EXECUTIVE SUMMARY

BACKGROUND

GeoVisual Analytics ("GeoVisual") has developed an Artificial Intelligence (AI) based computer image analysis technology to enable high-value crop growers and processors to know when and where to harvest, improving profitability and reducing costs. Using systematic monitoring of fields with airplanes, drones, and mobile phones, GeoVisual applies its AI algorithms to analyze crop maturity, health, and predicted yields. GeoVisual provides this information via a SaaS platform with an annual subscription, selling directly to large producers and to smaller ones through grower associations. The company is currently targeting the largest U.S. producers of specialty crops with business centers in CA, Western US, and in Mexico.

TRACTION

- Raised $75k from Taylor Farms and has since formed a strategic partnership with them
- Paid pilot program with 4 of the largest top 10 specialty crop producers to begin July 1 2017
- Awarded a $250k Colorado Advanced Industries Accelerator grant to be received in Q2 2017
- Awarded $950k from NASA with option for NASA to match current seed round

UPCOMING MILESTONES FOR SUCCESS

- Continue refining scalable CLIP architecture across additional high value crops
- Use successful pilots and entire valley imaging to win more paying customers
- Implement IP strategy, including patents, trade secrets and bank of longitudinal data
- Continue to expand programming capacity for additional crops and top growing regions

USE OF FUNDS

- Scaling OnSight inventory and forecasting capabilities from MVP to commercial levels
- Perform multiple trials to enhance analytics repeatability and accuracy
- Scale four major growers into production
- Expand service to entire Salinas, Yuma, and Central Valley to accentuate barriers to entry
- Runway: 18 months

KEY CHALLENGES

- Deciphering correlation between imagery data and performance metrics for each crop
- Capturing sufficient market share before better funded companies enter the space
- Reducing the time to deliver accurate crop yield forecasts

PEOPLE

- CEO - Jeff Orrey
- CFO - Chris Ewing
- CTO - Bernie Johnston
- VP of Engineering - Purandar Mukundan

FINANCIALS

GeoVisual's primary revenue driver is their Computer Learning Imagery Platform (CLIP). The revenue model multiplies the price for this service by the total acres measured. The company reports revenues of $369k in 2015 from grants and consulting services and $17.5k in 2016 from consulting services. Projected revenues for 2017 equate to $341K, and projected EBITDA in 2021 is just over $10M.

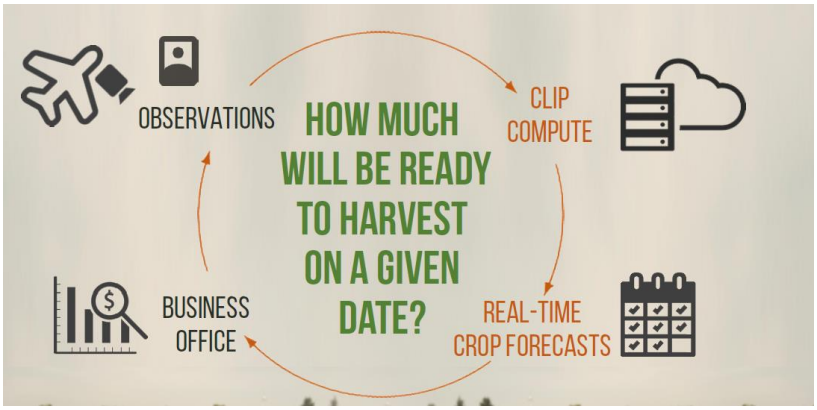
DEAL STRUCTURE AND VALUATION

- Funding Request: $500k equity exchange
- Desired Close Date: July 14, 2017
- Company's Stated Valuation: $3M pre money

BUSINESS

GeoVisual seeks to provide business intelligence through their Computer Learning Imagery Platform (CLIP), an algorithmic extrapolation of imagery data. The product is designed to help high value crop producers and processors make key operational decisions and optimize the supply chain. Crop producers need to find the perfect balance of supply to demand so that they do not short supply distributors (potentially violating contracts) while also not over-supplying and wasting crops, time, resources, and therefore capital.

GeoVisual's leadership team asserts they have a solid combination of technical expertise and data analytics know-how to collect quality data, normalize information, and synthesize imagery in order to provide meaningful insights to producers, help predict harvest yields, and optimize supply.



To date, GeoVisual has established a strategic partnership with Taylor Farms (the world's largest fresh cut vegetable producer). This relationship includes a $75K convertible note and an agreement to test the product on 500 acres with expansion pending success. Beginning July 1, 2017, GeoVisual will be conducting a trial project, imaging the entire Salinas Valley and providing crop analytics to Taylor Farms, Church Brothers, Tanimura & Antle, JV Smith and Woolf Farms for both lettuce and tree nuts.

Initially, GeoVisual is most interested in developing solutions that service several of the key specialty crops, including lettuce, broccoli, spinach, carrots and tree nuts. Their most advanced and potentially market-ready offering targets lettuce due to their successful early pilot test with Taylor Farms. The company plans on using the anticipated funding to:

1. Acquire contracts to provide analysis for 20,000 acres
2. Create ongoing relationships with at least 4 major producers
3. Formalize key partnerships for imagery acquisition
4. Refine and optimize scalable CLIP architecture

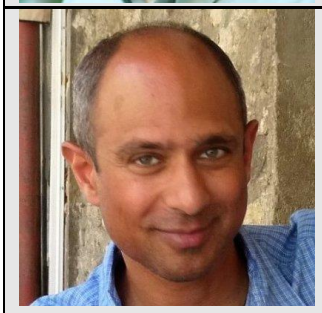
While the strategic relationship with Taylor Farms is impressive, the product is still largely being validated and tested. Company leadership shared that the algorithms are being refined and while they are farthest along with helping optimize lettuce supply, they still have work to do in scaling the data and venturing into other crops. Being able to provide a similar value proposition for various crops is essential for their business viability and scalability. In response to VCA comments on company traction, GeoVisual's leadership added that validation is the fundamental challenge of forecasting with machine learning algorithms, which require time to train. This inherently brings risk as the product continues along the technology readiness level scale. GeoVisual plans to offset this risk with an early release offering ("OnSight Inventory") that is validated for lettuce, anticipating that this will provide early revenues across several leafy green crops.

This risk also indicates a significant opportunity depending upon how quickly GeoVisual can expand their technological capabilities and market penetration. Per their revenue model and product development strategy, GeoVisual looks to rapidly expand to several crops (lettuce, tree nuts, carrots, broccoli) and assumes a total of 14 crops with their CLIP price per acre average of ~$75 at

scale. GeoVisual's key performance indicators moving forward include the following:

- Finance: Burn Rate, Revenue Growth Rate
- Customer Adoption: Acres of Cropland Imagery Collected, Acres of Cropland Analyzed, Number of Distinct Crops Analyzed, Average per Acre Subscription Price, Customer Churn
- Technical: Validated Accuracy of CLIP Inventory Tier, Validated Accuracy of CLIP Forecast Tier, Feature Backlog vs. Plan

