optimize asset monitoring, and manage your crops more efficiently.

## Pulse Aerospace

*United States*

**[www.pulseaero.com](http://www.pulseaero.com)**

Pulse Aerospace, Inc. develops, manufactures, and supplies unmanned helicopters and associated systems. It offers electric powered helicopter unmanned aircraft systems (UAS) for use in airborne mapping, agriculture, and security applications; gasoline powered helicopter UAS for carrying larger payloads for longer flight times in airborne laser scanning and LIDAR, agriculture mapping and spraying, and security applications; guidance, navigation, and control UAV autopilots; and automatic flight control systems for fixed wing and helicopter unmanned air vehicles (UAV).

## Raptor Maps

*United States*

**[www.raptormaps.com](http://www.raptormaps.com)**

Raptor Maps builds software to save time and reduce the cost of farming. Farming isn't easy, but farm data should be. Raptor Maps (1) increases the efficiency of a farm's workforce and (2) decreases input (e.g., chemical, fertilizer) costs with yield monitoring and statistics.

## senseFly SA

*Switzerland*

**[www.sensefly.com](http://www.sensefly.com)**

At senseFly, we believe in using technology to make work safer and more efficient. Our proven drone solutions simplify the collection and analysis of geospatial data, allowing professionals in surveying, agriculture, engineering, and humanitarian aid to make better decisions, faster.

## Senterra LLC

*United States*

**<https://senterra.com>**

Senterra, LLC designs, manufactures, and distributes drone and data management systems for agriculture, mining, infrastructure, security, and public safety markets. It offers drone sensors, drones, and OnTop, a mobile app and desktop client that allows users to access inspections.

## Skycision

*United States*

**[www.skycision.com](http://www.skycision.com)**

Skycision provides a data-driven platform that processes drone-collected aerial imagery. Its platform enables users to identify pests, weeds, or blights before they make a significant impact on crops. The company's aerial mapping application can map elevation, provide NDVI as an indicator of field health, and make critical field measurements.

## SkySquirrel

*Canada*

**[www.skysquirrel.ca](http://www.skysquirrel.ca)**

SkySquirrel Technologies is a

crop-analytics company that develops drone-based technology for monitoring crop health, with a primary focus on improving crop yields and reducing costs at commercial vineyards. Whether you are a vineyard owner, viticulture consultant, researcher, or drone pilot, we can help you grow your business. Partner with us to raise the bar on grape quality and yield.

## SLANTRANGE, Inc.

*United States*

**www.slantrange.com**

SLANTRANGE, Inc. develops and delivers airborne remote sensing and intelligence systems and analytics solutions for agriculture intelligence applications. Its products include SL4000c calibrated multispectral imaging system, which is used to measure crop conditions from lightweight/low-flying aircraft, including fixed wing and multicopter configurations; and SLANTVIEW, a data processing and visualization suite for visualizing and interacting with data products generated by the imaging system. The company's analytics solutions translate raw and narrow-band multispectral sensor data into information layers, which provide crop status, health trajectory, and projected performance for supporting input decision of growers.

## Wingtra AG

*Switzerland*

**https://wingtra.com**

We help people to collect information using aerial robots. Wingtra developed a new category of drones. The Wingtra-One drastically simplifies how aerial data is collected. Wingtra aims to have a positive impact for the human condition on a large scale. We do this through technology and robots. While conventional quadcopters are limited in range and speed, fixed wing airplanes need catapults and runways. Wingtra's hybrid drone combines the advantages of both worlds. It is as agile as multicopters and has

the superior flight capability of a fixed-wing aircraft regarding range and speed. It opens new possibilities in improving wildlife protection, agriculture, parcel delivery, and many other applications. Wingtra is a spin-off from the Autonomous Systems Lab at ETH Zurich.

## VRT ANALYTICS

## AeroVironment, Inc.

*United States*

**www.avinc.com**

AeroVironment, Inc. designs, develops, produces, and supports a portfolio of unmanned aircraft systems (UAS), supplied to organizations within the United States Department of Defense (DoD), charging systems for electric vehicle batteries and power cycling, and test systems supplied to commercial and government customers. The Unmanned Aircraft Systems business segment focuses primarily on the design, development, production, and support of UAS. The Efficient Energy Systems business segment focuses on the design, development, production, and support of electric energy systems, which addresses the demand for clean transportation.

