



## GEOVISUAL ANALYTICS

## Introduction

GeoVisual Analytics ("GeoVisual") has developed an Artificial Intelligence (AI) based Computer Learning Imagery Platform (CLIP), an algorithmic extrapolation of imagery data. The product is designed to help high value crop producers, processors, and possibly large retailers make key operational decisions that reduce waste and optimize the supply chain. Using systematic monitoring of fields with airplanes, drones, and mobile phones, GeoVisual applies its AI algorithms to analyze crop maturity, health, and predicted yields. Crop producers need to continuously improve the balance of supply to demand so that they do not short supply distributors while also not over-planting and wasting crops, available water, fertile land, labor resources, and time to market. With the growing concerns over water resources, labor supply diminishing, the industry is being compelled to improve efficiency. GeoVisual provides this information via a SaaS platform with an annual subscription, selling directly to large producers and processors.

GeoVisual's leadership has a solid combination of technical expertise and data analytics know-how to collect quality data, normalize information, and synthesize imagery to provide meaningful insights to growers and processors, help predict harvest yields, and optimize supply in agriculture. GeoVisual lead investors assessed that through international

partnerships,

"the capability brings opportunities for financial and expansion benefits to the global agriculture market."

To date, GeoVisual has cultivated a strategic partnership with Taylor Farms (the world's largest fresh cut vegetable producer). This relationship includes an equity investment Taylor Farms have chosen



after pioneering the initial test of the product on 500 acres. Beginning July 21, 2017, GeoVisual has conducted multiple trial projects, providing crop analytics to Taylor Farms and

other top 10 growers including Church Brothers, Tanimura & Antle, JV Smith and Betteravia Farms for leafy greens.

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. Jeff shared that GeoVisual made early pivots before settling on the AgTech space in 2015 in Salinas. 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 in Forestry with his launch of Firecast for Conservation international, when agriculture showed the most potential for product-market fit. Bernie has known and worked with Jeff for 16 years, first at Vexcel Corporation and subsequently on a variety of imaging programs at Microsoft. Bernie is now serving as the CTO and machine learning and data analysis expert.

## **International Market Opportunities**

GeoVisual is currently working on speed and focus in USA market. The core innovation that the team has created has many use cases across the globe. The research done by 3Lines team has suggested large merits in the effectiveness(>80% accuracy) of the CLIP in forecasting the yield by combining weather data. GeoVisual has been contacted by public and private sectors from Indian Agriculture market mainly due to their work published in a highly accredited NASA spinoff magazine(https://spinoff.nasa.gov/Spinoff2017/ee\_8.html). This has triggered the enthusiasm in GeoVisual team to explore opportunities in Indian Agriculture.

Our initial research suggested that in addition to predicting yield, the core innovation can be used as a great tool to improve farmer adoption and engagement for agri businesses. Crop Insurance is one such service in India that is increasing the adoption and engagement with farmers. Indian government has given 98% subsidies and paid over \$2B premiums to insurance companies to support over 30Million farmers. This industry is growing at a very fast rate with ICICI Lombard and other insurance companies actively looking for monitoring solutions. A very good monitoring system built on top of GeoVisual can help the crop insurance industry.

GeoVisual is still early stage company to explore International market but the venture capital investments and other grants received from NASA makes it possible to do initial validation with strong partners. Aeroptic is a data collection company from USA partnered with GeoVisual. Aeroptic is collecting and providing weekly aerial data to GeoVisual. Both these companies have authorized 3Lines India to explore joint venture opportunities in Indian Agriculture market.

Over the last one year, 3Lines team has validated investment opportunities in USA, India and has learned that the best opportunities can be reached through capital management, seed stage investment education to both investors and entrepreneurs, helping start-ups in growth, and opening up access into new international markets. 3Lines fund is strategically investing 60-80% directly in USA and 20-40% in India through a customized education program. 3Lines has identified investment growth opportunities in Artificial Intelligence, B2B Sensor Interoperability, SaaS Software sectors for USA and Agricultural and Food Processing Technology investments in India.