TEAM

	Jeff Orrey, CEO www.linkedin.com/in/jeffrey-orrey2155b26 Jeff brings experience as a Program Manager at Microsoft and AAAS Science and Technology Policy Fellow for the U.S. Agency for International Development. He was also Technical Director at Vexcel Corporation, which was acquired by Microsoft in 2006 for an undisclosed amount, and Senior Scientist at TRAC, a Colorado startup whose IP was sold to a Chevron venture. Jeff holds a Ph.D. in Physics with a focus on Big Data computation for geophysical analysis.
	Chris Ewing www.linkedin.com/in/ewingc Chris has several years' experience as a CFO, for Vodafone Americas, TTLC Management, and now for Future Venture Capital Americas. While at Vodafone he also served on the Board of Directors for the Americas region and oversaw over $3.5B cash flows per year. Chris also has several years' experience mentoring early-stage companies.
	Bernie Johnston, CTO www.linkedin.com/in/bernie-johnston-b413236/ Formerly the Director of Data Science, Data Analytics, and Adaptive Learning at Pearson, Bernie brings several years' experience with machine learning and technical architecture to the GeoVisual team. He has also worked as Technical Lead at Bing Search, and holds three patents, one for machine learning. Bernie received his Ph.D. in Mathematics from Purdue University.
	Purandar Mukundan, VP of Engineering www.linkedin.com/in/purandarmukundan Prior to joining the GeoVisual Analytics team, Purandar was Senior Staff Engineer and Manager at Qualcomm, where he led several data-driven software development teams. Purandar, a certified Scrum Master, holds two patents and brings over a decade of experience in software development, machine learning, and team management to GeoVisual. He has a M.S. in Computer Science from Stanford.

The formation of GeoVisual stems from CEO Jeff Orrey's experience with remote sensing technologies at Vexcel Corporation and building cloud-based map platforms at Microsoft, and background working on geophysical data processing and modeling software at the Geophysical Institute at the University of Alaska, Fairbanks. Six years ago, Jeff brought these interests together by founding GeoVisual.

During diligence interviews, Jeff shared that GeoVisual made early pivots before settling on the AgTech space. Initially the company intended to provide geothermal imaging software and analysis; however management quickly realized that the market for such a product was limited. They then began pursuing similar applications of their technology when agriculture showed the most potential for product-market fit. The VCA team appreciated the flexibility shown by these early pivots, which demonstrate GeoVisual's confidence in the analytical capabilities of their product.

Bernie has known Jeff for 16 years, having worked together first at Vexcel Corporation and subsequently on a variety of imaging programs at Microsoft. Bernie is a contractor with GeoVisual, serving as their machine learning and data analysis expert. During the diligence interview, Bernie shared that his interest in becoming a full employee is high, which the company plans to act on immediately following this round of funding.

Jeff and former employees Carl Kalin and Joe Clark collectively own 100% of GeoVisual's issued stock (1,147,059 common shares total). Carl's 117,647 shares vested in April 2015 on a schedule of 25% after one year and 20 successive monthly installments thereafter. The company indicated that new employees will be provided a 4-year vesting schedule for future option grants.

Joe Clark left GeoVisual for personal reasons on May 25, 2015. In doing so he forfeited half of his unvested shares, and retains a 2.3% stake in the company.

Carl Kalin left GeoVisual for consulting work in the LED lighting industry in April 2017. Per an agreement with company leadership, he was granted 31,000 option shares upon departure, which fulfilled all company commitments to Carl.

GeoVisual leadership has been particularly responsive to hiring recommendations from investors, and has recently filled a number of key team positions as a result. These hires have been targeted for specific skillsets necessary to company success, and include a Geospatial Data Scientist, a Fresh Produce Industry Expert, an Account Manager located in the Salinas Valley, and two Agronomists.

Company leadership indicated three gaps in their current team, which they will seek to fill with this round of funding. There is a need for an experienced agriculture industry advisor to help overcome challenges presented by the different specialty crops the company intends to cover. Currently, leadership actively is seeking to hire a computer scientist with experience in machine learning and data science, as well as a geospatial data scientist.

PRODUCT

GeoVisual provides a software-as-a-service (SaaS) platform that helps farmers more accurately monitor crop growth, count existing inventory, and predict future crop yields. This helps farmers run their business smarter by managing inventory, signing more accurate contracts, and actively combating issues that can negatively impact crop yield such as weeds and disease. GeoVisual functions as an eye in the sky, pointing out specific areas within the crop field that are healthy, those that need help, and yield readiness. When a farmer has this data they can more efficiently dispatch their staff to collect additional data or take action in specific locations. Data collected in the field is also automatically fed into the GeoVisual system so that it can be further analyzed and addressed. With this toolset, farmers can improve efficiency, gain a competitive advantage, and

grow their business.

GeoVisual provides this service by ingesting and analyzing multiple types of data: high-resolution photography provided by other parties or strategic partners, precision weather data and weather forecasts, and in-field crop health and yield validation data. Farm managers receive benefit from using the GeoVisual service by receiving tabular crop status and predicted yield data through an API and by logging onto an online dashboard called OnSight. The OnSight dashboard provides a variety of information to the farm manager such as planting data, aerial imagery, in-field survey results (e.g., photos, actions taken, notes, date & time stamps, etc.), crop estimates, growing timelines, harvest recommendations, crop yield and more.

The OnSight dashboard is supported by several important pieces of technology.

- **CLIP:** GeoVisual's "Computer Learning Imagery Platform" combines machine learning and artificial intelligence to analyze different kinds of multiband high-resolution imagery to provide the farm manager with insights into crop vigor, plant count and more.
- **OnSight App:** The OnSight dashboard allows the farm manager to quickly assign specific data collection tasks to their field staff. The field staff receives these requests through the OnSight app, which instructs them where to go, what to do and when to perform the work. Once the field staff collects the data, the OnSight App automatically uploads the results to the OnSight Dashboard for instant accessibility by the farm manager. The mobile application is currently available on Android devices, but due to market feedback, the company plans to launch an iOS application with the proceeds from this round of funding.
- **Timeline:** A timeline feature allows the farm manager to see when the data was collected and how the crops are developing throughout their maturation cycle.

The company is rolling out a three-tiered service (i.e., good, better, best) product strategy. This model will allow the company to start engaging their clients with a low cost service that provides a simple pilot mechanism and builds trust and brand equity in the industry. It also allows the company to generate revenue while the product continues to develop.

The three levels of service are alert only (OnSight Scout), inventory management (OnSight Inventory), and crop forecasting tools (OnSight Forecast).

1. **OnSight Scout:** Priced at $29 per season for unlimited users, this product is designed to be an entry point for new clients. This service level provides limited workflow functionality and no automated data analytics (see table below). However, it still provides farmers value and demonstrates the benefits of centralized data management and workflow application. The product is close to full production.
2. **OnSight Inventory:** This product ranges in price from $30 to $150/acre/season, depending on the crop. OnSight Inventory gives the farmer access to aerial imagery and automated data analytics. The company is working to include regularly refreshed aerial imagery data in the per acre cost, which could simplify the pricing and sales process for the market. As the workhorse of the lineup, this product delivers the core value proposition of GeoVisual to the farmer. It is fairly well developed and could be considered beyond the Minimally Viable Product (MVP) development stage as it has already been used in field tests successfully. However, more work needs to be done for the OnSight Inventory in order to be applicable to a broader range of crops. This product could start generating revenue today with the specialty crop, lettuce.
3. **OnSight Forecast:** This product ranges in price from $50 to $250/acre/season, depending on the per acre value of the crop. The intent of OnSight Forecast is to use the

data collected from OnSight Inventory operations to predict future crop forecasts. The company plans to develop predictive models that require training their machine learning algorithms, coupled with ongoing optimization. OnSight Forecast is the least developed module at this time (i.e., pre-MVP status) and is a future roadmap item.