## Decisive Farming Corp.

*Canada*

**www.decisivefarming.com**

Decisive Farming Corp. provides information technology solutions for the farming industry. The Company offers variable rate technology and precision agronomy service for applications in the areas of fertility, seeding, fungicide, and top dressing. Decisive Farming serves farmers in North America.

## Demand Side Instruments

*France*

**http://dsinstruments.fr**

Our innovative irrigation management solution is based on a network of communicating

objects to collect data from plots in real time and a web application that allows the farmer (from his smartphone, tablet or PC) to implement precision irrigation: Remote control of all types of sprinklers • Creation and management of irrigation periods • Configuring simple alerts • Advanced analyzes (meteorological monitoring, etc.).

## E4 Crop Intelligence

*United States*

**www.e4cropintelligence.com**

The E4 Crop Intelligence software platform integrates services, software, and data into a single source system. The E4 data structure is based on the digital coordinates of individual fields. The simple reason is farmers make their decisions that way, so all raw data — soil sample results, fertility history, yield history, chemical applications, hybrid/variety numbers — are aligned. Getting that raw data right is key to a useful, dependable system. E4 understands that since it's what we have done for over a decade. The E4 system can also import data and information from other sources — soil type maps, Google maps (to help vendors locate fields) and weather (to grab growing degree days to schedule harvest.) As the volume of data builds, growers (and their consultants and vendors who have system access) start to recognize the underlying reasons for variations in crop performance. The E4 system makes it easier to recognize patterns that can then be used to guide management decisions. We call this ability to recognize the underlying issues and anticipate ways to capitalize on those insights "crop intelligence."

## Echelon Ag

*Canada*

**www.echelonag.ca**

Echelon is the global precision agricultural and farm data technology brand of Crop Production Services. We work with progressive farmers to improve

the efficiency and profitability of farms using the latest technologies and agricultural practices (Variable Rate Fertilizer Technology, Farm Data Management, Precision Farming, GPS, GIS, RTK, and Farm Management).

## Esri

*United States*

**www.esri.com**

ArcGIS is a complete mapping & analytics platform with ready-to-use applications to unlock the wealth of information in your agriculture data. The power of ArcGIS creates deeper understanding, through visualization of spatial data. It is used to create actionable information by gaining an understanding of relationships across all your data. Our solution leverages configurable apps, so customers gain immediate return on investment, however, if you need a solution tailored for a specific need there are extensive options for customization to build that unique mapping, visualization, or analysis software application on any device regardless of your development experience. ArcGIS gives you the ability to easily create, use, and share maps and analysis on any device, anywhere, anytime.

## Farm Dog

*Israel*

**www.farmdog.ag**

Farm Dog is a software management platform that helps growers optimize pesticide treatments. The end-to-end decision support system provides growers and their agronomists with in-field scouting tools, treatment decision support, efficacy analyses, and communication tools. Farm Dog is suitable for large teams as well as small ones, integrates with John Deere Operations Center, and is optimized for offline use.

## Farmade Management Systems

*United Kingdom*

Farmade Management Systems, one of the major crop manage-

ment and agronomy software businesses in the UK, has been bought by Farmers Weekly's parent company Reed Business Information. Farmade will be combined with Farmers Weekly's sister company Farmplan to create the UK's leading provider of farm management systems, in both the arable and livestock sectors. Gatekeeper software is a complete field recording package for growers and agronomists. Full field records including physical and financial analysis, traceability, crop assurance, nutrient management mapping, and precision farming.

## FarmLogs

*United States*

<https://farmlogs.com>

AgriSight, Inc., doing business as FarmLogs, provides online farm management software solutions for farmers worldwide. It offers FarmLogs Standard, FarmLogs Advantage, FarmLogs Prescriptions, and FarmLogs Flow software tools that offer a range of solutions, such as field mapping, crop health monitoring, rainfall tracking, activity tracking, nitrogen monitoring, scouting and notes, yield maps, soil composition maps, variable rate nitrogen/seed prescriptions, input planning, inventory management, and growth stage analysis.

## Precision Hawk

*United States*

[www.precisionhawk.com](http://www.precisionhawk.com)

Leading aerial data and safety solutions for commercial drones: Lancaster UAV, PrecisionMapper, TerraServer, and LATAS. PrecisionHawk is a global leader in developing and integrating commercial drone technology.

## Prime Meridian

*United States*

[www.primemeriandata.com](http://www.primemeriandata.com)

Prime Meridian can help you grow your precision ag retail business by delivering custom precision agriculture data man-

agement and consulting services via the web. Our precision experts work in the background so that you can be out front with your customers when it comes to providing 21st century precision ag solutions. Whether its turnkey services like GPS grid soil sampling or simple data processing and map creation, Prime Meridian has the customized offerings to serve you and your customers. We even brand the finished products — both digital and print — with your business name, logo, and important contact information.

## Satshot Inc.

*United States*

[www.satshot.com](http://www.satshot.com)

Satshot is a fully customized cloud-based online GIS mapping engine that manages high, medium, and low resolution satellite imagery for distribution and management for the precision ag industry. Satshot uses 3 main products to help make use of this data. Mapcenter, Landscout, and iCue. Satshot can be used to monitor crops, look at crop health and stress throughout the season, access crop damage for insurance, manage land use and sustainability, create VRA maps, or numerous other processes and needs that a land owner or operator may have.

## Smart! Fertilizer

*Israel*

[www.smart-fertilizer.com](http://www.smart-fertilizer.com)

We provide fertilizer management tools that agriculturalists and farmers can make use of to attain better, high quality yield and effectively decrease their production costs. With proper use of one of the most important resources — fertilizers — we can revive the industry of agriculture and achieve a healthier environment. Our SMART! software platform has been tested and used professionally and has been proven effective in producing better crop yields, lowering costs, and helping minimize environmental pollution. Thousands of

commercial agricultural projects have used our management system and found it to be effective and beneficial. With their trust, we have made a difference in the agriculture of more than 62 countries.

## Textron Systems

*United States*

[www.textronsystems.com](http://www.textronsystems.com)

Harnessing agility and a broad base of expertise, Textron Systems' innovative businesses design, manufacture, field, and support comprehensive solutions that expand customer capabilities and deliver value. Textron Systems' businesses are industry-leading developers and integrators of unmanned systems, advanced marine craft, armored vehicles, intelligent battlefield and surveillance systems, geospatial management and analysis systems, intelligence software solutions, precision weapons, piston engines, test and training systems, and total lifecycle sustainment and operational services.

## VRT APPLICATIONS

### 360 Yield Center

*United States*

<https://360yieldcenter.com>

360 Yield Center is giving you control with new tools to help you precisely manage N availability by testing mid-season and applying more N where and when it's needed. It's called the Base-Plus Approach and here is how it works. BUILD A NITROGEN BASE: Apply a base rate of N in the fall or spring — whether through anhydrous or weed and feed at planting — to ensure your corn gets off to a great start, but save some of your N supply for later in the season. Instead of putting all your N out early when it's vulnerable to loss, save some and let Mother Nature show her hand. Then, test your soil to find out how much N you've used, lost, or gained through mineralization, and refuel the crop to get to

the finish line. MEASURE HOW MUCH NITROGEN IS LEFT: Use 360 SOILSCAN to test N availability — and soil pH — in the field with the accuracy of a soil lab. 360 SOILSCAN has a Corn Nitrogen Need Calculator to build an N recommendation based on yield goal, corn growth stage, and soil organic matter. So, now you can build N application plans instantly after measuring your soil. APPLY AT THE RIGHT TIME AND PLACE: Mid-season N application is key to feeding your crop later in the season when your corn needs N most to reach its yield potential. The sidedress window is now so wide you can split-apply N with more confidence. 360 Y DROP provides flexibility and control for timing midseason N application anywhere from V6 to tassel — a window of more than 30 days. And, where N is applied is just as important as when it is applied. A corn plant acquires more than 60% of its N from a horizontal radius of about 7 inches from the stalk base. 360 Y DROP places liquid N at the base of the stalk, where even modest dew pushes N to the root zone for rapid uptake.

## Ag Leader

*United States*

[www.agleader.com](http://www.agleader.com)

AG Leader Technology, Inc. provides technologies, products, and support systems to agriculture sectors. The Company offers GPS receiver systems, seed monitoring, sectional control, and liquid applications, as well as data management, planting, harvest, and water management services.