*** Ancillary Services:** In addition to the core product offerings, the company plans to provide supply management services to grower processors as well as large retailers such as Costco, Walmart, and Amazon. In response to a number of conversations with stakeholders throughout the fresh produce supply chain; GeoVisual intends to offer a region-wide seasonal analysis subscription to grower processors. Similarly, the company will be able to offer consolidated seasonal crop surveys to retailers. These products are still in development and pricing has yet to be determined, however there exists considerable interest in this sort of supply management product.

Table 1. Product Subscription Levels, Features and Release Schedule for 2017

Product Feature	OnSight Scout	OnSight Inventory*	OnSight Forecast*
Directed Scouting with Waypoints	x	x	x
Field Observation Gathering: Pre-Defined Survey Data & Photos	x	x	x
Mobile Asset Tracking using the Dashboard	x	x	x
Aerial Imagery Overlays on Dashboard and in Mobile App		x	x
Early Warning of Vigor Anomalies (from Aerial Imagery)		x	x
In-field Validation with Mobile App of Aerial Imagery Analysis		x	x
Stand Counting with Aerial Imagery		x	x
Yield Forecast Estimates			x
Forecast Model Management			x
Release Date:	**Funding Close + 4 weeks**	**Funding Close + 10 weeks**	**Funding Close + 22 weeks**

* The Inventory and Forecast features include 3rd party aerial imagery from one of our imagery acquisition partners. Currently we have informal co-sell agreements in place with the two major aircraft imagery acquisition companies, and we contract individual pilots for drone imagery acquisition.

As evidenced by the company's release dates on the table above the solution set needs to continue to develop in terms of its readiness for broad scale commercialization. However, the company does appear to have MVP products with OnSight Scout and OnSight Inventory. For example, Taylor Farms paid GeoVisual for a series of trial studies. According to an external source familiar with the GeoVisual trial, the initial 2016 Taylor Farms field study yielded an 83% accuracy rate for detecting and counting iceberg lettuce. Since then, Taylor Farms has participated in a series of meetings to discuss the next phase of implementation. According to Taylor Farms, the holy grail for lettuce analytics in addition to counting is the measurement of lettuce head density. This capability is still in development by GeoVisual.

During the upcoming July 1 pilots, GeoVisual intends to further test OnSight Scout and OnSight Inventory, as well as OnSight Forecast's most notable feature, yield forecast estimation. The test will allow industry leading participants (Church Brothers, Tanimura & Antle, Woolf Farms) access weekly crop reports, including row uniformity and vigor, row head count, and yield weight per row at both planned harvest date as well as projected optimal harvest date. Product market fit and/or product readiness is a topic that investors should discuss further with the company to understand where the product is from commercialization standpoint.

Another topic of investor discussion should be scalability. In the business plan the company describes customer engagement as requiring an onsite visit and 1-2 hours of instruction. This would be unusual for a typical SaaS business in that it could increase costs and impede the company's ability to scale in fragmented markets such as SMB; however GeoVisual notes that this demonstration step is part of an enterprise-wide sales process targeting senior management at the

major companies in a consolidated industry. Additionally, investors should ask about how data moves throughout the workflow. The GeoVisual Analytics Business Plan indicates that data is accessed from aerial imagery providers via automated web services; however it is unclear how much direct vs. subcontracted involvement is required of GeoVisual for in-field photo validation. These types of onboarding and data management tasks could put pressure on the GeoVisual team and have important impacts on their staffing model and overall growth curve.

Product development goals for 2017, outlined GeoVisual's updated strategic business plan, indicate that the company intends to have several operational and revenue-generating products for lettuce, spinach, broccoli, carrots, and tree nuts by July 1st, 2018. Lettuce, GeoVisual's most market-ready offering, will be operational by November, servicing 15% of the crop in the Yuma and Imperial Valley region. Beginning November 1st, the company will begin a winter trial campaign covering broccoli and spinach. According to company leadership and discussions with company advisors, the positions recently filled by GeoVisual, in addition to planned trials each season over the next year, are targeted specifically to drive this aggressive product development strategy.

COMPETITION

The agriculture technology industry is building momentum as evidenced by the funding that is flowing into the marketplace and the industry leaders who see AgTech as having a large impact. F Samuel Allen, CEO of John Deere, stated, "In the not-too-distant future, precision agriculture may evolve to a point that farmers will be able to monitor, manage, and measure the status of virtually every plant in the field… Precision farming is a big deal. It is an already almost certain to shape, if not define, the future of our industry."[1]

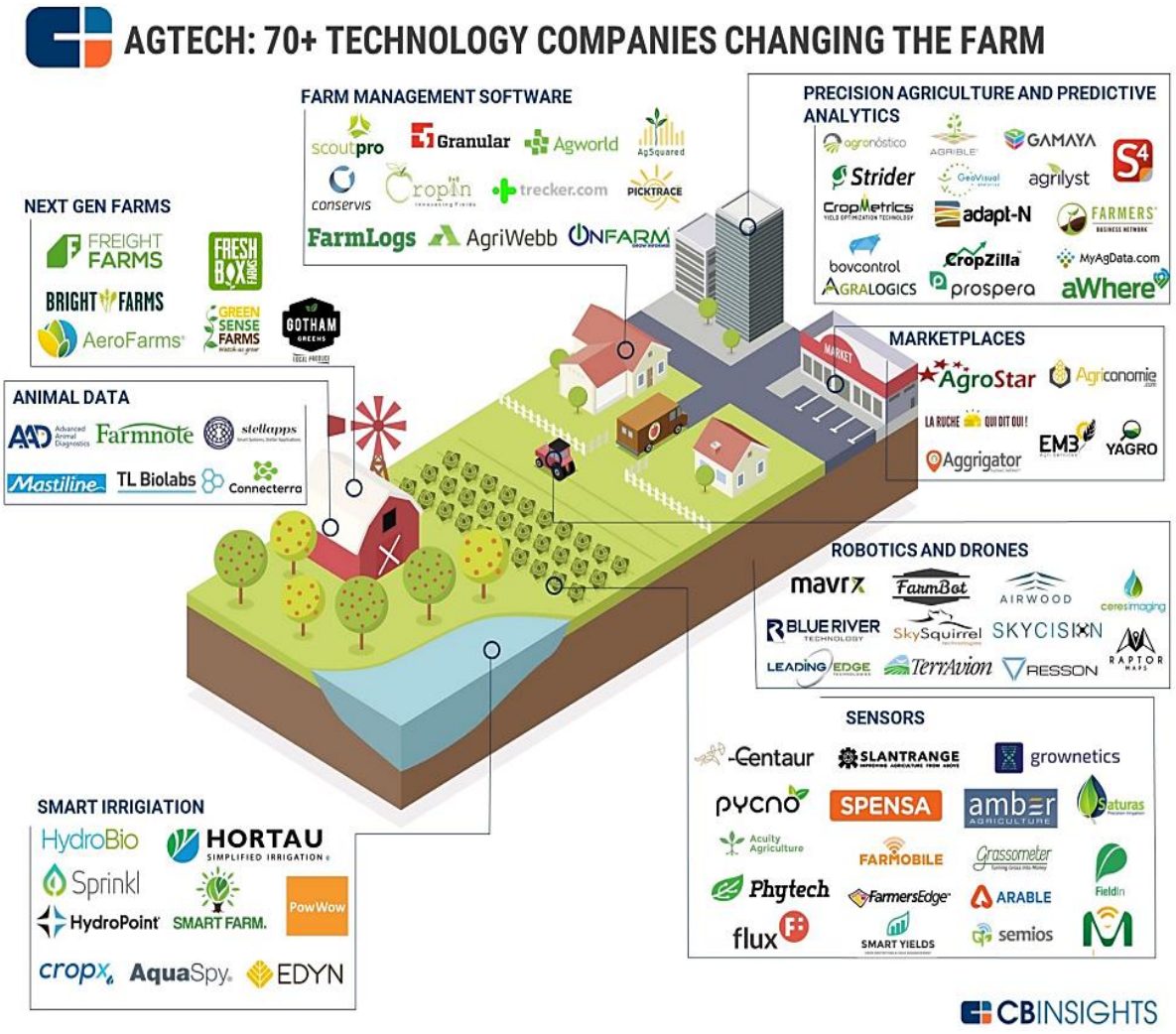
According to a report by Nikhil Krishnan, Research Analyst with CB Insights, "The agriculture industry is going through massive shifts. There are new sources of data thanks to sensors, satellites, and cheaper sequencing."[2] Krishnan added, "New business models have been enabled thanks to mobile and the internet." GeoVisual falls into the Precision Agriculture & Predictive Analytics cluster located in the top right section of the CB Insights market map.