## AG-NAV

*Canada*

[www.agnav.com](http://www.agnav.com)

The Company's primary market segment is associated with Agriculture and the use of GPS technology in this area. The AG-NAV Guia is a navigation system that gives the operator GPS Precision Navigation for the placement of sprayed fertilizers and pesticides for



aerial applications. The product offering for this segment has expanded to the development of accurate flow control equipment for the deployment of liquid and dry materials used in this industry. Nowadays the AG-NAV's products are used in various applications: Agricultural and Forestry Aerial Applications; Larviciding and Mosquito Control; Wildlife Tracking, Baiting, and Controlling; Wildfire Suppression Coordination, Geophysical Navigation, Photo, and Remote Sensing Navigation.

### AgOtter

*United States*

**www.agotter.com**

The AgOtter allows you to see, monitor, and record all the sprayer's essential information. See your speed, acres, gallons, and rate (for left boom, right boom and total output of the sprayer). AgOtter's Valve controls to a constant rate of spray regardless of ground speed. Set it to a rate and forget it. Thick canopy of trees? No worries. AgOtter's patent-pending technology combines inertial and magnetic sensors with GPS/GNSS so satellite signal can be lost but logging, mapping, and flow control continue uninterrupted.

### Agri-Inject

*United States*

**www.agri-inject.com**

Agri-Inject Inc. provides fluid injection technology. The Company offers technology for agriculture, turf, and water treatment industries.

### Agrothermal Systems

*United States*

**http://agrothermalsystems.com**

Agrothermal Systems is pioneering the usage of heat in agriculture as a means to increase yields, reduce pesticide needs, improve crop qualities, and manage climatic challenges such as drying off crops after rains and adding sugar late in the season when target maturity slows.

### Cultivating Solutions

*United Kingdom*

**www.cultivating-solutions.co.uk**

With the benefit of years of our own hands on arable farming experience, we design and manufacture innovative items of cultivation equipment. These machines are designed to improve both the accuracy of working and the level of attention to detail utilized in crop production in order to increase crop profitability. From the initial 3D CAD design, through to fabrication, welding, spray painting, oven baking, and final assembly, are all carried out in house in our factory by a highly skilled and dedicated team.

### Ezy Technology Innovations

*Ireland*

**www.ezytechnology.com**

The machines are designed for the precision farming market offering farmers machines to enhance operation and increase crop yields. From Ground Preparation to Crop Handling the Ezy Range of machinery will help farmers to achieve the maximum output from their lands. Our experienced team designs and manufactures the machines to the highest standard to ensure the Ezy machines are a true asset on any Farm. Our Research and Development department is constantly striving to design the next generation of Ezy Equipment to remain the precision Farmers choice when it comes to machinery.

### FarmBot

*United States*

**https://farmbot.io**

FarmBot develops fully-automated, open-source precision farming machine that provides basic design for a farming robot to farms.

### Farmobile

*United States*

**www.farmobile.com**

Farmobile is the farm data

company. We help farmers own their data outright. Our products are used to store, share, and sell valuable agronomic and machine data to vetted third parties. After all, data is among the most valuable commodities a farm produces.

### Farmscan Ag

*Australia*

**www.farmscanag.com**

Since 1976 Farmscan Ag has developed, acquired, and employed industry leading technologies, innovations, and innovators to help farmers become among the world's most efficient producers via a complete range of electronics to steer, map, monitor, and control spraying, spreading, planting, and harvesting machinery.

### FloMetrix

*United States*

**www.flometrix.com**

FloMetrix produces flow meters which are designed for dry flowable materials like seed, grain, and minerals. Our meters actually weigh materials in real-time without interrupting the flow. They are accurate, self-cleaning, compact, and can be easily retro-fitted vertically into existing pipes. The flow meter does not utilize strikeplates which can damage material like grain and seed. The flow meter does the work of a scale in a pipe.

### GenZ Technology

*United States*

**http://genztechnology.com**

GenZ's technology uses an air-assisted tunnel design to introduce air into the crop allowing for deeper penetration. The focused spray surrounds the crop while our tunnel design shields material from the wind, offering a greater concentration of on-target spray. Our technology also uses pressure equalization under the hood to significantly reduce drift. While our equipment is capable of dispensing maximum chemical volumes, growers may also choose to dial down to lower

label concentrations while maintaining effective coverage. This results in a reduction of excessive refills, fuel consumption, labor outputs, and maintenance.

### Hexagon Agriculture

*Brazil*

**www.hexagonagriculture.com**

A leading global provider of information technologies that drive quality and productivity improvements across geospatial and industrial enterprise applications.