Corporate investors such as Mitsui, Monsanto, and Syngenta and seed stage VC's and accelerators in California have backed startups improving irrigation, crop spraying, harvesting, and more.[3] With this level of investment and focus across the industry, several emerging competitors such as Ceres, AGERPoint, Raptor Maps naturally are pursuing some of the space where GeoVisual is operating. The following non-comprehensive table compares GeoVisual to several of the leading crop monitoring and imaging analysis companies in the market.

1 CB Insights, Agriculture & Farming Tech Webinar, 3/16/2017. https://www.cbinsights.com/research-webinar-AgTech?utm_source=CB+Insights+Newsletter&utm_campaign=326a1cb7f1-TuesNL_3_14_2017&utm_medium=email&utm_term=0_9dc0513989-326a1cb7f1-87011449

2 CB Insights, Agriculture & Farming Tech Webinar, 3/16/2017. https://www.cbinsights.com/research-webinar-AgTech?utm_source=CB+Insights+Newsletter&utm_campaign=326a1cb7f1-TuesNL_3_14_2017&utm_medium=email&utm_term=0_9dc0513989-326a1cb7f1-87011449

3 CB Insights Tech Market Map, 1/30/2017: https://www.cbinsights.com/blog/agriculture-tech-market-map-company-list/



Competitor	Description	Specialty	Stage	Funding
Agribotix[4] Boulder, CO	Drone enabled software company that processes & analyzes agricultural data Intelligence is applied to increase yields and maximize the bottom line while reducing the environmental footprint.	Serves clients in over 45 countries and experience with more than 44 crops, including corn, grapes, apples and sugar cane. Integrated weather data, image recognition & analytics to provide detailed recommendations. 2016 North American Frost & Sullivan Award for Enabling Technology Leadership.[5]	Startup/ privately owned	$250K Grant, Colorado Advanced Industry Program[6]

4 http://agribotix.com/

5 http://www.prnewswire.co.uk/news-releases/frost--sullivan-honors-agribotix-for-developing-a-superior-drone-technology-and-an-unrivaled-analytics-platform-for-the-precision-agriculture-market-570625521.html

6 Crunchbase: https://www.crunchbase.com/organization/agribotix#/entity

Competitor	Description	Specialty	Stage	Funding
Prospera[7] Tel Aviv, Israel	Prospera offers continuous crop image monitoring and image analysis, as well as crop development analysis and yield prediction. With in-field cameras and climatic sensors, Prospera claims to offer accurate remote agronomy and management solutions to farmers around the world.	Develop computer vision technologies that monitor & analyze plant health, development & stress. Integrated climate & visual data from field provides actionable insights to growers via mobile & web.	Startup/ privately owned	$7M Series A, Bessemer Venture Partners 2016[8]
Gamaya[9] Lausanne, Vaud, Switzerland	Increases efficiency & sustainability of large industrial farming, and the productivity / scalability of small-holder farming, by deploying mapping & diagnostics of farmland. The farmland analytics solution improves production efficiency and risk management by facilitating optimum decision making, including use of chemicals and fertilizers, resulting in larger yields and minimizing environmental impacts. Won numerous awards in Switzerland and Europe, including Venture Kick; Venture: Companies for tomorrow; Swisscom Startup Challenge and CloudEO Copernicus Masters. Has been featured by Forbes as one of the 4 European AgTech startups with a potential to become a $1B company.[10]	Specific to sugar cane cultivation and production, Gamaya specializes in field monitoring, targeted treatment of crop issues, early yield prediction, higher yield quality, and increased efficiency. Patented ultra-compact hyperspectral imaging camera for use with drones. Appear to have the tools needed to branch into specialty crops if so desired.	Startup/ privately owned	$800K Seed, Feb 2015 CHF3.2M Series A, Peter Letmathe / VI Partners / Sandoz Foundation / Seed4Equity SA, May 2016[11]

COMPETITIVE DIFFERENTIATION:

In the company's business plan, GeoVisual states that they are strategically positioned to become a leader in yield forecasting for "specialty crops" due to their partnerships, reputation in the industry, and go-to-market strategy. While the company has achieved momentum by obtaining several top tier strategic beta clients with a limited amount of funding, GeoVisual still faces domestic and international competition. Agribotix, a Colorado company operating on a limited amount of funding, has established an international distribution partnership with John Deere, which has resulted in clients across 45 countries and experience with more than 44 crops, including corn, grapes, apples and sugar cane. While some of these crops are considered commodities, others are considered

7 Venture Beat 7/26/2016: http://venturebeat.com/2016/07/26/prospera-raises-7-million-for-a-i-based-farming/

8 Crunchbase: https://www.crunchbase.com/organization/prospera-technologies#/entity

9 gamaya.com

10 www.venturekick.ch/GAMAYA-closes-CHF-32-Million-Series-A-to-boost-the-deployment-of-their-advanced-crop-analytics-services

11 www.crunchbase.com/organization/gamaya#/entity

specialty. Agribotix is also providing image recognition & analytics to provide detailed recommendations. GeoVisual may experience competitive pressure from Agribotix and others as they expand.

GeoVisual has a memorandum of understanding with Aeroptic, LLC, who has agreed to partner with GeoVisual to provide its high quality aerial imagery to GeoVisual, who can perform imagery analytics and sell the value-added service to its agriculture customers. Costs of Aeroptic imagery capture will be passed along to the customer. Aeroptic and GeoVisual jointly have organized a large-area trial in the Salinas and San Joaquin Valleys of California between July and October 2017, wherein Aeroptic will fly their military-grade cameras in their own aircraft, which will be dedicated to this agtech project. They will collect imagery over several hundred thousand acres, weekly, with a high degree of spatial resolution. Based upon the success of this trial, Aeroptic and GeoVisual will discuss future partnership plans, including a possible joint venture.

Aeroptic and GeoVisual have agreed, through a series of leadership meetings that an important strategic play likely to gain the team a strong competitive advantage is to collect high-resolution imagery over large acreages of specialty cropland as soon as possible. Having the imagery "in the bank", will place GeoVisual ahead of competitors that will first have to collect the imagery before demonstrating a similar capability.

Even with this partnership with Aeroptic, the company's long-term plan is to remain sensor agnostic, a strategy that can benefit their flexibility and scalability. Competitors Prospera and Gamaya sell hardware in the form of drones and high-resolution cameras, which means they will be incentivized to sell a complete ecosystem of hardware and software to their clients. GeoVisual can leverage the existing market of imagery collected by aircraft and augment that information with data collected by OnSight Mobile and a variety of third party sensors. While this strategy increases the costs of developing their solution (e.g., developing API's to consume 3rd party data and supporting 3rd party data questions from clients), it helps distinguish the company from other firms in the market and reduces expenditures and product development in hardware.

In addition to the aforementioned competitors in the Precision Agriculture & Predictive Analytics cluster, GeoVisual anticipates competition from IntelinAir ($4.5M raised) and SlantRange ($7.7M raised). IntelinAir explicitly advertises their use of computer vision and deep learning with aerial imagery, and the company is also agnostic to imagery platforms. SlantRange publishes that their technology detects individual plants in the field as well as weeds – indicating more sophisticated and higher resolution computer vision capabilities.

The existence of strong competition is not necessarily a red flag. In many cases, it validates the product/market fit and the existence of broad market demand. Investors should spend time with the company to understand how their technology or execution model will provide GeoVisual with a defensible competitive advantage.

MARKET

The fresh produce market has been undergoing considerable transformation in recent years largely due to rising labor costs, water regulation, and the entrance of powerful retailers such as Amazon. These forces are likely to continue to pressure the already consolidating industry to improve efficiency through advanced technology and robotics or be forced to move production internationally.

GeoVisual's precision agriculture and predictive data analytics business focuses on specialty

crops.[12] Their addressable market is the specialty crop industry, which represents a collection of more than 40 diverse crops spanning fruit, potatoes, tomatoes, cotton, and plantation products like coffee and cocoa. Specialty crops grown throughout the year in all regions have a total farmgate value of more than $500B[13]. The USDA puts the specialty crop market value at $82B as of 2012.

GeoVisual plans to target the largest US producers of specific high value specialty crops: lettuce, broccoli, spinach, carrots, and tree nuts (specifically almonds, walnuts, and pistachios). They aim to provide operational intelligence for farmers of these specific crops and state that for these crops alone, the market size is approximately $14B, which is verified from 2014 data[14]. Compared to corn, of which the value typically ranges between $600 and $1200 per acre, tree nuts average approximately $6,800 per acre, and leafy greens are worth about $10,000 per acre[15]. GeoVisual expects future iterations of their technology to be applicable to forecasting many non-specialty crops, such as corn, soy, wheat and other commodity crops.

The company is initially targeting business centers in California and lands throughout the West and Mexico. This decision is based on their market assessments showing that over one third of US vegetables and two thirds of US fruits and nuts were produced in California, and that growers in California also contract with growers based in Arizona and Florida. GeoVisual plans to subsequently move into other crops with similar needs such as grapes, citrus, melons and orchard crops.

In 2015 California's farms and ranches received approximately $47B for their output, which represented a decrease of nearly 17 percent compared to 2014. However, California remains the leading US state in cash farm receipts.[16]

California's top 10 valued commodities for 2015 include specialty crops such as grapes, lettuce and almonds[17]:

- **Milk and Cream— $6.29 billion**
- **Almonds — $5.33 billion**
- **Grapes — $4.95 billion**
- **Cattle and Calves — $3.40 billion**
- **Lettuce — $2.26 billion**
- **Strawberries — $1.86 billion**
- **Tomatoes — $1.71 billion**
- **Flowers and Foliage — $1.08 billion**
- **Walnuts — $977 million**
- **Hay — $945 million**

AgTech Venture Capital Investment

Venture capital investment in the AgTech space has increased significantly over the past seven years after a record breaking 2015 where $4.6B was invested followed by $3.23B in 2016.[18] To provide context on how AgTech investment has increased over the past two years, the total investments made in 2015 and 2016 was $7.8B compared to a total of $4.7B between the 4 years of 2010-2014.[19]

One key reason for the recent increase in investment in the AgTech space was the acquisition of Climate Corporation (Underwrites weather insurance for farmers) by Monsanto for $990M.[20] This

12 www.cbinsights.com/blog/agriculture-tech-market-map-company-list/
13 www4.syngenta.com/~/media/Files/S/Syngenta/our-industry-syngenta.pdf
14 http://nationalaglawcenter.org/wp-content/uploads/assets/crs/R43632.pdf
15 https://www.ers.usda.gov/webdocs/DataFiles/54499/FruitandTreeNutYearbook2016.pdf?v=42671
16 www.cdfa.ca.gov/statistics/
17 www.cdfa.ca.gov/statistics/
18 AgTech Investing Report 2016, AgFunder
19 Ibid.
20 www.forbes.com/sites/bruceupbin/2013/10/02/monsanto-buys-climate-corp-for-930-million/#1e8ad2c6177a

acted as a catalyst for further investments into the AgTech Sector. Climate Corporation proved the demand for Ag data, and grew a business by nearly 30x. Monsanto described the purchase as an "entry ticket into a $20 Billion market opportunity".[21] In addition, other trends existed during this transition in 2013 that helped build momentum such as a groundswell of macro-economic trends that tipped the balance between supply and demand in agriculture. Shifting consumer tastes was another and a confluence of new hardware technology that freed computation from the desktop and automated multivariate collection of big data.[22]

The majority of investments made in the last year have been in the Food Marketplace / Ecommerce, as well as Ag Biotechnology. However, Farm Management and Precision Software was third on the list of deal volume out of nine AgTech categories with a funding amount of $363M in 2016 across 117 deals equating to an average of $3.1M per investment.[23]

The Global Precision Farming market is poised to grow at a CAGR of 12.3% over the next decade to reach approximately $8.8B by 2025.[24] Although investments have increased in recent years, exits have decreased and no notable exits have occurred at the same scale as the Climate Corporation. Farm data is expected to be a $20-25B revenue opportunity in the future, but as it currently stands, the industry is nascent.[25]

LEGAL LANDSCAPE

GeoVisual Technologies Inc. filed as a Colorado corporation in 2000 and remains in good standing. GeoVisual has an issued trade name certificate from the State of Colorado for the name "GeoVisual Analytics". The company has filed the appropriate charter documents and has internal By-Laws in place. Company leadership shared that GeoVisual has no pending litigation nor have they encountered such issues in the past.

To date, GeoVisual has issued a total of 1,147,059 shares of common stock at $.001 per share. Jeffrey Orrey was issued 1M shares in 2000 and in 2013 Carl Kalin and Joe Clark were issued 117,647 and 58,823, shares respectively. Joe Clark left GeoVisual in May of 2015. He forfeited the unvested portion of his shares at the time but retained a total of 29,412 shares. Carl Kalin was also awarded a stock option grant in exchange for contributions to the company in the amount of 31,000 shares for $.40 per share, for a total of $12,400, per the Non-Qualified Stock Option Agreement. Joe Clark was issued a new stock certificate reflecting forfeiture and Carl Kalin was issued the option grant in April, 2017. All stock currently owned has vested and 9.4% has been reserved as an employee incentive option pool.