### John Deere

*United States*

**www.deere.com**

When you're spraying, seeding, or spreading, Variable Rate Application matches application rates to actual field conditions as you move across the land based on predefined application maps that you create with your desktop software. It also records application data on a field-by-field basis to support your planning for the next season. The bottom line? Less wastage, fewer skips, and higher yields later on.

### On Target Spray Systems

*United States*

**https://ontargetspray.com**

On Target Spray Systems designs, manufactures, and sells the top selling brand in electrostatic spray systems with Wrap Around Technology that covers your crop in ways other sprayers simply can't. Our market includes Orchard, Vineyard, Cane, Blueberry, Strawberry, and Row Crops. By getting a smaller drop to fasten itself to the plant (whole leaf and stem) results in unmatched coverage, reduced material, and water use, and saved time and money.

### PlantTape

*United States*

**www.planttape.com**

The Plant Tape automated transplanting system is ideal for

agricultural producers aiming for increased efficiency and productivity in their operations. The system is more efficient than the conventional transplanting methods using plugs and soil blocks. Plant Tape offers a fully integrated system from sowing the tape, to germination and nursery care, to transplanting in the field. Plant Tape is commercially used to plant lettuce, and the adaptability for other vegetable crops is currently being developed.

## Precision Planting

*United States*

**[www.precisionplanting.com](http://www.precisionplanting.com)**

Precision Planting develops precision seed spacing and depth control products for growers to solve agronomic issues. The company offers mechanical products, monitoring and cloud solutions, and control systems. It serves customers through a network of dealers.

## Raven Industries

*United States*

**<http://ravenprecision.com>**

We develop markets, and produce technical solutions to great challenges. By providing precision agriculture products designed to reduce operating costs, decrease inputs, and improve yields, Raven delivers impactful technology to growers and custom applicators around the world. From field computers to sprayer and planter controls, and from GPS guidance steering systems to wireless technology, we lead the way for precision ag technology that delivers in the field.

## SBG Precision Farming

*Switzerland*

**<http://www.sbg.nl/en>**

**<http://ravenprecision.com>**

SBG Precision Farming is active in the development and sale of precision RTK GPS systems

for agricultural applications. The development includes the design, testing, and developing products from SBG Precision Farming upon demand of the market and users. The development of software, electronics, and mechanical parts in-house, instead. Note: Raven Europe.

## SprayTest Controls

*Canada*

**[www.spraytest.com](http://www.spraytest.com)**

We are manufacturers and distributors of wireless control for agricultural applications including the original SprayTest Remote Boom Control. We can also adapt wireless controls to numerous other applications such as grain truck endgates and hoists, seed tender gates and conveyors, hopper augers, and grain trailer slides.

## TeeJet Technologies

*United States*

**[www.teejet.com](http://www.teejet.com)**

Teejet Technologies manufactures and delivers light bar guidance systems, sprayer control systems, job computers/controllers, agricultural spray nozzles, boom components, strainers, spray guns, and speed sensors. It offers air induction dual pattern flat spray tips, nozzle bodies, check valves, push to connect fittings, two and three-way ball valves, and flow back ball valves; nozzle bodies and caps, and clamps and various fittings. The company also provides GPS guidance products that are used for in field guidance via the use of GPS navigation; mapping software; GPS receivers and accessories; boom section controls, including automatic swath management systems and tilt compensation products; electronic control systems for precise application of fertilizer and crop protection materials; and direct chemical injection system

components, including precision controls, metering pumps, chemical tanks, and accessories for direct injection systems. In addition, it offers precision farming systems; speed, flow, and pressure sensors; control systems that are designed for the precise application of animal waste products; grain loss monitors and equipment; drill controls for the automatic creation of tramlines during the seeding operation; and tractor and machine performance monitoring systems.

## Terramera

*Canada*

**<http://terramera.com>**

Terramera develops high-performance biopesticides for agriculture, bee health and public health by harnessing the power of natural plant defenses and innovative chemistry.

## TracMap

*New Zealand*

**[www.tracmap.com](http://www.tracmap.com)**

TracMap is a world leader in supplying precision guidance systems for ground applications in the agriculture, horticulture, viticulture, and aviation industries.

**Know of a company that we may have missed?**

Please contact Judy Gill-Totten, Meister Media's Senior Compilation Editor:  
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