21 www.reuters.com/article/usa-farming-data-idUSL2N0N11U720140409

22 techcrunch.com/2015/04/01/the-new-queen-of-green/

23 AgTech Investing Report 2016, AG Funder

24 www.researchandmarkets.com/reports/3798567/global-precision-farming-market-analysis-and?gclid=CjwKEAjwzKPGBRCS55Oe46q9hCkSJAAMvVuMLGcObdkYftE-ky7MSAc-rUwLbD5NYCl03F_DTWsUUhoCYVHw_wcB

25 www.reuters.com/article/usa-farming-data-idUSL2N0N11U720140409

		Pre Money	
		Shares	%
Common Shares			
	J Orrey	1,000,000	76.9%
Restricted	C Kalin	117,647	9.0%
Restricted	J Clark	29,412	2.3%
	Total Common	1,147,059	88.2%
Incentive Plan			
	Issued Restricted	147,059	11.3%
	Issued Options	31,000	2.4%
	Remaining	121,941	9.4%
	Total Pool	300,000	23.1%
Preferred Shares			
	RVC		
	Additional Seed Investors		
	Total Seed Preferred		
	Taylor Farms Conversion		
	Total Preferred		
Total Fully Diluted Capitalization		1,300,000	100.0%

GeoVisual signed a purchase agreement for a $50K convertible promissory note with a 20% discount and an 8% interest rate with Maginfo. This note matured on February 24th of 2017. Maginfo elected not to convert and instead set up a repayment plan with GeoVisual for the balance and interest of the note, which is $56K. GeoVisual has also signed a Series A Convertible Note for $75K with a 30% discount and a 10% interest rate with Taylor Ventures. Taylor Ventures has elected to convert the note into equity as a part of the current equity sale.[26]

INTELLECTUAL PROPERTY

GeoVisual has over 20 signed NDA agreements with its employees, contractors, and individuals engaged in a potential business relationship. New technology reports have also been filed with NASA as a result of a grant received from NASA. While filing this report does not infringe on any of GeoVisual's rights to use the technology, it allows NASA the right to use the technology should it see fit to do so.

GeoVisual has yet to file any patents. As a preliminary step, GeoVisual entered into a consulting agreement with Dr. Yoriko Morita of Patents Integrated in performing a preliminary IP landscape search using broad keywords, such as "artificial intelligence image forecast" and "crop forecast image analysis machine learning artificial intelligence". After an initial investigation, Dr. Morita did not find any significant references that would likely prevent GeoVisual from obtaining patent protection on their specific technological approach in the US and more broadly.

While patents by some of GeoVisual's possible competitors (Iteris, Blue River, SlantRange) have come up during the search, Dr. Morita advised that, based on her preliminary research, they appear to be focused on technological details that lie outside of GeoVisual's specific niche[27]. She noted that there are a few companies whom have filed patents that perform AI analytics in conjunction with machine learning but not in the agricultural space. She also mentioned that there was a very broad patent which had recently expired that may have covered this technology. She regarded this fact as positive because that would've resulted in a disinterest in the creation of the technology altogether by others. As it relates to GeoVisual's interest in forecasting technology, they may be ahead of any competitor who was deterred by the expired patent.

26 Changes in the capitalization table upon Taylor Farm's conversion are reflected in the Appendix.

27 Dr. Morita advised that SlantRange had filed patents that may be in the same family of analytics but their hardware specific patent happened to be allowed first. She stated that further research can determine why this is and how likely their other patents are to be granted.

GeoVisual has also identified several existing references by other parties that will be proactively taken into consideration as they craft their IP portfolio. More in-depth examination of these identified references will be performed as GeoVisual's initial patent applications are prepared. Furthermore, GeoVisual plans to monitor the IP-related activities of a larger set of competitors to stay up to date with of the technology development of their peers. The analysis of the competitor IP landscape from Dr. Morita, when completed, will give a better idea of what GeoVisual could be protecting as trade secrets.

FINANCIALS

GeoVisual is seeking to raise a $500K equity round with a $3M valuation. To date, the company has received $950K in grants from NASA, $67K in consulting services ($17.5K in 2016), and has raised $125K from external sources (a convertible note of $75K from Taylor Farms, which they elected to convert on July 30th, 2017, and a convertible note of $50K from Maginfo LLC). The company was recently awarded a Colorado Advanced Industries Accelerator grant for $250K. With the current equity raise and Colorado grant, GeoVisual plans to accomplish/exceed the following milestones:

- Acquire contracts to provide analysis for 20,000 acres
- Create ongoing relationships with at least 4 major producers
- Formalize key partnerships for imagery acquisition
- Refine and optimize scalable CLIP architecture

Monthly per Acre Analytics Fee per Crop:			Annual Fee:
Lettuce	$	8.62	$ 103.43
Broccoli	$	5.51	$ 66.11
Spinach	$	5.92	$ 71.05
Carrots	$	7.57	$ 90.87
Tree Nuts	$	5.64	$ 67.72

GeoVisual's main revenue driver revolves around their CLIP smart algorithms. GeoVisual's revenue model assumes that in 5 years the company will capture 15% of total high value crop areas in California (500,000 acres), and that they can capture the relevant Value per Acre for each crop. These assumptions are based on the current trial prices GeoVisual already has in place with growers. It is important to note that the assumptions made by the company are conservative estimates. This is because the operating revenue assumptions listed in the chart above are actually lower than the cost of the trial for the company.[28] It is also important to note that all of the revenue assumptions are based on season, going from to Arizona to California by the appropriate growing season for each location. GeoVisual has put in place a comprehensive Strategic Plan that specifies which crops will be driving their revenues for each month of the first 18 months.[29]

GeoVisual's revenue model is then derived from multiplying the average CLIP price per acre and multiplying it by the number of acres covered. In 2017, for instance, the company projects revenue of $216K from CLIP and an additional $125K from the Colorado Advanced Industries Accelerator Grant, for a total of $341K.[30]

28 GeoVisual and the producers are negotiating cost sharing for the trials.

29 See Appendix

30 The Revenue Model listed does not reflect the amount of the $250 grant, which is split over two years with $125 distributed in 2017, and the remaining $125 in 2018.

GeoVisual 5-Year Revenue Projections

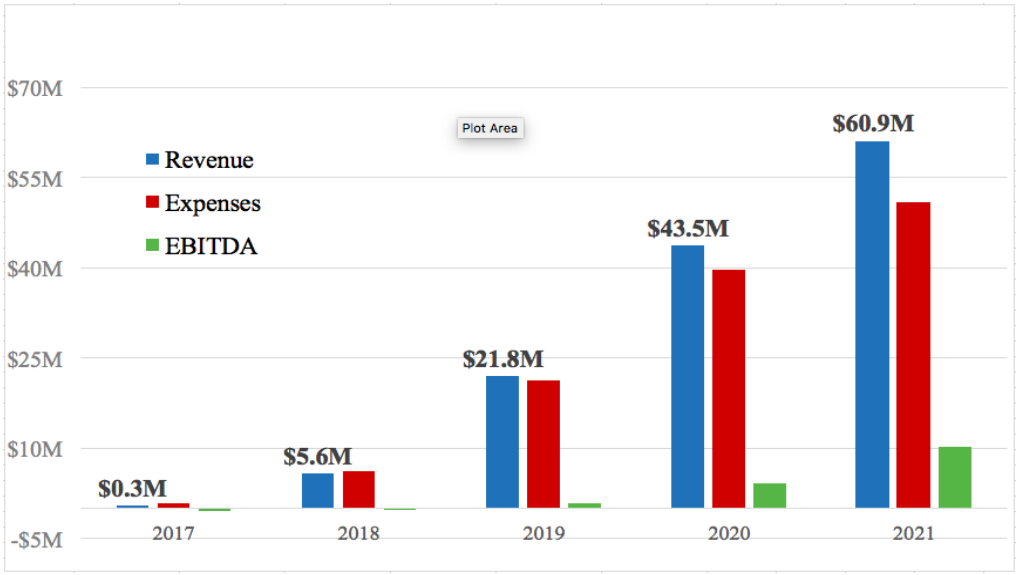
Assumptions:

1) Acres covered, revenue and expenses for 2017 and 2018 taken from 18-month pro forma P&L.
2) CLIP is priced differently for different crops due to different crop values and ROI for each from CLIP
3) Average price of CLIP (from "18MonthRevenueModel" tab): $79.84

	2017	2018	2019	2020	2021
Acres Covered:	12,555	66,256	272,512	545,024	763,034
CLIP Revenue:	$216,420	$5,504,140	$21,756,471	$43,512,943	$60,918,120
YoY Increase (Ratio):		25.4	4.0	2.0	1.4
Total Expenses	$698,412	$5,948,981	$21,122,788	$39,557,221	$50,765,100
Revenue/Expense ratio	0.31	0.93	1.03	1.1	1.2

Because GeoVisual is heavily reliant on their CLIP revenue stream (i.e. no other revenue streams other than grant money), the revenue model is highly sensitive to changes in the CLIP price per acre assumption. For instance, if we apply a reduction of CLIP price per acre to $50, revenue naturally takes a substantial hit ($41M as opposed to $60.9M in Year 5). Without pursuing additional very high value crops like strawberries and the opportunity with retailers, the lack of additional revenue streams could pose a risk to investors as their ROI is directly tied to the CLIP pricing per acre assumptions. However, as stated above, the Price per Acre assumptions are conservative relevant to the cost of the trials. This may indicate that revenues are likely to exceed initial assumptions. Based on GeoVisual's 18-month pro forma projections, a $500K investment plus their $250K grant from Colorado will keep the company cash flow positive until November of 2018.

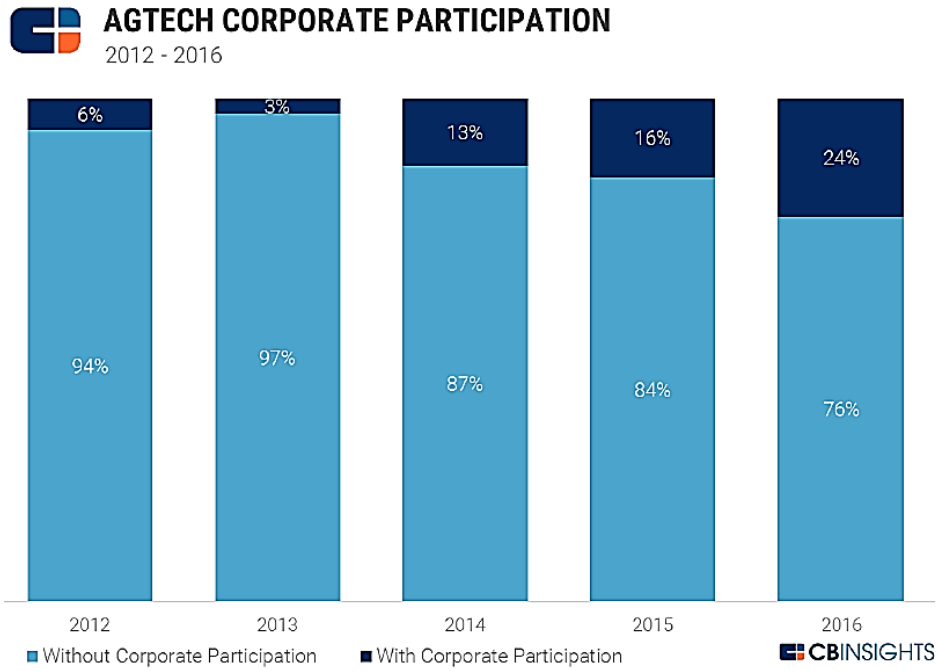
Total Revenue	$341,420	$5,629,140	$21,756,471	$43,512,943	$60,918,120
Total Expenses	$698,412	$5,948,981	$21,122,788	$39,557,221	$50,765,100
EBITDA	-$356,992	-$319,841	$633,684	$3,955,722	$10,153,020



EXIT

GeoVisual anticipates being acquired within 5 years at a revenue multiple in the 3-5x range.

Revenues are expected to be driven through their recurring model. Some of the key risks to a successful exit that GeoVisual foresees include a slower speed to market or a time lag in terms of collecting data. As discussed in the markets section, the AgTech venture capital investment has grown substantially in the last 2 years.



Potential acquirers in AgTech vary widely as investors like Agribusiness Corporates (Monsanto, Syngenta, BASF) and Tech Corporates (Google Ventures and more traditional venture capital firms) participate in this space. Some Agribusiness Corporates have their own dedicated VC arms and private market activity that focuses on consolidation in their space.[31]

POTENTIAL ACQUIRERS

TRIMBLE

Trimble is headquartered in Sunnyvale, California and makes Global Positioning System (GPS) receivers. Trimble's revenues have grown from approximately $270 million to over $2 billion in 2012. Trimble sells products and services into the following major industries: Land Survey, Construction, Agriculture, Transportation, Telecommunications, Asset tracking, Mapping, Utilities, Mobile Resource Management and Government. They have made seven acquisitions since 2015, with one of those in an Agriculture business called Agri-Trend that is a data and software platform solution for the largest network of independent consultants.

JOHN DEERE

John Deere is an American manufacturing company for agricultural equipment. As of 2013, they had revenues in excess of $37 billion. They have shown an appetite for acquiring businesses in the AgTech space and agreed to purchase Precision Planting from Monsanto in 2015. Precision Planting develops products to help solve agronomic issues facing growers. John Deere has said that precision services and its "intelligent solutions group" would be a major component of its strategy

31 CBinsights: Cultivating Agriculture Tech Webinar (16th March 2017)

to double its size from a $25 billion company in 2010 to a $50 billion company by 2018.[32]

MONSANTO

Monsanto is a multinational agrochemical and agricultural biotechnology company, and leading producer of genetically engineered seeds. They have revenues in excess of $15 billion as of 2015. Monsanto Ventures have been the most active out of those potential acquirers and as stated in the Market section, their purchase in Climate Corporation for $990 million helped fuel the venture capital investment in the AgTech sector thereafter. Also, in 2016, they helped lead an $11m Series B round for Resson, who are a Canadian image analysis startup for the agriculture sector. Clearly Monsanto maintain an appetite for investments in the AgTech space and state that they believe entrepreneurs are more engaged with the food and agriculture sector than ever before.[33]

Other companies GeoVisual included as potential acquirers were, DJI Innovations (commercial and recreational drone systems), Wilbur-Ellis (international marketer and distributor of agricultural products), DuPont Pioneer (US producer of hybrid seeds and GMO's) or a large integrator such as Accenture or Verizon. GeoVisual states that although a large agribusiness is the most likely scenario, they believe imagery providers such as drone, aircraft or satellite businesses are possible candidates as well.

ACQUISITIONS

While it is clear that investments into the AgTech sector have increased, actual exits and liquidity events still lag behind as pipeline companies mature. Sustaining returns are yet to be achieved; however, this will undoubtedly change over the next 5 years as the agriculture industry has historically sprouted large public corporations.[34] A few notable recent AgTech acquisitions are shown below.

Acquisition	Year	Amount	Description
Farmers Edge acquiring Gran Duke Geomatics	2015	Undisclosed	Gran Duke provided their clients with custom tailored software solutions and geospatial applications for precision agriculture.[35]
Monsanto acquiring Precision Planting	2012	$210M	Precision Planting provided clients with improving yields through on-farm planting performance.
Trimble acquiring Harvestmark	2015	Undisclosed	Trimble acquired Harvestmark who are a provider of food traceability and quality inspection solutions.
Allflex Group acquiring SCR	2014	$250M	Allflex are a leader in animal identification and tracking tags acquires SCR who develop, manufacture and market advanced systems for monitoring cows.

VALUATIONS

GeoVisual Analytics is seeking $500,000 of capital in this round of financing, currently proposing a $3M pre-money valuation. This provides seed stage investors with approximately 14.3% of equity in the business. The Rockies Venture Club team utilized several valuation methods to determine a narrow valuation range. What follows is an analysis of the GeoVisual business influenced by the team, market, technology, and key opportunities in the future, but also the key risks.

32 www.reuters.com/article/usa-farming-data-idUSL2N0N11U720140409

33 agfundernews.com/why-monsanto-invested-in-ag-image-analytics-company-resson6053.html

34 techcrunch.com/2015/04/01/the-new-queen-of-green/

35 agfundernews.com/farmers-edge-acquires-granduke-geometrics.html

Multiple Raise/Dilution Method

The Multiple Raise/Dilution Method is utilized for companies expecting to raise several rounds of financing, with at least one subsequent financing to follow the current raise. It demonstrates the cumulative effect of dilution from these multiple raises on the Company's, early investors, and the Angels they are seeking capital from in this current fund raise. This model also provides for complex exit scenarios to be tested to determine if the presented deal terms on a current raise could provide Angels with a suitable Internal Rate of Return (IRR).

GeoVisual has indicated a subsequent Series A raise of $3M in 2018, following this $500k seed raise. Assuming that VCs leading the Series A would look for 20-25% of GeoVisual at that time, GeoVisual would be raising this Series A on a $9M to 12M pre-money valuation, presenting a 3-4x bump in valuation. One noted risk is that GeoVisual's target milestones from the use of funds of this current seed raise may not translate into value drivers for the next round of funding. Potential matching funds from the NASA grant could help to multiply the milestones and provide GeoVisual with more validation on certain high yield crop specialties, but the success of a subsequent Series A raise may depend on the company's ability to generate further revenues and strategic partnerships.

When modeling out potential exit scenarios, Angel investors in this $500k seed raise would only reach the desired target 10x multiple on investment if the company were to exit for $63M or higher in Year 5. GeoVisual has mapped out $37.3M in revenue by Year 5, so they would need to hit at least a 1.7x revenue multiple at acquisition to reach a $63M+ terminal value. This seems achievable given the comps in this industry, but ultimately it comes down to the team's ability to execute and drive revenue above $35M by Year 5. This valuation method yielded a pre-money valuation of $3M.

Scorecard Method

The Scorecard Method measures the company in question based on variables derived from a starting, baseline valuation from an average company at the same stage and ideally in the same industry as the company in question. For a baseline valuation, comparable AgTech businesses with initial revenues were identified, and a median valuation of $3.5M pre-money was used as the baseline. The "Weight" column in the table below is held constant for all valuations (unless an investor wanted to change their values based on their own valuation theory), with Team, Opportunity Size, and Product/Technology the most heavily weighted areas. The "Multiplier" is based on the particular company and its relative performance compared to its peers. The results are added to obtain a cumulative multiplier factored into the baseline valuation.

The GeoVisual team scored well given the expertise in AgTech, data science, machine learning, and geophysical data. There appears to still be a strong need for business expertise on the team and they currently have just 2 FTEs, with a part-time CMO. The competitive environment with multiple, well-funded players in the space posed some concern, as did the need for further strategic partners beyond just Taylor Farms. While the Beta tests have proven to be successful thus far, there is further validation needed on a high value crop-by-crop basis. This development path will take time, which always presents an element of risk. GeoVisual is aiming to raise a $3M Series A in 2018. The concern is that the target milestones from the current series seed raise may not translate into value to VCs unfamiliar with the AgTech space. This may limit GeoVisual's financing options.

Scorecard Method			
Average Company Valuation			$3,500,000
Team	30%	125%	0.38

Opportunity Size	25%	100%	0.25
Product/Technology	15%	75%	0.11
Competitive Environment	10%	75%	0.08
Marketing/Sales Partnerships	10%	75%	0.08
Need for additional investment	5%	75%	0.04
Other factors	5%	100%	0.05
Total Scorecard Adjustment			**0.9750**
Scorecard Adjusted Valuation			**$3,412,500**

SUMMARY

The five valuation methods utilized in this review yielded a standard deviation of $210k, with the Scorecard Method presenting the highest result of $3.4M and the Burn Rate Method yielding the lowest result of $2.9M. The median valuation came to $3M, while the average of all models was a $3.1M pre-money valuation for GeoVisual. The models fell in line with GeoVisual's proposed valuation of $3M pre-money.

Valuation Summary	
Method	Valuation Pre-Money
Scorecard Method	$3,412,500
Risk Factor Adjusted Method	$3,200,000
Multiple Raise/Dilution Model	$3,000,000
Burn Rate Method	$2,900,000
Gut Check Method	$3,000,000
Standard Deviation	**$204,710**
Median	**$3,000,000**
Average	**$3,102,500**

APPENDIX

Post-Money Capitalization Table with Taylor Farms Equity Conversion

		Pre Money		Series Seed Financing				
		Shares	%	$ Invested	Preferred Shares	Total Shares	% Outstanding	% Fully Diluted
Common Shares								
	J Orrey	1,000,000	76.9%			1,000,000	70.8%	63.8%
Restricted	C Kalin	117,647	9.0%			117,647	8.3%	7.5%
Restricted	J Clark	29,412	2.3%			29,412	2.1%	1.9%
	Total Common	1,147,059	88.2%			1,147,059	81.2%	73.2%
Incentive Plan								
	Issued Restricted	147,059	11.3%			147,059		9.4%
	Issued Options	31,000	2.4%			31,000		2.0%
	Remaining	121,941	9.4%			121,941		7.8%
	Total Pool	300,000	23.1%			300,000		19.2%
Preferred Shares								
	RVC			$ 250,000	108,333	108,333	7.7%	7.1%
	Additional Seed Investors			$ 250,000	108,333	108,333	7.7%	7.1%
	Total Seed Preferred			$ 500,000	216,667	216,667	15.3%	14.3%
	Taylor Farms Conversion				49,672	49,672	3.5%	3.2%
	Total Preferred				266,339	266,339		
Total Fully Diluted Capitalization		1,300,000	100.0%			1,566,339	100.0%	100.0%

Notes:
Maginfo opted not to convert their promissory note.

Series Seed Total Raise	$500,000
Pre-Money Valuation	$3,000,000
Post-Money Valuation	$3,614,628
Price Per Share	$2.3077

Taylor Farm's convertible promissory note:			
	Amount	$75,000	
	Effective Date	10/18/16	
	Conversion Date	6/30/17	
	Valuation Cap	$5,000,000	
	Discount	30%	
	Interest Rate	10%	
	Discount Conversion	49,672	shares

18 Month Strategic Plan